

LOWER MILFORD TOWNSHIP
Subdivision and Land Development
Ordinance

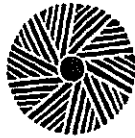
April 2013

Developed and submitted to

Lower Milford Township, Lehigh County, Pennsylvania

by

Brandywine Conservancy, Inc.

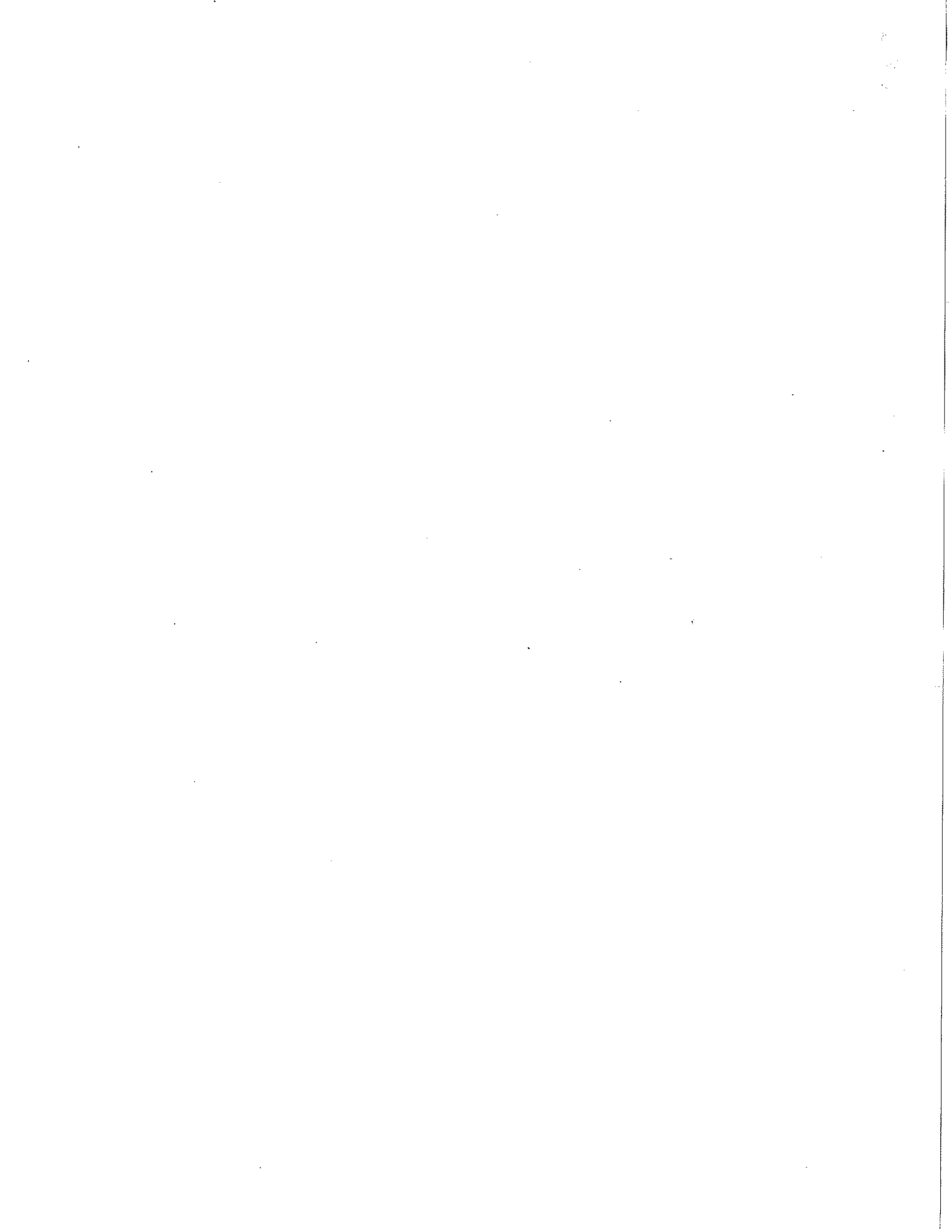


In coordination with

Lower Milford Township Planning Commission

and

Cowan Associates, Inc.

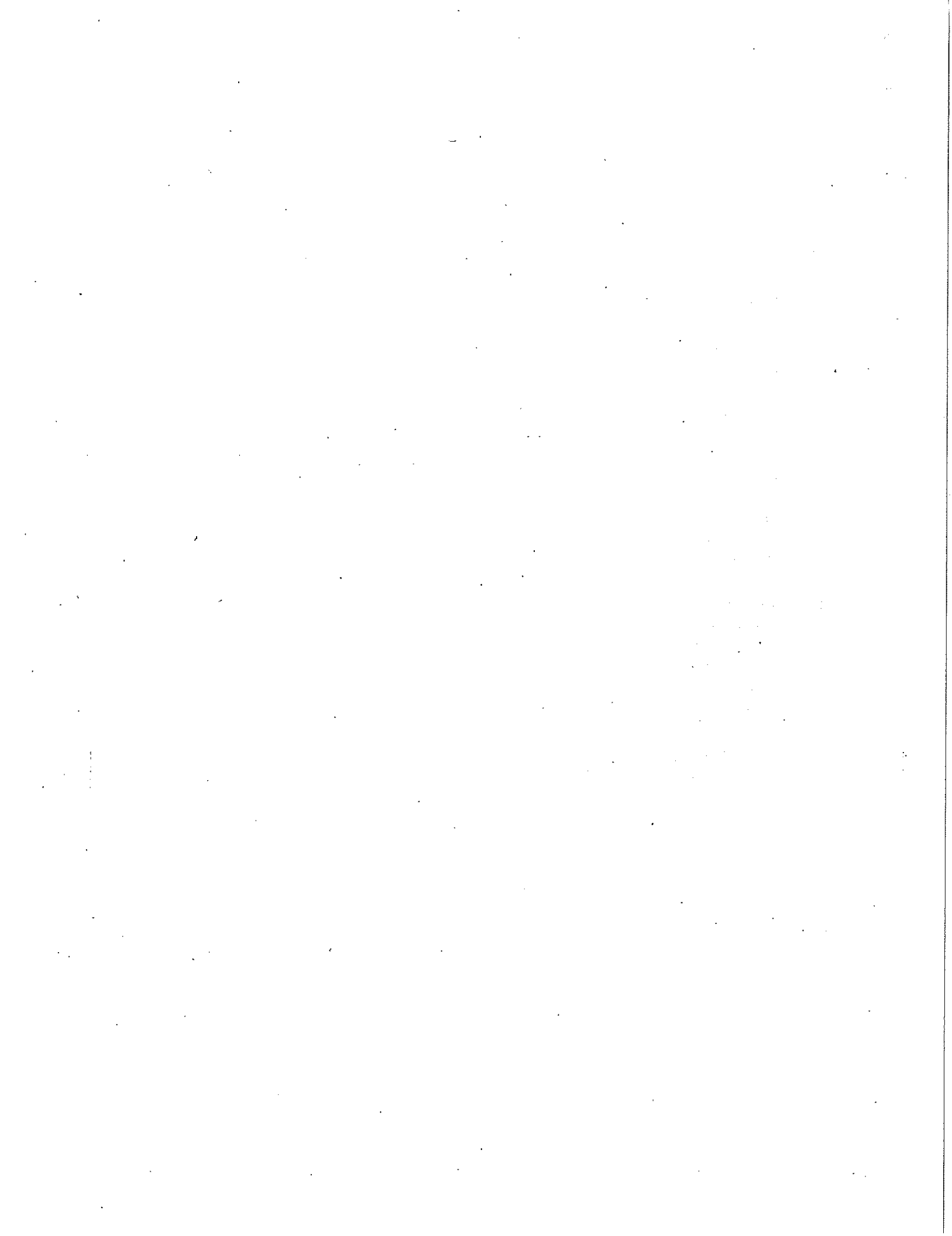


**Lower Milford Township
Subdivision and Land Development Ordinance**

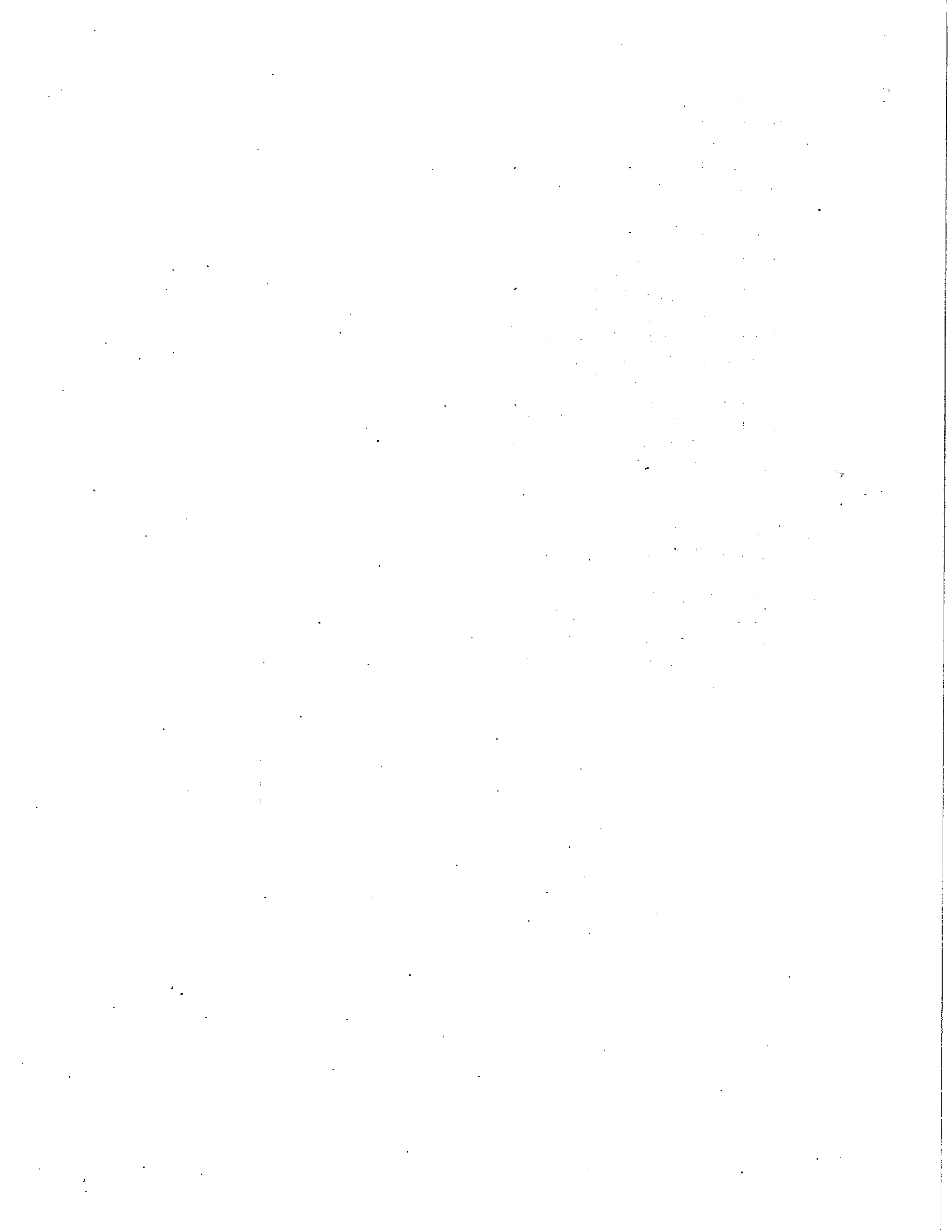
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ARTICLE I
PURPOSE AND AUTHORITY

Section 100. Title

An ordinance establishing rules, regulations, and standards governing the subdivision and development of land within Lower Milford Township, setting forth the procedures to be followed by the Board of Supervisors and Planning Commission in administering these rules, regulations and standards, and setting forth the penalties for the violation thereof.

Section 101. Short Title

These regulations shall be known and may be cited as "The Lower Milford Township Subdivision and Land Development Ordinance."

Section 102. Purpose

These regulations are adopted for the following purposes:

- A. To further the goals and objectives of the adopted Southwestern Lehigh County Comprehensive Plan, and the Southwestern Lehigh County Regional Recreation and Open Space Plan.
- B. To promote the health, safety, and general welfare of the residents of the Township.
- C. To promote the conservation and enhancement of the rural and agricultural character of the Township.
- D. To ensure the development of land will be conducted with due regard to topography, geologic conditions, and natural, scenic and cultural resources, so that the highest quality environment is maintained or enhanced.
- E. To ensure that proper provision shall be made for pedestrian and vehicular access and circulation, stormwater management, water supply, wastewater treatment and disposal, community services and facilities, and to provide for adequate coordination of existing and new services and facilities.
- F. To provide for adequate light, air, open space, recreation, landscaping and other community amenities.
- G. To encourage and promote flexibility, economy and ingenuity in the layout and design of subdivisions and land developments to facilitate realization of these purposes.

- H. To establish procedures and standards for observance by applicants, the Planning Commission and the Board of Supervisors.
- I. To promote orderly, efficient, integrated and harmonious development in the Township.
- J. To coordinate proposed streets with existing or proposed streets, parks or other features of the Comprehensive Plan and to provide for drainage, water supply, sewage disposal and other appropriate utility services.
- K. To secure equitable treatment of all subdivision and land development plans by providing uniform procedures and standards.

Section 103. Authority

This Ordinance has been prepared under the authority and is consistent with the terms and requirements of the Pennsylvania Municipalities Planning Code (53 P.S. §10101 et seq., Act 1988-170, as amended) and is in accordance with the police power authority granted to the Township under the Second Class Township Code (53 P.S. §65101 et seq.). It is intended to further the objectives of Article I, Section 27 of the Constitution of the Commonwealth of Pennsylvania, and of the Southwestern Lehigh County Comprehensive Plan.

Section 104. Jurisdiction

- A. Subdivision and Land Development Control. It shall be unlawful for the owner or any other person, firm, or corporation owning or controlling any land in Lower Milford Township, to subdivide any lot, tract, parcel of land, or interior or exterior space by leasehold or other means, including the creation of condominium units, to otherwise undertake any land development as defined herein, or to lay out, construct, open or dedicate for public use or travel, any road, sanitary or storm sewer drainage facility or other facility in connection therewith, for the common use of occupants of buildings located within the subdivision or land development, unless the following conditions have been met:
 - 1. Final plans for any such subdivision or land development shall: (a) have been prepared and signed by and sealed by a professional engineer, land surveyor, geologist, or landscape architect, as permitted by the applicable registration laws, duly and currently registered in the Commonwealth of Pennsylvania; (b) have been submitted to and approved in writing thereon by the Planning Commission and endorsed by the Board of Supervisors subsequent to meeting all applicable requirements set forth in this Ordinance; and (c) have been recorded in the Lehigh County Recorder of Deeds office in Allentown, Pennsylvania; and

2. Proper completion of any improvements required by the Township Planning Commission as condition(s) of plan approval, or any other conditions of approval, have been guaranteed by deposit of funds or financial security sufficient to cover the cost of improvements, inspections and legal fees.
- B. In order to aid the Board of Supervisors in their administration of adopted plans and ordinances, the Board of Supervisors hereby decrees that the Planning Commission of Lower Milford Township shall serve the following functions for the purposes of this Subdivision and Land Development Ordinance:
1. All plans upon submission to the duly-authorized representative of the Township shall be referred to the Planning Commission for review and approval.
 2. The Planning Commission shall approve, disapprove, modify, and/or impose reasonable conditions for approval of such plans.
 3. Upon an Applicant's completion of all required plan improvements, and acceptance of such improvements by the Planning Commission or security posted for the completion of such improvements, the Commission shall forward the Final Plan to the Board of Supervisors for signature, recordation, and distribution.
 4. The Planning Commission shall consider, and may grant, an applicant's formal requested modifications to provisions and standards of this Ordinance, or formal requested waiver or deferral of roadway improvements along existing roads, or curbing, sidewalk, and other improvements, as provided for herein.
- C. Prior to the approval of any plan by the Township Planning Commission, a complete copy of the proposed submission shall have been transmitted to the Lehigh Valley Planning Commission ("LVPC"), and the Commission shall have thirty (30) days in which to review and make recommendation(s) in the form of a report to the Township Planning Commission in regard to such submission. Pending the receipt and consideration of such report, the Planning Commission shall defer action thereon, but if such report is not received by the Commission within thirty (30) days from the submission of the plan to the LVPC, or within such further time as may be agreed upon by the Township Planning Commission, the Commission may proceed to final action thereon.

Section 105. Interpretation

- A. The provisions of this Ordinance shall be held to be minimum requirements to meet the above stated purposes. Where the provisions of this Ordinance impose greater restrictions than those of any statute, other ordinance, or regulation, the provisions of this Ordinance shall govern. Where the provisions of any statute,

other ordinance or regulation impose greater restrictions than those of this ordinance, the provisions of such statute, ordinance, or regulation shall govern.

- B. Wherever the provisions of this Ordinance mirror language found in the Pennsylvania Municipalities Planning Code, and in the event of subsequent modifications that do not explicitly overrule provisions herein, then the provisions of the more restrictive statute or ordinance shall apply.

Section 106. Severability

It is hereby declared to be the legislative intent that if a court of competent jurisdiction declares any provisions of this Ordinance to be invalid or ineffective in whole or in part, the effect of such decision shall be limited to those provisions which are expressly stated in the decision to be invalid or ineffective, and all other provisions of this ordinance shall continue to be separately and fully effective.

Section 107. Repealer

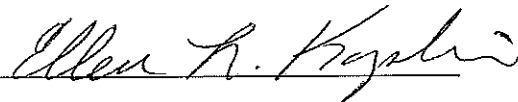
All Ordinances and parts of Ordinances inconsistent herewith are hereby repealed to the extent that such Ordinances or parts of Ordinances are inconsistent herewith. Ordinance No. 76, The Lower Milford Township Subdivision and Land Development Ordinance of 1997, and subsequent amendments thereto, are hereby specifically repealed.

Section 108. Enactment

THIS ORDINANCE NO. 124 IS HEREBY ENACTED AND ORDAINED this 18th day of April, 2013, and shall take effect as provided for by law.

Passed by the Lower Milford Township Board of Supervisors this 18th day of April, 2013.

ATTEST:



Township Secretary



Chair, Board of Supervisors



Vice-Chair, Board of Supervisors



Member, Board of Supervisors

ARTICLE II

DEFINITION OF TERMS

Section 200. Interpretation

Unless otherwise expressly stated, the following words and phrases shall be construed throughout this Ordinance to have the meaning indicated in this Article. Words and phrases not defined herein shall have the meaning set forth in the Lower Milford Township Zoning Ordinance. The present tense includes the future. The singular number includes the plural and those in the plural include the singular, except that such interchange of meaning shall not apply where numbers in the text refer to specific, minimum and maximum quantities. The masculine gender includes the feminine and neuter. The word "used" includes the words "designed" or "intended to be occupied." The word "person" includes any corporation, association, firm, partnership, or other legal entity as well as an individual. The word "structure" includes buildings and shall be encountered as if followed by the phrase "or part thereof." The words "should" and "may" are permissive; the words "shall" and "will" are mandatory and directive.

Section 201. Definition of Terms

ACCESS DRIVEWAY - A privately owned, constructed, and maintained vehicular access from a street or access drive to one dwelling unit, commercial unit, or industrial unit.

ACCESSORY USE OR STRUCTURE - A use, building or other structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.

ACCESSORY BUILDING - A detached subordinate building, the use of which is customarily incidental and subordinate to that of the principal building, and which is located on the same lot as that occupied by the principal building. Examples include, but not limited to: a private garage, garden shed or barn, a private playhouse, a private greenhouse, and a private swimming pool.

ACT 167 - The Pennsylvania Storm Water Management Act of 1978, as amended.

ACT 247 - The Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended.

ACT 537 - The Pennsylvania Sewage Facilities Act of 1966, as amended.

ALTERATION - Any change or rearrangement, other than a repair, in supporting members of an existing building, such as bearing walls, columns, beams or girders, as well as any change in the opening of exterior doors or windows, or any enlargement to or

diminution of a building or structure, whether horizontally or vertically, or moving of a building or structure from one location to another.

ALTERATION, STRUCTURAL – Any change in or addition to the supporting or structural members of a building or other structure, such as bearing walls, partitions, columns, beams or girders, or any change which could convert an existing building or other structure into a different structure.

ALLEY – A right-of-way providing secondary vehicular access to the side or rear of two (2) or more properties.

APARTMENT – A dwelling unit commonly identified within a multi-family residential building.

APPLICANT – A landowner or developer, as defined herein, who has filed an application for development including his heirs, successors and assigns or the equitable owner of property with the owner's permission.

APPLICATION FOR DEVELOPMENT - Every application, whether preliminary or final, required to be filed and approved prior to start of construction or development including but not limited to an application for a building permit, for the approval of a subdivision plat or plan or for the approval of a land development plan.

BANKFULL FLOW OR LEVEL – The discharge that fills the water channel to the top of its banks and at a point where the water begins to overflow onto a floodplain.

BASEMENT – As defined by the (PaUCC) Pennsylvania Uniform Construction Code.

BASE SITE AREA – The gross tract or lot area, measured either in acres or square feet, from which certain portions that may not be usable for the activities proposed for the site are subtracted, pursuant to the Site Capacity Calculations of Section 1009.F of the Lower Milford Township Zoning Ordinance.

BERM - A mound of earth which serves purposes such as: directing the flow of surface water runoff, preventing soil erosion; or supporting plant materials or fencing to aid in screening or buffering.

BEST MANAGEMENT PRACTICES (BMPs) - Management practices or methods for controlling stormwater runoff which provide hydrological (i.e., reduction of runoff volumes) and water quality (i.e., reduction of pollutants) benefits.

BLOCK – A unit of land bounded by streets or by a combination of streets and public land, railroad rights-of-way, waterways or any other barrier to the continuity of development.

BOARD OF SUPERVISORS - The elected governing body of Lower Milford Township.

BUFFER or BUFFERING - Provision for the year-round visual and/or sound attenuation between uses, through the application of such means as plantings, earthen berms, depressions, fences and walls.

BUILDING - Any form or arrangement of building materials to form a structure for supporting or sheltering any occupancy and/or use; including mobile homes and trailers to be used for human habitation.

BUILDING ENVELOPE - The building envelope is that area of a lot that has no development restrictions. The building envelope shall not include the area of any required setbacks (except for driveways which would cross yards), buffer yards, natural features with a one hundred (100) percent protection standard and the portion of those natural features that may not be developed or intruded upon as specified in Article X, Natural Resource Protection Standards, of the Lower Milford Township Zoning Ordinance.

BUILDING HEIGHT - See **HEIGHT OF A STRUCTURE**.

BUILDING PERMIT - An approved document signed by the Building Code Official authorizing an officially requested activity that is regulated by the Lower Milford Township Building Code Ordinance.

BUILDING PERMIT APPLICATION - The official request filed by any person with the Building Code Official that seeks authorization to conduct an activity that is regulated by the Lower Milford Township Building Code Ordinance.

BUILDING, PRINCIPAL - A building in which the primary use is conducted on the lot.

BUILDING SPACING - The minimum distance between buildings. The minimum building spacing shall be measured from the outermost wall or projection of a building, excluding bay windows, chimneys, flues, columns, ornamental features, cornices and gutters. These exceptions may encroach not more than two (2) feet in minimum building spacing areas between buildings.

BUILDING CODE OFFICIAL - The officer of the Township designated by the Board of Supervisors as the individual who administers and enforces the Lower Milford Township Building Code Ordinance.

BULK REGULATIONS - Standards that control the height, density, intensity and location of structure, i.e., setbacks or yard requirements.

CALIPER – The diameter of a tree trunk measured at a point six (6) inches above ground level.

CARTWAY – The portion of a street or right-of-way, paved or unpaved, which is used or intended for use by vehicular traffic.

CERTIFICATE OF OCCUPANCY - The certificate issued by the delegated authority which permits the use of a building in accordance with approved plans and specifications and which certifies compliance with the provisions of law for the use and occupancy of the building in its several parts together with any special stipulations or conditions of the building permit.

CERTIFIED HISTORIC BUILDING OR STRUCTURE – A building or structure listed in the National Register of Historic Places and/or located within a registered historic district and certified by the Secretary of the Interior as being of historical significance by the Pennsylvania Historical and Museum Commission in accordance with PA Act No. 167 as of June 13, 1961, P.L.282, as amended.

CLEAR-CUTTING – The removal of all trees greater than twelve (12) inches dbh on a site, or any portion thereof greater than one-half (0.5) acre in contiguous area, during a single timber harvesting operation or within a three (3) year period. See also “Selective Cutting”, as defined in the Lower Milford Township Zoning Ordinance.

CLEAR SIGHT DISTANCE - Sight distance represents the continuous length ahead along a roadway throughout which an object of specified height is continuously visible to the driver. See Pennsylvania Code, Title 67, Transportation, Chapter 441 “Access To and Occupancy of Highways by Driveways and Local Roads”, latest edition and PennDOT Design Manual, Part 2, Publication 13, latest edition.

CLEAR SIGHT TRIANGLE – An area of unobstructed vision at a street intersection; defined by lines of sight between points at a given distance from an intersection down the center lines of the street.

COMMON OPEN SPACE – See **OPEN SPACE, COMMON**.

COMPREHENSIVE PLAN - The maps, charts, and textual material adopted by the Board of Supervisors of Lower Milford Township in accordance with the Pennsylvania Municipalities Planning Code and designated, as a whole and in its several parts, as a Comprehensive Plan for Lower Milford Township, as may be amended from time to time.

CONDOMINIUM – Real estate, portions of which are designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of those portions and organized in accordance with the Pennsylvania Uniform Condominium Act, 68 Pa.C.S.A. § 3101 et seq.

CONSTRUCTION – The erection, rebuilding, renovation, repair, extension, expansion, alteration, demolition or relocation of a building or structure, including the placement of a mobile home.

CUL-DE-SAC STREET - A single access local street intersecting another at one end and terminating in a bulb or other style of vehicular turn around at the other end, built to Township public street standards.

DBH – See **DIAMETER AT BREAST HEIGHT**.

DENSITY - The number of dwelling units per acre of area.

A. Density, Gross. This is the maximum density that may be permitted in any zoning district. It is calculated by dividing the total number of dwelling units by the base site area. This density is illustrative only; net density is controlling.

B. Density, Net. This is the maximum density permitted on the buildable portion of the site, as determined through the procedures of Section 1009.F of the Lower Milford Township Zoning Ordinance. All tracts of land within a zoning district may be developed to the same net density. Net density is calculated by dividing the total number of dwelling units by the Net Buildable Site Area (Section 1009).

DEP or PADEP - The Pennsylvania Department of Environmental Protection.

DEVELOPER – Any landowner, agent of such landowner, or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or land development. Written evidence of authority to act for the landowner shall be filed with the application when signed by one other than the landowner.

DEVELOPMENT – Any man-made change to improved or unimproved real estate.

DIAMETER AT BREAST HEIGHT (DBH, dbh) – The diameter of a tree trunk, measured at four and one-half (4.5) feet from the ground surface at the point of the highest elevation in contact with the trunk of such tree.

EASEMENT – A grant of the specified use of a parcel of land to a public or private entity.

EFFECTIVE DATE OF THE ORDINANCE - The date upon which this Ordinance officially comes into effect, except that with respect to the subject matter of any amendment, said date shall mean the date upon which the particular amendment became or becomes effective.

EFFECTIVE VISUAL OR NATURAL SCREEN - A wall, fence, plantings, earth works, or combinations thereof, which are arranged or placed as provided in Section 518 of the Township Subdivision & Land Development Ordinance to create either an opaque

visual barrier or to provide for a filtered view which diverts attention from, or obstructs at least fifty (50) percent of an otherwise clear view of a use or activity during all seasons of the year.

ENGINEER, TOWNSHIP - A professional engineer, licensed by the Commonwealth of Pennsylvania, and duly appointed by the Board of Supervisors as the engineer for the Township of Lower Milford, Lehigh County.

EROSION - The wearing away of soil, bedrock or land surface by water, wind, ice, chemical, or other natural force.

EROSION, ACCELERATED - The removal of the surface of the land through the combined action of man's activity and the natural processes at a rate greater than would occur because of the natural process alone.

ERSAP - Existing Resources and Site Assessment Plan. A required submittal document for preliminary and final plan applications, showing the natural and cultural resources existing on the application property, and the ability of the proposed subdivision or land development to avoid impacts to identified resources, or at a minimum, the applicant's proposed measures to mitigate unavoidable impacts.

EXCAVATION - Any act by which earth, sand, gravel, rock or any other similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated or moved and shall include the conditions resulting there from.

EXTRACTION OPERATION - Open pit and deep mining, strip and borrow mining. Also used to describe a site dewatering process for trenches, tunnels, or basements, where wells are drilled to dewater them.

FILL - Material, exclusive of structures, placed or deposited so as to form an embankment or to raise the surface elevation of the land.

FLOODPLAIN - Areas adjoining streams subject to the 100-year-recurrence-interval flood. The areas considered to be Flood Plain within the municipality shall include those areas identified as being subject to the one hundred (100) year flood in the Flood Insurance Study for the Municipality prepared by the Federal Insurance Administration dated November 2, 1979 and the accompanying Flood Boundary and Floodway Map dated November 2, 1979 or current version as amended.

- A. **Floodway.** That portion of the Flood Plain including the watercourse channel and land adjacent to the channel which must be reserved to carry the 100-year-recurrence-interval flood without cumulatively increasing that flood elevation more than one (1) foot.
- B. **Flood Fringe.** That portion of the Flood Plain which is outside the Floodway.

C. Approximate 100-Year Flood Plain. That portion of the Flood Plain for which no detailed flood profiles or 100 year flood elevations have been provided.

FLOOD PLAIN SOIL - Areas subject to periodic flooding containing soil types listed in the accepted Lehigh County Soils Survey.

GRADE - A reference plane representing the average of finished ground level adjoining a building at exterior walls or other structure, such as, but not limited to, a sign or swimming pool. Where the finished ground level slopes away from the exterior walls of a building or base of a structure, the reference plane shall be established by the lowest points six (6) feet from the building, or two (2) feet from the base of a structure.

GRADING - The changing of the surface of the ground by excavation or fill or a combination thereof; the act of moving earth.

GROUNDWATER RECHARGE - The replenishment of water, contained in interconnected pores located below the water table in an aquifer, from the infiltration of precipitation, streams, lakes, or other water sources.

HAZARDOUS MATERIALS - Any substance or mixture of such physical, chemical or infectious characteristics as to pose a significant actual or potential hazard to water supplies, or other hazards to human health, if such substance or mixture were discharged into land or waters of the Township. Hazardous materials include, without limitation, organic and inorganic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalies, and include products such as pesticides, herbicides, petroleum solvents, thinners and fertilizers. More specifically, hazardous materials, as defined herein, are those substances listed on the Hazardous Substance List, Chapter 323 of the Pennsylvania Code, including the automatic additions referenced in Chapter 323.

HIGHWAY CAPITAL IMPROVEMENTS FUND - A separate ledger account maintained by Lower Milford Township, and into which funds are deposited and maintained for highway capital improvement projects on roads within the Township and not for general road maintenance.

HISTORICAL COMMISSION - The Lower Milford Township Historical Commission appointed to administer the Historic Resources provisions of the Lower Milford Township Zoning Ordinance.

HISTORIC RESOURCE INVENTORY - The list of Class I and Class II Historic Resources within Lower Milford Township as prepared by the Historical Commission.

HISTORIC STRUCTURES - Any structure within Lower Milford Township which meets the criteria specified in Article XI, Section 1101, of the Lower Milford Township Zoning Ordinance.

HOMEOWNERS ASSOCIATION - A non-profit organization comprised of homeowners or property owners, planned and operated under negotiated and approved rules and regulations, for the purpose of administering the needs of residents through the maintenance of community-owned property. This term is synonymous with property-owners association.

HYDRIC SOILS - Mapped soils which have been classified as containing major hydric components listed in the accepted Lehigh County Soils Survey.

HYDROGEOLOGIST - A person trained and having experience in the areas of hydrology and geology that deal with groundwater, its occurrence and movements, in its replenishment and depletion, the properties of rocks that control groundwater movement and storage, and the methods of investigation and utilization of groundwater.

HYDROLOGIC SOIL GROUP - A classification of soils by the Natural Resources Conservation Service into four runoff potential groups. The groups range from A soils, which are very permeable and produce little runoff, to D soils, which are not very permeable and produce much more runoff.

HYDROLOGIC STUDY - An analysis of the volume and rate of water flow through a watershed consistent with standardized modeling practices such as the USDA Natural Resources Conservation Service TR-55 Model or Modified Rational Method.

IMPERVIOUS SURFACE - Impervious surfaces are those surfaces which are impenetrable by liquid or which are incapable of allowing groundwater recharge or absorption of precipitation or runoff. All buildings including roof overhangs, and all parking areas, driveways, roads, sidewalk, and any areas in concrete, asphalt and stone shall be considered impervious surfaces within this definition. In addition, other areas determined by the Township Engineer to be impervious within the meaning of this definition will also be classed as impervious surfaces. For purposes of compliance with lot coverage limitations and stormwater management calculations, porous or pervious paving materials and compacted stone aggregate shall be considered impervious.

IMPERVIOUS SURFACE RATIO - The impervious surface ratio is a measure of the intensity of use of a piece of land. It is measured by dividing the total area of all impervious surfaces within the site by the Base Site Area (see Section 1009.F of the Lower Milford Township Zoning Ordinance).

IMPROVEMENTS - Physical addition and changes to land, including but not limited to grading, paving, curbing, fire hydrants, water mains, sanitary sewers, stormwater management systems, culverts, sidewalks, monuments, crosswalks, bridges, earthworks, road lights, wells, sewage disposal systems, road trees and other plantings, buildings, and other structures that may be necessary to produce usable and desirable land development.

INSTITUTE OF TRANSPORTATION ENGINEERS (I.T.E.) - The Institute of Transportation Engineers, founded in 1930, is an international educational and scientific

association of transportation professionals who are responsible for meeting mobility and safety needs. ITE facilitates the application of technology and scientific principles to research, planning, functional design, implementation, operation, policy development and management for any mode of transportation.

INVASIVE PLANTS (VEGETATION) - Any plant species not native to local natural communities that grow and spread aggressively and displace native plants. These species tend to reproduce prolifically and out-compete native plants for light, space, and nutrients, reducing plant diversity and wildlife habitat. A listing of invasive plants is provided in the Lower Milford Township Standard Construction Details and Specifications.

LAKES AND PONDS - Natural or artificial bodies of water which retain water year-round. Artificial ponds may be created by dams, or result from excavation. Lakes are bodies of water two (2) or more acres in extent. Ponds are bodies of water less than two (2) acres in extent. The spillway crest elevation is the basis on which the shoreline is established.

LAKE AND POND SHORELINES – See **WETLAND** and **WETLAND MARGIN**.

LAND DEVELOPMENT - Any of the following activities:

- A. The improvement of one (1) lot or two (2) or more contiguous lots, tracts or parcels of land, excluding for the purpose of a single family dwelling or accessory buildings thereto, for any purpose involving:
 - 1. a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or
 - 2. the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.
 - 3. A subdivision of land; or
 - 4. Transfer of air rights.
- B. The definition of land development shall not include the addition of an accessory building on a residential or agricultural property, including farm buildings, on a lot or lots where clearly subordinate to an existing principal building, or a second principal residential dwelling, in the case of an agricultural property (see Section 302.B.2 of the Lower Milford Township Zoning Ordinance).

LAND DISTURBANCE – Any activity which exposes soils, alters topography, and/or alters vegetation. The following activities shall not be regulated as land disturbance but shall nevertheless be undertaken in a manner such that disturbed areas shall be stabilized with suitable vegetation and shall not be left bare:

- A. Customary agricultural practices such as tilling, plowing, mowing and harvesting.
- B. Removal of hazardous or invasive vegetation.

LANDOWNER - The legal or equitable owner or owners of land including the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition), a lessee if he is authorized under the lease to exercise the rights of the landowner, or other person having a proprietary interest in land.

LANDSCAPING - The planting of turf-grass or other appropriate ground cover in all open areas of the lot, and in addition, the planting of evergreen and deciduous trees, and shrubs, including the maintenance thereof, for the control of erosion, retention of precipitation, protection against the elements, promotion of human comfort, and otherwise protecting the public health, safety and welfare.

LANE LOT - A lot which does not achieve the required minimum lot width at the ultimate right-of-way line and/or the front setback line but which has direct access to a public street through a narrow strip of land which is part of the same lot. A lane lot consists of the lane (i.e., the aforementioned narrow strip of land, the side lot lines of which must be parallel or nearly parallel), which extends from a public street rearward to the line where the lane lot first achieves the applicable minimum lot width and the main lot (i.e., that portion of the lane lot exclusive of the lane).

MARKER - A metal pipe or pin at least five-eighth (5/8) inches in diameter, and at least eighteen (18) inches in length.

MONUMENT - A concrete monument with a flat top at least four (4) inches across and at least twenty-four (24) inches in length. Concrete monuments shall be embedded with iron rebar for detection purposes.

MUNICIPALITIES PLANNING CODE (MPC) – The Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended.

NATIVE PLANTS - Plants that are indigenous and original at approximately the time of European settlement of the region (Eastern Pennsylvania) and are most appropriate for planting as a result of their adaptation to regional environmental conditions including climate, soils, topography, winds, precipitation, wildlife and other living organisms. A partial listing of native plants suitable for use is provided in the Lower Milford Township Standard Construction Details and Specifications.

ONLOT SEWAGE DISPOSAL SYSTEM - A system serving a single lot, collecting and disposing of wastewater on the lot where such system is used.

OVERLAY SHEET - A transparent sheet containing graphic matter to be superimposed on another sheet (as a map or photograph).

PADEP or DEP - Pennsylvania Department of Environmental Protection.

PA UCC - Pennsylvania Uniform Construction Code, derived from the Pennsylvania Construction Code Act (Act 45) of 1999, as amended.

PARCEL - A lot or tract of land.

PERSON - Any individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties, including any members, directors, officers, trustees, employees, managers and supervisors, partners or principals thereof. Whenever used in any clause prescribing and imposing a penalty, person specifically includes the members, directors, officers, trustees, employees, managers and supervisors, partners or principals, or any of them, of such legal entities.

PLAN, AS-BUILT - A corrected final plan, showing dimensions and locations of all streets and other improvements as actually constructed.

PLAN, FINAL - A complete and exact subdivision and/or land development plan, including all required supplementary data, complete and prepared for official recording in accordance with the requirements of this ordinance and with any conditions of approval imposed by the Township, to define property rights, proposed roads and other improvements. See Article IV. of this Ordinance for final plan content.

PLAN, PRELIMINARY - A subdivision and/or land development plan presented to the Lower Milford Township Planning Commission demonstrating compliance with existing ordinances and regulations and showing existing features, proposed road and lot layout, stormwater management facilities and engineering detail sufficient to ensure proper functioning of proposed improvements. See Article IV. of this Ordinance for preliminary plan content.

PLAN, SKETCH - An informal plan indicating existing features of a tract and its surroundings and, with respect for those features, the general layout of the proposed subdivision or land development submitted to the Township for discussion purposes only with the Planning Commission. See Article IV. of this Ordinance for sketch plan content.

PLANNING COMMISSION - The Planning Commission of the Township of Lower Milford, Lehigh County, Pennsylvania.

PRIME AGRICULTURAL LAND – Land used for agricultural purposes that contain soils of the first, second or third class as defined by the United States Department of Agriculture Natural Resource Conservation Services County Soil Survey.

PUBLIC HEARING - A formal meeting held pursuant to public notice by the Lower Milford Township Planning Commission or Board of Supervisors, intended to inform and obtain public comment, prior to action in accordance with the Municipalities Planning Code, Act 247 of 1968, as amended.

PUBLIC MEETING - A meeting preceded by public notice, or a regularly scheduled meeting, for the discussion of a particular matter or required purpose, such as the review, approval, or denial of subdivision or land development applications. Such meetings may, at the discretion of the meeting body, inform and obtain public comment, and shall proceed pursuant to the applicable regulations for the matter at hand, including the Pennsylvania Municipalities Planning Code, Act 247 1968, as amended.

PUBLIC NOTICE - Notice published once each week for two (2) successive weeks in a newspaper of general circulation in the municipality. Such notice shall state the time and place of the hearing and the particular nature of the matter to be considered at the hearing. The first publication shall not be more than 30 days and the second publication shall not be less than seven (7) days from the date of the hearing.

PUBLIC WATER - See **WATER SUPPLY**.

RAZING - The complete removal of an entire building or structure so as to leave no part of the building or structure standing.

RECONSTRUCTION – Any or all work needed to remake or rebuild all or a part of any building to a sound condition, but not necessarily of original materials.

REFORESTATION - The restocking of an area with forest trees, including natural regeneration, as well as tree planting.

RESTORATION - Any or all work connected with the returning to or restoring of a building or a part of any building to its original condition through the use of original or nearly original materials.

RIGHT-OF-WAY - Land reserved or dedicated for use as a street, alley, walkway, or any other public or private purpose.

RIGHT-OF-WAY, FUTURE - The right-of-way deemed appropriate to provide adequate width for future street improvements.

RIGHT-OF-WAY, LEGAL - The right-of-way of streets as established by the Commonwealth of Pennsylvania or other appropriate governing authority.

RIGHT-OF-WAY, ULTIMATE - The maximum boundary line of the right-of-way.

SANITARY SEWAGE DISPOSAL - See **SEWAGE DISPOSAL SYSTEM, INDIVIDUAL**.

SEDIMENTATION POND - A primary sediment control structure, including, but not limited to, a barrier, dam or excavated depression which details water runoff to allow sediment to settle out.

SETBACK LINE - The line denoting the minimum requirements for front yard, side yard, and rear yard of a lot.

SEWAGE - Any substance that contains any of the waste products or excrementitious matter or other discharge from the bodies of human beings or animals and laundry, bathroom, and kitchen waste water.

SEWAGE DISPOSAL SYSTEM

- A. **Individual.** The disposal of sewage from one (1) dwelling unit by use of septic tanks or other safe and healthful means, approved by the Lower Milford Township Sewer Enforcement Officer.
- B. **Community Onlot Sewage System.** A system of piping, tanks, or other facilities serving two or more lots and collecting, treating, and disposal of the sewage into a soil absorption area on one or more of the lots or at another site.
- C. **Public Sewer System (Centralized).** An off-site system for collection, treatment, and disposal of sewage in which sewage is conveyed to a treatment facility and disposed of through means and approved by the Pennsylvania Department of Environmental Protection.

STABILIZATION - The proper placing, grading and/or covering of soil, rock, or earth to insure their resistance to erosion, sliding or other movement.

STORM SEWER - A system of pipes or other conduits which carries intercepted surface runoff, road water and other waters, or drainage, but excludes domestic sewage or wastewater and industrial wastes.

STORMWATER - The precipitation reaching the ground surface.

STORMWATER MANAGEMENT FACILITY - Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to, detention and retention basins, open channels, storm sewers, pipes, and infiltration structures.

STORMWATER MANAGEMENT PLAN - The plan prepared by the developer or his representative indicating how stormwater will be managed in accordance with the requirements of the Lower Milford Township Act 167 Ordinances or other applicable Stormwater Management Ordinance.

STREAM - A watercourse.

SUBDIVIDER - See **DEVELOPER**.

SUBDIVISION - The division or redivision of a lot, tract or parcel of land by any means, into two (2) or more lots, tracts, parcels or other divisions of land, including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development: Provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten (10) acres, not involving any new street, easement of access or any residential dwellings shall be exempted.

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE - The Lower Milford Township Subdivision and Land Development Ordinance, as adopted and amended from time to time.

SURFACE RUN-OFF - Water flowing from a specific site or land area, typically from defined precipitation events such as a 24-hour storm, including flows from pervious natural surfaces in excess of soil permeability rates and flows from fully and partially impervious developed surfaces.

SURVEYOR - A professional land surveyor registered by the Commonwealth of Pennsylvania.

TOPSOIL - The organically enriched layer of soil nearest the soil surface, containing a large part of the nutrient and water supplies to support plant growth, extending in depth to the extent of the majority of plant roots.

TOWNSHIP - The Township of Lower Milford, Lehigh County, Pennsylvania.

TRACT - An area of land, parcel, or property which is the subject of a development application.

TRACT AREA - The total amount of land formed by property lines.

TRACT AREA, GROSS - The tract area.

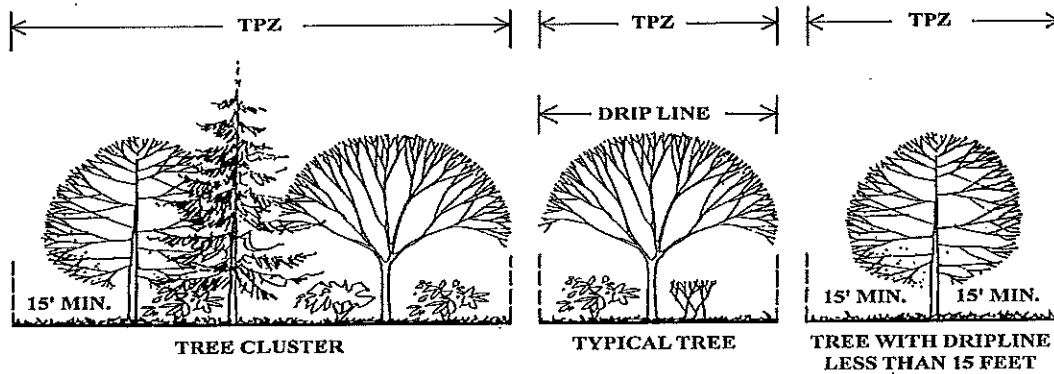
TRACT AREA, NET - See **LOT AREA, NET**.

TRAIL - A right-of-way containing a marked or beaten path, either paved or unpaved, for pedestrians, equestrian or bicycle use.

TREE DRIPLINE - The line marking the outer edges of the branches of the tree.

TREE PROTECTION ZONE - An area that is radial to the trunk of a tree in which no construction activity shall occur. The tree protection zone shall be fifteen (15) feet from the trunk of the tree to be retained, or the distance from the trunk to the dripline, whichever is greater. Where there is a group of trees or woodlands, the tree protection zone shall be the aggregate of the protection zones for the individual trees.

Tree Protection Zone (TPZ)



WATERCOURSE - A watercourse is a channel or conveyance of surface water, whether natural or artificial, having defined bed and banks, with perennial or intermittent flow. For the purpose of this ordinance, the definition of watercourse shall exclude facilities constructed solely for stormwater management.

WATERS OF THE COMMONWEALTH - Any and all rivers, streams, creeks, lakes, rivulets, dammed water, ponds, springs, and all other bodies of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of the Commonwealth of Pennsylvania.

WATER SUPPLY

- A. **Individual.** A supply of water to a single use or dwelling from a private well located on the lot in which the use is located and which does not fall under the definition of "community water supply."
- B. **Community.** A system for supplying water from a common source or sources to more than one dwelling and other buildings within a development. The water supply source may be located on-site or off-site and may be publicly or privately owned.
- C. **Public.** A system for supplying water in sufficient quantities to more than one dwelling or other buildings of a development, which is administered by a municipal authority or by a municipality or public utility as defined and regulated by the Pennsylvania Public Utility Commission.

WATER TABLE - The upper surface of a zone of saturation, except where that surface is formed by an impermeable body.

WETLAND OR WETLANDS – Wetlands are those areas inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, ponds, lakes, and similar areas. Wetlands shall include any area so delineated by the National Wetlands Inventory of the U.S. Fish and Wildlife Service and all lands regulated as wetlands by the Pennsylvania Department of Environmental Protection or the U.S. Army Corps of Engineers. In the event there is a conflict between the definitions of these agencies, the more restrictive definition that defines the wetlands most expansively shall apply.

WETLANDS MARGIN - The transitional area extending seventy-five (75) feet from the outer limit of the wetland. The first twenty-five (25) feet is designated as Zone A with 0% disturbance and the remaining fifty (50) feet is designated as Zone B with a 20% disturbance limitation.

ZONING ORDINANCE – The Lower Milford Township Zoning Ordinance, as adopted and amended from time to time.

ARTICLE III

PROCEDURES FOR SUBDIVISION AND LAND DEVELOPMENT

Section 300. General Provisions

In order to discharge the duties imposed by law, the Township has adopted the procedures set forth herein which shall be observed by all applicants, developers, and their agents.

A. Authority for Plan Approval.

1. Final authority for approval or denial of approval of all preliminary subdivision and land development plans shall be vested in the Township Planning Commission in accordance with the procedures set forth herein. Prior to action by the Planning Commission, all sketch and preliminary plans shall be referred for review to the Township Engineer, other Township consultants, and such other agencies as deemed pertinent by the Planning Commission or as required by law. However, the failure to make such referral and/or the failure by any reviewing party to review and/or make recommendation with respect to any plan shall not affect the validity of any action taken by the Planning Commission with respect to such plan.
2. Final authority for approval or denial of approval of all final subdivision and land development plans shall be vested in the Township Planning Commission in accordance with the procedures set forth herein. Prior to action by the Planning Commission, all final plans shall be referred for review and recommendation to Township Engineer, other Township consultants, and such other agencies as deemed pertinent by the Planning Commission or as required by law. However, the failure to make such referral and/or the failure by any reviewing party to review and/or make recommendation with respect to any plan shall not affect the validity of any action taken by the Commission with respect to such plan.

B. Overview of Plan Submission and Review Process.

Procedures	All Subdivisions or Land Developments
Pre-Application Meeting	Recommended
Existing Resources and Site Analysis Plan (ERSAP)	Required as part of plan submission
Site visit with Township representatives	Recommended
Four-Step Design Process	Required as part of plan submission for the Open Space Design Option
Sketch Plan	Recommended
Preliminary Plan	Required
Final Plan	Required

The plan review steps summarized above represent the standard procedures used in Lower Milford Township. Plan contents shall be as set forth in Article IV and the number of plan sets to be submitted shall be as specified herein.

- C. Plans Exempted from Standard Procedures. In the case of a subdivision or land development which the Township Planning Commission considers to have minimal impact, the Planning Commission may permit the combining or elimination of one or more of the above-listed review stages when circumstances warrant, such as the:

Lot Line Change – When a landowner wishes to change or eliminate a lot line without creating any new lots, the Planning Commission may permit the submission of a Final Plan pursuant to Section 304.C. without requiring a preliminary plan submission, and without requiring supplemental information or improvements normally required for subdivisions.

- D. Municipalities Planning Code Requirements. Preliminary and final plans shall be reviewed in accordance with the requirements of the Pennsylvania Municipalities Planning Code (MPC) and as set forth herein.

- E. Site Access for Purposes of Plan Review. The owner of the parcel of land to be subdivided or developed shall, as part of initial submission in regard to the subject property, submit a written statement on a form provided by Lower Milford Township granting the Lower Milford Township Board of Supervisors, its

authorized agents and representatives, the Planning Commission, and the representatives of Lehigh County, Lehigh Valley Planning Commission, state, and federal departments and agencies having responsibility for review and/or approval under this ordinance the right to enter the parcel of land for the purpose of evaluating the site and the proposed development thereof.

F. Plan Review by Adjacent Municipalities and the Southern Lehigh School District.

1. Any plan applications for tracts of land adjoining the municipal boundary shall, at the same time as any plans or supplementary documentation are submitted to the Township, include submission of one additional complete set of such plans and documentation, which shall be forwarded by the Township to the adjacent municipality for its comments.
2. The Township may solicit comments from an adjacent municipality even if the plan is not on the boundary of the Township, where a plan, in the opinion of the Township, affects the adjacent municipality, in which case additional plan sets may be required.
3. Any plan applications for residential development proposing five (5) or more dwelling units shall, at the same time as any plans or supplementary documentation are submitted to the Township, include submission of one additional complete set of such plans and documentation, which shall be forwarded by the Township to the Southern Lehigh School District for its comments.
4. When comments are solicited from any adjacent municipality or the School District, the Planning Commission shall review the reports from the adjacent municipality as part of the plan review process.

G. Notification of Surrounding Property Owners.

1. The Applicant shall notify in writing all individuals or entities, who own real estate where any portion thereof is adjacent to or within three hundred (300) feet of the proposed subdivision or land development, including property all or partly within adjacent municipalities, of the date, time, and location of the first Planning Commission meeting to be held on such subdivision or land development proposal, and the location of the Township application which is available for public review. Said notification shall be provided by certified mail with return receipt. Copies of the return receipts shall be provided to the Township.
2. The Township shall not be further obligated to provide affected landowners with written notice of subsequent meetings held on the application except as may be required by other provisions of this Ordinance, other Township ordinances, or other applicable legal authority. The failure of any person or entity to receive notice given pursuant to this section shall not constitute grounds for any court to invalidate the actions of the Township.

- H. Multiple plans for the same property shall not be processed simultaneously without the express approval of the Township Planning Commission and, where permitted, may be separately required to be accompanied by all appropriate fees.

Section 301. Pre-Application Planning and Design Procedures

The following procedures are to be followed for plans submitted to Lower Milford Township. The content of required plan submissions is set forth in Article IV.

- A. Pre-Application Meeting. Prior to any formal plan submission, it is strongly recommended that the Applicant for any subdivision or land development approval schedule a pre-application meeting with representatives of the Township, including the Township Engineer and Township Zoning Officer. The purpose of the pre-application meeting is to introduce the Applicant to the Township's planning objectives and applicable regulations and procedures, and to discuss the Applicant's objectives. Applicants are requested to present the required Existing Resources and Site Analysis plan, to the extent available at the time of this meeting. Upon scheduling a pre-application meeting, the Applicant shall establish with the Township an escrow account to cover reasonable costs incurred by the Township. Any funds not utilized shall be refunded.
- B. Existing Resources and Site Analysis Plan (ERSAP). The purpose of the ERSAP submission is to familiarize Township representatives with existing conditions on the Applicant's property and within its immediate vicinity, to provide a complete and factual reference for making a site visit, and to provide a basis for planning and design consistent with the Township's natural and cultural resource protection and design objectives.
 - 1. All applicants for Conditional Use approval for use of the Open Space Design Option, as provided for in the Township's Zoning Ordinance, shall prepare an ERSAP for the application property as a submittal requirement. Such ERSAP shall be prepared in accordance with the requirements contained in Section 400.
 - 2. Where not otherwise submitted pursuant to the provisions of B.1 above, all applicants for non-residential subdivision or land development approval, and all applicants for residential subdivision approval, except for those exempted as described in sub-paragraph 3 below, shall submit an ERSAP prepared in accordance with the requirements contained in Section 400. While this analysis is a required component of Preliminary Plan submission, it is strongly recommended that it be provided prior to scheduling a site visit, or at the time of sketch plan submission, as provided below.
 - 3. ERSAP submittal shall not be required for residential subdivisions proposing four (4) or less lots with all proposed lots being greater than five (5) acres in size; for residential subdivisions creating no more than one (1) new building lot; or for proposed lot line adjustments, lot

consolidations, and agricultural subdivisions which do not include new disturbance activities other than agricultural activities.

C. Site Visit. After preparing the ERSAP, it is requested that all applicants for subdivision or land development approval arrange for a site visit of the property by Township representatives that may include the Township Engineer and any other representatives or consultants as the Township deems appropriate. Upon scheduling a site visit, the Applicant shall establish with the Township an escrow account to cover reasonable costs incurred by the Township if the Applicant has not yet already done so. Any funds not utilized shall be refunded. It is further requested that Applicants distribute copies of the ERSAP to the Township prior to the site visit. Applicants are encouraged to accompany Township representatives. The purpose of the site visit is to familiarize Township representatives and any other representatives or consultants as the Township has deemed appropriate with the property's existing conditions and special features, to identify potential site design issues, and to provide an informal opportunity to discuss site design concepts, including the general layout of open space, undisturbed areas and landscaped areas, potential locations for proposed buildings and road alignments, stormwater management concepts, and protection of natural and cultural (including historic) resources. Comments made by the Township, their staff and consultants, or other representatives shall be only advisory and are not binding on either the Township or the Applicant. It shall be understood by all parties that no formal recommendations can be offered, and no official decisions can be made, at the site visit or during the sketch plan process.

D. Four-Step Design Process. All applicants for sketch plan, Conditional Use approval for use of the Open Space Design Option, as provided for in the Township's Zoning Ordinance, and subdivision or land development approval using the Open Space Design Option of the Lower Milford Township Zoning Ordinance shall use the following four-step design process to assist in determining the most suitable approach to development of the subject site. Applicants for conventional subdivision or land development approval are encouraged, but not required, to follow the four-step design process. The layout of lots or development shall be designed such that areas or features identified as being important in the ERSAP or upon site visit are preserved and the areas of secondary importance are used for development. Demonstration of compliance with the four-step design process is a required component of sketch plan, Conditional Use approval, and Preliminary Plan submission for use of the Open Space Design Option. The steps in the four-step design process are as follows:

1. Step 1: Establishment of Site Context and Delineation of Resources to be left undisturbed, protected, or incorporated into development plans.
 - a. Proposed site resources and open areas to be left undisturbed or specifically incorporated into development plans shall be identified and described based on review and assessment of mapping and other information included in the ERSAP, including open space, agricultural resources, woodlands, other significant vegetation,

slopes, views, and historic resources, as relevant. The pre-application meeting and the site visit shall be used to discuss and help determine those areas that should have minimal or no disturbance.

- b. Special design considerations relative to structural placement, architecture, and landscape treatment shall be identified based on review of the Southwestern Lehigh County Comprehensive Plan and Township Zoning Ordinance, as applicable, as well as assessment of relationships to neighboring properties.
 - c. The open and undisturbed areas identified at this stage of the design process shall include consideration for stormwater management, taking into account areas suitable for groundwater recharge and infiltration, wherever feasible.
2. Step 2: Location of Structures and Alignment of Infrastructure: Buildings, roads, trails, utilities, and stormwater management
- a. Potential building area(s) and zones of land disturbance shall be identified in a manner which provides for maximal conservation of significant site resources as inventoried in the ERSAP and considered in Step 1. Conservation of historic resources may include their incorporation into development plans.
 - b. Building sites shall not be located closer than fifty (50) feet from the boundary of any designated open space lands, taking into consideration the potential negative impacts of development on such areas as well as the potential positive benefits of locations which provide attractive views and visual settings for buildings.
 - c. An access and circulation plan shall be designed to provide pedestrian and vehicular access to the development which reflects a logical relationship to topographic conditions and neighboring properties, and which minimizes further land disturbance or negative impacts to resource protection objectives.
 - d. Locations and methods available for providing facilities for water service, wastewater disposal, stormwater management and other utilities, as necessary, shall be defined and indicated.
3. Step 3: Preparation of Schematic Design, Building and Conservation Plan.
- a. Narrative and plans shall be provided as appropriate to indicate the ways in which the Applicant proposes to undertake development, as defined in Step 2, in order to implement identified design objectives and respect significant existing features of the land

described in the ERSAP and areas designated for non-disturbance in Step 1.

- b. Indication of proposed limits to land disturbance on the subject site, including limits to grading and soil disturbance activities.
- c. Indication of how proposed limits to land disturbance comply with any applicable disturbance limitations set forth in the Township Zoning Ordinance in respect to natural and cultural resources.
- d. Description and plans as necessary to demonstrate how existing natural contours and vegetation will be respected.
- e. Description of the manner in which stormwater will be captured on site for maximum infiltration. This should indicate that the areas best suited for stormwater infiltration have been selected for that purpose, based on hydrologic soil groups and the stormwater management requirements of this ordinance.
- f. Description and plans as necessary to indicate building plan including schematic architecture and incorporation of necessary infrastructure, road improvements, and landscaping.
- g. Description of any historic resources on the site and proposal to preserve their historical integrity, including where incorporated into any building program.

4. Step 4: Drawing Lot Lines/Defining Ownership Responsibilities

Lot lines shall be drawn as required to delineate the boundaries of individual lots, public and private rights-of-way, and open space areas. In all cases, ownership responsibilities shall be defined in a manner which affords implementation of the Schematic Design, Building and Conservation Plan defined in Step 3. Where permanently restricted from development, and where approved by the Board of Supervisors, for a Conditional Use approval, or by the Planning Commission, for a subdivision approval, designated open space areas may be included within the bounds of private lots.

Documentation - Applicants shall be prepared to submit maps indicating the findings of each step of the design process, if so requested by the Planning Commission at the time of Sketch Plan review, if submitted, and if not, at the time of Conditional Use application, for zoning, or at the time of Preliminary and/or Final Plan application, or both.

Section 302. Sketch Plans

- A. Purpose and Applicability. The purpose of the Sketch Plan, which is an optional but strongly encouraged submission for all plans, is to afford the Applicant the

opportunity to consult early and informally with the Planning Commission and the Township before submission of formal plans: Conditional Use approval for zoning; or preliminary or final plan, as applicable for subdivision or land development approval. The sketch plan is viewed by the Township as an important, valuable, and highly recommended submittal that can speed the review process and may result in lower costs for the project. It is strongly recommended that all applicants for sketch plan review follow the Pre-Application Planning and Design Procedures set forth in Section 301.

B. Sketch Plan Submission and Review.

1. Applicant shall submit nine (9) copies of the Sketch Plan application and any supplemental studies or information to the Township. Submitted applications shall be prepared in accordance with the requirements contained in Section 401. Applications for subdivision or land development approval shall be accompanied by the ERSAP and, for subdivisions utilizing the Zoning Ordinance's Open Space Design Option, documentation of fulfillment of the Four-Step Design Process. It is requested that the Sketch Plan and supporting materials be filed with the Township at least twenty-eight (28) calendar days prior to the Planning Commission meeting at which the Applicant requests that time be reserved on the agenda to discuss the Sketch Plan. Submission by the Applicant within the required time does not guarantee that the Applicant will be on the next Planning Commission agenda.
2. In addition to the paper copy submission, the Sketch Plan also shall be submitted to the Township electronically in the format specified by the Township Engineer.
3. Copies of the Sketch Plan application shall be distributed by the Township to the Township Planning Commission, Township Engineer, and any other Township consultant or appointed committee of the Board of Supervisors as determined appropriate by the Township or its Planning Commission.
4. The Applicant shall present the Sketch Plan and supporting materials to the Township Planning Commission. While not guaranteed, the Sketch Plan application will generally be placed on the next regularly scheduled public meeting agenda subsequent to submission in accordance with Section 302.B.1, above. Failure of the Applicant or his agent to be present at the Planning Commission meeting where the Sketch Plan application has been placed on the public meeting agenda shall result in deferral of the agenda item until the next available Planning Commission meeting.
5. The Township Planning Commission shall review the Sketch Plan and shall discuss the plan upon presentation by the Applicant or at subsequent public meeting(s). As a result of their review and discussion, the Planning Commission shall informally advise the Applicant of the extent to which the proposed subdivision or land development conforms to relevant Township ordinances, regulations and policies; to Township planning,

design and historic preservation objectives; and to environmentally responsible design; and may suggest possible plan modifications. To the extent that sufficient information has been submitted or presented to the Planning Commission, the Commission shall undertake a general review which may encompass but shall not be limited to:

- a. the compatibility of the proposal with respect to the objectives and policy recommendations of the Southwestern Lehigh County Comprehensive Plan, and other plans as applicable;
 - b. consistency with the Zoning Ordinance;
 - c. compatibility of the plan with the input from the Pre-Application Conference, Site Visit, ERSAP, and the Four-Step Design Process where requested;
 - d. the location of all areas proposed for land disturbance (roads, foundations, yards, utilities and wastewater disposal systems, storm water management areas, etc.) with respect to notable features of natural or cultural significance as identified on the Applicant's ERSAP;
 - e. the proposed building density and impervious coverage;
 - f. the potential for vehicular and pedestrian connections with existing roads, other proposed roads, and existing or potential development on neighboring properties;
 - g. the location of proposed access points along the existing road network; and
 - h. the need for any waivers or modifications from otherwise applicable ordinance standards.
6. Prior to making recommendations on the proposed Sketch Plan, the Planning Commission may request the preliminary input of the Township's Zoning Officer, the Township's planning and engineering consultants, and other Township commissions or committees where relevant (e.g., Historical Commission), and may hear comments from surrounding or affected landowners present at its public meeting(s). All planning and engineering review fees shall be the responsibility of the Applicant.
7. All comments and recommendations made by Township representatives in regard to Sketch Plan review are non-binding. No comment or recommendation, nor the failure of the Planning Commission or any Township representative, to proceed or act in accordance with this Section, shall be deemed to be a decision with respect to any subdivision or land development plan or to vest any rights in the Applicant.

Section 303. Preliminary Plans

A. Purpose and Applicability.

1. All applicants for subdivision or land development approval, except those submitting plans exempted from standard provisions as provided for in Section 300.C., shall submit a Preliminary Plan application which is a set of documents demonstrating compliance with zoning provisions, showing existing features, proposed road and lot layout, storm water management facilities and engineering detail sufficient to ensure proper functioning of proposed improvements and sufficient to meet the plan requirements of this ordinance. Applicants for Lot Line Change pursuant to Section 300.C.1. may proceed with Final Plan application.
2. It is strongly recommended that all applicants for Preliminary Plan approval follow the Pre-Application Planning and Design Procedures set forth in Section 301, and submit a Sketch Plan as set forth in Section 302, prior to formal submission of a Preliminary Plan application. Applicants are advised that those who choose to submit Preliminary Plans without taking advantage of Pre-Application and Sketch Plan options may incur added engineering expense. Evaluation of planning, design, and ordinance issues, occurring during pre-application and sketch plan review with the Township, can facilitate the Final Plan review process by addressing a number of issues at an early stage during plan preparation.
3. The Preliminary Plan application shall conform to any conditions of approval from a previously approved Variance, Special Exception, or Conditional Use application. The Preliminary Plan application shall otherwise conform to all information requirements and procedures set forth herein.

B. Preliminary Plan Submission and Acceptance for Review.

1. The Preliminary Plan application shall include all information as set forth in Section 402, specifically including the ERSAP and documentation of fulfillment of the Four-Step Design Process for subdivisions filed pursuant to the Open Space Design Option of the Zoning Ordinance. Steps which have been satisfactorily completed during the Pre-Application or Sketch Plan review stages need not be undertaken again. Submitted plans and accompanying documentation shall be clearly marked "Preliminary Plans."
2. Applicant shall submit the Preliminary Plan application, including all required supporting information and materials, to the Township. Official submission shall comprise:
 - a. Ten (10) copies of a completed Application for Review of Preliminary Subdivision Plans;

- b. Ten (10) black-on-white or blue-on-white prints on paper of the Preliminary Plan which shall fully comply with the provisions of this Ordinance as set forth in Section 402;
 - c. Ten (10) copies of all required supplemental information and studies as set forth in Sections 404 through 408, as applicable;
 - d. Ten (10) copies of 11" x 17" reduced scale copies of the Preliminary Plans;
 - e. Ten (10) copies of a waiver request letter, if applicable; and
 - f. The appropriate filing fee(s).
- 3. In addition to the filing of paper copies, plans included in the Preliminary Plan application also shall be submitted to the Township electronically in the format specified by the Township Engineer.
 - 4. All of the documentation required by this ordinance shall be included with the application and required escrow, review, and/or filing fees shall be submitted to the Township in accordance with the municipal fee schedule.
 - 5. The Preliminary Plan application shall be filed with the Township at least twenty-eight (28) calendar days prior to the Planning Commission meeting at which the Applicant requests that time be reserved on the agenda to discuss the Preliminary Plan. Submission by the Applicant within the required time does not guarantee that the Applicant will be on the next Planning Commission agenda.
 - 6. Where not previously accomplished, upon Township acceptance of a submission for review, the Applicant shall arrange for a site visit of the subject property as set forth in Section 301.C.
- C. Distribution of Preliminary Plans. The Township Zoning Officer shall refer preliminary plan submission materials to the various review bodies as follows:
- 1. Three (3) plan prints and three (3) copies of the supplemental information/studies to the Township Planning Commission;
 - 2. One (1) application, one (1) plan print, and one (1) copy of the supplemental information/studies to the Township Engineer;
 - 3. One (1) application, one (1) plan print, and one (1) copy of the supplemental information/studies to the Township Sewage Officer;
 - 4. One (1) application and one (1) plan print for residential subdivisions proposing five (5) or more new dwelling units to the Southern Lehigh School District for all residential subdivisions or land developments;

5. One (1) application, one (1) plan print, and one (1) copy of the supplemental information/studies to be retained by the Township Zoning Officer;
 6. Whenever a proposed subdivision or land development is located adjacent to another municipality, one (1) application and one (1) plan print shall be referred to that municipality; and
 7. One (1) application, one (1) plan print, and one (1) copy of the supplemental information/studies to the Township Recreation and Open Space Board.
- D. Additional Distribution of Preliminary Plans. Additional copies of the Preliminary Plan materials shall be required and shall be submitted by the Applicant to the respective agencies in the following circumstances:
1. One (1) application, one (1) plan print, and one (1) copy of the supplemental information/studies to the Lehigh Valley Planning Commission;
 2. One (1) plan print and one (1) copy of the supplemental information/studies to the Lehigh County Conservation District;
 3. Whenever the property being subdivided or developed abuts a State Legislative Route, one (1) application and one (1) plan print shall be submitted to the Pennsylvania Department of Transportation District Office;
 4. Whenever the property being subdivided or developed abuts or includes an electric power line right-of-way, one (1) plan print shall be submitted to the appropriate electric utility; and
 5. Any fees required by any of the above-listed review authorities for the review of submitted plans shall be directly paid by the Applicant, and evidence of such payment shall be provided to the Township.

E. Review of the Preliminary Plan and Rendering of Decision.

1. Official Review Period.

The Planning Commission shall render its decision that the submitted plan be approved, approved with conditions, or disapproved within the time period set by applicable law for decision making. This time may be extended if the Applicant grants an extension of time to the Township in writing, on a form provided by the Township. Any extensions of time shall be granted in minimum increments of ninety (90) days.

2. Review by Township Engineer, Zoning Officer, and other Township Staff and Consultants

- a. The review shall assure the following:
 - i. that all information required by this Ordinance is presented in the plans submitted and that the submission complies with all requirements of this Ordinance;
 - ii. compliance with all other Township ordinances, resolutions, regulations, and policies;
 - iii. in the case of the Open Space Design Option, compliance with the Four-Step Design Process;
 - iv. that any conditions set forth in any previous order or approval for conditional use, special exception, or zoning variance have been complied with, if applicable; and
 - v. that, in the opinion of the Township Engineer, the various schemes presented for the location, alignment and grade of roads, stormwater management/Best Management Practices, erosion and sedimentation control, physical site constraints, site grading, sanitary sewers, water supply, and any other proposed improvements are feasible from an engineering perspective.
 - b. The Township Engineer and other staff and consultants, as applicable, shall submit their written comments to the Township. All review fees shall be the responsibility of the Applicant and shall be deducted from the escrow deposit.
 - c. The Township at its discretion may engage additional review by the Township Engineer, Township staff, Township commissions or committees in addition to the Planning Commission where relevant (e.g., Historical Commission), land planning consultant, or other professional consultants to the Township to ascertain the accuracy of the preliminary plan and submitted supplementary data or materials, as deemed necessary based on the specific circumstances of the subject application. All additional review fees shall be the responsibility of the Applicant, and shall be deducted from the escrow deposit.
3. Review by Lehigh Valley Planning Commission and Other Agencies.
- a. Lehigh Valley Planning Commission. The Lehigh Valley Planning Commission will be provided the opportunity as required by the

Municipalities Planning Code (MPC) to review and comment on the preliminary subdivision plan materials.

- b. Lehigh County Planning Commission. The Lehigh County Planning Commission will be provided the opportunity to timely review and comment on matters relating to the Township's adopted Act 167 Stormwater Management Ordinances.
- c. Lehigh County Conservation District. The Lehigh County Conservation District will be provided the opportunity to timely review and comment on matters relating to site drainage, control and abatement of soil erosion and sedimentation, stormwater management/Best Management Practices, open space management where applicable, and compliance with National Pollutant Discharge Elimination System (NPDES) and NPDES Phase II requirements. Input from the Lehigh County Conservation District may be waived by the Township Planning Commission upon the recommendation of the Township Engineer.
- d. Other Agencies. County, state, federal, or other reviewing or regulatory agencies having jurisdiction over all or a portion of the property subject to application will be provided the opportunity to review and comment on permit or other agency-specific matters.

4. Review by the Township Planning Commission.

- a. The Township Planning Commission shall at its duly advertised public meetings review the preliminary plan application in accordance with:
 - i. the criteria contained in this Ordinance and any other applicable ordinances, resolutions, regulations or policies;
 - ii. with any conditions of approval contained in any applicable Order or Approval for any conditional use, special exception, zoning variance, or other form of granted zoning relief;
 - iii. with the results of any sketch plan review or discussion and any previously submitted documentation of the Four-Step Design Process; and
 - iv. in consideration of the comments submitted to the Township by the Township Engineer and any other Township consultants.

- b. Where not previously provided, the Planning Commission may request that the Applicant submit documentation of compliance with the Four-Step Design Process. The Planning Commission review shall further include, but is not limited to, those items set forth in Section 302.B.5.a through h of this Ordinance.
- c. The Applicant or designated representative shall be present at such meeting to provide dialogue with the Planning Commission. Failure of the Applicant or designated representative to attend the initial Planning Commission meeting where such Preliminary Plan has been placed on the agenda for discussion shall automatically defer that agenda item until the next regularly scheduled Planning Commission meeting.
- d. No action shall be taken by the Township Planning Commission with respect to a Preliminary Plan until the Township Planning Commission has received and considered the written report of the Lehigh Valley Planning Commission. However, if the Lehigh Valley Planning Commission shall fail to report thereon within thirty (30) days after receipt of a Preliminary Plan, then the Township Planning Commission may officially act without having received and considered such report.
- e. Prior to officially acting on any Preliminary Plan application, the Township Planning Commission may request the input and/or may review the written comments or testimony of any of the Township's planning and engineering consultants, Zoning Officer, or other agencies involved in review of the subject plan as provided in Sections 303.D.2 and 3 above; it may receive comments from surrounding or affected landowners; and it may also conduct a site visit(s) to facilitate its review and decision-making. All fees for the input, written comments, or testimony requested by the Planning Commission shall be the responsibility of the Applicant, and shall be deducted from the escrow deposit.
- f. Except where an extension of time is granted by the Applicant, the Planning Commission shall approve, conditionally approve, or disapprove the Preliminary Plan within the time period set by applicable law for decision-making. If a conditional approval is granted, a letter confirming the acceptance of any conditions must be completed and signed by the Applicant or designated agent the same night that the Planning Commission grants the conditional approval.

- g. The decision shall be in writing and shall be communicated to the Applicant personally or mailed to him at his last known address not later than fifteen (15) days following the decision.
 - i. When the application is not approved as filed, the decision shall specify the defects found in the application, describe requirements which have not been met and shall cite the provisions of the statute, ordinance, resolution, regulation and/or policy relied upon.
- h. The Planning Commission decision shall also be communicated in writing to the Township Zoning Officer, Township Engineer, Sewage Enforcement Officer, and Lehigh Valley Planning Commission.
- i. Upon approval of the Preliminary Plan application, the Planning Commission shall designate one copy of the preliminary plan as the official copy. This copy shall include all necessary corrections as required by the Planning Commission. It shall be retained in the Township files. This plan shall contain a fully executed property owner's certification. (Sample wording is provided in Appendix A of this Ordinance.)
- j. Approval of the preliminary plan shall not constitute approval of the Final Plan or authorize the sale of lots or construction of buildings.

Section 304. Final Plans

A. Purpose.

The purpose of the Final Plan application for subdivision or land development is to demonstrate full compliance with this Ordinance, with applicable zoning provisions and with all other applicable laws, policies, and regulations prior to formal recording of all relevant planning documents and land records, and to ensure long-term proper functioning, maintenance and funding for all proposed improvements.

B. Applicability.

- 1. Within one (1) year after approval of the Preliminary Plan, a Final Subdivision or Land Development Plan (Final Plan) and all required supplemental data and impact studies or assessments shall be submitted to the Township. An extension of time may be granted by the Township Planning Commission upon written request filed at least twenty-eight (28) days prior to the one-year expiration date. Otherwise, the plan submitted

will be considered as a new Preliminary Plan and related procedures must be followed.

2. The Final Plan shall conform in all significant respects to the Preliminary Plan as previously approved by the Township Planning Commission and shall incorporate all modifications required in its Preliminary Plan approval. However, the Township Planning Commission may accept a final plan with substantial changes which have occurred since the time of preliminary plan review.
3. The Final Plan may be submitted in sections or stages, each covering a reasonable portion of the entire proposed subdivision as shown on the reviewed Preliminary Plan, in accordance with the regulations set forth in Section 403. In the case of the Final Plan which is to be submitted in sections or stages over a period of years, the time between submission of application for final approval of each stage or section shall be no greater than twelve (12) months from the approval date of the previous stage.
4. All Final Plan applications shall conform to any Order or Approval for any conditional use, special exception, zoning variance, or other form of granted zoning relief.
5. For plans exempted from standard procedure submission as provided for in Section 300.C., such as lot line changes, and subdivision application resubmissions, Final Plans may be filed at any time, pursuant to the submittal and acceptance procedures of Section 304.C, and in the case of application resubmissions, subject to the approval of the Township Planning Commission.
6. Final Plan application cannot be submitted until the Preliminary Plans have received approval from the Planning Commission.

C. Final Plan Submission and Acceptance for Review.

1. The Final Plan application shall include all information as set forth in Section 403 and Sections 404 through 408 of this Ordinance as applicable. Steps which have been satisfactorily completed during the Pre-Application, Sketch Plan, or Preliminary Plan review stages, as applicable, and meet applicable criteria for Final Plan submission, need not be undertaken again. Submitted plans and accompanying documentation shall be clearly marked "Final Plans."
2. Official submission of a Final Plan to the Township shall comprise:
 - a. Ten (10) copies of the completed Application for Review of Final Subdivision or Land Development Plan;

- b. Ten (10) black-on-white or blue-on-white prints on paper of the Final Plan which shall fully comply with the provisions of this Ordinance as set forth in Section 403;
 - c. Ten (10) copies of all required supplemental information and studies as set forth in Sections 404 through 408, as applicable;
 - d. Ten (10) copies of 11" x 17" reduced scale copies of the Preliminary Plans;
 - e. Ten (10) copies of a waiver letter, if applicable; and
 - f. The appropriate filing fee(s).
- 3. The Final Plan application shall be filed with the Township at least twenty eight (28) calendar days prior to the Planning Commission meeting at which the Applicant requests that time be reserved on the agenda to discuss the Final Plan. Submission by the Applicant within the required time does not guarantee that the Applicant will be on the next Planning Commission agenda.
 - 4. Where specifically requested by the Township upon the recommendation of the Township Engineer, plans included in the Final Plan application also shall be submitted to the Township electronically in the format specified by the Township Engineer.
 - 5. All of the documentation required by this ordinance shall be included with the application and required escrow, review, and/or filing fees shall be submitted to the Township in accordance with the municipal fee schedule.
- D. Distribution of Final Plans. The Township Zoning Officer shall refer final plan submission materials to the various review bodies as follows:
- 1. Three (3) plan prints and three (3) copies of the supplemental information/studies to the Township Planning Commission;
 - 2. One (1) plan print and one (1) copy of the supplemental information/studies to the Township Engineer;
 - 3. One (1) plan print to the Township Sewage Enforcement Officer;
 - 4. One (1) plan print may be forwarded to the Southern Lehigh School District for any plans exempted from standard procedure submission; and
 - 5. One (1) plan print and one (1) copy of the supplemental information/studies to be retained by the Township Zoning Officer.
- E. Additional Distribution of Final Plans. Additional copies of the Final Plan materials shall be required and shall be submitted by the Applicant to the respective agencies in the following circumstances:

1. One (1) plan print and one (1) copy of the supplemental information/studies to the Lehigh Valley Planning Commission;
2. One (1) plan print and one (1) copy of the supplemental information/studies to the Lehigh County Conservation District;
3. One (1) plan print shall be submitted to the Pennsylvania Department of Transportation District Office, unless a Highway Occupancy Permit has been received;
4. One (1) plan print shall be submitted to the appropriate electric utility whenever the property being subdivided or developed abuts or includes an electric power line right-of-way, unless comments were previously received and no revisions were requested; and
5. Any fees required by any of the above-listed review authorities for the review of submitted plans shall be directly paid by the Applicant, and evidence of such payment shall be provided to the Township.

F. Review of the Final Plan.

1. Official Review Period.

The Township Planning Commission shall take action by approving or disapproving of the Final Plan not later than ninety (90) days following the date of the next regular meeting of the Township Planning Commission following the date the application is accepted for review, provided that should the next regular meeting be more than thirty (30) days following acceptance for review, said ninety (90) day period shall be measured from the thirtieth (30th) day following the day the application is accepted for review.

2. Review by Township Engineer, Zoning Officer and other Township Staff and Consultants.

a. The review of the Final Plan shall assure the following:

- i. that all information required by this Ordinance is presented in the plans submitted;
- ii. that all other applicable Township ordinances, regulations, and policies are complied with;
- iii. that the Final Plan conforms with the approved Preliminary Plan, as applicable; and

- iv. that any conditions set forth in any Order or Approval for any conditional use, special exception, or zoning variance have been complied with.
 - b. The Township Engineer and other staff and consultants, as applicable, shall submit their written comments to the Township. All review fees shall be the responsibility of the Applicant and shall be deducted from the escrow deposit.
 - c. The Township at its discretion may engage additional review by the Township Engineer, Township staff, Township commissions or committees in addition to the Planning Commission where relevant (e.g., Historical Commission), land planning consultant, or other professional consultants to the Township to ascertain the accuracy of the Final Plan and submitted supplementary data, materials, or documentation, as deemed necessary based on the specific circumstances of the subject application. All additional review fees shall be the responsibility of the Applicant, and shall be deducted from the escrow deposit.
- 3. Review by Lehigh County and Other Agencies.
 - a. Lehigh Valley Planning Commission. The Lehigh Valley Planning Commission will be provided the opportunity as required by the Municipalities Planning Code (MPC) to timely review and comment on the Final Plan submission.
 - b. Lehigh County Planning Commission. The Lehigh County Planning Commission will be provided the opportunity to timely review and comment on matters relating to the Township's adopted Act 167 Stormwater Management Ordinances.
 - c. Lehigh County Conservation District. The Lehigh County Conservation District will be provided the opportunity to timely review and comment on matters relating to site drainage, control and abatement of soil erosion and sedimentation, stormwater management/Best Management Practices, open space management where applicable, and compliance with NPDES and NPDES Phase II requirements. Input from the Lehigh County Conservation District may be waived by the Township Planning Commission upon the recommendation of the Township Engineer.
 - d. Other Agencies. Other County, state, federal, or other reviewing or regulatory agencies having jurisdiction over all or a portion of the property subject to application may also be provided the opportunity to review and comment on permit or other agency-

specific matters as applicable and where not duplicative of any relevant prior review.

4. Action by the Township Planning Commission.
 - a. The Township Planning Commission shall, at its duly advertised public meeting, review the Final Plan application:
 - i. for consistency with any applicable Preliminary Plan approval;
 - ii. for compliance with the criteria contained in this Ordinance and other applicable ordinances, regulations, and policies of the Township;
 - iii. for compliance with any Order or Approval for any conditional use, special exception, zoning variance, or any other form of granted zoning relief; and
 - iv. in consideration of the comments submitted to the Township by the Township Engineer and any other Township consultants.
 - b. The Applicant or designated representative shall be present at such meeting to provide dialogue with the Planning Commission.
 - c. Prior to communicating its decision to an applicant, the Commission may request the input and/or may review the written comments or testimony of any of the Township's planning and engineering consultants or other agencies involved in review of the subject plan as provided in Sections 304.F.2 and 3 above; and it may conduct a site visit(s) to facilitate its review.
 - d. The Final Plan shall not be recorded until the Sewage Planning Module approval is received by Lower Milford Township from the Department of Environmental Protection as required and as provided for in the PA Code – Title 25, Chapter 71, and as may be amended thereafter.
 - e. Except where an extension of time is granted by the Applicant, the Planning Commission shall take action by approving, or disapproving, the Final Plan within the Official Review Period.
 - i. When the Final Plan is not approved as filed, the Commission's decision shall specify the defects found in the Final Plan application, describe requirements which

have not been met and shall cite the provisions of the statute, ordinance, resolution, regulation and/or policy relied upon.

- f. The Planning Commission may include with its approval, conditions, changes, modifications, or additions to the application which the Commission deems necessary. Prior to Final Plan approval, the Applicant or designated agent shall agree in writing to these conditions, changes, modifications, or additions. The acceptance of conditions must be completed and signed the same night that the Planning Commission grants the conditional approval.
- g. The Township Planning Commission shall document the findings upon which their action is based in writing to:
 - i. The Applicant, developer, or his representative by certified mail return receipt;
 - ii. The Township Zoning Officer;
 - iii. The Township Board of Supervisors;
 - iv. The Township Engineer;
 - v. The Sewage Enforcement Officer; and
 - vi. The Lehigh Valley Planning Commission.

In no case shall the action of the Planning Commission be communicated to the Applicant later than fifteen (15) days from the date such action was taken.

- h. When all conditions of Final Plan approval have been satisfied as determined in writing by the Township's Engineer, the Applicant's Final Plan shall be forwarded to the Board of Supervisors for endorsement and recordation.

G. Board of Supervisors Endorsement and Recordation of the Final Plan.

- 1. Prior to endorsement of the Final Plan by the Board of Supervisors, the Applicant shall submit the following documentation to the Township:
 - a. Eight (8) paper prints and two (2) reproducible prints of the Final Record Plan fully executed by the owner(s) of the property;

- b. One (1) complete set of the Final Plans fully executed by the owner(s) of the property;
- c. One (1) disk containing complete set of Final Plans AutoCAD format (.dwg);
- d. A completed and executed copy of the Subdivision Improvements Agreement and Maintenance Agreement as agreed upon by the Applicant/developer and the Planning Commission;
- e. A performance guarantee based on the Subdivision Improvements Agreement in the amount of one hundred ten (110) percent of the cost of all required improvements as set forth in Section 703 guaranteeing the construction and installation of all such improvements within a stated period, which shall not be longer than one (1) year from the date of the Final Plan approval. Where the Final Plan is to be developed in stages or sections, the amount of the guarantee may also be provided in stages if acceptable to the Planning Commission. Where the Final Plan is to be developed in stages and sections, each stage or section shall have a performance guarantee that commits the Applicant or developer to constructing and installing all such improvements within a stated period, which shall not be longer than one (1) year from the date of the Final Plan approval of that stage;
- f. A maintenance guarantee based on the Maintenance Agreement in an amount of not less than fifteen (15) percent of the actual cost of the installation of the improvements as set forth in Section 703. This guarantee assures the structural integrity of the improvements as well as the functioning of said improvements in accordance with the design and specifications as depicted on the Final Plan for a term of eighteen (18) months after the acceptance of all such improvements by the Planning Commission;
- g. Approval by the Lehigh County Conservation District of the erosion and sedimentation control plan. If needed, a copy of the Department of Environmental NPDES permit shall also be submitted;
- h. Review by the Lehigh Valley Planning Commission of the stormwater management plan prepared pursuant to the Township's applicable Act 167 Stormwater Management Ordinance;
- i. A legal deed of dedication of all areas offered to the Township;

- j. A copy of the Pennsylvania Department of Transportation Highway Occupancy Permit, if applicable; and
 - k. Copies of any other permits or approvals necessary for the commencement of construction activities.
2. The Final Plan forwarded to the Township Board of Supervisors for endorsement shall be signed and dated by the Chairman and Secretary of the Planning Commission, and shall include signature blocks for the Chairman and Secretary of the Board of Supervisors. Eight (8) paper prints and two (2) reproducible prints of the Final Record Plan and one complete set of reproducible drawings shall be endorsed by the Board of Supervisors.
 3. The signature of the Lehigh Valley Planning Commission shall be placed on all prints of the endorsed Final Plan indicating Lehigh Valley Planning Commission review of the plans, and a fully endorsed and signed paper print shall be provided to the Commission.
 4. The Township shall then prepare, and file, one (1) of the endorsed Final Record Plans with the County Recorder of Deeds within ninety (90) days of Final Plan approval. All Township costs for preparing and recording the Final Plan shall be billed to the Applicant and deducted from the escrow deposit.
 5. The developer shall receive one (1) reproducible print and two (2) paper prints of the endorsed Final Plan.
 6. One (1) paper print of the endorsed Final Plan will also be sent by the Township to the Southern Lehigh School District, and all other copies of the endorsed and recorded plan are retained by the Township.

ARTICLE IV
PLAN CONTENT AND SUPPLEMENTAL STUDY
REQUIREMENTS

Section 400. Required Content of Existing Resources and Site Analysis Plan (ERSAP)

The following information shall be included in any ERSAP required, or filed in support of an application for conditional use, sketch plan, or subdivision or land development approval.

- A. Site boundaries.
- B. Existing Resources Inventory. A comprehensive analysis of existing conditions on the proposed development site and areas within 200 feet, showing:
1. Geologic formations on the proposed development parcel, including rock outcroppings;
 2. Soils - Soils types, based on maps contained in the Soil Survey for Lehigh County, Pennsylvania, U.S. Department of Agriculture, as last revised. The soil classifications and boundary lines of all soils shall be shown. In addition, any alluvial soils, floodplain or hydric soils, or Class I, II, or III agricultural soils shall be graphically indicated. Soil descriptions for all soil types shall be provided and may be in the form of plan notes;
 3. Topography - Contour lines measured at vertical intervals of two (2) feet, determined by aerial photogrammetry or on-site survey;
 4. Slope areas - Areas to be shown graphically. The amount of area in acres, in each slope category shall be indicated;
 - a. Moderately steep slopes - 8% to 15% grade
 - b. Very steep slopes - 15% to 25% grade
 - c. Prohibitively steep slopes - greater than 25% grade
 - d. Steep slope margins, as defined by the Township Zoning Ordinance, shall also be shown graphically.
 - e. Slopes shall be measured as the change in elevation over the horizontal distance between consecutive contour lines and expressed as a percent. For the purpose of application of these

regulations, slope shall be measured over three (3) or more two (2) foot contour intervals (six [6] cumulative vertical feet of slope). All slope measurements shall be based on contour intervals determined by detailed topographical survey using aerial photogrammetry or actual field survey and shall be signed and sealed by a registered surveyor or engineer licensed to practice in the Commonwealth of Pennsylvania.

5. Ridge lines and watershed boundaries;
6. Floodplain areas, using the most recently available FEMA maps. When no FEMA mapping has been prepared, a determination of the floodplain for any stream with a drainage area of three (3) acres or more shall be made by the applicant;
7. Streams, watercourses, Waters of the Commonwealth, lakes, ponds, and all natural drainage areas with an explanation of how site drainage works. Boundaries between drainage areas shall be indicated along with the names of any named stream to which drainage flows. Applicable major drainage basin(s) shall be indicated;
8. Applicable stream classifications made by PA DEP or PA Fish and Boat Commission shall be indicated;
9. Riparian areas, Zones 1 & 2, as defined by the Lower Milford Township Zoning Ordinance, shall be indicated;
10. Woodlands and hedgerows- Woodlands and tree masses as classified by the Woodland Classification Map, Exhibit 3, of the Zoning Ordinance, shall be indicated. Hedgerows, and trees over twelve (12) inches in diameter at breast height (dbh), as well as Heritage Trees, Heritage Vegetation, and Higher Value Species, as defined by the Zoning Ordinance, shall also be indicated;
11. Wetlands and wetland margins - All wetland boundaries and wetland margins as defined by the Zoning Ordinance shall be indicated. Wetland boundaries within the tract shall be determined from on-site delineation in accordance with the 1987 US Army Corps of Engineers Wetlands Delineation Manual. All wetlands shall be classified as one of the following: exceptional value, important, or limited value. Wetlands delineation and classification shall be conducted by professional(s) acceptable to the Township, and shall be plotted from actual field survey;
 - a. If any wetland disturbance is proposed, a detailed Wetland Delineation Report shall be provided.

- b. The wetland delineation must have been completed within one (1) year of the submission of the preliminary plan and shall be deemed valid for five (5) years from the date of submission.
 - c. The Township may undertake its own wetland delineation at the applicant's expense if any of the following site-specific criteria are applicable:
 - i. It is recommended by the Township Engineer due to uncertainties raised by the applicant's delineation or if conflicts exist between the applicant's delineation and wetlands information obtained from other sources including surrounding subdivisions.
 - ii. Greater than one acre of wetlands exists on-site.
 - iii. Wetlands on-site are associated with a wetland system of ten or more contiguous acres.
 - d. In the event the applicant's and the Township's delineations are conflicting, the delineation which will result in the preservation of the larger area of wetlands shall govern.
12. Any Pennsylvania Natural Diversity Inventory Sites and any resources identified in *A Natural Areas Inventory of Lehigh and Northampton Counties, Pennsylvania, 2005 Update or latest addition*;
13. Reference to any areas or properties designated for conservation or preservation or indicated as sensitive environmental areas in the Southwestern Lehigh County Comprehensive Plan, and applicable regional and local recreation and open space plan adopted by Lower Milford Township;
14. Groundwater (may be substituted at preliminary plan submission by Water Resource Impact Study);
- a. Groundwater classifications and aquifer designations.
 - b. Principal groundwater recharge zones.
 - c. Individual groundwater withdrawals greater than 10,000 gallons per day.
 - d. Existing residential wells.
 - e. Groundwater elevations, if possible.

- f. Stream and/or stormwater runoff from the site shall be tested for all pollutants listed in the Township's municipal separate storm sewer system NPDES II permit and/or total maximum daily load requirements, if applicable.
15. Areas of known environmental impact (e.g., failed septic, leaking underground storage tank (UST), polluted stream flow and/or stormwater runoff, eroded stream embankments, sludge application, heavy agricultural or forest pesticide or herbicide use), via laboratory analysis and photographic evidence, shall be included;
16. Existing and historical land uses shall be indicated, or described, including, but not limited to:
 - a. Open space and greenways.
 - b. Parks and trails.
 - c. Equestrian farms and lands.
 - d. Areas used for crop farming or orchards.
 - e. Areas used for sludge application.
17. Historic resources on-site, and within two-hundred fifty (250) feet of the proposed uses, as may be included on the Lower Milford Township Historic Resource Inventory, or which may have been indicated as historic by the Pennsylvania Historical and Museum Commission or local information sources;
18. All recorded easements and deed restrictions;
19. Existing buildings, structures, and roads;
20. Photographs of the site including views from all abutting public roads;
21. For sketch plan, conditional use, and subdivision applications filed pursuant to the Open Space Design Option of the Zoning Ordinance, a view shed analysis shall be prepared, which shall indicate:
 - a. the scope and character of views into the tract from outside the tract, from public roads and from private properties in relationship to identified site features.
 - b. The scope and character of views within the tract in relationship to identified site features.

- c. The scope and character of external views from within the tract.
 - d. A notation of any and all scenic roads.
22. Aerial photograph of the site – most recent available;
- C. Applicants for sketch plan, or conditional use approval, shall submit the above-listed information to the extent available from existing published information and where not otherwise waived by the Township.
- D. All applicants may rely on existing published information for submitting the above-listed information required for lands adjoining the proposed development site.

Section 401. Required Content of Sketch Plans

A sketch plan to be submitted as part of a conditional use request for the Open Space Design Option of the Zoning Ordinance, or when filed in advance of Preliminary Plan submittal pursuant to this Ordinance, shall consist of and be prepared in accordance with the following standards:

A. Drafting Standards.

Specific drafting standards are not required for Sketch Plan submission, however, to the extent practicable at the time of Sketch Plan submission, it is strongly suggested that the drafting standards set forth in Section 402.A for Preliminary Plan submission be employed.

B. Required Contents of Sketch Plan.

1. Name and address of the legal owner, the equitable owner, and/or the Applicant.
2. Tax Parcel Number(s) from current Lehigh County Tax Assessors records.
3. Name and address of the professional engineer, surveyor, planner, architect, landscape architect, or site designer responsible for preparing the plan.
4. Graphic scale (not to exceed 1 inch = 400 feet) and true north arrow. Precise scale and dimensions are not required at the time of Sketch Plan submission; however, the subject plan shall clearly be titled "Sketch Plan."
5. Approximate tract boundaries and tract size.

6. Location map showing relation of the site to adjoining properties, municipal boundaries, and streets within one thousand (1,000) feet. Scale 1" = 800'. The map is to be based on applicable tax maps and include the relationship to the nearest street intersection.
7. Zoning requirements for the proposed use, including:
 - a. applicable districts and overlays.
 - b. maximum density permitted and proposed density.
 - c. required and proposed lot sizes and yard requirements.
 - d. any required and proposed open space and impervious surface ratios.
 - e. identification of a Building Envelope on each lot, and documentation of the Site Capacity Calculations on the entire tract and on each lot, performed pursuant to Section 1009.E. and F., respectively, of the Township Zoning Ordinance.
 - f. any variances, conditional use, special exceptions, or other forms of zoning relief granted, or to be sought.
8. Locations and names of existing and proposed streets on, adjacent to, or within one hundred (100) feet of the subject tract.
9. A brief narrative description of the subdivision or land development proposal.
10. Topographic, physical, and cultural features as required in the ERSAP as provided in Section 400. Where aerial photogrammetry or on-site topographic survey has not been completed at the time of Sketch Plan submission, USGS topographic information may be utilized.
11. Schematic layout indicating a general concept for land conservation and development including lot lines, if any, proposed locations of buildings and other major structures, parking areas, roads and other vehicular and pedestrian access ways, necessary utilities and proposed stormwater management locations, including Best Management Practices, roadscape, landscape, and recreational improvements, and any other improvements; for sketch plans, conditional use, or preliminary subdivision applications filed pursuant to the Open Space Design Option of the Zoning Ordinance, the schematic layout shall demonstrate a clear evolution of the Schematic

Design, Building and Conservation Plan defined in the required Four-Step Design Process (See Section 301.D of this Ordinance).

Section 402. Required Content of Preliminary Plans

A preliminary plan shall consist of and be prepared in accordance with the following minimum standards:

A. Drafting Standards.

1. The plan shall be drawn on a scale equal to or larger than 1" = 100'.
2. Dimensions shall be set in feet, bearing in degrees, minutes, and seconds, with errors of closure not to exceed one part per 10,000.
3. Each sheet shall be numbered and shall show its relationship to the total number of sheets.
4. The plan shall bear an adequate legend to indicate clearly which features are existing and which are proposed.
5. The original drawing, and all submitted prints thereof, shall be made on sheets no larger than thirty-six (36) inches by forty-eight (48) inches and no smaller than eighteen (18) inches by twenty-four (24) inches.
6. If the preliminary plan requires more than one sheet, a master sheet at a scale not smaller than 1"= 200' showing the location of each section shall accompany the plan, or a key diagram illustrating relative location of the several sections shall be drawn on each sheet.
7. If more than one scale is used in the plan, a key must be provided that indicates the differences in scales.

B. Required Content of Preliminary Plan and Supplementary Documentation.

1. A location map and north arrow for the purpose of locating the site to be subdivided or developed, at a scale of not less than eight hundred (800) feet to the inch, showing the relation of the tract to adjoining property and to all roads and municipal boundaries existing within one thousand (1,000) feet of any part of the property proposed to be subdivided or developed.
2. A series of plan sheets prepared in accordance with the drafting standards set forth above, with accompanying narrative as needed, showing the following existing conditions:

- a. Proposed subdivision or land development name or other identifying title;
- b. Name, address and telephone number of the applicant and the owner of record or of his authorized agent, if any;
- c. Name, address and telephone number of the registered engineer or surveyor responsible for the plan. If a registered engineer, land surveyor, geologist, or landscape architect collaborated in the preparation of the plan, his or her name, address, license number, and seal shall also appear. All plans showing the subdivision of land must be signed and sealed by a registered surveyor;
- d. Name of the municipality or municipalities within which the subdivision is proposed;
- e. Zoning information for the proposed uses, including applicable district(s), existing and proposed lot size and yard requirements, copy of any Zoning Hearing Board decision or Conditional Use decision entered for the subject property, and any other zoning boundaries that traverse or are within one hundred (100) feet of the tract;
- f. All modifications being requested by the Applicant pursuant to Section 802 of this Ordinance shall be clearly stated on the first sheet of the preliminary plan submission, and also filed simultaneously in letter form describing the specific waivers, presenting adequate justification therefore, and requesting approval of the Township Planning Commission;
- g. Original date of preparation, revision dates, with concise descriptions of each revision, north point, and scale, both written and graphic;
- h. Total lot or tract boundaries showing bearings and distances and along all existing rights of way within and adjacent to the tract prepared by a registered professional land surveyor;
- i. Total area of the subject lot or tract to the nearest square foot;
- j. The applicable front, side, and rear setbacks shall be shown on each lot, including any applicable required setbacks from pipeline rights-of-way or other above- or below-ground utilities;
- k. The names of all current owners and tax parcel identification numbers of all adjacent lands, the names of all proposed and

existing subdivisions adjacent, and the locations and dimensions of any roads or right-of-way easements;

- l. The locations and dimensions of all existing roads, railroads, sewers and sewage systems, water mains and feeder lines, fire hydrants, gas, electric, and oil transmission lines, water courses, sources of water supply, easements, and other significant features within the property, or such driveways, intersections and utilities; within one hundred (100) feet of any part of the subject lot or tract;
- m. Topographic, physical, and cultural features as required for submission of an Existing Resources and Site Analysis Plan (ERSAP), prepared in accordance with Section 400 of this Ordinance. Separate submission of an ERSAP is not required at the time of Preliminary Plan application if previously provided to the Township;
- n. Location and elevation of the datum to which contour elevations refer; datum used shall be a known established local bench mark;
- o. Any proposed improvements or land disturbances requiring a permit from the U.S. Army Corps of Engineers, the Pennsylvania Department of Environmental Protection, or the Lehigh County Conservation District shall be so indicated;
- p. In any case where individual on-lot sewage disposal systems are proposed in accordance with Section 510 of this Ordinance, percolation test holes and deep probe test pits shall be performed and the exact locations of the successful and failed percolation and deep holes for the primary and replacement disposal areas shall be shown. Minimum horizontal isolation distances shall be maintained for the sewage disposal system as required by Pennsylvania Code, Title 25 Environmental Resources, Chapter 73, Standards for Sewage Disposal Facilities and shall be indicated on the plan;
- q. In the case where an individual or shared well is proposed to serve the subdivision or land development, the proposed location of the well shall be indicated on the plan;
- r. The locations and widths of any municipally- or PennDOT planned roads or other public ways or places as shown upon an adopted local, County, or PennDOT plan, or adopted Official Map, if such plan or map exists for the area to be subdivided or developed;

- s. For any properties containing frontage on a PennDOT highway, the applicant shall provide proof that the plan has been submitted to PennDOT for review and comment on the proposal;
 - t. Locations of all existing structures on the tract, and distance thereof from lot lines;
 - u. When a high tension power line, gas, or oil line crosses a proposed subdivision or land development, a copy of the right-of-way or easement agreement between the utility and the landowner(s) must be supplied to the Planning Commission. If recorded, the recordation information regarding the instrument number to be indicated on the plan;
 - v. A boundary survey and certification as to the accuracy of the survey shall be provided for all subdivisions and/or land developments; and
 - w. All notations on the plan must be readable. Illegible notations will be considered incomplete data on the plan.
3. All Preliminary Plan applications filed pursuant to the Open Space Design Option of the Zoning Ordinance shall include demonstration of compliance with the Four-Step Design Process in accordance with Section 301.D of this Ordinance.
4. A full plan of the proposed subdivision or land development, prepared in accordance with the drafting standards set forth above, including at a minimum:
- a. Location and width of all roads and rights-of-way with a statement of any conditions governing their use, including distance to the nearest intersection; proposed dedicated rights-of-way and reserved ultimate rights-of-way; suggested road names and state or municipal road numbers;
 - b. Existing and proposed road and utility easement locations with approximate dimensions;
 - c. All proposed lot lines with approximate dimensions and lot areas, both gross and net, indicating those limitations excluded in the lot area definition; impervious and vegetative coverage calculations;
 - d. Information that clearly documents compliance with the natural resource protection standards of Article X of the Township Zoning Ordinance, including, but not limited to, proposed limits of

clearing and grading, proposed areas of tree removal, disturbance of any steep slopes, disturbance of any wetlands or wetland margins, or working within, or crossing, any streams or waterways, and proposed areas for reforestation or re-vegetation;

- e. For each proposed lot, the building envelope shall be shown, as required by Section 1009.E of the Township Zoning Ordinance, and for the entire development, Site Capacity Calculations shall be provided as required by Section 1009.F of the Township Zoning Ordinance;
- f. Building setback lines along each road, minimum side and rear yard limits;
- g. A statement of the intended use of all nonresidential lots and parcels;
- h. Lot numbers, and a statement of the total number of lots and parcels;
- i. Locations of all stormwater management facilities including but not limited to storm sewers, groundwater recharge areas, bioretention areas, and other drainage improvement measures. Specific design of such facilities shall be demonstrated in the required Stormwater Management Plan;
- j. Locations of all existing and proposed sanitary sewers and any other sewage conveyance, treatment or disposal facilities;
- k. Locations of all water supply facilities;
- l. Location of existing and/or proposed sidewalks, paths and trails throughout the property and on neighboring property within two-hundred (200) feet;
- m. Proposed parks, playgrounds, and other open space areas to be dedicated or reserved for public use and located and designed consistent with the provisions of Section 520.F of this Ordinance, with any conditions governing such use, ownership and maintenance;
- n. The Pennsylvania One-Call Number and a Table showing all affected utilities, and
- o. Copies of the proposed deed restrictions and protective and restrictive covenants referenced to the Preliminary Plan.

5. Improvement Construction Plan

An Improvement Construction Plan shall be required to accompany preliminary (and final) plans whenever an improvement is to be constructed or installed.

a. Scale

The Improvement Construction Plan shall have a scale of 1" = 50' or larger.

b. Data

The Improvement Construction Plan shall contain sufficient information to provide working plans for the layout and construction of proposed streets, utilities, stormwater retention structures, and other improvements. Such a plan shall include, but not be limited to, the following:

- i. A Horizontal Plan showing layout of proposed improvements, including stations corresponding to those shown on the profiles, horizontal curves, location and size of inlets and manholes, manhole numbers, horizontal location of proposed utilities and laterals, existing contours, and all existing and proposed buildings with elevations of finished floor and basement floor (if applicable);
- ii. A Profile Plan indicating the final grades of streets and sewers and the extent of cut and fill operations;
 - a) The Profile Plan shall show the vertical section of the existing grade and proposed grade along the centerline and rights of way of the proposed street. Where storm drainage and/or sanitary sewer lines are to be installed, they shall also be indicated on the Profile Plan.
 - b) The horizontal scale of the Profile Plan shall be not less than 1"=50' and the vertical scale shall be not less than 1"-5'.
 - c) A typical cross-section street construction shall be shown on the Profile Plan and shall indicate the following:

- 1) Right of way width and the location and width of paving within the right of way;
 - 2) Type, thickness and crown of paving;
 - 3) The location, width, type, and thickness of curbs and sidewalks to be installed, if any; and
 - 4) Typical location, size and depth of any underground utilities that are to be installed in the right of way where such information is available.
- d) All storm sewer, sanitary sewer, public water, gas line, and other existing utility crossings shall be shown by profile, including ground, rim and invert elevations, grade of all existing and proposed sewer mains, pipe lengths, and size and type of sewer pipe.
 - e) Drawings shall contain a note that all construction of sanitary sewers shall be in accordance with the standards and specifications adopted by the Township.
 - f) All elevations shall be based on USGS datum with bench marks noted and described and shall be tied into any bench marks established by the Township.

6. Phasing Plan

- a. When a subdivision or land development is to be developed in stages or sections over a period of time, the following shall be submitted:
 - i. A map with each stage or section of the proposed subdivision consecutively numbered to illustrate phasing of the development; and
 - ii. A schedule indicating the approximate time when each stage or section is intended to be developed.

7. A completed Sewage Facilities Planning Module for review and approval by the Township Sewage Enforcement Officer and the PADEP. A completed Planning Module shall consist of the following:
 - a. A plan entitled "Sewage Planning Module," drawn at minimum scale of one (1) inch = one hundred (100) feet, containing the following:
 - i. Existing and proposed buildings and structures along with their existing and proposed uses;
 - ii. Complete tract boundaries, proposed lot lines, existing rights-of-way and easement lines, together with restrictions to their use, providing accurate distances to hundredths of a foot and bearings to thirty seconds;
 - iii. Lot sizes;
 - iv. Adjacent lots and owners' names;
 - v. Any existing sewage systems, inclusive of facilities within one hundred (100) feet of the tract;
 - vi. Existing and proposed water supplies and surface water (wells, springs, ponds, streams) within one hundred (100) feet of the tract;
 - vii. Existing and proposed streets, roadways, access routes, parking areas, drives, etc.;
 - viii. North arrow;
 - ix. Soils mapped directly on plan (as per Lehigh County Soil Survey). Specifically depict any prime farmland soils in addition to all other soils present, and provide accompanying list of prime agricultural soils found on-site;
 - x. Restricted open space areas, and conservation easement areas if existing or proposed;
 - xi. Lands subject to flooding as identified as flood plain on the current FEMA maps, Waters of the Commonwealth, Waters of the United States, or alluvial soils on the Lehigh County Soil Survey;

- xii. Wetlands as shown on National Wetland Inventory and/or Hydric Soils mapping;
 - xiii. Proposed and existing underground utilities, storm sewers, sanitary sewers, water, electric, pipelines, transmission lines, etc.;
 - xiv. Existing and proposed contours at intervals of two (2) feet. In areas of steep slopes greater than fifteen (15) percent, five (5) foot contour intervals may be used;
 - xv. Other physical features including existing and proposed stormwater management provisions and any natural or proposed features that will affect the installation or operation of a sanitary sewage system;
 - xvi. Location map delineating the location of the project relative to highways, municipalities, or other identifiable landmarks;
 - xvii. Proposed changes to land surface and vegetative cover;
 - xviii. All soil probe evaluations, percolation test holes, monitoring wells, and other applicable test locations; slopes of land across each tested area;
 - ix. Delineation of all proposed subsurface sewage disposal systems, including initial and replacement areas consistent with the requirements of this Ordinance;
 - xx. The engineer and/or surveyor shall certify as to the accuracy of the drawn plan; and
 - xxi. For applications proposed for lots or tracts within the Limeport Village Sanitary Sewerage Service District, the following information shall be submitted in-lieu of the requirements of sub-sections xviii. and ix. above:
 - a) Locations of the proposed sewer connection, grinder pump or other appurtenances associated with the sewer connection.
- b. Submission of PADEP Module Components, reports, and other documentation which is required by Title 25, Rules and Regulations of the PADEP and the Sewage Enforcement Officer.

8. The preliminary plan shall also be accompanied by the following supplementary documentation:
 - a. A Preliminary Erosion and Sedimentation Control Plan, prepared in accordance with Section 516 of this Ordinance;
 - b. A Preliminary Stormwater Management Plan, prepared in accordance with any applicable Lower Milford Township Stormwater Management Ordinance in effect at the time of plan submission;
 - c. A Preliminary Landscape Plan demonstrating compliance with the requirements of Section 518 of this Ordinance;
 - d. If the preliminary plan or land development application is filed in accordance with an existing conditional use, special exception, zoning variance or other granted zoning relief, then the applicant's supplementary documentation shall include the Order or Approval for conditional use, special exception, zoning variance or other zoning relief, any conditions of approval, and all plans submitted and approved as part of the Order or Approval;
 - e. A Water Resources Impact Study prepared pursuant to Section 405 herein;
 - f. A Carbonate Geology Protection Assessment prepared pursuant to Section 406 herein;
 - g. An Historic Resource Impact Study prepared pursuant to Section 407 herein;
 - h. An Environmental Impact Assessment prepared pursuant to Section 408 herein;
 - i. A Traffic Impact Study prepared pursuant to Section 409 herein;
 - j. Preliminary designs of any bridges or culverts which may be required. Such designs shall meet all applicable requirements of the Pennsylvania Department of Environmental Protection – Division of Dams and Encroachments and/or the Pennsylvania Department of Transportation;
 - k. Date of the last subdivision or land development plan approved for the application parcel(s);

1. Complete zoning history for the application parcel(s). History should include previous variances granted, subdivision or land development approvals, previous uses, etc.; and
- m. Opinion of Title.

Section 403 Required Content of Final Plans

Final plans shall conform in all important details to approved preliminary plans where applicable, including any conditions of approval specified by the Planning Commission. A final plan shall consist of and be prepared in accordance with the following:

A. Drafting Standards.

Final Plans shall conform to the drafting standards set forth in Section 402.A.

B. Required Content of Final Plan and Supplementary Documentation.

Final Plan submissions shall include all information and data set forth below, except that the Township may waive any specific submission requirement where deemed not relevant to the subject application upon the recommendation of the Township Engineer. Information and data already supplied at the time of Preliminary Plan submission, where applicable, and satisfactorily meeting all requirements for Final Plan submission need not be resubmitted except to the extent that additional copies are needed by the Township to facilitate review.

1. Final Plan submissions shall include all information and data required under Section 402.B, except that preliminary supplementary documentation required under Section 402.B.8.a-d need not be resubmitted and instead shall be supplanted by the required supplementary plans set forth in Section 403.B.18.;
2. All final lot area calculations and lot line dimensions, including straight lot lines and chords and radii of curved lot lines, defined in feet and hundredths of a foot by distances, and in degrees, minutes and seconds;
3. A statement of restrictions of any type which exist as covenants in the deed(s) for all lots contained wholly or partly in the subdivision shall be included and, if covenants are recorded, the deed book and page number shall be included, as well as any such private deed restrictions as may be imposed upon the property as a condition to sale;
4. Proposed placement of each building and all water and sewer facilities shall be shown;

5. The location of all existing and proposed monuments per Section 701.A.10 through 12. shall be shown;
6. All easements or rights-of-way for any purpose, including written legal descriptions, and any limitations on such easements or rights-of-way, shall be included. Easements or rights-of-way shall be specifically described on the plans. Easements should be located in cooperation with the appropriate public utilities where applicable;
7. If the subdivision proposes a new road intersection with a state legislative route, the plan shall contain a notice that a highway occupancy permit is required pursuant to Section 420 of the act of June 1, 1945 (P.L.1242, No. 428), known as the "State Highway Law", before street access to a State highway is permitted;
8. A certification of ownership, acknowledgement of plan and offer of dedication shall be affixed on the plan, and shall be duly acknowledged and signed by the owner(s) of the property and notarized;
9. All modifications or waivers being requested by the Applicant, as well as all modifications or waivers granted to the Applicant by the Planning Commission, shall be clearly stated on the first sheet of the Final Plan submission;
10. Signature blocks for certification of review by the Township Engineer and for approval of the plan by the Township Planning Commission, endorsement by the Board of Supervisors, and review by the Lehigh Valley Planning Commission, shall be presented; as well as any other certificates required by the Township;
11. The name, number, cartway width and Right-of-Way lines of all existing public roads and the name and location of all other roads within the property, shall be included as applicable;
12. Plan notes shall be included disclosing current and past zoning uses since 1967 of the application property and all current land uses on contiguous parcels;
13. The following data shall be included for the centerline of the cartway and both right-of-way lines of all recorded, and proposed roads, within and adjacent to the property:
 - a. Courses and distances with length in feet and hundredths of a foot of all straight lines and of the radius and the arc (or chord) of all curved lines with delta angles including curved lot lines, and bearings in degrees, minutes and seconds for all straight lines; and

- b. The width in feet of the cartway, right-of-way and of the ultimate right-of-way, and (in degrees, minutes and seconds) of the delta angle of all curved lines, including curved lot lines.
14. A boundary survey and certification as to the accuracy of the survey shall be provided for all subdivisions and/or land developments. Exceptions to this requirement may be considered by the Planning Commission for large tracts that will remain in agricultural use;
15. If the Final Plan requires more than one sheet, a key diagram showing the relative location of the several sections shall be drawn on each sheet;
16. The Final Record Plan shall contain the following notation:
 - “Sheets _____ through _____ inclusive, on record at the Township, shall be considered a part of the approved Final Plan as if recorded with same”; and
17. A list of the applicant’s utilities and each utility’s phone numbers shall appear on the plans, and proof of contact shall be presented in the form of the Pennsylvania One Call System serial number.
18. The Final Plan shall be accompanied by the following supplementary documentation:
 - a. A final Erosion and Sedimentation Control Plan, prepared in accordance with Section 516 herein;
 - b. A final Stormwater Management Plan, prepared in accordance with any applicable Lower Milford Township Stormwater Management Ordinance in effect at the time of plan submission;
 - c. A final Landscape Plan demonstrating compliance with the requirements of Section 518 herein;
 - d. A copy of a permit granted by the Department of Environmental Protection for a shared water system, where applicable.
 - e. Approval by the Lehigh County Conservation District of the erosion and sedimentation control plan. If needed, a copy of the Department of Environmental Protection National Pollutant Discharge Elimination System (NPDES) shall also be submitted;

- f. Lehigh Valley Planning Commission review of the stormwater management plan prepared pursuant to the Township's applicable Act 167 Stormwater Management Ordinance;
 - g. A legal deed of dedication of all areas offered to the Township; and
 - h. A copy of a letter of approval or permit granted by the Department of Environmental Protection, Division of Dams and Encroachment, for any structure, channel change or grading activity, pipe crossing, or outfall which may affect normal or flood flow in any stream.
19. In the case of a subdivision or land development proposed to be developed in stages or sections over a period of years, Final Plan requirements as listed in Sections 403.B.1 through 16 shall apply only to the stage or section for which Final Plan approval is being sought. However, the Final Plan presented for the stage or section must be considered as it relates to information presented for the entire subdivision or land development in the application for Preliminary Plan approval.

Section 404. Impact Studies and Assessments

- A. To the extent required by the Planning Commission, any application for subdivision or land development plan approval shall be accompanied by the following impact studies and assessments. Applicants shall submit nine (9) copies of each required impact study or assessment to the Township:
 - 1. A Water Resources Impact Study in accordance with Section 405 herein;
 - 2. A Carbonate Geology Protection Assessment in accordance with Section 406 herein;
 - 3. A Historic Resources Impact Study in accordance with Section 407 herein;
 - 4. An Environmental Impact Assessment in accordance with Section 408 herein;
 - 5. A Traffic Impact Assessment in accordance with Section 409 herein.
- B. Review and Approval of an Impact Study or Assessment.
 - 1. Each impact study or assessment shall be subject to review and approval by the Planning Commission. In making its evaluation, the Planning Commission may request any additional information as it deems necessary to adequately assess potential impacts. The Planning Commission may also contract with a qualified consultant to assist in evaluating the study or

assessment. When contracted, the Township's consultant shall deliver to the Planning Commission a written report on the adequacy of the study in identifying impacts, evaluating appropriate impact alternatives, and include an assessment of the Applicant's proposed mitigations.

2. Any fees incurred by the Township for consultant review of any submitted impact study prepared in accordance with the provisions herein shall be billed to the Applicant and deducted from the escrow deposit.
3. Following the report of the Township consultant(s) on any submission of any impact study or assessment, if requested, or prior to reaching a decision on the preliminary or final subdivision or land development application, the Planning Commission shall either accept the findings and recommendations of the study or assessment, accept it with conditions, or reject it. The Planning Commission's decision on whether compliance has been achieved shall be made part of its decision on the subdivision or land development application.

Section 405. Water Resources Impact Study

- A. All projects withdrawing ten thousand (10,000) gallons per day ("gpd") over any thirty (30) day period or greater of groundwater or surface water, or a combination of these two (2) sources are required to obtain a permit from the Delaware River Basin Commission ("DRBC"). Such a proposed water withdrawal project shall be reviewed and approved by the Township prior to an application being filed with the DRBC.
- B. Any water withdrawal project not under the jurisdiction of the DRBC will be reviewed by the Township. A Water Resources Impact Study shall be required when one (1) or more of the following conditions are met:
 1. A subdivision / land development proposing a total groundwater withdrawal of one thousand (1,000) gallons per day (gpd) or more or a total onsite wastewater disposal of one thousand (1,000) gpd. or more, inclusive of any existing withdrawal or disposal;
 2. A proposed non-residential subdivision / land development that results in an additional withdrawal of one thousand (1,000) gpd or more;
 3. A new supply source is proposed to be developed for a public water system; and/or
 4. A well is proposed in conjunction with an extraction operation.
- C. The Water Resource Impact Study shall be prepared and completed by or under the supervision of a Pennsylvania licensed professional geologist with experience

in the practice of hydrogeology and qualified to conduct groundwater investigations. The purpose of the study will be to determine if there is an adequate supply of water for the proposed use and to estimate the impact of the additional water withdrawals on existing nearby wells, underlying aquifers, and watercourses. The Township Engineer or other designated professional consultant shall be involved in the study as much as the Township feels is necessary and appropriate.

D. Water Supply Needs.

1. Projected water supply needs of the project shall be determined, based upon the use(s) proposed for the site and estimated in accordance with the following documents:

- a. Pennsylvania Department of Environmental Protection "Public Water Supply Manual," Bureau of Water Quality Management Publication No. 15;
- b. American Water Works Association ("AWWA") Manual "Forecasting Urban Water Demand" by R. Bruce Billings and C. Vaughn Jones (1996);
- c. Water use data provided by the Township for similar water supply systems;
- d. Water use data obtained from the DRBC for similar water supply systems (reference to specific project(s) required);
- e. "Guide For Determination Of Required Fire Flow" by the Insurance Services Office (ISO), as modified; and
- f. At least one year of daily water use readings from a similar and local facility.

2. In the absence of specific water use data being provided by the documents listed in Subsection 1 above, the adequacy of water supply shall be determined, based upon the use(s) proposed for the site, and following water consumption assumptions. Where more than one (1) type of use is proposed, the peak consumption shall be estimated by combining the applicable daily usage assumptions.

a. Agricultural

i. Crops Annual average gpd. per acre

Vegetables

357

Alfalfa, corn, potatoes	179
Orchards & vineyards	625

ii.) Livestock & Poultry gpd. per animal

Dairy cow	35.0
Dry cow and beef cattle	12.0
Hog	1.5
Goat, sheep	2.0
Horse, mule	12.0
Chickens, per 100	9.0
Turkeys, per 100	14.0

b. Nursery – twenty-six one hundredths (0.26) of a gpd. per square foot.

c. Residential – two (2) persons for the first bedroom/sleeping area and one (1) person for each additional bedroom/sleeping area using one hundred (100) gpd. per person.

d. Retail – four hundred (400) gallons of water per public restroom or ten (10) gpd. per employee, whichever is greater.

e. Restaurant/Bar/Eatery gpd. per patron

Kitchen waste only, single-service utensils (no public toilet)	3.0
Kitchen and public toilet wastes, single-service utensils	8.5
Kitchen and public toilet wastes, reusable utensils	10.0
Additional for bar/cocktail lounge	2.0

f. Hotel/Motel/Inn – one hundred (100) gpd. per guest room.

g. Office – eight one hundredths (0.08) of a gpd. per square foot of floor area or ten (10) gpd. per employee, whichever is greater.

h. Industrial/Commercial – one tenth (0.10) of a gpd. per square foot of floor area or thirty-five (35) gpd. per employee, whichever is greater.

i. Special Water Intensive Uses – Applicant must provide literature and expert reports specifically showing exactly how much water will be used on a daily, weekly, monthly, and yearly basis by the

proposed use(s). The estimated consumption shall be based upon these figures.

3. Where the estimates within or between Subsections 1 and 2 above conflict, the estimate showing the highest daily usage shall be used in the Study.
- E. General Study Requirements. Prior to implementation of the Water Resources Impact Study, the Applicant shall complete the following:
1. Notify the Township in writing of its intent to proceed with the Study.
 2. Apply for and obtain all the necessary permits and approvals, including, but not limited to, Well Drilling Permits.
 3. At least three (3) weeks prior to start of any activity connected with the conduct of the Study, submit protocols for the drilling of the required wells for review and approval by the Township. These protocols shall set forth the following: tasks to be completed, procedures and methodologies to be employed in the completion of such tasks, and steps to be undertaken to guarantee quality and reliability of the hydrogeologic data generated. Drilling shall not commence until the protocols are approved by the Township.
 4. Review available hydrogeologic maps and reports and previous Studies prepared by other Applicants that are deemed to be relevant by the Township. The Applicant shall certify that previous reports have been reviewed and shall reference them in the Water Resources Impact Study submitted to the Township.
 5. For projects that propose a public water system or propose to withdraw more than ten thousand (10,000) gallons per day the following shall also be accomplished by the Applicant:
 - a. Seek and obtain from the DEP, approval of the drilling location.
 - b. Verify with the DRBC the availability of groundwater allocation within the sub-basin or watershed where the project is located. Meet all requirements of the DRBC concerning the drilling of the required wells.
 - c. Provide to the Township all copies of correspondence to and from DEP and DRBC. When required by the Township, submittals to the two agencies will take place through the Township.
- F. Technical Study Requirements. As a part of any Water Resources Impact Study, the Applicant must comply with the following requirements:

1. Prepare detailed drilling records and geologic logs during the drilling and construction of the wells required herein. The logs shall be prepared by an experienced geologist / hydrogeologist licensed to practice in Pennsylvania or under their direct supervision. They will include description of rock specimens which shall be collected at no greater than ten foot (10') intervals, location and estimated yield of water-bearing zones, and all other data collected and observations made during drilling. All work shall be completed in strict adherence to the drilling protocols previously approved by the Township.
2. At least three (3) weeks prior to the implementation of the long-term pumping test, submit pumping test protocols to the Township for review and approval. These protocols shall set forth, among other things, methods and procedures to measure the pumping rate; methods and procedures for maintaining a constant pumping rate; methods of water level monitoring and frequency of water level monitoring prior to and during implementation of the test (drawdown and recovery phases), in both the pumping and observation / monitoring network wells. The pumping test shall not be implemented until the pumping test protocols are approved by the Township.
3. Conduct a long-term pumping test with the pumping phase of the test lasting forty-eight (48) hours or longer, with the determination as to the actual duration of this phase to be made in the field, based on analysis of the water level data collected in the pumping well. The pumping test shall be conducted at a rate equal to, or greater than, the projected peak water demand of the project and shall be maintained constant as much as possible and not allowed to deviate more than five percent (5%) from its set value.
4. Ensure the long-term pumping test is conducted during a period of no significant recharge event, unless the influence of recharge upon the results of the test shall be properly evaluated. The pumping test shall include one pumping well roughly centered onsite. Where individual wells will be installed per lot, a pumping test shall be required for each fifteen (15) lots or fraction thereof. For each such group of lots, a separate test will be required for each hydrogeologic unit (aquifer) from which a withdrawal is proposed. When more than one (1) pumping test is required, the pumping wells shall be located to allow for optimum definition of the area and degree of impact, particularly in relation to existing offsite wells. When more than one (1) pumping test is required, they shall not be conducted within five days of each other.

5. Well and Surface Water Monitoring Network
 - a. At least two (2) "Observation Wells", shall be used for each pumping test. The Observation Wells shall be completed spatially and at depth in the same hydrogeologic unit as the pumping test wells with their positions established by survey and distributed at appropriate distances along and across geologic strike from the pumping well. If active water supply wells are used as Observation Wells, they shall not be pumped for at least a week prior to, during and at least one week after the pumping test.
 - b. Include a comprehensive, representative network of nearby "Monitoring Wells" in conjunction with the pumping test. Monitoring wells may be existing wells on and near the subject property. The purpose of the monitor well network is to monitor water levels prior to, during, and after the test, to determine areal extent and degree of impact from pumping of the project well. Enough monitoring wells shall be included in the monitoring network and their water levels monitored frequently enough to allow for definition of the area of impact with a reasonable degree of professional or scientific certainty.
 - c. Any springs and streams located within one-half (0.5) mile of the Study Site, and all wetlands on the Study Site shall be noted on a plan submitted with the proposed pumping test plan. The location of perennial versus intermittent streams shall be identified on the plan based upon field observations not USGS 7.5 minute topographic map depictions. Where deemed applicable, stream and spring flow monitoring may be incorporated into the monitoring program.
 - d. Precipitation shall be monitored during the pumping test period. Measurements shall be made using a tipping bucket method of monitoring or manual readings obtained every hour. If freezing conditions exist during the test, notes shall be made as to when snow / ice melting occurs. If significant groundwater recharge occurs during the pumping test, to the point that it may mask drawdown effects from the pumping well on the monitoring network, the pumping test may need to be re-run during a time when significant recharge is not occurring.
6. For the purpose of preparing a monitoring well network and to notify the community of potential water supply disruptions caused by the pumping test, contact residents located within a one-half (0.5) mile radius of the outer boundaries of the site at least twenty eight (28) days prior to submitting the proposed pumping test plan to the Township (See

subsection 5.c). Such contact shall be made in writing by certified mail, return receipt requested, and shall solicit from those residents the desire of the applicant to monitor their wells. If necessary and to obtain a meaningful well network, residents shall be contacted by other reasonable methods until a sufficient response is obtained. The Township shall be copied on all correspondence sent to residents and the entire record of the effort to obtain permission to include nearby wells in the network shall be made a part of the report, including the response of each person so contacted. All correspondence with the green certified mail return receipt cards shall be attached to the Report as an appendix.

Notice to adjoining property owners shall include:

- i. Name of consultant performing the long-term pumping test.
 - ii. Name of developer or project owner.
 - iii. Purpose of test.
 - iv. Approximate date of test.
 - v. Statement that owners may have their well monitored at no cost to them if they are chosen, to determine if there is detrimental impact.
 - vi. Note that any questions or concerns may be directed to a designated representative of the developer's consultant and / or the Township.
 - vii. A request for information regarding their well depth, yield, water quality and knowledge of any historic water supply problems.
7. Include provisions for the collection of baseline water level data in the pumping test design. This data shall be collected from both the onsite and offsite wells in addition to springs / streams where applicable, at sufficient frequency to establish water level trends. A continuous water level record is strongly recommended for the pumping, observation and monitoring wells. Collection of water level data shall commence no less than seven (7) days prior to implementation of the pumping test.

G. Water Quality.

1. At a minimum, the quality of the groundwater at the pumping well shall be investigated for the parameters included in Table I and for any additional parameters that the Township may deem appropriate. For any wells that must be permitted by DEP, analysis shall be completed for any additional parameters required by State regulations. These analyses shall be

completed on a groundwater sample collected just prior to the completion of the pumping phase of the long-term pumping test. A groundwater sample and analysis shall be required from each hydrogeologic unit (aquifer) from which a withdrawal is proposed and for every required pumping test. Water quality for potable purposes, must meet current PA DEP drinking water limits. Table I provides the drinking water limits present at the time of writing this Ordinance.

2. Where applicable, the Study shall indicate the location and design of all existing and proposed onsite sewage disposal systems on the subject site and shall describe anticipated water impacts to the area located downgradient of the systems, assuming wastewater loadings of nitrate ($\text{NO}_3\text{-N}$) at 45 mg/L and low natural groundwater recharge rates equal to 1-year in 25 frequency as provided in the USGS Water Resources Investigations Report 96-4127 titled "Water-Use Analysis Program for the Neshaminy Creek Basin, Bucks and Montgomery Counties, Pennsylvania", Table 6, or provide an alternative recharge rate based on documented, updated, local information. Calculated nitrate levels in the wastewater plumes from each system shall not exceed 10 mg/L at any of the property boundaries on which the system resides or within 100 feet of any water supply well.

H. Study Requirements. All Water Resources Impact Studies submitted to the Township shall adhere to the following requirements:

1. Statements concerning regional hydrogeologic conditions shall be kept to a minimum. The Study shall place an emphasis on site-specific and Township-specific hydrogeologic conditions.
2. The text of the Study shall contain pertinent data, analyses, and methods used to arrive at the Study's conclusions. All numerical parameters shall be presented with appropriate units, and all data shall be referenced by source, date, location, and time, where appropriate. Graphs shall be used to evaluate and compare water level trends over time.
3. The Study shall specifically set forth the calculations of the projected water needs for the proposed project and all the information these calculations are based upon.
4. Analyze the water level data collected during the pumping test (drawdown and recovery) in addition to all other relevant information developed during the Study. Analysis shall include the estimated long-term sustainable yield, also referred to as safe yield or long-term sustainable yield of the pumping well. For purposes of this analysis, the long-term yield may be assumed, initially, to allow for continuous operation of the well at the peak water demand for a period of 180 days without recharge.

Analyze the water level data collected during the pumping test for well and aquifer parameters including specific capacity, hydraulic conductivity, and transmissivity (directional).

5. Perform a "Hydrologic Budget" on an annual basis to show that the proposed withdrawal will not exceed a one in 25 year recharge rate. This will be performed by comparing withdrawal to the one in 25 year base-flow rates presented in the USGS Water Resources Investigations Report 96-4127 titled "Water-Use Analysis Program for the Neshaminy Creek Basin, Bucks and Montgomery Counties, Pennsylvania", Table 6, for the appropriate aquifer / bedrock. Base-flow rate shall be considered equivalent to ground water recharge rate. If other, more accurate and more local data exists to define the one in 25 year recharge rate for the Study Site, it should be considered. The maximum recharge area allowed to replenish withdrawals will be limited to the extent of the development's property.
6. Based on the results of the hydrologic budget, a determination shall be made on whether or not the potential exists for adverse effects on the hydrologic environment (wells, streams, springs) caused by the project.
7. Each Study shall contain a topographic site map at a minimum scale of 1 inch = 2,000 feet clearly showing the location of the proposed site relative to the Township boundary.
8. All maps used to describe site-specific features and impacts of the site shall include, at a minimum, the location of all the following features within a half-mile (0.5) radius from the perimeter of the site: faults, lineaments, fracture tracts, wells, springs, watercourses, onsite sewage disposal systems, potential and known contamination sources in addition to any other similar features that may affect the quality and availability of groundwater at the site.
9. All maps used to describe site-specific features and impacts of the site shall describe the area influenced by the project with respect to any anticipated degradation of water quality or quantity.
10. The Study shall contain a geologic map, updated with site-specific information and shall cover, at a minimum, the area within a one (1) mile radius from the perimeter of the site.
11. The Study shall contain a static groundwater elevation contour map (feet above mean sea level) based on a minimum of three (3) monitoring points.

12. The Study shall contain a projected piezometric surface contour map of the proposed pumping scheme at the end of a 180 day pumping period assuming no precipitation recharge during that period.
 13. The Study shall include a map illustrating the drawdown effects upon offsite wells and springs located within a half-mile (0.5) distance from the site boundary, indicating draw-downs at the end of a 180 day pumping period assuming no precipitation recharge during that period.
 14. Where individual on-lot wells are proposed as the source of water supply, the Study shall demonstrate that each well is likely to provide sufficient yield equal to or greater than six (6) gallons per minute of which no more than four (4) gallons per minute is obtained from storage and at least two (2) gallons per minute is obtained from contributing water-bearing zones.
 15. All other requirements as set forth in this Ordinance concerning individual wells, well construction, and yield shall also apply.
 16. The Applicant shall provide to the Township any and all applications, documents, correspondence, reports, or information submitted to and/or received from the DEP and/or the DRBC regarding the withdrawal of water from the site.
 17. The study shall include a brief statement of the qualifications of the person(s) preparing the study and list all references used to generate the study.
- I. An application for subdivision and/or land development shall not be approved by the Planning Commission if the Water Resources Impact Study shows any of the following:
1. The proposed water system does not provide an adequate quantity of water for the proposed use.
 2. The proposed water system does not provide an adequate quality of water for the proposed use in regards to taste, odor, turbidity, and potability unless proper water treatment is provided.
 3. The proposed water system will adversely affect existing wells, springs, watercourses, and/or other bodies of water.
 4. The proposed water system will withdraw more water than the site itself provides in recharge, based upon a one in 25 year dry period annual recharge rate. Use of neighboring properties to obtain additional recharge water will not be considered.

Table I: Water Quality Testing Parameters

Secondary Contaminants			
	SMCL (mg/L)		SMCL (mg/L)
Temperature	N/A degrees*	Color	15 color units
PH	6.5-8.5*	Odor	3 threshold odor #s
Chloride	250	Turbidity	0.5 to 1NTU***
Sulfate	250	Iron	0.3
Total dissolved solids	500	Manganese	0.05
Hardness	120-150**	Copper	1
Microbiological Contaminants			
	MCLG		
Total Coliforms	0****		
Inorganic Chemicals			
	MCL (mg/L)		MCL (mg/L)
Arsenic	0.01	Lead	0.005
Barium	2.0	Mercury	0.002
Cadmium	0.005	Nitrate/Nitrite as N	10
Chromium (hexavalent)	0.1		
Synthetic Organic Chemicals			
	MCL (mg/L)		MCL (mg/L)
Alachlor	0.002	Ethylene dibromide	0.00005
Atrazine	0.003	Hexachlorocyclopentadiene	0.05
Benzo(a)pyrene	0.0002	Lindane	0.0002
Carbofuran	0.04	Methoxychlor	0.04
Chlordane	0.002	Oxamyl (Vydate)	0.2
Dibromochloropropane	0.0002	Pentachlorophenol	0.001
Di(2-ethylhexyl)adipate	0.4	Picloram	0.5
Di(2-ethylhexyl)phthalate	0.006	Simazine	0.004
Endothall	0.1	2-4-D	0.07
Volatile Organic Chemicals			
	MCL (mg/L)		MCL (mg/L)
Vinyl chloride	0.002	1,1,2 Trichloroethane	0.005
1,1 Dichloroethene	0.007	Tetrachloroethene	0.005
Methylene chloride	0.005	Chlorobenzene	0.1
Trans-1,2 Dichloroethene	0.1	Ethyl benzene	0.7
Cis-1,2 Dichloroethene	0.07	m.p Xylene	0.44
1,1,1 Trichloroethane	0.2	O Xylene	10
Carbon tetrachloride	0.005	Styrene	0.1
Benzene	0.005	1,4 Dichlorobenzene	0.075
1,2 Dichloroethane	0.005	1,2 Dichlorobenzene	0.6
Trichloroethene	0.005	1,2,4 Trichlorobenzene	0.07
1,2 Dichloropropane	0.005	Methyl tert-butyl ether	0.02
Toluene	1.0		

MCL – Maximum Contaminant Level (for reference only, refer to current PA DEP published levels)

SMCL - Secondary Maximum Contaminant Level (for reference only, refer to current PA DEP published levels)

MCLG – Maximum Contaminant Level Goal (for reference only, refer to current published levels)

* Can be measured in the field

** Guidance only. Upper practical limit for treatment is considered to be 500 mg/L.

*** Performance standard

**** If positive, analyze for fecal coliform

Section 406. Carbonate Geology Protection Assessment

A. Preliminary Plan Submission Requirements

1. All subdivision or land developments, or portions thereof, located within, or within two hundred 200 feet outside of the areas depicted on the Carbonate Geology Map in Appendix B shall be subject to the following requirements, in addition to other requirements set forth in the Zoning and Subdivision and Land Development Ordinances. Carbonate geology shall refer to bedrock which contains more than 50 percent of the minerals calcium carbonate, commonly referred to as limestone, and / or magnesium carbonate, commonly referred to as dolomite.
2. A recognized professional with competence in the field shall review aerial photographs, soils, geologic and other related data available to him or her, as the data relates to the subject property and prepare a report regarding the potential for sinkhole and contamination damage occurring on the site. The professional shall also conduct a site inspection of the property.
3. Based on the work required in Section 406.A.2, 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:
 - a. Closed depressions and "ghost lakes" (Delineate Outer Rim);
 - b. Open sinkholes and closed/ remediated/ historic sinkholes (Delineate Outer Rim);
 - c. Disappearing Streams;
 - d. Unplowed areas in plowed fields; and
 - e. Outcrops of bedrock.
4. Based upon the work performed in Section 406.A.2, the professional shall determine what further testing should be done by the applicant to ensure compliance with the performance standards set forth in Section 519.A. Testing methodology shall be reasonable under the circumstances, including:
 - a. the scale of the proposed development, and
 - b. the hazards revealed by examination of available data and site inspection.

5. The applicant shall cause the additional testing established in Section 519.A.4 to be done. The test results shall be included with the submission and shall be referred to the Municipal Engineer or designated reviewer.
6. The Municipal Engineer or designated reviewer shall report to the Planning Commission, with a copy to the landowner, their opinion as to the adequacy of the study and as to the capability of the site to support the proposed development in a manner in which the risks attendant to development in carbonate areas are either eliminated or minimized. Recommendations for site development, including storm water management, the layout of utility lines, and building location may be included. Additional studies or testing as deemed necessary by the municipal engineer to produce an adequate study given the scale of the proposed development and the hazards revealed may be required of the applicant.

Section 407. Historic Resource Impact Study

A. Applicability.

The requirements of Section 1104 of the Lower Milford Township Zoning Ordinance are specifically incorporated herein. In order to verify compliance with the Zoning Ordinance,, a Historic Resource Impact Study (HRIS) shall be submitted to the Township as part of a Preliminary Plan and Final Plan for any subdivision or land development application which proposes new construction of buildings, structures, roads, driveways, parking areas, or other land disturbance within three hundred (300) feet of any historic resource, unless waived or modified by the Planning Commission.

B. Purpose.

1. To delineate sensitive Historic Resources and identify the necessary measures needed to protect them.
2. To establish a clear process by which proposed land use changes affecting significant Historic Resources can be reviewed.
3. To preserve and protect significant Historic Resources.
4. To conserve historic settings, including contributing scenic corridors, vistas and landscapes.

C. Contents of Historic Resource Impact Study. The HRIS shall contain the following information:

1. Background Information.
 - a. If not otherwise provided by the Applicant, a general description of the site the subject of the application, including topography, watercourses, vegetation, landscaping, existing drives, etc.
 - b. General description and classification of all Class I and Class II historic resources within three hundred (300) feet of any proposed land development or land disturbance.
 - c. Physical description of all Class I and Class II historic resources on the site, including location information on identified and potential archaeological resources and their relationship to the environmental attributes of the property.
 - d. Narrative description of the historic and architectural significance of each historic resource relative to both the Township and to the region in general.
 - e. Any easements, deed restrictions, rights-of-way, or any other encumbrances upon the land, including location, size and ownership.
 - f. Sufficient number of black and white or color 4"x 6" photographs to show all elevations of Class I and Class II historic resources identified and the resource in its setting.
 - g. Where a proposed subdivision or land development involves the rehabilitation, alteration, or modification of buildings and/or structures that contribute to the historic character of Limeport Village, a detailed description of the planned efforts toward compliance with Section 704 of the Lower Milford Township Zoning Ordinance.
2. Assessment of Potential Impacts to Historic Resources. Description of potential impact(s) to each Class I or Class II historic resource including, but not limited to, impacts to the integrity, setting, relationship to scenic corridors, vistas and landscapes, and future use of each historic resource.
3. Mitigation Measures. Suggested approaches to mitigate potentially negative impacts to each Class I or Class II historic resource, including avoidance, design alternatives, buffering, landscaping, conservation of existing vegetation, and any other appropriate measures permitted under the terms of this and other Township ordinances.

4. **Additional Township Review.** The Township Historical Commission shall review the Historic Resource Impact Study and shall forward it along with written recommendations to the Planning Commission before a decision regarding the applicable land development application is rendered and within the timeframe applicable to the subject application.
5. **Qualifications of Preparer.** Historic Impact Studies shall be prepared by those individuals meeting the Secretary of Interior's Professional Qualifications Standards (36 CFR Part 61). Lists of qualified consultants are available from the Pennsylvania Historical and Museum Commission.

Section 408. Environmental Impact Assessment

- A. **Applicability.** The applicable requirements of Section 1306 and Article X of the Lower Milford Township Zoning Ordinance are specifically incorporated herein. An Environmental Impact Assessment (EIA) shall be submitted to the Township as part of a Preliminary Plan and Final Plan for any subdivision or land development application, unless exempted according to sub-section B. below.
- B. **Exemptions.** The following are exempt from the EIA submittal requirement:
 1. Any proposed subdivision or land development exempt from ERSAP submittal requirements, or where the ERSAP submittal requirements have been waived by the Planning Commission.
 2. Any subdivision proposed with a residential density of not less than one (1) dwelling unit per five (5) gross acres.
 3. Any residential subdivision proposing four (4) or less lots.
 4. Any subdivision conditionally approved for use of the Open Space Design Option as provided for within the Lower Milford Township Zoning Ordinance.
- C. **Purpose.**
 1. To disclose the environmental consequences or effects of subdivision or land development proposals in order to enable the Planning Commission to more effectively evaluate an application;
 2. To describe specific alternatives evaluated to avoid or minimize the environmental impacts, and to identify appropriate impact mitigations where unavoidable impacts are expected to occur, and
 3. To ensure that adequate analysis of site features result in designs that preserve and incorporate open space, historic, visual, environmental,

biological and natural and other community resources in development plans.

D. EIA Content. Within the EIA, specific emphasis shall be directed toward the proposed project's effects on and relationship to applicable site, neighborhood (including areas in adjacent townships where applicable) and township-wide resources, conditions, or characteristics. The EIA shall include text, tables, maps, photographs, and analyses for the purpose of describing the project site, proposed use(s), environmental characteristics and the environmental effects of the proposal, design or development alternatives considered, and mitigations proposed. The ERSAP prepared for the Preliminary or Final Subdivision or Land Development shall be made part of, but shall not fully substitute for, the required EIA.

E. Narrative. The EIA shall include a narrative description of the following:

1. The general character of the site features identified in accordance with this Ordinance, including environmental quality, conservation value and scenic, historical and archaeological significance, as applicable. Relevant information provided in any submitted Historic Resource Impact Study may be cited by reference.
2. An analysis of all impacts, both positive and negative, to environmental, natural, scenic, and archaeological resources caused by or directly related to the development/improvement projects submitted to the Township for review and approval, including impacts to the property and any impacts to surrounding properties, regardless of distance of affected properties from the proposed development parcel.
3. A description, and identification on plan map(s), as applicable, of proposed means and/or rationale demonstrating how development as proposed will avoid, minimize, or mitigate the identified negative impacts, including a detailed description of the proposed measures that will be taken to mitigate any impacts to the identified resources on the property and any other affected property as a result of the planned development.

F. Qualifications of Preparer.

1. The EIA must be prepared by a certified planner(s) and/or environmental professional(s) with appropriate education, training and experience to perform such an analysis. A report presenting the results of the EIA must be submitted with the development plan.
2. Each EIA report must include a certification statement from the individual or company that prepared the report as follows:

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

- G. Review and Approval. Each EIA shall be subject to review and comment by the Township Planning Commission and/or an independent third-party reviewer retained by the Township to assist in reviewing the EIA.

Section 409. Traffic Impact Study

- A. Applicability. A traffic impact study (TIS) shall be submitted to the Township as part of a Preliminary Plan, and if substantial changes are made to the site design the Planning Commission may require an updated traffic study as part of a Final Plan for any subdivision or land development when:

1. The residential development is expected to generate more than one hundred (100) trips per day, based on the most current version of the Trip Generation Manual prepared by the Institute of Transportation Engineers (ITE), as amended, or
2. The non-residential development is expected to generate more than one hundred (100) total trips per day or more than twenty (20) truck trips per day, based on the most current version of the Trip Generation Manual prepared by the Institute of Transportation Engineers, as amended, or
3. The Planning Commission determines that a Traffic Impact Study is necessary to study the traffic impacts of the site during the peak hours at the development's site access and adjacent or corner intersection.

- B. Purpose.

1. To identify any traffic problems likely to result from the proposed development in relation to ingress/egress, road capacities, off-site traffic flow, and pedestrian and other non-vehicular circulation.
2. To enable the Planning Commission to assess the likely impacts of the proposed development on the existing transportation network of the Township and surrounding areas.

C. Contents.

1. The TIS shall be prepared in accordance with the Institute of Transportation Engineer's (ITE) Recommended Practice *Traffic Access and Impact Studies for Site Development*, current edition, and PennDOT Publications 201 and 282, current editions.
2. The TIS shall include, but not necessarily be limited to, an analysis of expected traffic generation to, from, and upon surrounding roads within a radius of 1-mile, or as otherwise determined by the Township, from the proposed development site, particularly showing AM and PM peak hours of existing traffic flow during a normal business day, in comparison with what is anticipated after the proposed development is fully completed and, if applicable, upon the completion of each stage. Estimated peak hour trip generation shall be based on procedures set forth in the most recent edition of the ITE Trip Generation Manual. Existing traffic flows shall be based on actual counts.
3. The determination of the levels of service for all intersections within the study under both pre-development and post-development conditions.

ARTICLE V

DESIGN STANDARDS

Section 500. Application

- A. The design standards and requirements outlined in this section will be utilized by the Township Planning Commission in determining the adequacy of all plans for proposed subdivisions and land developments.
- B. Development shall be planned, reviewed, and carried out in conformance with all Township, state and other applicable laws and regulations.
- C. The standards and requirements outlined herein shall be considered minimum standards and requirements for the promotion of the public health, safety, and general welfare.
- D. In a number of cases, separate standards are provided for development in accordance with the Open Space Design Option (OSDO) in order to facilitate the flexibility intended for the use of that option.
- E. Whenever other Township Ordinances or regulations impose more restrictive standards and requirements than those contained herein, such other regulations shall be observed.

Section 501. General Standards

- A. Land shall be suited to the purpose for which it is to be subdivided. Land with unsafe or hazardous conditions such as open quarries, unconsolidated fill, steep slopes, or flood prone areas shall not be subdivided unless the subdivision plan provides for adequate safeguards which are approved by the Township Planning Commission.
- B. Land shall be used in conformance with the Township's Zoning Ordinance, Comprehensive Plan, and other ordinances, codes, and regulations in effect in Lower Milford Township.
- C. The development of the proposed subdivision shall be coordinated with adjacent existing development so that the area, as a whole, may develop harmoniously.
- D. Land shall be developed in conformance with all pertinent statutes, regulations, rules and codes of Federal, State and County agencies concerned with subdivision, land development, construction and improvements or any activity arising out of or related thereto in any way whatsoever.

- E. Applicants shall make every effort to protect natural and cultural resources from disturbance due to subdivision or land development, including floodplains and floodways, steep slopes, watercourses/riparian forest buffers, woodlands, hedgerows, and specimen vegetation, wetlands and wetlands margins, groundwater recharge areas, and historic sites and structures as defined in this Ordinance.

Section 502. Block and Lot Design Standards

A. Block Layout.

- 1. The length, width and shape of blocks shall be determined with due regard to:
 - a. Provisions of adequate sites for buildings of the type proposed;
 - b. Township zoning requirements;
 - c. Least adverse impact to topography and natural features;
 - d. Requirements for safe and convenient vehicular and pedestrian circulation, including the reduction of intersections with arterial streets; and
 - e. Thoughtful and innovative design to create an attractive community.

B. Block Depth.

- 1. Single family residential blocks shall be of sufficient depth to accommodate two tiers of lots, except:
 - a. Where reverse frontage lots are required; or
 - b. Where prevented by the size, topographical conditions or other inherent conditions of property, in which case the Township Planning Commission may approve a single tier of lots.

- C. In commercial or residential land development areas, the block layout shall conform, with due consideration of site conditions, to the best possible layout to service the public, to permit good traffic circulation and the parking of cars, to make delivery and pick-up efficient, and to reinforce the best design of the units in the commercial or residential area.

D. General Lot Design Standards.

1. Within the requirements of the Township Zoning Ordinance, the size, shape, and orientation of lots shall be appropriate for the type of development and use contemplated.
2. Building areas shall be sited to provide access for emergency vehicles.
3. Generally, side lot lines shall be at substantially right angles to straight street lines or substantially radial to curved street lines. Substantially right angles or substantially radial shall mean an intersection angle of not less than eighty-three (83) degrees.
4. Where feasible, lot lines shall follow Township boundaries rather than cross them, in order to avoid jurisdictional problems.
5. Generally, the depth of residential lots shall be neither less than one (1) nor more than three (3) times their width.
6. Depth and width of parcels intended for non-residential uses shall be adequate for the use proposed and sufficient to provide satisfactory space for on-site parking, loading and unloading, setbacks, and landscaping.
7. Subdivisions shall not result in remnants of land that do not meet minimum area and bulk requirements for the applicable zoning district. All portions of a plan shall be incorporated into existing or proposed lots unless special usage for a specific piece of land is applied for, and approved by the Planning Commission, as part of a subdivision or land development proposal.

E. Lot Frontage.

1. All lots shall have frontage along the right-of-way of a street and have direct access to an existing or proposed street. Each lot shall have, in addition to the minimum width at the street line as specified by the zoning district, sufficient free and complete access to an existing or proposed street cartway to avoid the need to cross any portion of another lot to reach such road.
2. Under certain conditions, reverse frontage lots along existing streets are preferable and may be required under the following circumstances:
 - a. Reverse frontage lots and marginal access streets may be required if existing environmental, topographic, traffic conditions, and safety concerns may be adversely impacted by multiple access points to an existing street.

- b. Reverse frontage lots may be required in order to preserve and maintain the rural appearance and character of the area surrounding the proposed development.
- c. All reverse frontage lots shall incorporate a buffer along the rear lot line to afford a degree of privacy to the residence.

3. Use of Lane Lots

Lane lots may be permitted in certain circumstances to minimize hardships in the use of land that lacks adequate lot width along existing streets for an equitable use of the land being subdivided. This provision is intended for tracts of land with limited frontage that would limit the number of lots (i.e., less than twice the required lot width) but with sufficient area in the rear of the tract to conform with lot area and setback requirements. It is not intended that lane lots be permitted merely to increase the density of the development or to minimize the amount of road improvements.

A subdivision may only include lane lots under the following circumstances:

- a. The proposed lane lots conform in every respect to applicable sections of the Lower Milford Township Zoning Ordinance with the exception of lot width.
- b. Lower Milford Township Ordinance No. 40 established the use of Lane Lots under certain conditions. In order to continue the intent of that ordinance, lane lots are only permitted on tracts of land whose frontage along streets was established prior to Ordinance No. 40's adoption on April 13, 1978.
- c. No more than two (2) lane lots may be created from a tract of ground which existed on April 13, 1978.
- d. A lane lot, once subdivided, shall not be further subdivided without the creation of a new street meeting Township design and construction specifications. Said street is to be dedicated to the Township upon completion of construction.

4. Design of Lane Lots

- a. A lane lot may be used for only a single family detached dwelling.
- b. A lane lot shall not take access from a proposed street or extension of an existing street.

- c. Point of access for lane lots shall either be immediately adjacent to another lane lot or separated by the minimum lot width distance as designated by the zoning district.
 - d. The minimum lot area, lot width, lot depth, and setback of the zoning district shall be met exclusive of the lane.
 - e. The length of lane servicing the lane lot shall not exceed five hundred (500) feet.
 - f. Multiple tiering of lane lots is prohibited.
5. The minimum width of the lane servicing the lane lot shall be twenty-five (25) feet.

F. Lot Access.

1. General Provisions

- a. All driveways and related improvements shall be located and constructed in such manner as to provide safe access to Township and State roads and not to impair the drainage or normal maintenance within road rights-of-way, to alter the stability of any roadway, subgrade, or roadway embankment, to change the drainage of adjacent areas, nor to interfere with the traveling public. Sufficient area for and access to off-street parking shall be provided for.
- b. The location of any proposed access to a street may be prohibited by the township where such access point would create a hazard to traffic flow, and safety issues such as street grades, frequency of access points, or limited sight distances.
- c. Sight distance requirements for all driveways shall be in accordance with the Pennsylvania Code, Title 67, Transportation, Chapter 441 "Access To and Occupancy of Highways by Driveways and Local Roads", latest edition. All sight distance obstructions, including, but not limited to, embankments and vegetation, shall be removed by the applicant to provide the required sight distance.
- d. Clear sight triangles shall be provided at all driveway entrances and shall be shown on plans submitted for preliminary and final plan, or land development, approval. Within such triangles, nothing shall be erected, placed, planted, or allowed to grow in such a manner as to materially impede vision between a height of

two (2) and ten (10) feet above the centerline grade of the intersecting street. Such triangular area shall be determined by the intersecting street centerline, each point which is seventy-five (75) feet from the intersection of the driveway and street centerlines.

- e. No more than two (2) lots shall be served by a private driveway in cases of common ownership or shared use of a private driveway. As a condition to final plan approval, an agreement providing for the maintenance, repair, construction and reconstruction, including drainage facility maintenance and snowplowing of the shared driveway, shall be approved by the Township and shall be recorded against the lots in question.
- f. No driveway shall be situated within five (5) feet of a side or rear property line, except where shared driveways are utilized.
- g. Driveways to corner lots or lots having access to more than one street shall gain access from the street of lower classification when bounded by streets of two different classifications.
- h. Where a driveway slopes down from the street surface, the design of the driveway must contain provisions for adequate drainage facilities to insure stormwater runoff will not be channeled toward the residence.
- i. Access drives shall be provided with a leveling area with a maximum grade of four (4) percent for the first twenty (20) feet from the future right-of-way of the intersecting street.
- j. Direct access onto an arterial or collector street shall be prohibited where an adequate alternative access can be obtained from an existing or proposed local street. Where direct access cannot be avoided, adequate turnaround space shall be provided behind the right-of-way line.
- k. Where access is proposed to a state highway, authorization from the Pennsylvania Department of Transportation must be provided in the form of a valid Highway Occupancy Permit.
- l. All points of access to a public street shall intersect at right angles, where practical, and in no case less than seventy-five (75) degrees.
- m. Where a subdivision or land development contains an existing or proposed collector or arterial street, the Planning Commission may restrict the number of access points to said streets by requiring

reverse frontage lots. Refer to Section 502.E.2 for additional requirements of reverse frontage lots.

G. Single Family Residential Driveways.

1. Access to two abutting residential properties may be provided by a shared driveway. The proposed shared entrance shall have a minimum width of eighteen (18) feet for the first forty (40) feet from the edge of the intersecting cartway.
2. Driveways servicing a single family dwelling shall be no less than ten (10) feet in width, and no less than twelve (12) feet within the legal right-of-way.
3. Driveway entrance to single family residence shall be rounded at the intersection with the existing cartway with a minimum five (5) foot radius for local streets and ten (10) foot radius for collector or arterial streets.
4. The maximum driveway grade outside of the leveling area defined in Section 502. F.1.i shall not exceed fifteen (15) percent.
5. The minimum distance between the centerline of a proposed residential driveway and any adjacent street on the same side of the street shall be seventy-five (75) feet.
6. Clear sight triangles drawn in conformance with Subsection 520.F.1.d. shall be included on preliminary and final subdivision plans, or land development plan, for all driveway intersections.
7. New driveways shall provide for a safe turnaround area outside of the road right-of-way so that vehicles will not be required to back into the adjoining street.

H. Multi-family and Non-residential Access Drives.

1. Multi-family and non-residential access drives shall be no less than twenty four (24) feet in width, and shall not exceed thirty-six (36) feet in width at the mouth of the driveway, not including any radii, unless provided a median divider, which shall clearly be defined by curbing.
2. Entrances of multi-family and non-residential access drives shall be rounded at the intersection with the existing cartway with a minimum twenty (20) foot radius for local streets and twenty-five (25) foot radius for collector or arterial streets.

3. The maximum grade outside of the leveling area defined in Section 502.F.1.i shall not exceed ten (10) percent.
 4. The minimum distance between the centerline of a proposed multi-family or non-residential access drive and any adjacent street on the same side of the street shall be one hundred-fifty (150) feet.
 5. No more than two (2) multi-family or non-residential access drives servicing a single lot shall be permitted onto any intersecting street. Said access drives must be separated by a minimum of two-hundred (200) feet.
 6. Shared non-residential access drives servicing adjacent parcels shall be used whenever practical.
 7. Clear sight triangles drawn in conformance with Subsection 502.F.1.d. shall be included on preliminary and final subdivision plans, or land development plan, for all multi-family and non-commercial driveway intersections.
- I. Concrete aprons, where required by the Township, shall be provided for all driveways with concrete sidewalks. Concrete aprons shall be a minimum of six (6) inches of Class AA concrete (a twenty-eight (28) day minimum compressive strength of 3,750 psi and six (6) percent air entrainment by volume), in accordance with Lower Milford Township Standard Construction Details and Specifications.

Section 503. Street Design Standards

A. General Requirements.

1. Proposed streets shall be properly related to such street plans or parts thereof as have been officially adopted by the Township, including recorded subdivision plans and the Official Map of the Township and shall be classified according to their function.
2. Proposed streets shall further conform to such Township, County and State road and highway plans as have been prepared, adopted, and / or filed as prescribed by law.
3. Thoughtful and imaginative design of streets and their relationship to the arrangement and shape of lots is required. Proposed street patterns shall relate to existing streets, topography and existing and planned settlement patterns in order to accomplish a smooth flow of traffic, to avoid poor sight distance, to avoid traffic congestion and to promote public safety. The rectilinear design of streets and lots, involving long straight sections of street should be avoided.

4. Local streets should be designed to discourage excessive traffic speeds and adequate provisions for emergency vehicle access shall be made.
5. Along the existing street on which a subdivision or land development abuts, additional right-of-way, paving or other improvements shall be made, as required by the Township, built to the specifications established by the Township.
6. Dead-end streets shall be prohibited, except as stubs to permit future street extension into adjoining tracts, or when designed as cul-de-sacs. Temporary paved turnarounds shall be required.
7. Emergency access routes may be required at the sole discretion of the Township. The maintenance responsibilities of the emergency access route shall be clearly defined on the plans. An easement for the route shall be provided at a sufficient width to accommodate traffic and maintenance.
8. Streets that are extensions of or obviously in alignment with existing streets shall bear the names of the existing streets. Street names shall not duplicate or closely resemble names of any existing street or areas. All houses shall receive address numbers as assigned by the Township. All street names shall be subject to the approval of the Township. Development names shall also be subject to approval of the Township.
9. Where streets continue into adjoining municipalities, evidence of compatibility of design, particularly with regard to street widths, shall be submitted. The applicant shall coordinate such design with both municipalities to avoid abrupt changes in cartway width or in improvements provided.
10. The developer shall be required to widen the cartway, install curb and sidewalk, and drainage improvements along the existing streets.
11. Traffic calming measures shall be implemented on all streets, access drives, parking and loading areas, where required by the Township. Traffic calming measures shall be selected in consultation with the Township and shall be chosen with consideration of Pennsylvania Department of Transportation's "Publication 383 - Traffic Calming Handbook", as last revised.
12. Acceleration, deceleration or turning lanes may be required along existing and proposed streets whenever the Planning Commission determines such lanes are required.
13. Specifications - The minimum requirements for materials and construction methods for street improvements shall be those in the Pennsylvania Department of Transportation's Specifications (Form 408) as last revised, unless otherwise specified by Lower Milford Township.
14. Where applicable and/or required by Federal or State law, all designs and specifications are to be in accordance with the Americans with Disabilities

Act (ADA), American National Standard Institute (ANSI), or US Department of Housing and Urban Development specifications.

B. Street Right-of-Way and Cartway Widths.

1. Street right-of-way and cartway widths in proposed subdivisions and land developments shall conform to the following Street Design Standards:

STREET DESIGN STANDARDS

Street Classification	Right-of-Way Width	Pavement Width	Minimum Horizontal Clearance ²	Traffic Lane Width
Principal Arterial	100	44' w/o curb ³ 52' with curb	10'	12'
Minor Arterial	80	44' w/o curb ³ 52' with curb	10'	12'
Collector	60	28' w/o curb ³ 32' with curb	8'	10'
Local	50	22' w/o curb ³ 26' with curb	4'	10'
Local, OSDO	50	18' w/o curb ³ 22' with curb	4'	8'

¹ Street classification shall be determined by reference to the map titled "Functional Classification of Streets/Roads" which is found in the Southwestern Lehigh County Comprehensive Plan and any applicable Township Ordinance.

² Minimum horizontal clearance is defined as the distance beyond edge of shoulder or face of curb to an obstruction such as a utility pole or tree, but excluding mailboxes.

³ All local streets without curbs to have 5' stabilized shoulders installed on both sides. All collector streets without curbs to have 6' stabilized shoulders installed on both sides.

2. Additions and/or reductions in right-of-way and cartway widths may be required by the Planning Commission for one or more of the following purposes:
 - a. To promote public safety and convenience;

- b. To accommodate topographic circumstances which may result in cut/fill slopes extending beyond the standard right-of-way and in all circumstances to assure accessibility for maintenance operations;
 - c. To promote Township circulation and mobility plans for vehicular and / or pedestrian access;
 - d. To minimize impervious coverage and minimize stormwater runoff; and
 - e. To promote traffic calming.
3. Where a subdivision or land development abuts or contains an existing street of inadequate right-of-way width, additional right-of-way width shall be dedicated to conform to Township standards. Where a subdivision or land development abuts or contains an existing street of inadequate cartway width, the applicant shall be required to widen and/or reconstruct the roadway to meet Township standards.

C. Street Alignment.

- 1. Whenever street centerlines are deflected more than two (2) degrees, connections shall be made by horizontal curves. Long radial curves shall be used rather than a series of short curves and tangents.
- 2. Horizontal curves shall be designed to produce the minimum sight distances in accordance with Commonwealth of Pennsylvania, Pennsylvania Code, Title 67, Chapter 441 and Pennsylvania Department of Transportation Design Manual Part 2 standards based on speed limit and topographic features.
- 3. To ensure adequate sight distance, the minimum centerline radius for horizontal curves shall be:

Arterial Street	400'
Collector Street	300'
Local Street	150'
Local Street, OSDO	150'

- 4. For all street classifications except Local Streets within a development in accordance with the OSDO, a minimum tangent of one hundred (100) feet shall be required between reverse curves on a street. Local Streets within an OSDO development shall be required to provide a minimum tangent of fifty (50) feet between reverse curves except where the centerline radius

exceeds two hundred (200) feet, in which case no tangent shall be required.

5. Super elevation shall be provided for Arterial and Collector streets having a horizontal curve radius of less than five hundred (500) feet. Super elevated roadways shall be designed in accordance with the latest edition of "AASHTO – Geometric Design of Highways and Streets."
6. The approaches to an intersection shall follow a straight course for at least fifty (50) feet within a development in accordance with the OSDO and one hundred (100) feet in any other subdivision or land development, as measured from the intersection of the right-of-way lines.

D. Street Grades.

1. There shall be a minimum centerline grade on all streets of one (1) percent.
2. Unless approval is obtained from Planning Commission upon recommendation from the Township Engineer, centerline grades shall not exceed the following:
 - a. Local streets, excluding cul-de-sacs and loop streets - ten (10) percent; and
 - b. Collector streets - eight (8) percent.
3. Intersections shall be approached on all sides by leveling areas. Such leveling areas shall have a minimum length of one hundred (100) feet (measured from the intersection of the center lines of the intersecting road), within which no grade shall exceed a maximum of two (2) percent.
4. Vertical Curves
 - a. Vertical curves shall be used in changes of grade exceeding one (1) percent.
 - b. Vertical curves shall be designed to meet minimum sight distances according to standards set forth by the Pennsylvania Department of Transportation Publication No. 70, latest edition, "Guidelines for Design of Local Roads and Streets" and "Design Manual Part 2".

E. Street Intersections.

1. Streets shall intersect at right angles whenever practical. However, no two streets shall intersect with an angle of intersection less than seventy-five (75) degrees (measured at the centerline).
2. Multiple intersections involving the junction of more than two streets shall be prohibited. The use of roundabouts for multiple street intersections may be permitted in consultation with the Township. Roundabouts shall follow the standards of the Pennsylvania Department of Transportation Guide to Roundabouts (Pub. 414), as amended.
3. Two streets intersecting a third street shall either intersect with a common centerline or their centerlines shall be offset according to the following distances:
 - a. The two streets shall be separated by a distance of one hundred fifty (150) feet between centerlines measured along the centerline of the street being intersected when all three streets involved are local streets; and
 - b. The two streets shall be separated by a distance of four hundred (400) feet between centerlines measured along the centerline of the street being intersected when one or more of the streets involved is a collector or arterial street.
4. Street curb intersections shall be rounded by a tangential arc with a minimum radius of:
 - a. Twenty-five (25) feet for intersections involving only local streets; and
 - b. Thirty-five (35) feet for all intersections involving a collector street.
5. Street right-of-way lines shall be concentric with curb arcs at intersections whenever possible.
6. Clear sight triangles shall be provided at all street intersections. Within such triangles, nothing shall be erected, placed, planted, or allowed to grow in such a manner as to materially impede vision between a height of two (2) and ten (10) feet above the centerline grades of the intersecting streets in the area. Such triangular area shall be determined by: 1) the intersecting street centerline, each point of which is one hundred (100) feet from the intersection of such street centerlines or 2) as may be required

per PennDOT Publication 70, "Guidelines for Design of Local Roads and Streets," whichever controls.

7. Wherever a portion of the line of such triangles occurs within the proposed building setback line, such portion shall be shown on the Final Plan of the subdivision, and shall be considered a building setback line.
8. Sight distances at proposed intersections shall be in accordance with the current Commonwealth of Pennsylvania, Pennsylvania Code, Title 67, Chapter 441 "Access To and Occupancy of Highways by Driveways and Local Roads", latest revision and Pennsylvania Department of Transportation Design Manual 2. Plans shall indicate both required and available clear-sight distances.

F. Cul-De-Sac Streets and Loop Streets.

1. Dead-end streets are prohibited unless designed as cul-de-sac streets, or when designed as temporary cul-de-sac for future access to adjoining properties.
2. Any cul-de-sac street which is constructed for future access to an adjoining property shall be provided with a turning circle. The turning circle shall be completely within the boundaries of the subdivision and the use of the turnaround shall be guaranteed to the public. Additional areas beyond normal rights-of-way shall be granted as an easement to the Township, such easement to be extinguished upon the extension of the street.
3. Cul-de-sac streets, permanently designed as such, shall not be less than two hundred fifty (250) feet in length as measured from the intersection with the center line of an existing road to the center of the turning circle. Cul-de-sac streets shall not exceed one thousand (1,000) feet in length.
4. Cul-de-sac streets shall not serve more than fifteen (15) dwelling units. Loop streets shall not serve more than twenty-five (25) dwelling units.
5. All cul-de-sac streets shall be provided, at the closed end, with a fully paved turning circle in accordance with Lower Milford Township Standard Construction Details and Specifications. The turning circle may be offset to the left, but turnarounds offset to the right shall be discouraged.
6. The minimum radius to pavement edge or curb line shall be forty (40) feet and the minimum radius of the right-of-way shall be fifty (50) feet in a development.

7. The centerline grade on a cul-de-sac street shall not exceed eight (8) percent, and the grade of the diameter of the turning circle shall not exceed four (4) percent.
8. There shall be a leveling area of fifty (50) feet approaching the turning circle within developments in accordance with the OSDO and a leveling area of at least one hundred (100) feet in all other subdivisions or land developments. The grade of the leveling area shall not exceed four (4) percent.
9. Cul-de-sac streets are not permitted to take access from a loop street, or a cul-de-sac street.
10. All non-through streets shall be provided with an authorized sign stating that no outlet exists.
11. All cul-de-sac streets shall have a snow storage easement shared among at least two lots fronting the turn-around to facilitate snow removal. The size of the easement and number of encumbered lots shall be determined by the length of the street in proportion to the area of snow removal (i.e., 100 square feet of easement area for every ten (10) lineal feet of street). This easement shall be free and clear of any obstructions, including, but not limited to, shrub or tree plantings, fences, walls, benches, or signs that might limit its intended purpose. Mailboxes may not be located within five (5) feet of the easement.
12. Alternate cul-de-sac design standards: The Township may permit and / or require an alternate design for cul-de-sac turn around area on subdivisions or land developments submitted pursuant to, and limited to, the OSDO. The Applicant is encouraged to discuss this design standard with the Township during the sketch plan process.

Section 504. Street Construction Standards

All materials and construction methods for the construction of streets, roadways, street signs, curbs, sidewalks, handicap facilities and storm drainage facilities shall be in accordance with the applicable requirements of Pennsylvania Department of Transportation Specifications Publication 408, latest revision thereof, and shall be supplied by vendors approved by the Pennsylvania Department of Transportation for the supply of such materials. Construction details shall be as described in "Lower Milford Township Standard Construction Details and Specifications", latest edition as approved by the Board of Supervisors.

Section 505. Curbs

Concrete curbs shall be required at streets, private and public, at the sole discretion of the Planning Commission, and will generally be required along heavily traveled streets, at intersections and where street grades require them for proper drainage. Curbs shall be Plain Concrete Curb (18" height) in accordance with "Lower Milford Township Standard Construction Details and Specifications", as last revised. Belgium Block curb may be permitted at the discretion of the Planning Commission. If Belgium Block curb is used, the developer shall supply replacement blocks to the Township for use in the future. Number of replacement blocks shall be five (5) blocks per one hundred (100) lineal feet of curb installed.

- A. Curbs shall be provided on all parking areas within a land development. Curb may be waived, at the sole discretion of the Planning Commission, if the applicant can demonstrate that the physical barrier is not warranted and the elimination of curb helps promote water quality measures including filtration and infiltration of stormwater runoff.
- B. All curbs shall conform to the specifications for Class AA concrete, as specified by the Pennsylvania Department of Transportation Publication 408, last revised, with a minimum compressive strength of 3,750 psi after twenty-eight (28) days.
- C. Curbs shall be constructed to the dimensions shown in the Lower Milford Township Standard Construction Details and Specifications. Final curb height, above the wearing course, shall be eight (8) inches.
- D. Curb constructing methods shall be in accordance with Pennsylvania Department of Transportation Publication 408, last revised.
- E. Where a curb ties into an inlet, two (2) #5 reinforced bars twelve (12) inches long shall be used to connect the curb to the inlet.
- F. Depressed curbs at driveways shall be no higher than one and one-half (1-½) inches above the street surface. The length of this depressed curb, at the mouth of the driveway, not including any radii, shall not exceed thirty-six (36) feet without a safety island. This safety island shall not be less than fifteen (15) feet in length. Pipes, grates or other constructions shall not be placed in the gutter to form a driveway ramp. The depressed curb at handicapped ramps shall be flush with the paving surface.
- G. New curb cuts for driveways and parking areas shall be limited to the extent feasible.
- H. Excavations shall be made to the required depth and the material upon which the curb is to be constructed shall be compacted to a firm even surface as specified in the Lower Milford Township Standard Construction Details and Specifications.

- I. Where it is necessary to replace existing vertical curbs with depressed curbing, two (2) ten (10) foot long sections of existing curb shall be removed down to the subgrade. Any portions of the cartway disturbed during curbing removal or installation will be repaired to new condition.
- J. Curbing shall be constructed in ten (10) foot lengths. A pre-molded bituminous impregnated expansion joint having a minimum thickness of one-half (1/2) inch shall be placed between sections of curved curb and at intervals of not more than fifty (50) feet. Intermediate joints between ten (10) foot sections shall be saw cut.
- K. All curb depressions for handicapped ramps must comply with the requirements of the Americans with Disabilities Act, ANSI A117.1, and the Pennsylvania Universal Accessibility Act, as applicable.

Section 506. Street Names and Street Signs

- A. Street nameplates shall be put at all intersections, naming all streets at each intersection, and shall be visible from both directions when approaching an intersection. Generally, the sign shall be parallel to the street that it is identifying.
- B. Street nameplates shall match existing street nameplates as currently used by the Township, and in accordance with the Lower Milford Township Standard Construction Details and Specifications.
- C. The nameplates shall be located with a view to making them seen at all times with a minimum of effort by both pedestrian and vehicular traffic, and as close to the side of the cartway or curb as practical, but no part of the name plate shall be permitted to overhang any part of the cartway or curb.
- D. Types and samples of street nameplates, standards and installation and location shall be submitted for the inspection and approval of the Township prior to installation.
- E. Temporary street signs and signs identifying the address and lot numbers of each lot shall be erected by the developer as soon as streets are rough-cut in.
- F. Permanent street signs, including stop signs and speed limit signs, shall be erected prior to issuance of the first building permit on the affected street.
- G. Street signs shall be consistent in design and construction standards with current PennDOT standards and those in general use by Lower Milford Township.
- H. All signs shall be high-grade reflectivity signage in accordance with PennDOT standards.

- I. Proposed streets which are in alignment with others already existing and named shall bear the name of the existing streets.
- J. In no case shall the name of a proposed street duplicate an existing street name in the municipality, in the fire district, and in the postal district, irrespective of the use of the suffix street, road, avenue, boulevard, driveway, place, court, or lane.
- K. All street names shall be subject to the approval of the Township Planning Commission. Prior to the acceptance of a street name, the developer shall provide verification from the United States Postal Service that there are no duplicate or similar street names within the area code district servicing the development.

Section 507. Easements

- A. Easements with a minimum width of twenty (20) feet shall be provided for utilities. Additional width may be required for access and maintenance as determined by the Township. Permanent or temporary construction easements may also be required at the sole discretion of the Township.
- B. Generally, easements shall be centered on or adjacent to rear or side lot lines.
- C. Nothing shall be permitted to be placed, planted, set or put within the area of an easement unless necessary for the purpose of the easement.
- D. Drainage easements shall be required along watercourses.
- E. Where stormwater or surface water will be gathered within a subdivision or land development and discharged or drained over lands within or beyond the boundaries of the subdivision or land development, the developer shall reserve or obtain easements over all lands affected if flow patterns are changed, as deemed by the Planning Commission. These easements shall be adequate for such discharge of drainage and for the carrying off of such water and for the maintenance, repair and reconstruction, including the right of passage over and upon the same by vehicles, machinery and other equipment for such purposes, and shall be of sufficient width for such passage and work. The width of the easement shall be as required by the Planning Commission.
- F. The Township may accept dedication of easements prior to the final dedication of improvements to enforce such easements during construction or prior to the completion of all improvements.
- G. Metes and bounds descriptions shall be provided for all easements.
- H. The developer shall provide a method of physically delineating easements for emergency access, pedestrian access or other utilization across private lots. Such

method may include shrubbery, trees, fence, markers, or other method acceptable to the Planning Commission.

- I. Any easement or right-of-way required herein shall be made part of the deeds to all affected properties. Any error found in a deed shall be immediately corrected and re-recorded in the Lehigh County Recorder of Deeds office at the sole expense of the applicant. The applicant shall be solely responsible to the buyer for any failure to record an easement or right-of-way shown on the approved plan. Failure to record an easement or right-of-way shown on the approved plan shall not prevent its intended use from being utilized. All easements and rights-of-way shown on the final plan of record shall be deemed to be incorporated in the appropriate deed.

Section 508. Sidewalks

- A. Sidewalks shall be provided in all subdivisions and land developments, except as provided for development in accordance with the OSDO, on both sides of all existing and proposed streets, within parking areas, and, where necessary for safety and convenience, to establish pedestrian connections to parking areas and green spaces or through blocks. Within developments in accordance with the OSDO, sidewalks shall not be required on the side(s) of streets where abutting permanent open space if adequate alternative provision for pedestrian movement is provided within the open space, e.g., trail(s). All sidewalk construction must comply with the requirements of the Americans with Disabilities Act, ANSI A117.1, and the Pennsylvania Universal Accessibility Act, as applicable.
- B. Maintenance of sidewalks is the responsibility of the owner of the property directly adjacent to the sidewalk. Sidewalks which are damaged or deteriorating and present a hazard to public safety shall be repaired at the owner's expense. A note shall be added to the record plan indicating the sidewalk maintenance responsibilities.
- C. The following design standards shall be used for sidewalks:
 1. The minimum width of all sidewalks shall be four (4) feet. Additional width may be required, as determined by the Planning Commission, if the walk abuts a fence, a building, walls or parking areas. Where a sidewalk exists on an adjoining property, the dimensions may be modified to match existing conditions provided the sidewalk is located within the street right-of-way;
 2. The grades and paving of sidewalks shall be continuous across driveways;
 3. The construction of all sidewalks shall be in accordance with the requirements of the Township;

4. Sidewalks shall be laterally pitched at a slope not greater than two (2) percent;
5. Handicap ramps shall be provided at all intersections. All sidewalks and sidewalk ramps must meet the requirements of the Americans with Disabilities Act, ANSI A117.11 and the Pennsylvania Universal Accessibility Act. Where sidewalk grades exceed five (5) percent, a non-slip surface texture shall be used;
6. All sidewalks shall conform to the specifications for Class AA concrete, as specified by PennDOT, with a minimum compression strength of 3,750 psi after twenty-eight (28) days;
7. Where sidewalks abut the curb and/or a building, wall or other permanent structure, a premolded expansion joint one-half (1/2) inch in thickness shall be placed between curb and the sidewalk for the full length of such structure. Sidewalks shall be constructed in separate slabs fifty (50) feet in length except for closures. The slabs between expansion joints shall be divided into blocks five (5) feet in length by scoring transversely;
8. Sidewalks shall have a minimum thickness of four (4) inches when used solely for pedestrian traffic; a minimum thickness of six (6) inches at all residential driveways; and eight (8) inches for all non-residential driveways. Two layers of welded wire fabric (6/6) shall be provided in all sidewalks constructed at driveways; and
9. Excavation shall be made to the required depth whereupon a layer of six (6) inch base of 2A aggregate shall be placed and thoroughly compacted prior to laying the sidewalks when used solely for pedestrian traffic with a minimum thickness of a six (6) inch base at all driveways.

Section 509. Trails

At the discretion of the Planning Commission, a system of bicycle, equestrian, and/or pedestrian trails for public use generally may be established and secured by dedication or easement. When developing the trail system requested, consideration should be given to the content of the Lower Milford Township Trail Plan as adopted by the Board of Supervisors.

Section 510. Sewage Disposal

Each lot in a subdivision or land development shall have a permitted sewage disposal facility in accordance with the rules and regulations of the PADEP and the Township's Act 537 Sewage Facilities Plan.

- A. The developer shall provide sanitary sewage disposal consistent with the Township's Act 537 Sewage Facilities Plan and Chapter 71 of Title 25, the Rules and Regulations of the Pennsylvania Department of Environmental Protection.
- B. All required revisions/supplements to the Township's Act 537 Sewage Facilities Plan for sewage facilities shall be prepared for submission to the Township by the developer, and shall contain all information and supporting documentation as required by this Ordinance and Chapter 71 of Title 25, the Rules and Regulations of the Pennsylvania Department of Environmental Protection.
- C. Documented approval of the Sewage Facilities Planning Module for Land Development by the PADEP shall be required prior to final plan approval unless an exemption is received from PADEP.
- D. Sewage facilities shall be designed and constructed in strict accordance with the applicable requirements and specifications of the Township and the PADEP.
- E. Sanitary sewers shall not be used to carry stormwater nor shall floor drains or sump pumps be connected to the sanitary sewer.
- F. Prior to the start of construction in any subdivision or land development (building, site work, etc.), temporary toilet facilities shall be installed for the builders, contractors and subcontractors, unless the applicant or applicant's agent shows, to the satisfaction of the Township, that other suitable toilet facilities will be available during construction.
- G. In accordance with the Township's adopted Act 537 Sewage Facilities Plan, public sewer service shall be limited to serving existing and a limited number of new uses within the Village of Limeport Sewer Service Area. Lateral connections and grinder pumps for each building within the Service Area constructed after the completion of the original system shall be installed at the expense of the applicant or landowner, for dedication to the Township.
- H. Individual On-site Sewage Systems.
 - 1. All lots shall be provided with both primary and secondary on-site sanitary sewage disposal system sites compliant with the design standards of Title 25, Chapter 73, Rules and Regulations of the PADEP and Township standards.
 - 2. Soil Test Requirements.
 - a. Deep hole test pits and soil percolation tests, if required by PADEP regulations, shall be performed for each lot within the subdivision or land development.

- b. Deep hole and soil percolation tests shall be performed in accordance with the procedure required by the PADEP by a licensed professional engineer or land surveyor, a Pennsylvania certified sewage enforcement officer, or similarly qualified professional.
- c. Backfilling of all percolation test holes and related test pits on the tract shall be accomplished within the time period specified in 35 P.S. §750.7(b)(8) of the Pennsylvania Sewage Facilities Act.

I. Limeport Village Sanitary Sewerage System.

- 1. Any connection to the collection and conveyance system leading to the Limeport Sanitary Sewerage System shall be constructed in accordance with the Lower Milford Township Standards and Specifications for Sewer Construction.
- 2. If a planning exemption is requested, the developer shall submit a completed Sewage Facilities Planning Module Application Mailer to the Township for processing and submission to PADEP.

Section 511. Water Supply / Fire Protection

- A. Each dwelling unit, commercial or industrial building in all subdivisions and land developments hereafter granted approval shall have an adequate supply of potable water for domestic use as applicable by the PA UCC Code.
- B. Where the Applicant proposes that individual on-site water supply systems shall be utilized, he shall be responsible either to install such facilities or to guarantee (by deed restriction or otherwise), as a condition of the sale of each lot or parcel within the subdivision, that the facilities can be installed by the purchaser of such lot or parcel. The proposed locations of wells shall be shown on the preliminary plan for each lot; existing wells on the property or on adjoining properties must also be shown. Isolation distances (a circular area whose radius conforms to PADEP regulations) from on-site sewage systems, where proposed, must also be indicated on the plan. Individual water supply systems shall be designed and installed in accordance with all applicable standards of the PADEP.
- C. Where water is to be shared and maintained by the individual owners of more than one lot within the subdivision or land development, the Applicant shall present evidence to the Planning Commission that the future lot owners, and all assigns, will be made aware through the deeds to the affected lots of the shared water system, and by lot purchase, agree to maintain such system as long as the lots are occupied with residential dwellings.

- D. All proposed subdivisions or land developments that meet the Applicability requirements of Section 405.B of this Ordinance are required to submit a Water Resources Impact Study prepared pursuant to Section 405 at the time of application for Preliminary Plan approval.
- E. Individual on-lot well systems shall be provided in accordance with Part II of the Pennsylvania Department of Environmental Protection Public Water Supply Manual.
- F. Lower Milford Township is part of a special regulatory program instituted by the Commonwealth of Pennsylvania and the Delaware River Basin Commission for the purpose of protecting groundwater resources. All new wells, or a series of wells, that will draw more than 10,000 gallons of water per day are subject to these regulations.
- G. All wells, borings, and investigations of groundwater shall comply with the provisions of Section 405 of this Ordinance.

Section 512. Other Utilities

- A. In all developments proposing five (5) or more lots, all utility lines, including but not limited to electric and telephone, shall be placed underground, in accordance with the Pennsylvania Code Title 52, Chapter 57, Subsection H, entitled "Underground Electric Service in New Residential Developments". Installation of all utilities shall be in strict accordance with the engineering standards and specifications of the Township and of the public utility concerned.
- B. Underground utilities shall be installed before the roads are constructed, as approved by the Township. Whenever practical, all utility lines to be installed outside public street rights-of-way shall share a common utility easement.
- C. Easements shall be required to facilitate the maintenance and repair of utility lines. Utility easements shall be located either:
 - 1. Abutting the public street right-of-way. In this case, a minimum easement width of ten (10) feet shall be required; or
 - 2. Along rear or side lot lines. In this case, a minimum easement width of twenty (20) feet, ten (10) feet on each side of the lot line, shall be provided. Where the lot line coincides with the subdivision boundary, a minimum easement width of fifteen (15) feet may be required by the Township Planning Commission.
- D. All proposed utility locations shall be coordinated so as not to conflict with landscaping requirements.

- E. In accordance with the provisions of the Pennsylvania Utility Line Protection Act, Act 287 of 1974, as amended (Act 199 of 2004), or most current amendment, an applicant shall contact all applicable utilities and accurately determine the locations and depths of all underground utilities within the boundaries of the tract proposed for development prior to excavation. A list of the applicant's utilities and each utility's phone numbers shall appear on the plans submitted for review, and proof of contact shall be presented in the form of the Pennsylvania One Call System serial number.
- F. Petroleum, natural gas, or other gas transmission lines:
1. No company intending to install any petroleum, petroleum product or natural gas transmission line shall be allowed to construct the line on less than a fifty (50) foot right of way. Such lines are to be installed in the center of the right-of-way, and shall comply with applicable standards imposed by State and Federal laws and requirements; and
 2. There shall be a minimum distance of twenty-five (25) feet, measured from the right-of-way line, between any proposed dwelling unit and any petroleum, petroleum products or natural gas transmission line which traverses the subdivision.

Section 513. Monuments and Markers

- A. Monuments shall be placed at sufficient locations as determined by the Township Engineer to define the exact location of all roads and to enable the re-establishment of all road lines. In general, monuments shall be set on the road line on one side of the road at the beginning and ending of all curves and at those points on the curve at road intersections necessary to establish the actual intersection. Monuments shall be placed at the tract perimeter where no markers exist.
- B. Markers shall be placed at all points where lot lines intersect road lines or other lot lines and at all angle points in lot lines.
- C. Monuments shall be concrete with a minimum top width of four (4) inches by four (4) inches and a bottom width of six (6) inches by six (6) inches. The minimum height shall be twenty-four (24) inches. Concrete monuments shall be embedded with iron rebar for detection purposes.
- D. Markers shall be steel bars at least eighteen (18) inches long and not less than five-eighth (5/8) inches in diameter.
- E. Monuments shall be placed at each change in direction of a boundary, at each angle point and at the beginning and end of curves along all roadways. Markers shall be placed at all proposed lot corners except where concrete monuments are

required. Utility easements shall be monumented at their beginning, their end, and at all direction changes. Monuments shall be placed in the ground after final grading is completed.

- F. All monuments shall be certified for accuracy by the developer's engineer and their accuracy checked by the Township Engineer. Accuracy of monument shall be within three-hundredths (3/100) of a foot.
- G. In cases where it is impossible to set a monument or where the permanency of a monument may be better ensured by off-setting the monument with a reference monument(s), the Township may authorize such procedure, provided that proper instrument sights may be obtained and complete offset data is designated on the record plan. A reference monument (preferably two) shall be set on the boundary line(s) that intersect the corner.

Section 514. Parking Areas

All subdivisions and land developments shall provide adequate off-street parking and loading facilities in compliance with the requirements in Article XIII. of the Lower Milford Township Zoning Ordinance, as applicable. In addition, the following requirements shall apply to all non-residential uses:

- A. No parking shall be permitted within five (5) feet of a side or rear property line.
- B. All dead-end parking lots shall provide sufficient back up area for the end stalls.
- C. No less than a five (5)-foot radius of curvature shall be permitted for all curblines in parking areas.
- D. No more than twenty (20) parking spaces shall be placed in a continuous row without an intervening planting area of at least one hundred eighty (180) square feet.
- E. Parking areas and site accessibility for handicapped persons shall be provided in accordance with applicable federal and state standards, including in particular the Americans with Disabilities Act and the Pennsylvania Universal Accessibility Act, as each may be amended.
- F. Where the requirements of the Lower Milford Township Zoning Ordinance with respect to parking differ from the standards of this section, the stricter standards shall apply.

Section 515. Grading

- A. All proposed earth disturbances shall comply with the following standards related to grading and earthwork:

1. Natural and/or existing slopes exceeding one (1) vertical unit to four (4) horizontal units shall be benched or continuously stepped into competent materials prior to placing all classes of fill. Cut slopes shall not exceed one (1) vertical unit to three (3) horizontal units, except that cut slopes up to one (1) vertical unit to two (2) horizontal units may be permitted where the Township is satisfied that such steeper cut slopes will reduce the negative impacts of the grading disturbance overall and that adequate erosion control is provided.
2. Fills toeing out on natural slopes steeper than one (1) vertical unit to three (3) horizontal units shall not be made unless approved by the Township after receipt of a report 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 safely support the proposed fill.
3. Fill areas shall be properly prepared prior to the placement of any new material. If excessive wetness, springs, or other seepage of water can be observed, 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.
4. Fill shall begin at the lowest section of the area and spread in six-inch layers prior to compaction.
5. Each layer of fill shall be inspected prior to compaction. All roots, vegetation or debris must be removed and stones larger than six (6) inches in diameter must be removed or broken.
6. Each layer of compacted fill shall be tested to determine its dry density as per ASTM D1557, including its latest revision. The density of each layer shall be not less than ninety-five percent (95) percent of maximum dry density as determined by ASTM D1557. The moisture content of the compacted layer shall be not more than four (4) percent less or two (2) percent greater than the optimum moisture content as determined by ASTM D1557.
7. A qualified geotechnical engineer shall be required to inspect and certify all fill operations, as required by the Township. A written report, by the geotechnical engineer, shall be prepared and submitted to the Township detailing his or her findings respecting the fill operations.
8. The top or bottom edge of filled or cut slopes shall be at least five (5) feet from property or right-of-way lines of roads in order to permit the normal

rounding of the edge without encroaching on the abutting property or right-of-way line.

9. Adequate provisions shall be made for dust control as deemed acceptable by the Township.
10. 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 until growth is well-established at the time of completion and final inspection.

Section 516. Erosion and Sediment Control

- A. All earth disturbance activities shall be designed, implemented, operated and maintained so as to prevent sedimentation, and control erosion, in accordance with the PA "Clean Streams Law" in effect at the time of preliminary plan submittal. This shall be accomplished through:
 1. Erosion and sediment control and stormwater management during earth disturbance activity (e.g., during construction).
 2. Stormwater management and water quality protection measures after completion of an earth disturbance activity (e.g., after construction), including operations and maintenance.
- B. No preliminary or final subdivision plan, or land development plan, shall be approved unless:
 1. There has been an erosion and sediment control plan approved by the Township and the Lehigh County Conservation District, if applicable, that provides for minimizing erosion and sedimentation consistent with this section; or
 2. No earthmoving is planned as part of the subdivision or land development.
- C. All Best Management Practices (BMPs) shall conform to the State Water Quality Requirements or any more stringent requirements as determined by the Township.
- D. Post-construction water quality protection and the operation and maintenance of permanent stormwater BMPs shall be addressed as required by Article VI hereof.
- E. Erosion and sediment control plan requirements for earth disturbance activities:
 1. No earth disturbance activity shall commence until approval by the Township of an erosion and sediment control plan. The erosion and sediment control plan shall comply with this section, with the

requirements of the Lehigh County Conservation District, and with the following reference publications, as amended.

- a. 25 PA Code, Chapter 102, Erosion and Sediment Control, Section 102.4(b)(5); and
 - b. PADEP Erosion and Sediment Pollution Control Program Manual, March 2000, as amended.
2. The erosion and sediment control plan shall be prepared by a person trained and experienced in erosion and sediment control methods and techniques.
 3. Erosion and sediment control plans shall encompass the minimum limit of disturbance necessary for access for grading and borrow material in order to construct in accordance with the BMPs (including sediment basins and sediment traps), and the necessary erosion and sediment pollution controls. All plans shall adhere to applicable maximum area of disturbance criteria.
 4. If the development or subdivision proposes earth disturbance in excess of 5,000 square feet, the developer shall submit the erosion and sedimentation control plan to the Lehigh County Conservation District for review and approval.
 5. If the development or subdivision proposes earth disturbance in excess of one (1) acre, the developer shall be required to secure a National Pollutant Discharge Elimination System (NPDES) permit from the Pennsylvania Department of Environmental Protection.
 6. Evidence of any necessary permit(s) for regulated earth disturbance activity from the Northeast Regional PADEP office or Lehigh County Conservation District must be provided to the Township prior to the commencement of any earth disturbance activity for which any such permit may be required.
 7. Compliance with Township regulations and procedures:
 - a. The Planning Commission, in its approval of all preliminary plans of subdivision and land development, shall require the execution of erosion and sediment control measures as contained in the applicant's approved erosion and sediment control plan.
 - b. The installation and design of the specified erosion and sediment control measures shall, as a minimum, be in accordance with standards and specifications found in the Department of

Environmental Protection "Soil Erosion and Sedimentation Control Manual" available through the Lehigh County Conservation District.

- c. Final plans for minimizing erosion and sedimentation as approved will be incorporated into the agreement and bond required by the Township (see Section 703).
 - d. When the applicant proposes stream channel construction or alteration, the applicant shall obtain and provide the Township with evidence of a permit issued for said construction from the Pennsylvania Department of Environmental Protection prior to final plan approval.
 - e. Approval of plans and specifications for the control of erosion and sedimentation shall precede the approval of the final subdivision or land development plans, and become a part thereof.
8. Erosion and sediment controls must be constructed, stabilized, and functional before site disturbance begins within the affected tributary.
 9. Immediately after earth disturbance activities cease, the disturbed areas shall be stabilized. During non-germinating periods, mulch shall be applied at rates specified on the approved erosion and sedimentation control plan. Disturbed areas which are not at finished grade and which will be re-disturbed within one year shall be stabilized in accordance with temporary vegetative stabilization specifications. Disturbed areas which are at finished grade or which will not be re-disturbed within one year shall be stabilized in accordance with the permanent vegetative stabilization specifications.
 10. Until the site is stabilized, all erosion and sediment BMPs must be maintained properly. Maintenance must include inspections of all erosion and sediment BMPs after each runoff event and on a weekly basis. All preventive and remedial work, including cleanout, repair, replacement, re-grading, reseeding, re-mulching, and re-netting must be performed immediately. If erosion and sediment control BMPs fail to perform as expected, then immediate replacement BMPs or modifications of those controls previously installed is required.
 11. A copy of the approved erosion and sediment control plan and any required permit(s) shall be available at the project site at all times.

Section 517. Natural Resource Protection

The provisions of Article X. of the Lower Milford Township Zoning Ordinance are incorporated by reference herein. Any definition in the Lower Milford Township Zoning Ordinance that pertains to this Section is incorporated by reference herein. The provisions of this Section apply to all subdivision and land development applications in accordance with the regulation of this Ordinance.

Section 518. Landscaping, Screening, and Street Trees

- A. General Landscaping Requirement. Any part or portion of any lot or tract which is not occupied by buildings or structures or used for loading, parking spaces and aisles, pedestrian circulation, designated storage areas, or other permitted impervious or semi-pervious surfaces shall be landscaped according to a Landscape Plan approved by the Planning Commission or shall be left in its natural state (e.g., forest, meadow or hedgerow). The Landscape Plan shall be submitted as part of both Preliminary and Final Plan submissions and shall clearly identify all landscaped areas, all areas subject to vegetation disturbance and replacement pursuant to Section 517 above, and any areas to be left in a natural state. The Landscape Plan shall comply with this Ordinance, applicable provisions of Article XIII of the Lower Milford Township Zoning Ordinance, and the following:
1. Existing vegetation, with the exception of invasive species as defined in this Ordinance, and natural features shall be preserved wherever feasible, pursuant to Section 517 herein, and incorporated into the Landscape Plan; and
 2. Landscape plantings, with the exception of turf grasses, shall use native plants. For a partial listing of native plants suitable for use in Lower Milford Township, see the Lower Milford Township Standard Construction Details and Specifications.
- B. Buffering and Screening. Where applicable, subdivisions and land developments proposed within the Township's Village Center District shall comply with the Planting Screen requirements of Section 1305 of the Lower Milford Township Zoning Ordinance.
- C. Street Trees.
1. Except as provided below for development in accordance with the OSDO, all subdivisions or land developments shall provide street trees of varying species along the entire length of any existing or proposed public road or street that forms a property boundary and on both sides of any street within the subdivision or land development . Where a subdivision is

developed in accordance with the OSDO, street trees shall not be required along the side(s) of any street abutting permanent open space.

2. A naturalized street tree planting concept shall be used that conforms to the following parameters, subject to Planning Commission approval:
 - a. Varying street tree species spaced ten (10) to fifteen (15) feet back from the street right-of-way line and coordinated with utility suppliers;
 - b. An average of one street tree shall be planted on each side of the road for every thirty five (35) feet of road frontage; and
 - c. Planting design that accentuates desirable views, harmonizes with the existing landscape, and integrates important landscape elements is highly encouraged.
3. Street trees shall meet the following standards:
 - a. Minimum Size – three (3) to three and one-half (3½) inches caliper, unless otherwise designated within the Lower Milford Township Standard Construction Details and Specifications.
 - b. Branching Height - The height of branching shall depend upon the size and species of tree; those trees selected for street tree usage shall have a minimum clearance height of seven (7) feet above grade before branching begins.
 - c. All trees shall be balled and burlapped in accordance with the standards of the following publications: "American or U.S.A. Standard for Nursery Stock," ANSI or U.S.A.S. Z60.1 of the American Association of Nurserymen, as amended. The ball depth shall be not less than sixty (60) percent of the ball diameter.
 - d. Excavated plant pits shall be a minimum of two (2) feet wider than the ball size.
 - e. Trees shall be planted such that the root flare is between 3" and 8" above the surrounding existing grade. Excessive rootball above the root flare shall be removed to approximately the top of the root flare.
 - f. Backfill soil shall be topsoil from the area of the excavation unless otherwise approved by the Township. Subsoil excavation from the planting hole shall not be used as backfill. The addition of high

quality compost bringing total organic matter up to five (5) percent and addition of a slow release fertilizer to the backfill is encouraged but not required.

- g. Tree Guying - Three (3) No. 12 galvanized steel wires shall be spaced equally around the tree and be so connected to the tree with rubber hoses so that the wire does not come in contact with the tree and anchored with three (3) tree stakes.
 - h. All tree guying material shall be removed one (1) year after planting.
 - i. All plantings shall be mulched to a depth of three (3) inches in a six (6) foot diameter ring around the base of each tree or continuous beds, if trees or shrubs are less than six (6) feet apart. Only organic mulch is permitted. At no point shall the mulch come into contact with the tree trunk.
- D. Landscape Guarantee. All initial replacement plantings shall be guaranteed and maintained in a healthy and/or sound condition for at least eighteen (18) months or be replaced. Applicant shall escrow sufficient funds for the maintenance and/or replacement of the proposed vegetation during the eighteen (18) month replacement period to provide for the removal and replacement of vegetation damaged during construction.

Section 519. Carbonate Geology Protection Standards

A. Design Standards

1. Carbonate Geology Area Development - All buildings, structures, impervious surfaces and utilities shall be so situated, designed and constructed to minimize the risk of structural damage from existing or future sinkholes.
2. Buildings, structures and underground utilities shall not be located within one hundred (100) feet of the karst features identified pursuant to Section 519.A.2 unless:
 - a. a recognized professional with competence in the field demonstrates that a minimal risk of structural damage due to sinkholes will exist; or
 - b. 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.

3. Liquid fuels and other hazardous materials shall not be stored underground within areas underlain by carbonate geology. Liquid fuels and other hazardous materials stored in above-ground facilities underlain by carbonated geology shall have impervious secondary containment designed to safely hold the entire volume of liquid or hazardous material within the primary tank or container. The secondary containment shall be properly covered to prevent precipitation from accumulating within the overflow region.

- B. Stormwater – Refer to Saucon Creek Watershed Act 167 Stormwater Management Ordinance (Ord. No. 104) or latest amendment.

Section 520. Dedication of Land, or Payment in Lieu of Fees Thereof, for Parks, Recreation, or Open Space Uses

A. Purpose.

The purpose of this Section is to implement the April 2009 Lower Milford Township Parks, Recreation, and Open Space Plan, as may be amended, including:

1. Providing a variety of active and passive open space lands and facilities to serve the varied recreational needs of the Township's residents;
2. Preserving open space and protecting the natural, scenic, and historic resources of Lower Milford Township;
3. Developing a system of public parklands and other open space areas that can effectively and efficiently offer recreational opportunities and experiences;
4. Providing equitable and convenient accessibility to recreation facilities and open space areas within the Township's more densely settled areas; and
5. Supporting community development and stability through a balance of developed areas, locally and regionally valued open space resources, and neighborhood, community, and regional recreational opportunities.

B. Applicability.

The requirements of this Section shall apply to any subdivision or land development application proposing new residential building lots or new dwelling units.

C. General Requirements.

1. The Applicant shall make an irrevocable offer of dedication of park and recreation lands to the Township per the requirements of this Section. The Township Board of Supervisors may authorize the transfer of the land to a homeowners' association or other appropriate third party when such reservation is consistent with the 2009 Lower Milford Township Parks, Recreation, and Open Space Plan. In lieu of dedicating park, recreation, and open space land to the Township, the Applicant may elect to pay a fee to the Township.
2. All dedications of land for park and recreation purposes shall be consistent with any standards contained in the Lower Milford Township Parks, Recreation, and Open Space Plan, and all provisions of this Section. Such dedications shall be at locations deemed appropriate by the Township Planning Commission, in consultation with the Township Recreation and Open Space Board. If a specific site has been designated in the Lower Milford Township Parks, Recreation, and Open Space Plan for future park purposes, any preliminary or final plan shall show the dedications of land in a location that corresponds to the Plan designation. Title to land to be dedicated shall be good and marketable, free of all liens or other defects and acceptable to the Township Solicitor.

D. Amount of Land Required.

1. Consistent with the 2009 Lower Milford Township Park, Recreation, and Open Space Plan, the amount of park and recreation land required to be dedicated for subdivisions satisfying the applicability criteria of Section 520.B. shall equal to 0.067 acres of land per residential building lot or dwelling unit. Lands proposed for dedication shall be consistent with the Land Characteristics and Design Standards of Section 520.F of this Ordinance.
2. The land dedicated to the Township for park and recreation purposes of this section shall be in addition to the required restricted open space for subdivisions filed in accordance with the Open Space Design Option of the Lower Milford Township Zoning Ordinance.
3. The land dedicated to the Township for park and recreation purposes need not be part of the land development or subdivision. It may be located on a separate parcel of land, provided that in the sole discretion of the Planning Commission, it is convenient to the subdivision or land development. In addition, the developer, with the approval of the Planning Commission, may construct park and recreation facilities at the Township facilities, Southern Lehigh School District properties, or the facilities of another development to satisfy the requirements of this Section.

E. Fee-in-Lieu of Dedication.

1. Fee in lieu of dedication.
 - a. The Planning Commission and the applicant may agree to the payment of a fee in lieu of dedication of land.
 - b. Where the Planning Commission and the applicant agree that a fee is to be contributed in lieu of the dedication of land, the amount of the fee shall be equal to the greater of:
 - i. Fair market value of the undeveloped land that otherwise would have been required to be dedicated; or
 - ii. For residential buildings, a fee of \$1,000 per dwelling unit and for buildings that are wholly or partially nonresidential, a fee of \$0.50 for each square foot of gross building area for all floors.
 - c. Fair market value of the land in lieu of which the fee is paid shall be determined by agreement of the Planning Commission and the applicant. In the event that the Planning Commission and applicant cannot agree upon the fair market value of the land, then an MAI appraisal shall be supplied and paid for by the applicant and reviewed by the Planning Commission. The appraisal required by this subsection shall be prepared by a recognized, licensed, competent real estate appraiser with no interest, financial or otherwise, in the affected property or application.
 - d. The Planning Commission shall reserve the right to obtain its own appraisal, and, in the event that the Planning Commission appraisal is valued at less than 10% greater than the applicant's appraisal, the value shall be the average of the two appraisals; in the event that the Planning Commission appraisal is valued 10% greater than that of the applicant, then a third appraiser shall be selected by agreement of both the Planning Commission and applicant, to be paid for by the applicant, to resolve the difference.
 - e. Any fee in lieu of dedication which is collected by the Township shall be used only for the purpose of providing park and recreational facilities within the Township.
 - f. A fee authorized under this subsection shall, upon its receipt by the Township, be deposited in an interest-bearing account, designated as the Township Parks and Recreation Fund. Interest earned on such accounts shall become funds of that account. Funds from

such accounts shall be expended only on the design, construction or acquisition of specific recreation facilities approved by the Planning Commission.

F. Land Characteristics and Design Standards.

The Planning Commission in exercising its duties regarding the review of subdivision or land development plans shall consider the following criteria in determining whether to accept the Applicant's offer to dedicate land:

1. The area or areas shall be consistent with the plan for open space and plan for recreation components of the 2009 Lower Milford Township Park, Recreation, and Open Space Plan and any other open space, park or recreational facilities existing or subsequently adopted by the Township, Lehigh County, or regional recreation authority;
2. The area or areas shall be suitable for active recreational uses in their entirety without interfering with adjacent dwelling units, parking, driveways, and roads. Consistent with the primary objective of providing active recreation areas, the proposed open space shall be free of wetlands and surface water, and not characterized by floodplain, hydric soils, or slopes exceeding six (6) percent;
3. The area or areas and their use shall be consistent with natural resource protection provisions of this ordinance and the natural resource protection standards contained in Article X of the Lower Milford Township Zoning Ordinance;
4. The area(s) shall be comprised of areas not less than one-quarter (1/4) acre of contiguous areas and not less than seventy-five (75) feet in width, except where a narrower area of linear open space is serving solely as a connecting access strip between larger open space parcels or as a portion of a trail system or pathway network. The configuration of the recreation area must be able to accommodate the proposed recreation activities;
5. The area(s) shall be interconnected with common open space areas on adjoining parcels where ever possible, including provision for pedestrian pathways for general public use to create linked pathway systems between developments, neighborhoods, villages, and other public recreational areas;
6. The area(s) and uses shall be coordinated with applicable open space and recreation plans of any federal, state, county, regional, adjacent municipal or private organization to compliment various programs increasing the utility of the open space and recreation network;

7. The area(s) and uses shall be provided with sufficient perimeter parking when necessary, and with safe and convenient access by adjoining street frontage or other right of way easements capable of accommodating pedestrian, bicycle, maintenance and vehicle traffic and containing appropriate access movements;
8. The area(s) shall be undivided by any public or private streets, except where necessary for proper traffic circulation, and then only upon the recommendation of the Township Engineer and Planning Commission;
9. The area(s) shall be free of all structures and utility easements, except those structures related to outdoor recreational uses. Subject to the approval of the Township Planning Commission, supportive equipment for the use of such lands in the disposal of treated wastewater through land application or community subsurface methods may be permitted. Furthermore, other utility easements (cable, phone, fiber optic, or electric) where utilities are placed underground and no part of them or their supportive equipment protrudes above the ground-level are permitted within the area(s) free of woodlands and other sensitive natural or cultural resources;
10. The area(s) shall be subject to approval of a Landscape Plan. The Landscape Plan submitted in accordance with Sections 517 and 518 of this Ordinance shall include provisions for full invasives removal by the Applicant and/or developer prior to dedication of any natural area to the Township; and
11. The linkage of erosion and sediment control or stormwater control facilities with recreation facilities may be permitted and is encouraged by the Township if the presence of such facilities does not conflict with proposed activities or detract from the aesthetic values associated with the recreational facility. Plans for combining these facilities should be submitted to the Township for review and approval; and
12. Where part of a phased development, areas offered for dedication shall be in amount and at locations, as deemed acceptable by the Planning Commission, sufficient to meet the minimum recreational needs generated by each phase of the development. The Applicant shall provide, as part of the application for approval of the first phase of development, a schedule to the amount of recreational land, or of fees-in-lieu thereof, to be provided in each of the subsequent phases.

ARTICLE VI
STORMWATER MANAGEMENT

Section 600. General

- A. The management of stormwater runoff for subdivisions and land developments proposed in accordance with the provisions of this Ordinance shall be provided as follows:
1. For those areas of the Township which are located within the Saucon Creek watershed, stormwater management shall be provided in accordance with the Saucon Creek Watershed Act 167 Stormwater Management Ordinance No. 104 or as amended;
 2. For those areas of the Township that are located within the Perkiomen Creek headwaters, stormwater management shall be provided in accordance with the Perkiomen Creek Headwaters Act 167 Stormwater Management Ordinance No. 119, or as amended;
 3. Exemptions defined by Section 106 of either of the above-referenced Act 167 Plans shall provide stormwater management in accordance with the provisions contained within the current Lower Milford Township Stormwater Management Ordinance.

ARTICLE VII

IMPROVEMENT GUARANTEES AND ACCEPTANCE

Section 700. General Requirements

- A. Physical improvements to the subdivision/land development tract shall be provided, constructed, and installed as shown on the approved Final Plan, in accordance with the requirements of the Township Planning Commission, and any criteria contained in this Ordinance and any other applicable ordinances, resolutions, regulations or policies, and with any conditions of approval contained in any applicable Order or Approval for any conditional use, special exception, zoning variance, or other zoning relief.
- B. Prior to Board of Supervisors endorsement and recording of the Final Plan, the developer shall submit a completed and executed original copy of the Subdivision Improvements Agreements and the Improvements Maintenance Guarantee in the amount required by Section 703 to the Planning Commission at the time the application for the Final Subdivision Plan is filed. No Final Plan shall be signed by the Board of Supervisors or approved for recording until the developer has completed all required improvements or has provided financial security in accordance with Section 703 of this Ordinance.
- C. All improvements installed by the developer shall be constructed in accordance with the design specifications of the Township, public utility, PADOT, or municipal authority. The Township Engineer shall provide improvement specifications for a required improvement in cases where no applicable Township specifications exist. Any fees incurred by the Township for its Engineer to provide such improvement specifications shall be billed to the developer and deducted from the escrow deposit.
- D. Observation of the installation of those improvements required by Section 703 shall be at the direction of the Board of Supervisors. The subdivider shall pay directly to the Township a specified fee per hour or portion thereof for field inspection by the Township Engineer as defined herein. (See Section 806.C.)

Section 701. Required Improvements

- A. Improvements shall be provided, constructed, and installed by the developer as set forth in the Improvements Agreement, on the approved Final Plan, and as required in accordance with the design standards set forth in Articles V. and VI. of this Ordinance. The following improvements may be required, but are not limited to the following, in all applicable cases:

1. Public street excavating, grading, subgrade preparation, base course paving, and surface course paving installed according to current Township and PADOT standards and specifications;
2. Curbing or stabilized shoulder and drainage swale with no curbing installed according to Township specifications;
3. Sidewalks, trails, and other interior walkways installed according to Township specifications;
4. Sanitary sewer system improvements installed according to the specifications of the Township, the appropriate government authority, and the PADEP;
5. Water supply and distribution system improvements installed according to the specifications of the Township, the appropriate governmental authority, and PADEP;
6. Erosion and sedimentation control measures subject to Township, PADEP, and Lehigh County Conservation District specifications;
7. Stormwater management improvements established according to specifications of the Township, the current Township Stormwater Management Ordinance and applicable Act 167 Ordinances;
8. Landscaping, street trees, and any required screening from adjoining properties or uses as provided for in Article V of this Ordinance;
9. Open space and recreation areas as provided for in Article V of this Ordinance, and Article VIII of the Lower Milford Township Zoning Ordinance for Open Space Design Option developments; and
10. Monuments and markers:
 - a. Monuments and markers must be placed by a Registered Engineer or Surveyor so that the scored, etched, or marked point coincides exactly with the points of intersection of the lines being monumented. Markers must be set so that the top of the marker is level with the surface of the surrounding ground. Monuments must be set so that the top of the monument is at least level with, but no more than six (6) inches above the surface of the surrounding ground. All monuments and markers shall be certified for accuracy by the developer's engineer or surveyor in writing.

b. Monuments and markers must be constructed as follows:

	<u>Material</u>	<u>Minimum Size</u>
Monument	Concrete	24" x 4" x 4" (top) 6" x 6" (bottom) Monuments to be embedded with iron rebar for detection purposes.
Marker	Iron Pipes	18" x 5/8" Diameter

c. Monuments must be set:

- i. At the intersection of lines forming corners and angles in the original boundaries of the development;
- ii. Two (2) at each public street intersection and one side of each public street at angle points and at the beginning and end of curves;
- iii. At the beginning, intermediate changes of direction and end of utility easement(s); and
- iv. At external boundaries of areas to be conveyed for public use.

d. Markers must be set:

- i. At all angle points of lot lines;
- ii. At the point of curve and point of tangent of lot lines;
- iii. At the point of intersection of rear lot lines; and
- iv. At the point of intersection of lot lines with street lines.

e. Monuments and markers shall be placed in the ground after final grading is complete at a time specified by the Township Engineer, or monies given in escrow to insure installation.

f. Any monuments or markers that are removed must be replaced by a Registered Engineer or Surveyor at the expense of the developer.

11. Area to be Improved on Existing Public Roads. Except as provided for in Section 702.C, each subdivider of lots along an existing public road will

be required to construct improvements on his half of the public roadway in front of each lot.

- B. No occupancy permits for any building or buildings to be erected shall be issued by the Township until the Township Engineer certifies that:
1. The roads, streets, or lanes providing access to and from existing public roads to such building or buildings have been improved to a permanently passable condition by application of at least a base course thereon; and
 2. That all other improvements depicted on the approved final plan, either upon the lot or lots or beyond the lot or lots in question and necessary for the reasonable use of or occupancy of any such building or buildings have been completed.

Section 702. Waiver and/or Deferral of Improvements Requirements

The Planning Commission, where it deems appropriate, may waive the construction of roadway improvements to existing roads along the frontage of any proposed subdivision or land development within the Township and accept a contribution to the Township's Road Projects Fund to fund highway improvement projects which require coordination along more than a single property boundary. The amount of the contribution shall be calculated on a per-unit basis for curbing, sidewalk, shoulder stabilization and/or road widening according to the per unit cost schedule set forth in Ordinance No. 118 as may be amended from time to time.

Section 703. Improvement Guarantee Requirements and Agreements

- A. Before the Township Planning Commission shall approve final plans of any subdivision or land development and, as a requirement for approval thereof, the Applicant or developer shall enter into a written agreement in the manner and form set forth by the Township, to guarantee the construction and installation of all improvements required by this Ordinance at the developer's expense. This Subdivision Improvement Agreement shall specify the following where applicable:
1. That the Applicant or developer agrees that he will lay out and construct, at his expense, all roads, streets, lanes or alleys, together with all other improvements, including grading, paving, curbs, gutters, sidewalks, street lights, fire hydrants, water mains, street signs, shade trees, stormwater management facilities, sanitary sewers, landscaping, traffic control devices, open space and recreation areas, and erosion and sediment control measures in conformance with the final plan as approved, the applicable specifications and regulations of PennDOT and PADEP, and any other

applicable regulations, and that he shall complete these improvements within the time or times specified by the Township Planning Commission;

2. That the Applicant or developer guarantees completion of all public improvements by means of a bond or deposit of funds or securities in escrow in an amount established pursuant to Section 703.B herein; and
 3. That the Applicant or developer agrees to tender a deed or deeds of dedication to the Township for such streets and for such easements for sanitary and storm sewers, sidewalks, manholes, inlets, pumping stations, and other appurtenances as shall be constructed as public improvements provided that the Township shall not accept dedication of such improvements until their completion is certified as satisfactory by the Township Engineer. All streets, easements and other public improvements offered for dedication shall be accompanied by a metes and bounds description by the developer. The Board of Supervisors may require that the Applicant or developer supply a title insurance certificate from a reputable company before the Township accepts any property.
- B. The form and type of financial security (performance guarantee) shall be approved by the Township Solicitor, and may be either a Federal or Commonwealth chartered lending institution irrevocable letter of credit, a restrictive or cash escrow account in such lending institution or a performance bond. Such financial security shall be posted with a bonding company or Federal or Commonwealth chartered lending institution chosen by the developer posting the financial security, provided that the bonding company or lending institution is authorized to conduct business within the Commonwealth of Pennsylvania.
- C. The amount of financial security to be posted for completion of the required improvements shall be equal to one hundred-ten (110) percent of the cost of completion of the required improvements, estimated as of ninety (90) days following the date scheduled for completion by the developer. The estimated cost of completion of the required improvements shall be submitted by the Applicant or developer and prepared by a professional engineer licensed as such in the Commonwealth of Pennsylvania and certified by such engineer to be a fair and reasonable estimate of such cost. The Township Planning Commission may refuse to accept such estimate for good cause. If the Applicant or developer and the Township Planning Commission are unable to agree upon an estimate, the procedures set forth in the Section 509(g) of the MPC shall be followed. No final plan shall be approved until the scheduled date for subdivision or land development construction completion is explicitly set forth on its cover sheet.
- D. All the improvements required by this Ordinance and other laws, statutes and authorities and the approved Final Plan shall be installed within one (1) year of the approval date of the Final Plan. After such date, approval of the uncompleted part of the subdivision or development will become null and void. In the case of a

preliminary plat calling for the phased installation of improvements, the time for completing all required improvements in all phases of the subdivision for development plan shall not exceed three (3) years from the approval date of the Preliminary Plan. After such date, approval of uncompleted phases of the subdivision or development will become null and void.

- E. Each development phase in a residential subdivision shall contain a minimum of twenty-five (25) percent of the total number of dwelling lots as depicted on the preliminary plan.
- F. If the Applicant or developer requires more than one (1) year from the date of posting of the financial security to complete the required improvements, the Township Planning Commission may require that the amount of financial security be increased by an additional ten (10) percent for each one-year period beyond the first anniversary date from posting of financial security or to an amount not exceeding one hundred-ten (110) percent of the cost of completing the required improvements as re-established on or about the expiration of the preceding one-year period by using the above procedure for estimating the cost of completion of the required improvements.
- G. Where development is projected over a period of not more than three (3) years, the Township Planning Commission may authorize submission of final plans by section or stages of development subject to such requirements or guarantees as to improvements in future stages of development as it finds essential for the protection of any finally approved section of the development.
- H. As the work of installing the required improvements proceeds, the Applicant or developer may request that the Township release, from time to time, such portions of the financial security necessary for payment to the contractor performing the work. Any such request shall be in writing, addressed to Lower Milford Township, and the Board of Supervisors shall have forty-five (45) days from receipt of such request within which to allow the Township Engineer to certify, in writing, to the Board of Supervisors that the improvements have been completed in accordance with the approved plan. If the Township fails to act within the forty-five (45) day period, the Township shall be deemed to have approved the release of funds as requested. The Township may, prior to final release at the time of completion and certification by the Township Engineer, require retention of ten (10) percent of the estimated cost of the aforesaid improvements.
- I. Maintenance agreement: Where the Township accepts dedication of all or some of the required improvements following completion, the developer shall be required to post an additional financial security to secure the structural integrity of the improvements as well as the functioning of said improvements in accordance with the design and specifications in the Final Plan for a term not to exceed eighteen (18) months from the date of acceptance of dedication. Said financial security shall be in accordance with the requirements of Section 509 of the

Pennsylvania Municipalities Planning Code (53 P.S. 10509) with regard to installation of such improvements, and the amount of the financial security shall be fifteen (15) percent of the actual cost of installation of said improvements.

Section 704. Inspections

- A. At least seven (7) days and not more than thirty (30) days prior to the start of construction of earth disturbing activities, the developer shall schedule a preconstruction meeting with all contractors involved in the project, the land owner, all appropriate Township officials, the Township Engineer, PADOT (if applicable), the Lehigh County Conservation District, the plan preparer, and any other party involved. The developer will have sole responsibility to schedule the meeting and provide timely notification to all participants.
- B. The construction or installation of all improvements shall at all times be subject to inspections by the Township Engineer and/or representatives of the Township. If such inspection reveals that work is not in accordance with approved plans and specifications, that construction is not being done in a workman-like manner, or that erosion and sediment controls are failing to prevent acceleration erosion or water borne sediment from leaving the site of construction, the Township Engineer or Township representative shall immediately notify the Township Zoning Officer or Township Manager of the violations or infractions. The Township Zoning Officer, or in the absence of the Zoning Officer, the Township Manager is empowered to require corrections to be made and/or order the suspension of subdivision approval and to issue a stop work order which shall include the following sanctions:
1. That no lot in the subdivision shall be conveyed or placed under agreement of sale;
 2. That all construction on any lots for which a building permit has been issued shall cease; and
 3. That no further building permits for any lot shall be issued.

The Township Manager or Zoning Officer shall inform the Township Board of Supervisors of any ordered suspension of subdivision approval or stop work order issued, within twenty-four hours of such action.

- C. Any stop work order may be removed upon the determination of the Township that the said defects or deviations from plan requirements have been corrected.
- D. It shall be the responsibility of the Applicant, subdivider, developer, builder, or contractor to notify the Township Engineer and the Township Zoning Officer a minimum of two (2) working days in advance of the commencement of any construction or installation of any facility or utility required by this Ordinance or

by the approved subdivision or land development plan in order that provisions may be made for inspection by the Township.

E. In addition to the advance notice required in subsection C, above, it shall be the responsibility of the Applicant, subdivider, developer, builder, or contractor to call, at a minimum, for the following specific inspections, by notifying the Township Engineer, who in turn will notify the Township Zoning Officer or other duly authorized person, a minimum of one (1) working day in advance of the time anticipated for the required inspection:

1. Installation of erosion and sedimentation control facilities;
2. Key trench for stormwater management basins following excavation but prior to the placement of any backfill;
3. Underground stormwater management facility prior to excavation;
4. All pipe work, including outlet pipe and anti-seep collars in stormwater management basins, storm drains, and utilities, before backfill begins;
5. Utility work within existing roadways prior to road opening or saw-cutting of roadway;
6. Footings for structures following excavation but prior to the commencement of any further construction work on the structure;
7. Fill placement in existing or future Township right-of-ways prior to placement;
8. Road subgrade when completed, but before the start of installation of curbs or stone base course;
9. Curbs and/or sidewalks, when stone base is in place, and during the subsequent concrete pours;
10. Crushed aggregate base course during its installation;
11. Bituminous surface binder course during its installation;
12. Bituminous surface wearing course during its installation;
13. Erosion and sedimentation control facilities removal, including conversion of sediment basins / traps to permanent, prior to conversion; and
14. Final inspection.

F. Prior to Final inspection, the developer shall correct any impacts to natural or cultural resources on- or off-site due to construction, or correct any impacts to approved resource impact mitigation measures, including:

1. Trees removed by construction but demarked on the plans and/or in the field to be preserved shall be replaced in accordance with the replacement ratios specified within Section 1004.C of the Lower Milford Township Zoning Ordinance and Section 518 herein.
2. Erosion rills, channels, ditches or eroded stream embankments, including those caused by development on immediate downstream public and/or private property, shall be adequately stabilized by methods proposed by the developer/applicant and approved by the Township. Any permits required for these activities must be obtained by the applicant and/or developer.
3. All stormwater management facilities and piping systems must be cleared of sediments and debris. Underground facilities clogged with sediments shall be replaced if deemed necessary by the Township.
4. Any damage to stormwater basin berms, spillways and piping shall be repaired, including on the immediate downstream public or private property. Repairs shall be proposed by the applicant/developer and approved by the Township.
5. All temporary erosion control facilities left in place for construction, particularly filter fabric fencing and temporary stormwater basin outlet structures, shall be removed and replaced with permanent facilities where applicable. Any areas disturbed during the removal process must be stabilized.
6. Invasive plant species and algae must be removed from stormwater basin areas and any other areas where invasive plants conflict with the provisions of the landscaping plan.
7. All landscaping materials required by the land development plan but destroyed by humans or animals must be replaced. Plantings destroyed by humans must be relocated to lessen the chance of further damage. Plantings destroyed by animals, particularly deer, must be replaced with species less desirable to the animal or must be treated with environmentally sensitive repellents.
8. Any riparian buffer areas, wetlands or open space areas infringed upon by mowing, fencing, clearing, structures, etc., must be returned to their natural state. All structures, other than those previously identified for retention, including but not limited to those identified in the Historic

Resources Impact Study, must be removed or demolished and all debris removed from the site.

9. All construction debris must be removed from the site.

Section 705. As-built Plans

- A. Each developer shall be required to file with the Township an As-built Plan following completion of the development.
- B. The As-built Plan shall be a corrected copy of the approved subdivision/land development plan showing actual dimensions and conditions of roads and all other improvements, including but not limited to:
 1. Concrete monuments and lot pins;
 2. Cartway edges and centerline, location and elevations;
 3. Stormwater management improvements, including storm sewers, inlets, manholes, risers, and culverts;
 4. All known utilities including, but not limited to, electric, cable and telephone, whether underground or overhead;
 5. Landscaping, street trees, and screening where applicable;
 6. Easements; and
 7. Certification of the accuracy of the plan by the Applicant's or developer's engineer or surveyor.
- C. In addition, the As-built Plan shall indicate that the resultant grading, drainage structures and/or drainage systems and erosion and sediment control practices, including vegetative measures, are in substantial conformance with the previously approved drawings and specification. The Plan shall note all deviations from previously approved drawings. Two (2) copies of the As-built Plan shall be submitted to the Township for distribution to the Township Engineer and for the Township file.
- D. In addition to the paper plan submission, the Township may require a digital electronic submission from the developer meeting drafting standards, data layer separation requirements and in the format specified by the Township Engineer which shall remain electronically accessible for a minimum period of ten (10) years thereafter.

Section 706. Release from Performance Guarantee

- A. When the developer has completed all of the required improvements, and has submitted the As-built Plan in accordance with Sections 705.A through D. above, the developer shall notify the Township in writing by certified or registered mail of the completion of the improvements, and shall send a copy to the Township Engineer. The Board of Supervisors shall, within ten (10) days after receipt of such notice, direct and authorize the Township Engineer to inspect all of the Applicant's or developer's subdivision or land development improvements. The Township Engineer shall promptly file a report with the Board of Supervisors and shall mail a copy to the developer by certified or registered mail. The report shall be made and mailed within thirty (30) days after receipt by the Township Engineer of the authorization from the Township. This report shall indicate approval or rejection of the improvements, either in whole or in part, and if the improvements, or any portion thereof, shall not be approved or shall be rejected by the Township Engineer, the report shall contain a statement of reasons for such non-approval or rejection.
- B. The Board of Supervisors shall notify the developer within 15 days in writing by certified or registered mail of its actions in response to the Township Engineer's findings.
- C. If the Board of Supervisors or the Township Engineer fails to comply with the time limitations set forth herein, all improvements will be deemed to have been approved and the developer shall be released from all liability pursuant to the developer's performance guarantee, bond, or other security agreement.
- D. If any portion of the said improvements shall not be approved or shall be rejected by the Board of Supervisors, the developer shall proceed to complete the same and upon completion, the same procedure of notification, as outlined herein, shall be followed.
- E. Improvements bonds or funds in escrow may be released in stages as construction of a significant portion of streets, and all other public improvements, are completed and approved by the Board of Supervisors. Escrow releases must be signed and approved by the Township Engineer who shall be responsible for determination of the amount of escrow to be released. No such amount shall be released, however, until approved by the Board of Supervisors.
- F. The developer shall be responsible for maintenance of all public improvements until such improvements are offered for dedication and are accepted by the Township.
- G. In the event any improvements which may be required have not been installed as provided in this Ordinance or in accordance with the approved final plan, the Board of Supervisors has the power to enforce any escrow, corporate bond or

other security by appropriate legal and equitable remedies. If proceeds of such bond or other security are insufficient to pay the cost of installing or making repairs or corrections to all improvements covered by said security, the Board of Supervisors may, at its option, install all or part of the remainder of such improvements covered by said security, and may institute appropriate legal or equitable action to recover any monies spent in the installation thereof and any additional monies necessary to complete the remainder of the improvements. All the proceeds, whether resulting from the security, or from any legal or equitable action brought against the Applicant or developer, or both, shall be used solely for the installation of the improvements covered by such security and not for any other purpose.

Section 707. Dedication and Acceptance of Public Improvements

- A. Upon completion of any public improvements shown on an approved final plan, the Board of Supervisors may require that the developer offer such public improvements for dedication. In such a case, the developer shall prepare a deed of dedication and forward same to the Township for review by the Solicitor of the Township. Deeds of dedication for public improvements may be accepted by resolution of the Board of Supervisors at a regular meeting thereof. No roads or streets in any approved subdivision or development will be accepted as the responsibility of the Township until such time as fifty (50) percent of the lots in any approved subdivision or development have dwellings or other principal buildings erected thereon. Should the above-mentioned road or streets, even though constructed according to these specifications, deteriorate before the necessary fifty (50) percent of the lots have buildings erected thereon, such roads or streets shall be repaired in a manner acceptable to the Board of Supervisors before being accepted by the Township.
- B. Where streets are offered for dedication to the Township, and subject to final inspection and approval by the Township Engineer, such streets may only be accepted by the Board of Supervisors during the months of April through July of each year. For the Board of Supervisors to accept dedication of public streets outside of this four-month period, the developer must agree to compensate the Township for any lost liquid fuels revenue.
- C. The Board of Supervisors may require or accept dedication of any or all of the stormwater management facilities installed as part of the development. In the event the Township does not accept dedication of the facilities, the maintenance responsibilities for the facilities will be placed on the lot owners, a homeowner's association or similar entity, or an organization capable of carrying out such maintenance responsibility.
- D. Where maintenance of storm water management facilities is to be the responsibility of individual lot owners, a homeowners association or similar entity, or an organization capable of carrying out maintenance responsibilities, the

Board of Supervisors and Planning Commission, may require that an initial escrow maintenance fund be established in a reasonable amount, and/or that maintenance responsibilities be set forth in perpetual covenants or deed restrictions binding on the landowner's successors in interest.

- E. Where the Board of Supervisors accepts dedication of all or some of the required improvements following completion, the Township may require the posting of financial security to secure structural integrity of said improvements as well as the functioning of said improvements in accordance with the design and specifications as depicted on the final plans for a term not to exceed eighteen (18) months from the date of acceptance of dedication. Said financial security shall be of the same type as otherwise required in this Ordinance with regard to installation of such improvements, and the amount of the financial security shall not exceed fifteen (15) percent of the actual cost of the installation of said improvements.

ARTICLE VIII

ADMINISTRATION

Section 800. General Administration

All provisions of this Ordinance shall be administered by the Planning Commission and Board of Supervisors of Lower Milford Township, or by the Township Manager, Township Zoning Officer, or other Township official as designated by the Board of Supervisors. All plans, applications, correspondence, complaints, requests for variances, or appeals shall be delivered to the Township Building and submitted through the Township Zoning Officer.

Section 801. Amendments

Any amendment to this Ordinance shall be in accordance with Section 505 of the Pennsylvania Municipalities Planning Code. Resolutions adopted by the Board of Supervisors pursuant to the terms and conditions of this Ordinance regarding fees, paving and construction standards and timely changes in other design criteria as specifically permitted by Resolution of the Board shall not require an amendment to this Ordinance.

Section 802. Modifications

- A. Where, owing to special conditions, a literal enforcement of any of the requirements of this chapter would result in unnecessary hardship or where a requirement does not serve the purpose for which it was designed, the Planning Commission may make such reasonable exception thereto as will not be contrary to the public interest.
- B. In granting modifications, the Planning Commission may impose such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements so modified.

Section 803. Appeals

The decisions of the Planning Commission with respect to the approval or disapproval of subdivision or land development plans may be appealed directly to the Lehigh County Court of Common Pleas, in the same manner and within the same time limitations as is provided for zoning appeals in Article X of the Pennsylvania Municipalities Planning Code.

Section 804. Revisions to Recorded Plans

If, during the course of construction or completion of a subdivision or land development, minor changes, alterations or modifications of a Final Plan become necessary, such changes may be approved only after written acceptance by the Township Engineer. Substantial revisions to any such Final Plan, as determined by the Township Engineer, shall require resubmission to the Planning Commission for approval and endorsement by the Board of Supervisors and the re-recording of the Final Plan.

Section 805. Records

The Township shall assign a subdivision application number to all initial applications, and all matters referring to each such plan should be identified with and filed in accordance with the subdivision number. The Township shall keep a record of its findings, decisions and recommendations relative to all subdivision plans filed for review.

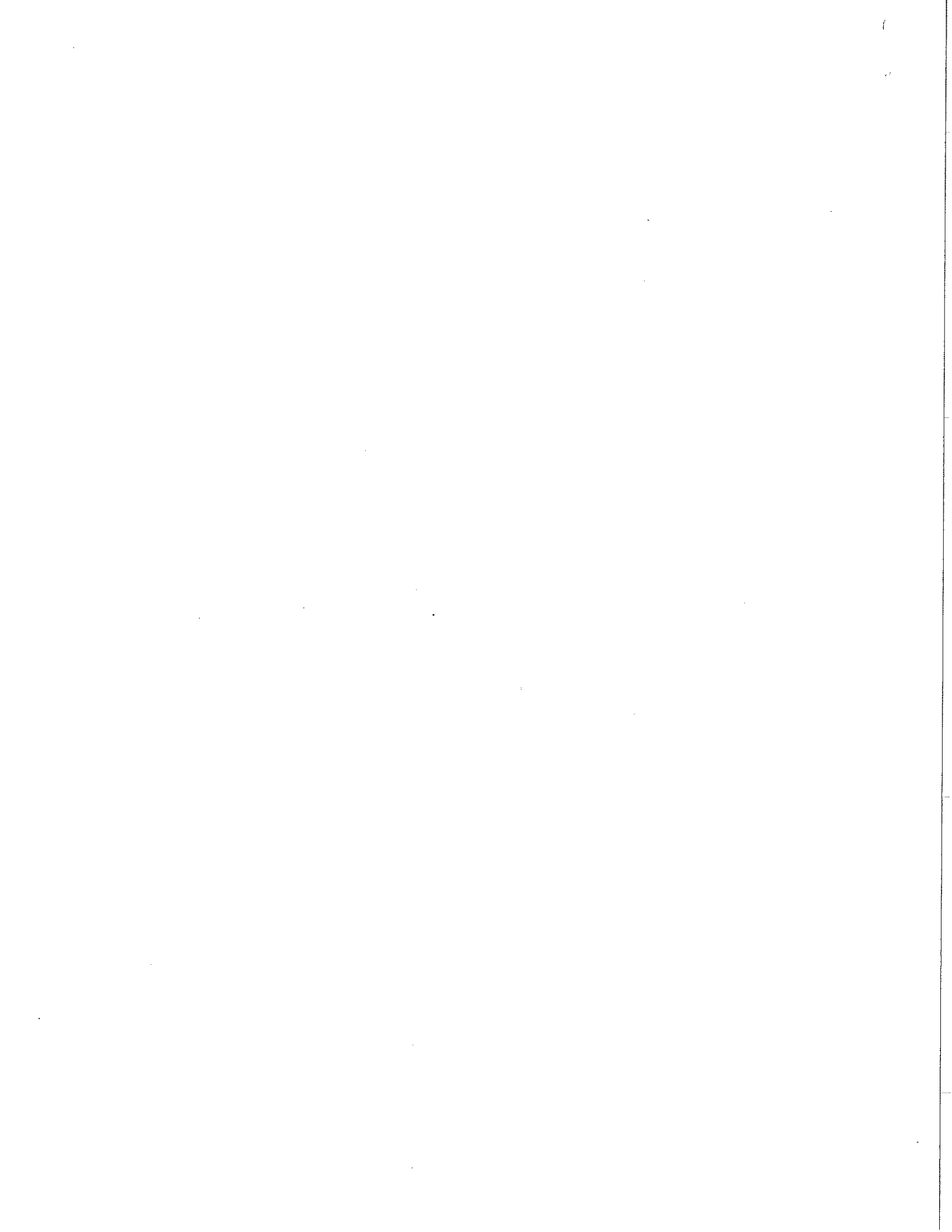
Section 806. Fees

- A. The subdivider or developer shall pay the initial subdivision fees customarily charged by the Township according to the Township's fee schedule. This schedule shall be set from time to time by Resolution of the Board of Supervisors. The subdivider or developer is also required to establish a Professional Service Agreement Escrow in accordance with the Township's fee schedule. When the escrow nears depletion, the Township may require the escrow account to be replenished in accordance with the fee schedule. The funds from the Professional Service Agreement Escrow shall be used to reimburse the Township for Engineering services, for Sewage Enforcement and module review services performed by the Sewage Enforcement Officer, for ground water surveys or testing, and legal fees incurred in the processing of the subdivision map, Improvements Maintenance Agreement, right-of-way dedication deeds, and recording costs as well as any other incidental expenses reasonably incurred by the Township (i.e., for surrounding property owner notification) respecting the subdivision. Following Final Plan recording, any amounts which have been placed in escrow in excess of the amounts hereinabove referred to shall be returned to the individual or entity from which the funds were received.
- B. No Final Plan shall be recorded unless the Township Secretary notifies the Township Board of Supervisors that all fees and charges are paid in full.
- C. Inspection fees. The subdivider shall pay directly to the Township a specified fee per hour or portion thereof for field inspection by the Township Engineer as defined herein. Such field inspections shall be made by the Township Engineer as are necessary to insure compliance with the provisions of this Ordinance. The Board may require payment of fees in advance of actual inspection to be maintained in an escrow account.

Section 807. Penalties

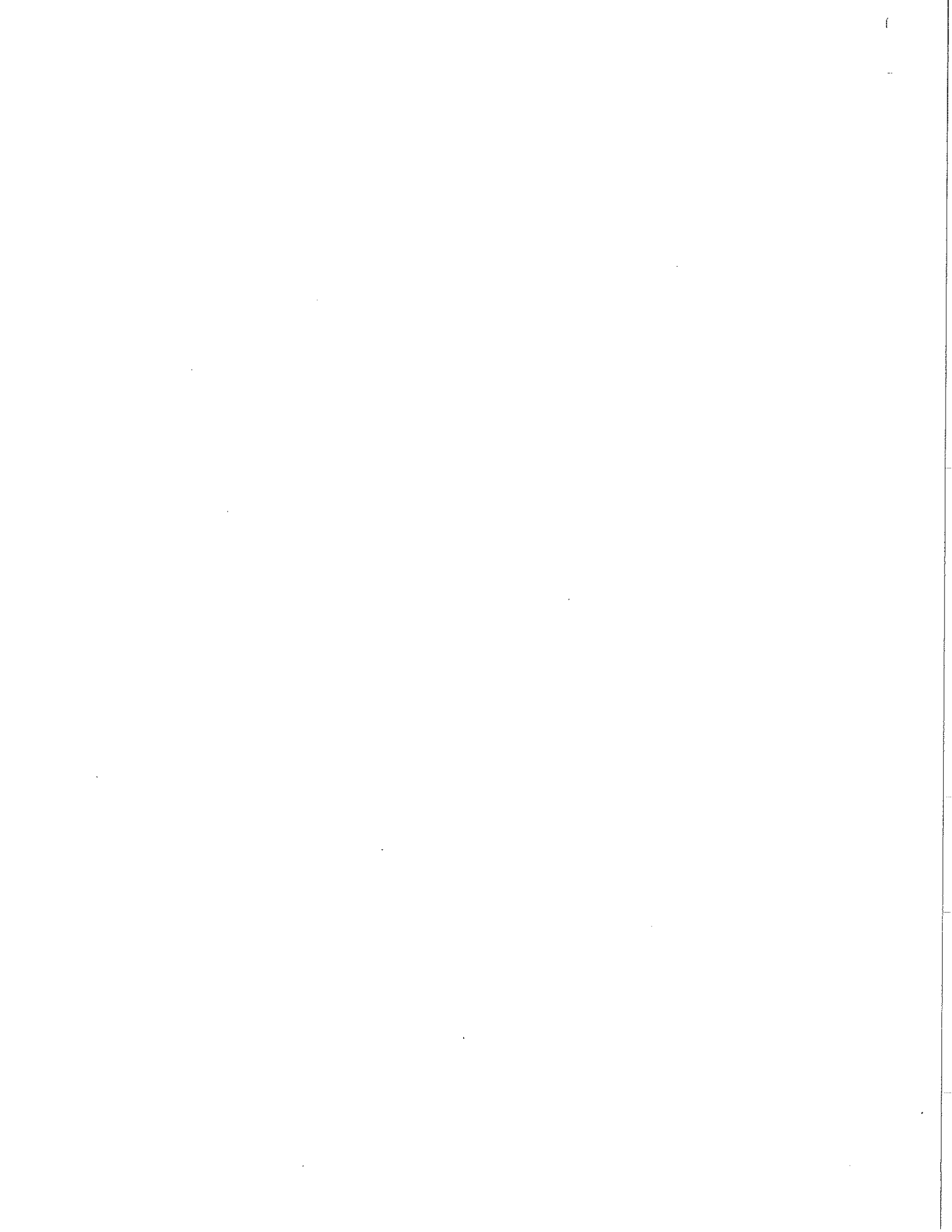
Any person, partnership, or corporation who, or which being the owner or agent of the owner of any lot, tract or parcel of land, shall lay out, construct, open or dedicate any street, sanitary sewer, storm sewer, water main or other improvements for public use, travel or other purposes or for the common use of occupants of buildings abutting thereon, or who sells, transfers or agrees or enters into an agreement to sell any land in a subdivision or land development, whether by reference to or by other use of a plat of such subdivision or land development or otherwise, or erect any building thereon, unless and until a Final Plan has been prepared in full compliance with the provisions of this Ordinance and has been recorded as provided herein, shall be guilty of a misdemeanor, and upon conviction thereof, such person, or the members of such partnership, or the officers of such corporation, or the agent of any of them, responsible for such violation shall pay a fine not exceeding one-thousand dollars (\$1,000.00) per lot or parcel or per dwelling within each lot or parcel. All fines collected for such violations shall be paid to the Township. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the seller or transferor from such penalties or from the remedies herein provided.

APPENDIX A

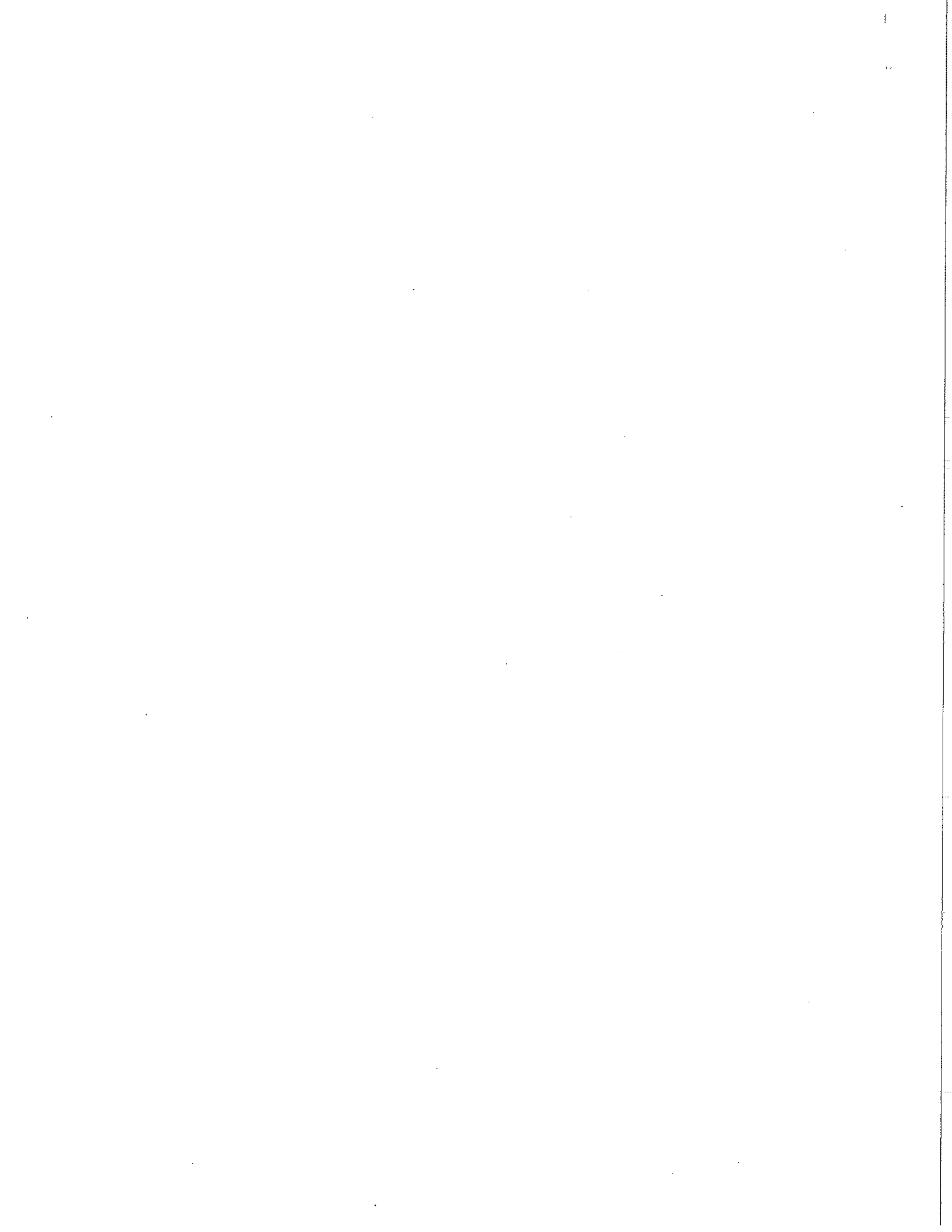


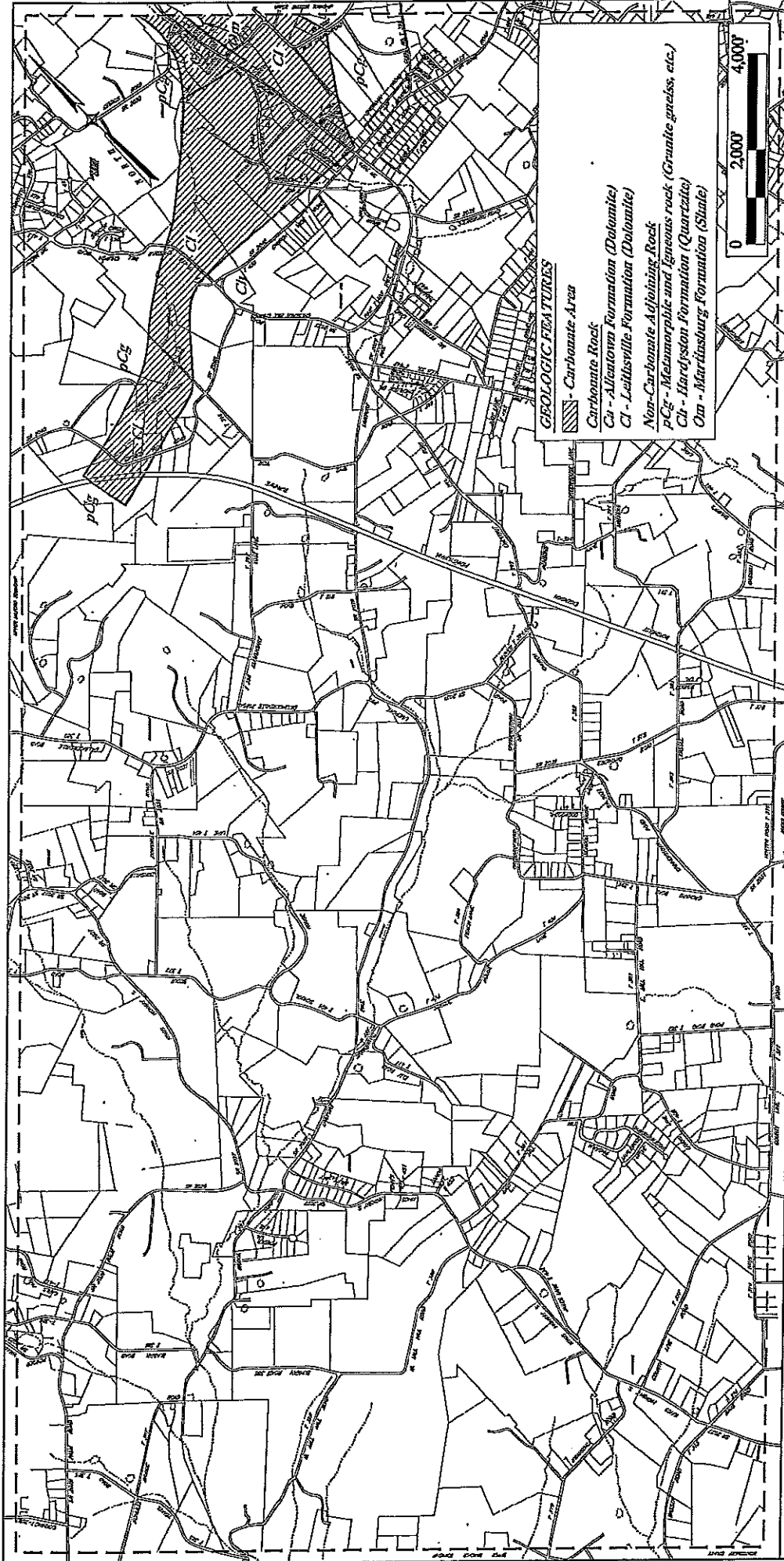
Certification of Ownership

I (we) certify that I (we) are the owner(s) of the property shown hereon in peaceful possession and there are no suits pending affecting the title of same, that I (we) will properly grade all individual lots and provide adequate surface drainage so that no low spots or water pockets will be created, and that the concrete monuments indicated will be placed upon completion of grading.



APPENDIX B





GEOLOGIC FEATURES

- Carbonate Area
- Carbonate Rock**
- Cr* - Allegheny Formation (Dolomite)
- Cl* - Lehighville Formation (Dolomite)
- Non-Carbonate Aliphizing Rock**
- pCr* - Metamorphic and igneous rock (Granite gneiss, etc.)
- Ch* - Hardeston Formation (Quartzite)
- On* - Martinsburg Formation (Slate)



Base map from Cowan Associates, Inc.; Geology from Commonwealth of Pennsylvania, DER. 1968. Plate 5A Geologic Map of the Saucun Valley, Pa., Showing Surface-Water Data-Collection Site.

CARBONATE AREA MAP



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Lower Milford Township
 Lehigh County

