

ELK TOWNSHIP • CHESTER COUNTY, PENNSYLVANIA

SUBDIVISION & LAND DEVELOPMENT ORDINANCE

The Subdivision and Land Development Ordinance of

ELK TOWNSHIP

Chester County, Pennsylvania

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As amended by Ordinance Amendment #2010-07 (Supplement I)

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ARTICLE I GENERAL PROVISIONS

SECTION 100. SHORT TITLE AND EFFECTIVE DATE.

- A. This Ordinance shall be known and may be cited as the "Elk Township Subdivision and Land Development Ordinance."
- B. This Ordinance shall become effective five (5) days after adoption and shall remain in effect until modified, amended, or rescinded by the Board of Supervisors of Elk Township.

SECTION 101. AUTHORITY.

This Ordinance has been prepared under the authority and is consistent with the terms and requirements of the Municipalities Planning Code, (MPC), Act 247 of 1968, and is in accordance with the police power authority granted to Elk Township under the Second Class Township Code.

SECTION 102. PURPOSES.

The purpose of this Ordinance is to support the policies of the Elk Township Comprehensive Plan, the Elk Township Open Space, Recreation, and Environmental Resources Plan, and the Elk Township Official Map and Ordinance, complement the provisions of the Elk Township Zoning Ordinance, and for the following purposes:

- A. To ensure the compatibility of subdivision and land development plans by providing uniform procedures and standards;
- B. To ensure the conformance of subdivision and land development plans with the public improvements of Elk Township, and to coordinate with the development of surrounding municipalities;
- C. To assure that sites proposed for development are suitable for development and human habitation;
- D. To provide for the coordination of existing streets, parks, and land use with proposed streets, parks, and land use;
- E. To provide for a safe, convenient, and functional system of vehicular traffic, on streets of such width, grade, and location as to accommodate prospective traffic as determined by existing and probable future land and building uses;
- F. To provide for drainage, water supply, sewage disposal, and other necessary and appropriate utility services;
- G. To assure land will be developed with due regard to topography and geologic conditions, so that the natural beauty of the land and vegetation and the community's rural character shall be protected and enhanced;
- H. To encourage subdivisions and land development to be harmonious with and protective of the natural resources of Elk Township;

- I. To provide proper procedures for regulating and recording of all public and private easements and rights-of-way within Elk Township;
- J. To provide a procedure and establish responsibility for the completion of public improvements; and
- K. To provide for arrangement of building lots, blocks, and streets so as to assure open spaces for traffic, recreation, light, and air and the proper distribution of population, thereby creating conditions favorable to the health, safety, and general welfare of the citizens of Elk Township.

SECTION 103. APPLICABILITY AND SCOPE.

From and after the effective date of this Ordinance, any subdivision and/or land development shall be in conformity with this Ordinance and all standards and specifications adopted as part of this ordinance.

SECTION 104. INTERPRETATION.

In the interpretation and application of the provision of this Ordinance, the said provisions shall be held to be minimum requirements for the promotion and protection of the public health, safety, and general welfare of citizens of Elk Township. Where the provisions of this Ordinance and all standards and specifications adopted under it impose greater restrictions than those of any statute, other ordinance, or regulations, the provisions of this Ordinance and its standards and specifications shall be controlling. Where the provisions of any statute, ordinance, or regulations impose greater restrictions than this Ordinance, the provisions of such statute, ordinance, or regulations shall be controlling.

SECTION 105. SEVERABILITY.

If any article, section, subsection, paragraph, clause, or provision of this Ordinance shall be declared by a court of competent jurisdiction to be unconstitutional, illegal, or invalid, such decision shall not affect the validity of any remaining provisions of this Ordinance.

SECTION 106. SUBDIVISION AND LAND DEVELOPMENT CONTROL.

- A. No subdivision of any lot, tract, or parcel of land shall be affected and no land development shall be affected, and no street, alley, sanitary sewer, water main or other facilities in connection therewith, shall be laid out, constructed, opened or dedicated for public use or travel, or for the common use of occupants of buildings abutting or to abut thereon, except in accordance with the provisions of this Ordinance.
- B. No lot in a subdivision may be sold, no permit to erect, alter or repair any building upon land in a subdivision or land development may be issued, and no building may be erected in a subdivision or land development unless or until a subdivision or land development has been approved, where required, recorded, and until the required improvements in connection therewith have either been constructed or the completion thereof has been assured by means of a proper completion guarantee in the form of a bond or the deposit of funds or securities, in escrow, sufficient to cover the cost of the required improvements, as estimated by the Township Engineer.

SECTION 107. JURISDICTION.

The Board of Supervisors shall have jurisdiction over subdivision and land development within the Township. In order to aid in its consideration of subdivision and land development applications, the Board of Supervisors hereby designates the Elk Township Planning Commission as agency of the Board of Supervisors performing the following functions:

- A. The Planning Commission shall review all plans and applications submitted to it by the Board of Supervisors.
- B. The Planning Commission shall make recommendations to the Board of Supervisors concerning application approval, disapproval/denial, modification, and the reasons for such determinations.
- C. The Planning Commission shall make recommendations to the Board of Supervisors concerning the interpretation and the granting of modifications to provisions and standards of this Ordinance.
- D. The Subdivision and Land Development Ordinance in place prior to the enactment of this Ordinance is hereby replaced in its entirety.

ARTICLE II DEFINITION OF TERMS

SECTION 200. DEFINITIONS.

The following words and phrases shall be construed throughout this Ordinance to have the meaning indicated in this Article. The present tense includes the future; the singular number includes the plural, and the plural the singular, except where the quantity stated is a part of the regulation; the masculine gender includes the feminine and neuter; the word "used" includes the words "designed, arranged, or intended to be used"; the word "person" includes any individual, partnership, firm, association, corporation, or organization; the word "occupied" includes the words "designed, or intended to be occupied"; and the word "shall" is always mandatory. The word "Township" means Elk Township, Chester County, Pennsylvania; the term "Board of Supervisors" means the Board of Supervisors of Elk Township; the term "Zoning Hearing Board" shall mean the Zoning Hearing Board of Elk Township.

ACT 247 - The "Pennsylvania Municipalities Planning Code", Act 247 of 1968, as amended, 53 P.S. §§ 10101 et seq.

AGRICULTURE - The cultivation of the soil including, but not limited to, raising of crops, nurseries, commercial greenhouses, horticulture, forestry, and the keeping or raising of livestock, horses, and poultry. Commercial composting, which includes the process of importing components for combination and resale, is excluded from this definition.

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

APPLICANT - A landowner or developer who has filed an application for subdivision or land development including his agents, heirs, successors, and assigns.

APPLICATION FOR DEVELOPMENT - Every application, whether preliminary or final, required to be filed and approved prior to the 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 development plan.

APPROVAL, TOWNSHIP – (A) A vote of the Elk Township Board of Supervisors to approve without conditions; or (B) after a vote by the Township Board of Supervisors to approve with conditions, acknowledgment by the Township Board of Supervisors that all conditions of approval have been met; or (C) deemed approval.

AQUIFER - A geologic formation, group of formations, or part of a formation that contains sufficient saturated, permeable material to yield useful quantities of ground water to wells and springs.

BASEMENT - A basement is an enclosed area partly or completely below grade. It shall be considered a building story if more than thirty-three and one-third (33 1/3) percent of the perimeter walls are five (5) feet or more above grade, and if the net area of the door or window openings in the exterior walls is at least equal to ten (10) percent of the enclosed floor area.

BASIN, DETENTION - A facility designed to detain surface water runoff for a period of time sufficient to cause the deposit of sediment and to reduce the velocity and/or volume of surface flows leaving a site, thus controlling erosion, reducing flood potential and promoting groundwater recharge.

BASIN, RETENTION - A reservoir designed to temporarily or permanently retain a specified amount of stormwater from a catchment area. It may also be used to retain freshwater from year-round streams or springs. A retention basin is generally designed to always contain water.

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

BOARD - See BOARD OF SUPERVISORS.

BOARD OF SUPERVISORS - Board of Supervisors of Elk Township, Chester County, Pennsylvania.

BOUNDARY SURVEY - The determination of the boundaries of a tract of land as certified by a registered land surveyor.

BUFFER AREA - A strip of land adjacent to the lot line that separates incompatible uses where a visible separation is to be established.

BUILDING - Any structure which has enclosing walls and a roof, including mobile homes.

BUILDING COVERAGE - The ratio obtained by dividing the ground floor area of all principal and accessory buildings on a lot (including covered porches, carports and breeze-ways, but excluding open patios) by the total area of the lot upon which the buildings are located. **Please refer to Figure 2-A at the end of this Article.**

BUILDING HEIGHT - A building's vertical measurement from the mean level of the finished grade surrounding the building to the point midway between the highest and lowest points of the roof, excluding the chimney and/or mechanical equipment above the roof, such as stair or elevator penthouse and water towers.

BUILDING SETBACK LINE - An established line within a property defining the minimum required distance between any building or structure to be erected and an adjacent right-of-way or street line. Please refer to Figure 2-A at the end of this Article.

CALIPER - The diameter of a tree trunk measured at a point six (6) inches above ground level. Caliper measurement criteria shall apply to newly installed trees. Please refer to Figure 2-B at the end of this Article.

CARTWAY - The surface of a street or alley available for vehicular traffic. Please refer to Figure 2-A at the end of this Article.

CERTIFICATE OF USE AND OCCUPANCY - A certificate issued and enforced by the Zoning Officer upon completion of the construction of a new building or upon a change or conversion of the structure or use of a building, which certifies compliance with all requirements and regulations as provided herein and with all other requirements herein incorporated by reference.

CLASS I, CLASS II, and CLASS III AGRICULTURAL SOILS - Soil classifications established by the United States Department of Agriculture as Agricultural Capability Units I, II, and II.

A. CLASS I AGRICULTURAL SOILS:

CdA	Chester silt loam	0 to 3% slopes
Cn	Congaree silt loam	
GeA	Glenelg channery silt loam	0 to 3% slopes
GgA3	Glenelg silt loam	0 to 3% slopes
NaA	Neshaminy gravelly silt loam	0 to 3% slopes
NeA	Neshaminy silt loam	0 to 3% slopes

B. CLASS II AGRICULTURAL SOILS:

CdB2	Chester silt loam	3 to 8% slopes	moderately eroded
Ch	Chewacla silt loam		
CkB2	Chrome gravelly silty clay loam	3 to 8% slopes	moderately eroded
GeA2	Glenelg channery silt loam	0 to 3% slopes	moderately sloped
GeB	Glenelg channery silt loam	3 to 8% slopes	
GeB2	Glenelg channery silt loam	3 to 8% slopes	moderately sloped
GnA	Glenville silt loam	0 to 3% slopes	
GnB	Glenville silt loam	3 to 8% slopes	
MgA2	Manor loam	0 to 3% slopes	moderately eroded
MgB2	Manor loam	3 to 8% slopes	moderately eroded
MoB2	Montalto channery silt loam	3 to 8% slopes	moderately eroded
NaB2	Neshaminy gravelly silt loam	3 to 8% slopes	moderately eroded
NeB2	Neshaminy silt loam	3 to 8% slopes	moderately eroded
UogB	Urban Land – Glenville complex	0 to 8% slopes	
UsbB	Urban Land – Manor complex	0 to 8% slopes	

C. CLASS III AGRICULTURAL SOILS:

AgB2	Aldino silt loam	0 to 3% slopes moderately eroded
CoA	Conowingo silt loam	0 to 3% slopes
CoB2	Conowingo silt loam	3 to 8% slopes moderately eroded
GeC	Glenelg channery silt loam	8 to 15% slopes
MgB3	Manor loam	3 to 8% slopes severely eroded
MgC	Manor loam	8 to 15% slopes
MgC2	Manor loam	8 to 15% slopes moderately eroded
NaC2	Neshaminy gravelly silt loam	8 to 15% slopes moderately eroded
6CwC	Conowingo silt loam	3 to 15% slopes
GgB3	Glenelg silt loam	3 to 8% slopes moderately sloped
GnC2	Glenville silt loam	8 to 15% slopes moderately sloped

Source: Soil Survey Geographic Database for Chester County, Pennsylvania, United States Department of Agriculture, Natural Resources Conservation Service, 1997.

CLEAR CUTTING - The felling of all trees on a tract of land, or any portion thereof, at one time.

CLEAR SIGHT TRIANGLE - An area of unobstructed vision at street intersections defined as lines of sight between points at a given distance from the intersection of the street rights-of-way, cartways, or centerlines. Please refer to Figure 2-C at the end of this Article.

CLUSTER DEVELOPMENT - An arrangement of residential structures that allows for grouping the structures by reducing lot area and yard requirements and incorporating the remaining area as open space. **Please refer to Figure 2-D at the end of this Article.**

COMPREHENSIVE PLAN - The document adopted as the Elk Township Comprehensive Plan (1987) by the Board of Supervisors, as amended.

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

CONVENTIONAL DEVELOPMENT - Individual residential lots that encompass the entire development tract or area without retaining common open space associated with Cluster Development. **Please refer to Figure 2-D at the end of this Article**.

CONVERSION - The division of a building into two (2) or three (3) dwelling units or an alteration of a building, structure or land by change of use, theretofore existing, to a new use which imposes other special provisions of a law governing building construction, equipment, exits, or zoning regulations.

CONVERSION, RESIDENTIAL - The division of a single family detached dwelling into two (2) or more dwelling units. For example, the conversion of a single-family home to two (2) or more apartments.

COUNTY COMPREHENSIVE PLAN - A land use and growth management plan adopted by the County Commissioners, which establishes broad goals and criteria for municipalities to use in preparation of their comprehensive plans and land use regulations.

COUNTY PLANNING COMMISSION - Chester County Planning Commission, Chester County, Pennsylvania.

CUL-DE-SAC - A residential street with an end open for public vehicular and pedestrian access and the other end terminating in a vehicular turn-around.

DATE OF FILING - Date on which a completed application together with all required information, fees, etc., is received by the Elk Township Secretary.

DENSITY - The total land area divided by the total number of dwellings to be housed thereon, expressed in dwelling units (DU) per acre.

DEPARTMENT OF HEALTH - The Department of Health of the Commonwealth of Pennsylvania or of Chester County, or their respective representative having jurisdiction in the Township.

DEVELOPER - Any landowner, agent of such landowner, tenant with the permission of such landowner, or equitable owner, who makes or causes to be made, a subdivision of land or a land development.

DEVELOPMENT - Any man-made change to improved or unimproved real estate, including but not limited to the construction, reconstruction, renovation, repair, expansion, or alteration of buildings or other structures, the placement of mobile homes, streets, and other paving, utilities, filling, grading, excavation, mining, dredging, or drilling operations and the subdivision of land. The phrase "provisions of the development plan" shall mean the written and graphic materials used in this definition.

DEVELOPMENT PLAN - The provisions for development, including a planned residential development, a plat of subdivision, all covenants relating to use, location and bulk of buildings and other structures, intensity of use or density of development, streets, ways and parking facilities, common open space and public facilities.

DIAMETER AT BREAST HEIGHT (DBH) - The diameter of a tree trunk measured at a point four (4) feet above ground level. DBH criteria typically applies to existing trees onsite when considering preservation or removal. Please refer to Figure 2-E at the end of this Article.

DISCONTINUANCE - The cessation of the use of property evident from continuous lack of maintenance or occupancy.

DISTRICT - A geographically definable area possessing a significant concentration, linkage, continuity of sites, buildings, structures, or objects for the purpose of establishing zoning regulations.

DRAINAGE - The movement of water from an area or property by stream or sheet flow, and removal of excess water from soil by downward flow.

DRAINAGE AREA - The upstream watershed area of a drainage basin measured from a point of discharge in the watercourse.

DRAINAGE FACILITY - Any ditch, depression, gutter, pipe, culvert, storm sewer, swale, basin, or other natural or mechanical structure or facility designed, intended, or constructed for the purpose of diverting surface waters from or carrying surface water off streets, public rights-of-way, parks, recreational areas, or any part of any subdivision, land development or contiguous area.

DRIVEWAY - A private means of vehicular access between a public street and a single lot.

DRIVEWAY, SHARED - A single driveway serving two (2) or more adjoining lots.

DWELLING UNIT (DU) - A room or rooms within a building connected together, constituting a separate independent housekeeping establishment for one (1) family only, for owner occupancy or for rental, lease, or other occupancy, physically separated from any other rooms or dwelling units, and containing independent cooking and sleeping facilities.

EASEMENT – A perpetual right-of-way granted, but not necessarily dedicated, for a private, public, or quasi-public purpose.

EARTHMOVING ACTIVITY - Activity resulting in the movement of the surface of the land or stripping of vegetative cover from the land.

EFFECTIVE DATE OF THIS 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.

ENGINEER - An individual licensed and registered under the laws of the Commonwealth to engage in the practice of engineering, and having training and experience in the specific field in which he or she is practicing.

EROSION - The wearing away of land surface by water or wind which occurs naturally from weather or runoff, but is often intensified by human activities.

EXCAVATION - Any activity that results in earth, sand, gravel, rock or other similar materials being dug, cut, quarried, uncovered, removed, displaced, relocated or moved, including the condition resulting from such activity.

FAMILY – A family is defined as:

- A. A single person occupying a dwelling unit;
- B. Two (2) or more persons related by blood or marriage occupying a dwelling unit, including not more that one (1) boarder, roomer, or lodger; or
- C. Not more than four (4) unrelated persons occupying a dwelling unit, living together.

FEMA - Federal Emergency Management Agency.

FILL - Material, exclusive of structures, placed or deposited to form an embankment or to raise the surface elevation of the land. Clean fill shall be defined by standards set forth by the Pennsylvania Department of Environmental Protection.

FLAG (INTERIOR) LOT - An interior lot that has an access strip not less than twenty-five (25) feet in width that connects to a street, said access strip shall be within the title lines of the lot, the minimum lot area and other dimensional requirements shall be those of applicable zoning district and shall be met on that portion of the lot exclusive of the access strip. The use of an alternate means of access, other than the access strip, shall not change the classification of the lot as a flag lot.

FLOOD - A general and temporary inundation of normally dry land areas.

FLOOD FRINGE - That portion of floodplain outside the floodway. Please refer to Figure 2-F at the end of this Article.

FLOOD, ONE-HUNDRED YEAR - A flood that, on the average, is likely to occur once every one hundred (100) years (i.e., that has a one (1) percent chance of occurring each year, although the flood may occur in any year).

FLOODPLAIN - A floodplain is defined as:

- A. A relatively flat or low land area adjoining a river, stream, or watercourse which is subject to partial or complete inundation; and/or
- B. An area subject to the unusual and rapid accumulation of runoff of surface waters from any source. Please refer to Figure 2-F at the end of this Article.

FLOODPROOFING - Any combination of structural and non-structural additions, changes and adjustments to properties and structures which reduce or eliminate flood damage to lands, water and sanitary facilities, structures, and contents of buildings.

FLOODWAY - The designated area of a floodplain required to carry and discharge flood waters of a given magnitude. For the purposes of this Ordinance, the floodway shall be capable of accommodating a flood of the one hundred (100) year magnitude. Please refer to Figure 2-F at the end of this Article.

FRONTAGE - The length of a front lot line coinciding with a street line.

GRADE - The elevation of the ground level in its natural state, before construction, filling, or excavation.

GRADE, FINISHED - The elevation of finished ground or paving which adjoins a building.

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.

HISTORIC STRUCTURE - Any structure that is:

- A. Listed individually on the National Register of Historic Places (managed by the Pennsylvania Historical and Museum Commission (PHMC) in Pennsylvania, and maintained by the National Park Service, Department of the Interior);
- B. Determined by the National Park Service, Department of the Interior or PHMC respectively to be a contributing property to the significance of a National Register listed or eligible historic district;
- C. Has received a determination of eligibility (DOE) for listing on the National Registration of Historic Places by the Pennsylvania Historical Museum Commission (PMHC); or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - 1. By an approved state program as determined by the Secretary of the Interior; or
 - 2. Directly by the Secretary of the Interior in states without approved programs.

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.

IMPERVIOUS SURFACE/COVERAGE - A surface, which has been compacted or covered with layer of material so that it is resistant to infiltration by water. It includes semi-pervious surfaces such as compacted clay soils, as well as most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar surfaces. Net increase of impervious surface refers to the difference between the existing impervious coverage and the total impervious surface proposed. Please refer to Figure 2-G at the end of this Article.

IMPROVEMENTS - Changes made to the natural state of the ground and anything that is man-made or constructed on land or underground, including, but not limited to, grading, paving, curbing, sidewalks, fire hydrants, water mains, sanitary sewers, storm sewers, catch basins, culverts, gutters, monuments, planting screens, landscaping and any underground electric or other utilities. For purposes of this Ordinance, the terms, "improvements" and "public improvements" may be used interchangeably.

INSPECTION - The act of monitoring compliance with applicable provisions contained in this Ordinance or other applicable regulations, as undertaken by authorized representatives of Elk Township and in the manner specified herein.

ITE TRIP GENERATION RATES - Vehicle trips generated for a particular size of land use published by the Institute of Transportation Engineers, ITE Trip Generation Manual, as amended. Utilization of such rates shall consider any applicable seasonal increase in traffic volume.

INVASIVE PLANT SPECIES - Plants that grow or reproduce aggressively, usually because they have no natural predators, which can so dominate an ecosystem that they kill off or drive out most other plant species. They can be native or exotic species. Examples include Multiflora Rose and Japanese Honeysuckle.

LAND DEVELOPMENT - According to usage

- A. The improvement of one (1) or more contiguous lots, tracts or parcels of land for any purpose permitted in this Ordinance involving a group of two (2) or more buildings, or the division or allocation of land between or among two (2) or more existing or prospective occupants by means of, or for the purpose of, streets, common areas, leaseholds, building groups or other features.
- B. A division of land into lots for the purpose of conveying such lots singularly or in groups to any person, partnership or corporation for the purpose of the erection of buildings by such person, partnership or corporation.

LAND DISTURBANCE - Any activity which causes land to be exposed to the possibility of erosion, including clearing, grading, filling, plowing, or any other similar earthmoving.

LANDOWNER - The legal or beneficial 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.

LANDSCAPE ARCHITECT - A professional who practices the art of arranging or modifying the features of a landscape for aesthetic or practical purposes and has graduated with a degree in landscape architecture from an accredited school of landscape architecture.

LANDSCAPE SCREEN - A completely planted visual barrier composed of evergreen plants and trees arranged to form both a low-level and a high-level screen.

LANDSCAPING - The planting of turf or other appropriate groundcover or the planting of deciduous and evergreen trees and shrubbery, including the maintenance thereof, for control of erosion, retention of precipitation, protection against the elements, and promotion of human comfort and welfare.

LOADING SPACE - A space, accessible from a street, alley, or accessway, in a building or on a lot, for the temporary use of vehicles, while loading or unloading merchandise or materials.

LOT - A designated parcel, tract, or area of land established by a plat or otherwise as permitted by law and to be used, developed, or built upon as a unit.

LOT AREA - The area of a lot may include any part of an abutting street, but may not include any part of a driveway or areaway used in common with the owners or occupiers of other lots.

LOT AREA, GROSS - The area of land contained within the limits of the legally described property lines bounding a lot.

LOT AREA, NET - The area of land contained within the legally described property lines bounding the lot, exclusive of any street or railroad rights-of-way, common open space, easements for the purposes of access, utility, or stormwater management, prohibitively steep slopes, the Floodplain Conservation District, and wetlands.

LOT, CORNER - A corner lot is one bounded on at least two (2) sides by streets whenever the lines of such streets extended for an interior angle of one hundred thirty-five (135) degrees or less. Any yards adjacent to streets shall be considered front yards. Any remaining yards shall be side yards.

LOT COVERAGE - The percentage of lot area covered by any and all impervious materials, such as buildings, paved parking areas, paved walks, terraces and similar surfaces which do not normally absorb rainfall.

LOT LINE - A property boundary line of any lot held in single and separate ownership, except that in the case of any lot abutting a street, the lot line for such portion of the lot as abuts such street shall be deemed to be the same as the street line and shall not be the centerline of the street or any other line within the street lines even though such may be the property boundary line in a deed.

LOT, REVERSE or DOUBLE FRONTAGE - Lots which are situated between two (2) public streets, but provide vehicular access solely from the street with the lesser highway functional classification.

MARKER - A Metal pipe or pin of at least one-half (1/2) inch diameter and at least twenty-four (24) inches in length.

MAINTENANCE GUARANTEE - Any security which may be required by the Township of a developer, after final acceptance by the Township of improvements installed by the developer. Such security shall be provided by an institution authorized to do business in the Commonwealth of Pennsylvania and may include, but is not limited to, Federal or Commonwealth lending institution irrevocable letter of credit or restrictive or escrow account.

MOBILE HOME - A transportable single-family building intended for permanent occupancy contained in one (1) unit, or in two (2) units, each having separate and individual sets of axles, designed to be joined into one (1) integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations and constructed so that it may be used without a permanent foundation. The term "mobile home" shall not include a modular home.

MOBILE HOME LOT - A parcel of land in a mobile home park, improved with the necessary utility connections and other appurtenances necessary for the erection thereon of a single mobile home, which said lot is leased by the park owner to the occupants of the mobile home erected on the lot.

MOBILE HOME PARK - A parcel of land containing at least ten (10) acres, under single or separate ownership, which has been planned and improved for the placement of mobile homes for non-transient use, consisting of two (2) or more mobile home lots.

MONUMENT - A stone or concrete fixture with a flat top at least 4" across and at least 24" in length, to the top of which is permanently affixed a brass or copper marker.

MPC - See ACT 247.

NATIVE PLANT SPECIES - A species of plant that currently or previously inhabited or grew in a specified location, and which was not introduced to that location as a result of human activity, either intentional or accidental. The term "native" species generally refers to a species whose range was located within a large area like a continent or a nation. The term "indigenous" species is typically used to refer to a species whose original range extended into a smaller area like a state, county, or watershed.

NATURAL RESOURCES - For the purposes of this Ordinance, natural resources include ponds, lakes, floodplains, wetlands, hydric soils, precautionary and prohibitive slopes, riparian buffers, Class I, II, and III Agricultural Soils, and woodlands.

OFFICIAL MAP AND ORDINANCE – The Official Map and Ordinance of Elk Township, Chester County, Pennsylvania.

OPEN SPACE – Parcels of land within a residential subdivision, exclusive of streets and lots, generally preserved in a natural state or improved to provide common amenities for the residents of the subdivision. Open space is intended to preserve environmentally sensitive areas and protected resources, provide active and passive recreation facilities, establish greenways, provide wildlife habitats, and facilitate stormwater management functions and landscaped bufferyards.

OPEN SPACE MANAGEMENT PLAN - A long-range plan that outlines the way in which an area of open space will be preserved, managed, and how the associated activities will be funded.

OPEN SPACE, RECREATION, AND ENVIRONMENTAL RESOURCES PLAN – The document adopted as the Elk Township Open Space, Recreation, and Environmental Resources Plan (1995) by the Board of Supervisors, as amended.

OPEN SPACE PLAN – See OPEN SPACE, RECREATION, AND ENVIRONMENTAL RESOURCES PLAN.

PARKING LOT - An off-street surfaced area designed solely for the parking of motor vehicles, including driveways, passageways and maneuvering space appurtenant thereto.

PARKING SPACE - A reasonably level space, having a surface slope not exceeding five (5%) percent, available for parking of one (1) motor vehicle, not less than ten (10) feet wide and having an area of not less than two hundred (200) square feet exclusive of passageways, driveways, or other means of circulation or access.

PENNSYLVANIA MUNICIPALITIES PLANNING CODE - See Act 247.

PERFORMANCE GUARANTEE - An acceptable bond, funds in escrow, or other form of payment acceptable to the Board of Supervisors and sufficient to cover cost of required improvements, estimated in accordance with the provisions of this Ordinance.

PLAN - Any one or more of the following:

- A. EXISTING FEATURES A plan to accompany preliminary and final application submissions that includes the property boundaries, a natural features inventory, and a man-made features inventory as required in this Ordinance.
- B. FINAL A complete and exact land development or subdivision plan prepared by a registered engineer, land surveyor or landscape architect for official recording as required by Act 247 to define property rights and proposed streets and other improvements.

- C. CONSTRUCTION IMPROVEMENTS A component of the preliminary and final plan, prepared by a registered engineer, showing the construction details of streets, drains, sewers, water supply systems, bridges, culverts and other improvements required, including a horizontal plan, profiles and cross-sections.
- D. LAND DEVELOPMENT A sketch, preliminary or final plan, including written and graphic material, showing the provisions for development of a subject tract when a subdivision plan is not applicable.
- E. NATURAL RESOURCES PROTECTION A plan addressing the requirements contained in the Natural Resource Conservation Overlay District of the Township Zoning Ordinance and other requirements of this Ordinance.
- F. PRELIMINARY A tentative land development or subdivision plan prepared by a registered engineer, land surveyor or landscape architect, in lesser detail than a final plan, showing approximate proposed street, drainage, and lot layout as a basis for consideration prior to preparation of a final plan.
- G. PROFILE A plan prepared by a registered engineer or surveyor showing the vertical section of the existing grade and proposed grade along the center line of any proposed street and any street, appurtenances to be constructed or installed, which must include a typical cross-section of the street construction.
- H. RECORDED A final plan, with accompanying documents as required by this Ordinance, that has been recorded by the applicant in the Office of the Recorder of Deeds, Chester County, Pennsylvania.
- I. SITE DESIGN AND LAYOUT A plan submitted that includes the layout and dimension of all proposed lots, location of all proposed streets, and the location of other sight features as required by this Ordinance.
- J. SKETCH An informal plan, not necessarily to exact scale, indicating topographic and other salient existing features of a tract and its surroundings and general layout of the proposed subdivision or land development.
- K. STORMWATER MANAGEMENT AND SEDIMENT AND EROSION CONTROL Separate or combined plans that contain all proposed stormwater management, and sedimentation and erosion control measures, as required by the Post-Construction Stormwater Management Ordinance of Elk Township, Chester County, Pennsylvania.

PLANNING COMMISSION - The Planning Commission of Elk Township, Chester County, Pennsylvania.

POST-CONSTRUCTION STORMWATER MANAGEMENT ORDINANCE – The Stormwater Management Ordinance of Elk Township, Chester County, Pennsylvania, 2006, as amended.

PRESERVATION OR PROTECTION - Conservation and safeguards of natural and historic resources. Not to be interpreted to authorize the unreasonable restriction of forestry, mining or other lawful uses of natural resources.

PUBLIC HEARING - A formal meeting held pursuant to public notice by the Board of Supervisors, the Planning Commission or the Zoning Hearing Board intended to inform and obtain public comment or to build an adjudicatory record prior to taking action in accordance with this Ordinance.

PUBLIC MEETING - A forum held pursuant to notice under the Act of July 3, 1986 (P.L. 388, No. 84), known as the "Sunshine Act" or the Open Meetings Law (65 Pa.C.S. Ch. 7).

PUBLIC NOTICE - Notice published in any newspaper of general circulation in Elk Township, once each week for two (2) successive weeks, the first not more than thirty (30) days and the second not less than seven (7) days, prior to any public hearing required by this Ordinance; such notice shall give time and place, and the nature of the matter to be considered.

PUBLIC WATER – Potable water supplied through a network of pipes by an entity which is subject to the control of the Pennsylvania Department of Environmental Protection and/or the Public Utility Commission.

PUC – The Public Utilities Commission. Public utilities are regulated under Title 52 (Public Utilities) of the Pennsylvania Code.

RECREATION, ACTIVE - Those recreational pursuits which require physical alteration to the area in which they are performed. Such areas are intensively used and include, but are not limited to, playgrounds, ball courts, and swimming pools.

RECREATION, INDOOR - The use of a building or part thereof for indoor sports such as bowling, tennis, racquetball, squash, indoor basketball, indoor swimming, and those sports activities usually conducted indoors, but excluding target shooting or any other activities that create loud noises or may be dangerous or disturbing to surrounding residents.

RECREATION, OUTDOOR - A recreational use and associated facilities designed and equipped for the conduct of sports and leisure time activities, including swimming, tennis, and other court games, baseball and other field sports, playground and other outdoor activities, but excluding amusement parks, go-cart tracks, shooting ranges and other activities which generate noise objectionable to a residential environment.

RECREATION, PASSIVE - Recreational pursuits which can be carried out with little alteration or disruption of the area in which they are performed. Such uses include, but are not limited to, hiking, biking and picnicking.

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

REPLACEMENT/ABSORPTION AREA -A component of an individual or community sewage system where liquid from a treatment tank seeps into the soil; it consists of an aggregate-filled area containing piping for the distribution of liquid and the soil or sand/soil combination located beneath the aggregate.

RIGHT-OF-WAY (ROW) - Land reserved for an easement, street, crosswalk or other public purpose. **Please refer to Figure 2-A at the end of this Article.**

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

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

RIPARIAN (FOREST) BUFFER - An area of trees and other vegetation adjacent to a watercourse that forms a transition area between the aquatic and terrestrial environment. The riparian buffer is designed to intercept runoff from upland sources for the purpose of mitigating the effects of nutrients, sediment, organic matter, pesticides or other pollutants prior to entry into surface waters. For the purposes of this Ordinance, the riparian buffer shall be divided into two Zones:

- A. ZONE ONE: INNER RIPARIAN BUFFER This zone begins at each edge of an identified watercourse and occupies a margin of land with a minimum width of twenty-five (25) feet measured horizontally on a line perpendicular to the edge of the water at bankful flow. Where very steep slopes (+25%) are located within twenty-five (25) feet of a watercourse, Zone One shall extend the entire distance of this sloped area.
- B. ZONE TWO: OUTER RIPARIAN BUFFER This zone begins at the outer edge of Zone One and occupies a minimum width of fifty (50) feet in addition to Zone One. In cases where Zone One extends beyond twenty-five (25) feet due to the presence of very steep slopes, the width of Zone Two shall be adjusted so that the total riparian buffer width equals a seventy-five (75) foot maximum. Please refer to Figure 2-H at the end of this Article.

ROAD FUNCTIONAL CLASSIFICATION - A designation given a road in accordance with its function as a carrier of traffic and from which specific setback distances as provided in this Ordinance apply. Classifications for new roads within the Township shall be determined by the Board of Supervisors after recommendation by the Planning Commission. For the purpose of this Ordinance, the following four (4) classifications shall apply:

- A. ARTERIAL A road with two (2) or more lanes, both limited access and non-limited access, which provides for large volumes or traffic between major population centers.
- B. COLLECTOR A road whose function is to provide for the movement of traffic to community facilities and carry larger volumes of traffic to the arterial road system.
- C. LOCAL A road whose function is to provide for local traffic movement and direct access to abutting properties.
- D. MARGINAL ACCESS Local or minor streets. Parallel and adjacent to abutting properties with controlled access points onto the collector or arterial street.

SEDIMENT - Fragmented material that originated from weathering rocks and decomposing organic material that is transported by, suspended in, and eventually deposited in the streambed.

SEDIMENTATION - Occurs when the sediment particles that have been suspended within the flowing water are deposited on the stream bottom or floodplain.

SETBACK LINE - A line established by the Zoning Ordinance parallel to and at a prescribed distance from a public or private street, which determines an area within which no structure may be erected. **Please refer to Figure 2-A at the end of this Article.**

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 FACILITIES - The following facilities shall be reviewed and approved by all applicable agencies:

- A. INDIVIDUAL (ON-SITE) The disposal of sewage from one (1) dwelling unit by use of septic tanks or other safe and healthful means, approved by the Chester County Health Department. Both primary and replacement individual on-lot systems shall be totally within the confines of the lot on which the use is located, or shall be located.
- B. CENTRAL COMMUNITY COLLECTION AND TREATMENT A sanitary sewage system which carries sewage from individual dischargers by a system of pipes to one (1) or more common treatment and disposal facilities, either on-site or off-site, and approved by the Pennsylvania Department of Environmental Protection.
- C. PUBLIC (SANITARY) SEWAGE SYSTEM An off-site system for treatment and disposal of sewage in which sewage is conveyed by interceptor to the treatment facility and disposed of through means approved by the Pennsylvania Department of Environmental Protection and all governmental agencies having jurisdiction over such matters and either governmentally or privately owned or Public Utilities Commission (PUC) controlled.

SIGHT DISTANCE - The maximum extent of unobstructed vision (in a vertical or horizontal plan) along a street from a vehicle located at any given point on the street.

SIGN - A sign is any letter, word, model, device, symbol, or representation intended as an announcement, direction, or advertisement and may be (A) either free-standing or attached to another structure, or (B) painted on the exterior wall of a building or other structure.

SINGLE AND SEPARATE OWNERSHIP - The ownership of a lot by one (1) or more persons which ownership is separate and distinct from that of any adjoining property.

SITE RESTORATION - Measures taken following the completion of land disturbance activities which will stabilize the land surface and minimize possible erosion or sedimentation.

SLOPES, PRECAUTIONARY - Those areas of land where the grade is fifteen (15) percent to twenty-five (25) percent.

SLOPES, PROHIBITIVE - Those areas of land where the grade is twenty-five (25) percent or greater.

SOILS, ALLUVIAL (FLOODPLAIN) - Areas subject to periodic flooding and listed in the Soil Survey of Chester and Delaware Counties, Pennsylvania, U.S. Department of Agriculture, Soil Conservation Service, May 1963. Alluvial soils include, but are not limited to:

Bowmansville silt loam (Bo) Chewacla silt loam (Ch) Congaree silt loam (Cr) Rowland silt loam (Ro,Rp) Wehadkee silt loam (We)

SOILS, HYDRIC - A soil that is saturated, flooded, or ponded, long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of wetlands vegetation. Wetlands vegetation include those plant species that have adapted to saturated soils and periodic inundations

occurring in wetlands and listed in the Soil Survey of Chester and Delaware Counties, Pennsylvania, U.S. Department of Agriculture, Soil Conservation Service, May 1963. Hydric soils include, but are not limited to:

Croton silt loam (Cr) Readington silt loam (Rd) Worsham silt loam (Wo)

SOLID WASTE - All refuse including garbage and trash, and all material which is putrescible and originating from the preparation, cooking and consumption of food and market produce.

STORM EVENT – The storm of a specific duration and intensity defined by the statistical frequency of expected occurrence.

STREET - A way, intended for general public use, to provide means of approach for vehicles and pedestrians. The word "street" includes the words "road," "highway," "thoroughfare," and "way".

STREET, CENTERLINE OF - A street centerline is the mid-point of the cartway or right-of-way. Please refer to Figure 2-A at the end of this Article.

STREET, HALF or PARTIAL - A street, generally parallel and adjacent to a property line, having a less right of way width than normally required for a satisfactory improvement and use of the street.

STREET LINE - A street line is the right-of-way line of a street. Please refer to Figure 2-A at the end of this Article.

STREET, PUBLIC - A public thoroughfare which has been dedicated and deeded to the Township and which affords the principal means of access to the abutting property.

STREET, SINGLE ACCESS - A street which has access to an existing public road and circulation system only at one (1) point.

STORMWATER MANAGEMENT FACILITY - Any ditch, depression, gutter, pipe, culvert, storm sewer, swale, basin or other natural or mechanical structure or facility designed, intended, or constructed for the purpose controlling and managing stormwater runoff.

STRUCTURE - That which is built or constructed or a portion thereof. For the purposes of this Ordinance, structures include any form or arrangement of building materials, on or in water or land, involving the necessity of providing proper support, bracing, tying, anchoring or other protection against the forces of the elements. Structures include, but are not limited to, buildings, sheds, mobile or manufactured homes, signs, fences or walls over six (6) feet in height, aerials and antennae, porches, platforms, tennis courts, swimming pools, tents, tanks, and towers.

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, subdivision resulting from a mortgage encumbrance, partition by the court for distribution to heirs or devisees, transfer of ownership, or building or lot development: Provided, however, that the division by lease of land for agricultural purposes into parcels of more than ten (10) acres, not involving any new street, easement of access, or residential dwellings shall not be included. The inclusion of any option, right of refusal, and/or any contractual provision permitting or requiring the future division of any parcel from another does not create any subsequent right to transfer

that parcel unless the owner/applicant complies with the requirements of this Ordinance prior to the creation of that right or obligation.

SUBSOIL - Clay, sand, gravel, or other natural earth material below the surface soil and containing little organic matter.

SUBSTANTIAL IMPROVEMENT - Means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50%) percent of the market value of the structure, either, (A) before the improvement or repair is started; or (B) if the structure has been damaged, and is being restored, before the damage occurred.

SUPERVISORS - The Board of Supervisors of Elk Township, Chester County, Pennsylvania.

SURFACE RUNOFF - That part of the precipitation that passes over the surface of the soil.

SURVEYOR - An individual licensed and registered under the laws of the Commonwealth of Pennsylvania to engage in the practice of land surveying or to perform engineering land surveys. A licensed land surveyor.

TOPSOIL - Natural and friable loam containing organic matter, sufficient nitrogen, phosphorus to support plant growth, and extending in depth to the extent of penetration of feeder roots of the prevailing native grasses.

TOWNSHIP - The Township of Elk, Chester County, Pennsylvania.

TOWNSHIP ENGINEER - A professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the engineer for Elk Township.

TRACT - One (1) or more lots assembled for the purpose of development.

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

TREE DRIPLINE - The line marking the outer edges of the branches of the tree. Please refer to Figure 2-I at the end of this Article.

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 of the tree to two (2) feet beyond 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. **Please refer to Figure 2-I at the end of this Article**.

USE - Any purpose for which a building or other structure or tract of land may be designed, arranged, intended, maintained or occupied, or any activity, or occupation carried on, or intended to be carried on, in a building or other structure or a tract of land.

VILLAGE - An unincorporated settlement that is part of a township where residential and mixed use densities of one (1) unit to the acre or more exist or are permitted and commercial, industrial, or institutional uses exist or are permitted.

WATERCOURSE - A permanent or intermittent stream or other body of water, whether natural or manmade, which gathers or carries surface water.

WATER SERVICE, OFF-SITE - A safe, adequate and healthful supply of water to more than one (1) user from a common source approved by all governmental agencies having jurisdiction over such matters and either governmentally or privately owned or Public Utilities Commission (PUC) controlled.

WATER SERVICE, ON-SITE - A safe, adequate and healthful supply of water to a single user from a private well as approved by the Chester County Health Department.

WATER SUPPLY:

- A. INDIVIDUAL A safe and healthful supply of water, to a single user from a private well located on the lot in which the use is located.
- B. COMMUNITY A system for supplying water from a common source or sources to all dwellings and other buildings within a development. The water supply source may be located on-site and/or off-site and may be publicly or privately owned.
- C. PUBLIC A system for supplying water in sufficient quantities to all dwellings and other buildings within a development, which is administered by a municipality, municipal authority or public utility as defined and regulated by the Pennsylvania Public Utility Commission.

WATER SURVEY - An inventory of the source, quantity, yield and use of groundwater and surfacewater resources within the Township.

WATER TABLE - The upper most level of saturation of pore space or fractures by subsurface water in an aquifer. Seasonal High Water Table refers to water table that rises and falls with the seasons due either to natural of man-made causes.

WETLANDS - Land areas that are inundated or saturated by surface or groundwater with 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 (wetlands generally include swamps, marshes, bogs, and similar areas); or areas that are defined and delineated in accordance with the Federal Manual for Identifying and Delineating wetlands, dated January 10, 1989, and as may be amended form time to time; or as further defined and delineated by the United States Army Corps of Engineers, the United States Environmental Protection Agency, or the Pennsylvania Department of Environmental Protection.

WETLANDS MARGIN - An examined area measured from the outer limit of the wetland extending to the outer limit of the hydric soils contiguous to the wetland or one hundred (100) feet, whichever is greater.

WOODLAND - A plant community predominantly of healthy trees and other woody vegetation, well stocked and growing more or less closely together. Specifically, woodlands consist of one-quarter (1/4) acre or more of continuous wooded land where the largest trees measure at least six (6) inches diameter at breast height. The woodland shall be measured from the drip line of the outer trees. Woodlands are also a grove of trees forming one (1) canopy where ten (10) or more trees measure at least six (6) inches at diameter at breast height.

YARD - A yard is that portion of a lot which is unoccupied and open to the sky and extends from the lot line to the building.

YARD, FRONT - A front yard is a yard extending along the full length of the front lot line to the nearest point of any building on the lot. Please refer to Figure 2-A at the end of this Article.

YARD, REAR - A yard extending the full width of the lot along the rear lot line and extending in depth from the rear lot line-to the nearest point of any building/structure on the lot. Please refer to Figure 2-A at the end of this Article.

YARD, SIDE - A side yard is a yard extending the full length of the lot along a side lot line and extending in width from such side lot line to the nearest point of any building on the lot. Please refer to Figure 2-A at the end of this Article.

ZONING - The designation of specified districts within Elk Township, Chester County, Pennsylvania reserving them for certain uses, together with limitations on lot size, heights of structures and other stipulated requirements.

ZONING, BASE - The basic system of zoning, which, under the zoning ordinance as amended, divides all land in the Township into separate, distinct zoning district classes, and sets limits and requirements for land use in each of these base zoning districts.

ZONING HEARING BOARD - The Zoning Hearing Board of Elk Township, Chester County, Pennsylvania.

ZONING MAP - The Official Zoning Map of Elk Township, Chester County, Pennsylvania as adopted and amended.

ZONING OFFICER - The administrative officer charged with the duty of enforcing the provisions of this Ordinance.

ZONING ORDINANCE - The Zoning Ordinance of Elk Township, Chester County, Pennsylvania, as amended.

ZONING PERMIT - A permit issued indicating that a proposed use, building or structure is in accordance with the provisions of this Ordinance, which authorizes an applicant to proceed with said use, building or structure.

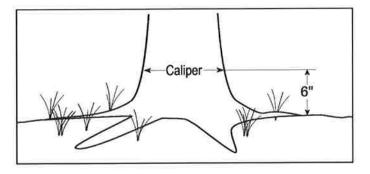
Undefined terms. In cases where definitions do not appear above or in Article II of the Township Zoning Ordinance, as amended, and disagreement arises as to meaning, the definition which will govern shall be that derived from an accepted dictionary of the English Language.

Rear Lot Line Rear Yard Rear Yard Line Side Yard Line Side Yard Line Side Side Yard Side Lot Line-Building Coverage (Area of Building) Building Setback Line, Front Yard Line Lot Width Front Yard Street Line Right-of-Way Cartway Street Center Line

Figure 2-A Lot Dimensions

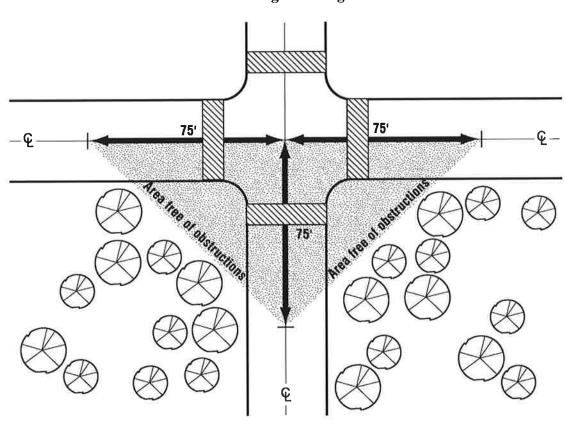
Source: Chester County Planning Commission, 1999.

Figure 2-B Caliper



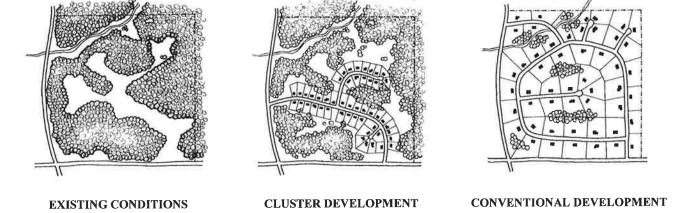
Source: Chester County Planning Commission. 2005.

2-C Clear Sight Triangle



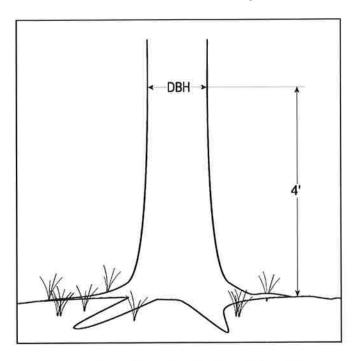
Source: Chester County Planning Commission, 2006.

Figure 2-D
Conventional and Cluster Development Patterns



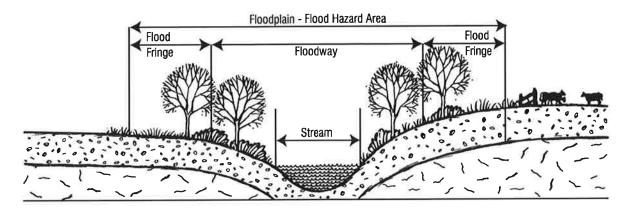
Source: Cluster Subdivision Design Guide. Chester County Planning Commission. 2004.

Figure 2-E Diameter at Breast Height



Source: Chester County Planning Commission. 2005.

Figure 2-F Floodplain



Source: Cluster Subdivision Design Guide. Chester County Planning Commission. 2003.

Figure 2-G Impervious Surface/Coverage

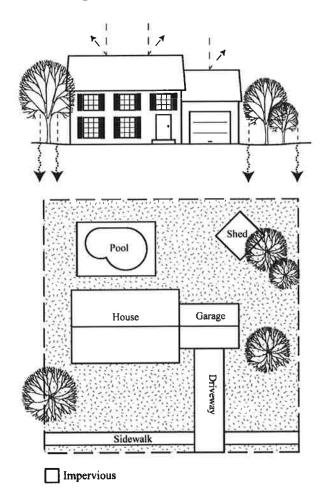
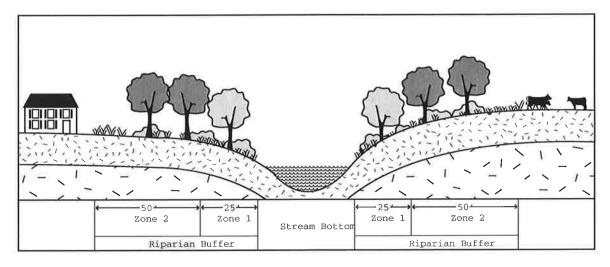


Figure 2-H Riparian (Forest) Buffer



Source: An Integrated Water Resources Plan for Chester County, Pennsylvania and its Watersheds., Chester County Water Resources Authority, 2002.

Figure 2-I
Tree Protection Zone

Drip Line

Production Zone

Tree Protection Zone

Source: Chester County Planning Commission, 2004.

ARTICLE III PLAN SUBMISSION AND REVIEW PROCEDURE

SECTION 300. GENERAL.

- A. In order to discharge the duties imposed by law, the Board of Supervisors has adopted the following procedures that shall be observed by all applicants and their agents.
- B. All preliminary and final subdivision or land development plans shall be reviewed by the Township Planning Commission and Township Engineer and shall be approved or denied by the Board of Supervisors in accordance with the procedure specified in this Ordinance.
- C. It is the intention of the Board of Supervisors in enacting these procedures to provide the applicant with a timely and comprehensive review of plans submitted for subdivision and/or land development. To this end, the following classifications of plans are established as hereinafter provided:
 - 1. Sketch Plans. (Section 303)
 - 2. <u>Preliminary Plans</u>. (Section 304)
 - 3. Final Plans. (Section 305)
- D. **Copies**. The number of copies of Sketch, Preliminary, and Final Plans to be submitted to various recipients shall be determined by administrative action of the Board of Supervisors. Specific instructions for submitting plans can be obtained from the Township Secretary in accordance with this Article.
- E. Every application for development shall include a Professional Plan Review and Escrow Agreement, signed by the landowner(s) and any agent, tenant or any other person submitting an application for development. The Professional Plan Review and Escrow Agreement form may be obtained at the Township Office. The Board of Supervisors may by Resolution create, revise and/or amend the form and content of the application, Professional Plan Review and Escrow Agreement, and/or any other agreement required by this ordinance.

SECTION 301. CLASSICATION OF PLANS – MINOR AND MAJOR.

- A. All subdivision and land development applications shall, for the purposes of this procedure, be classified as either minor or major. Plans shall be classified in accordance with the following criteria:
 - 1. <u>Minor Subdivision Plan</u>. A subdivision plan may be classified as a minor subdivision where the following circumstances apply:
 - a. No street, either public or private, nor any improvement (including the extension of a public water or sewer main), which is intended to be dedicated to the Township, is to be constructed;

- b. No land disturbance activities will take place except those incidental to construction of a single family detached dwelling on a single family lot;
- c. No more than two (2) lots are proposed; and
- d. No further subdivision can occur within the resulting lots.

or

- e. The purpose of the plan is to provide a lot line adjustment or a recombination of lots and no development is proposed.
- 2. <u>Minor Land Development Plan</u>. A land development plan may be classified as a minor land development where the following circumstances apply:
 - a. The addition to an existing non-residential structure having an area which is the equivalent of not more than ten (10) percent of the existing gross floor area or one thousand (1,000) square feet, whichever is less.

or

- b. The expansion of an existing parking lot having an area which is the equivalent of not more than twenty (20) percent of the existing parking lot area or fifteenhundred (1,500) square feet, whichever is less.
- 3. <u>Major Subdivision or Land Development Plan</u>. All subdivision or land development plans that do not meet the minor criteria, as defined above in Section 301.A.1 or 2, shall be classified as a major subdivision or land development plan.
- 4. The Board of Supervisors, upon recommendation of the Planning Commission, shall require a preliminary plan for a subdivision or land development otherwise identified as a minor plan if the Board of Supervisors determines that a plan could cause significant impact or harm to the environment or the health, safety, or welfare of the citizens of Elk Township.
- B. **Determination of Plan Classification**. Subdivision or land development plan submittals shall be made to the Township Secretary, or other person so designated by the Board of Supervisors to receive plans, who shall forward the plans to the Board of Supervisors. The Planning Commission, based upon the advice of the Township Solicitor and the Township Engineer, shall make the determination as to whether the subdivision or land development is classified as minor or major in accordance with Section 301.A, above.
- C. Review Procedure For Minor and Major Plan Submittals. Applications for subdivision or land development shall be submitted in accordance with the procedures set forth in Table 3-1.

Table 3-1
Plan Review Procedure for Minor and Major Plans

Plan Stage	Minor Subdivision or Land Development	Major Subdivision or Land Development	See Section
Sketch	Strongly Recommended	Strongly Recommended	303
Preliminary	Not Required	Required	304
Final	Required	Required	305

SECTION 302. TIME LIMITATIONS FOR PLAN REVIEW.

- A. **Start of Plan Review Time Period**. A preliminary or final plan shall not be considered officially filed and the time requirements of this section shall not be considered in effect until the submittal requirements of Section 304.A. for preliminary plans, or Section 305.A.for final plans have been met.
- B. Planning Commission Review (Report to the Supervisors). The Planning Commission shall make its recommendations on a preliminary or final plan in the form of a Report to the Supervisors. The Report to the Supervisors shall consist of a record of the meeting minutes from the associated planning commission meeting that refer to the recommendation of the Planning Commission as to the plan in question. If no report is provided by the Planning Commission within the time allotted, the Board of Supervisors may proceed to act on the plan without the recommendation of the Planning Commission.

C. Board of Supervisors Review.

- 1. All applications for preliminary or final plan approval shall be acted upon by the Board of Supervisors and communicated to the applicant within ninety (90) days following the date of the next regular Planning Commission meeting following the date the application is filed. However, if the next regular meeting of the Planning Commission occurs more than thirty (30) days following the filing of the application, the ninety (90) day period shall be measured from the thirtieth (30th) day following the day the application is filed, unless the applicant agrees to an extension of time as provided for in Subsection 4 below.
- 2. The decision of the Board of Supervisors shall be in writing and shall be communicated to the applicant personally or mailed (Certified and U.S. Mail) to the applicant at their last known address not later than fifteen (15) days following the decision or by the end of the said ninety (90) day period. The form and content of the decision shall comply with the applicable requirements of Section 508: Approval of Plats of Act 247.
- Failure of the Supervisors to render a decision and communicate it to the applicant within the time and in the manner required in Subsection 1 and 2, above, shall be deemed an approval of the application in terms as presented, unless the applicant has agreed in writing to an extension of time as described in Subsection 4 below.
- 4. The applicant may be requested to agree, in writing, to an extension of time beyond the said ninety (90) day period in which a decision concerning approval of a plan is to be rendered. The duration of this extension of time shall be at the discretion of the Board of Supervisors, but shall in no case be less than ninety (90) days. Following receipt of the applicant's written agreement, the Board of Supervisors shall render a decision and communicate it to the applicant before the end of the extended time period.

SECTION 303. SKETCH PLAN SUBMISSION AND REVIEW.

A. Submittal Procedure.

- 1. The sketch plan procedures are enacted to afford the applicant the opportunity to submit information for review and informal discussion with the Township and various County agencies before engaging in the detailed engineering design required for the preparation of preliminary and final plans.
- 2. Submission of a sketch plan shall not constitute the formal filing of a plan with the Township. As such, this procedure is voluntary and not subject to the time limitations imposed by Act 247.
- The Township Planning Commission is encouraged to submit the sketch plan to the Chester County Planning Commission (CCPC) for review and comment.
- 4. Although information to be included on the sketch plan is at the discretion of the applicant, the information listed in Section 400.B. is suggested as a minimum.
- Prior to submission of the sketch plan, the applicant is encouraged to consult this Ordinance, the Elk Township Zoning Ordinance, the Elk Township Comprehensive Plan, the Elk Township Open Space Plan, the Elk Township Official Map and Ordinance, the Elk Township Post-Construction Stormwater Management Ordinance, and any other applicable Township documents or ordinances to determine whether the proposed subdivision or land development concept is generally consistent with applicable requirements.
- 6. Sketch Plans must be clearly marked as such and should indicate acceptance of the provisions of Section 400.
- 7. The applicant is encouraged to submit 9 copies of sketch plans for subdivision or land development, as further described in Section 400, to the Township Secretary to permit the distribution specified in Table 3-2, below.

Table 3-2 Sketch Plan Distribution

Agency or Person	Number of Copies
Township Secretary 1	
Board of Supervisors	1
Township Engineer	2
Zoning Officer	1
Planning Commission	11
CCPC	2
CCHD (if necessary)	1
Total	9 copies

8. When a sketch plan review by the Township Engineer, Township Solicitor, or other Township consultant is requested by the applicant, the applicant shall submit an acceptable escrow deposit consistent with the requirements of Section 701.C. to cover all associated costs as may be incurred by the Township.

- B. Review Procedure Planning Commission. The sketch plan shall be discussed at a regularly scheduled Planning Commission meeting when the applicant or qualified agent is in attendance. A discussion of the preliminary and final plan review process shall take place at the meeting so that a clear understanding of the formal plan review procedure exists between the Township and the applicant. In addition to comments which may be submitted by the Township Engineer, CCPC, and Chester County Health Department (CCHD), the Planning Commission shall consider the suitability of the proposed subdivision or land development in regard to the following:
 - 1. Existing site conditions;
 - 2. The proposed design or lot layout;
 - 3. Potential environmental impacts;
 - 4. Proposed resource protection measures;
 - 5. Consistency with the Elk Township Comprehensive Plan; and
 - 6. General compliance with the criteria contained in this Ordinance, and with other applicable regulations of the Township.

SECTION 304. PRELIMINARY PLAN SUBMISSION AND REVIEW.

A. Submittal Procedure.

- 1. A preliminary plan shall be considered officially submitted only upon the receipt by the Township Secretary of the appropriate number of plan copies with supporting documents, a completed official application form, a signed Professional Plan Review and Escrow Agreement, and the correct application fee. Official application forms may be obtained at the Township Office.
- 2. Upon submission of a complete application, together with all required fees and escrow deposits, the Township Secretary shall accept the application, plans, and other required materials as filed, and shall transmit the requisite number of copies of the plans and other required materials to the Planning Commission, Township Engineer, Township Solicitor, and to the agencies as specified in Table 3-3, below. Any associated fees charged by these agencies shall be paid by the applicant.
- 3. Fourteen (14) copies of preliminary plans for subdivision or land development, as further described in Section 401, shall be submitted to the Township Secretary and shall be in accordance with Section 402 to permit the distribution specified in Table 3-3 below.

Table 3-3
Preliminary Plan Distribution

Agency or Person	Number of Copies		
Township Secretary	1		
Board of Supervisors	1		
Township Engineer	1		
Zoning Officer	1		
Planning Commission	3		
Township Solicitor	1		
CCPC	2		
CCHD	2		
CCCD	1		
Chester County Fire Marshall *	1		
Total 14			
Additional copies as required by the Board of Supervisors			

^{*}For any subdivision and/or land development proposing commercial or industrial use and any use served by a public water supply.

- B. **Township Review Procedure**. The Board of Supervisors shall refer such plan to the Township Engineer and Planning Commission for review and recommendation.
 - 1. Township Engineer. For each application for preliminary subdivision or land development, the authorized Township Engineer is responsible for reviewing all plans and documents submitted by the applicant and for informing the Township of any nonconformance with township, county, state, and federal laws and regulations. The Township Engineer shall state what permits are required of each application for subdivision or land development. The Township Engineer shall confer with the applicant to the extent necessary to obtain conformity of the plan with these regulations and to comment upon the matter subject to his review and shall forward his written comments on the plan to the Planning Commission within thirty (30) days of his or her receipt of the Plan.
 - 2. Township Planning Commission.
 - a. The Township Planning Commission shall review all plans referred to it by the Board of Supervisors. The Planning Commission shall not submit their recommendation to the Board of Supervisors until they have reviewed any comments from the Township Engineer, any state or county agencies, and any other review agencies who have submitted comments with respect to any such application. The Planning Commission shall review the plans as to overall conformance with this Ordinance, the Elk Township Zoning Ordinance, the Elk Township Comprehensive Plan, the Elk Township Open Space Plan, the Elk Township Official Map and Ordinance, the Elk Township Post-Construction Stormwater Management Ordinance, any other applicable Township regulations and any other applicable plans, practices, and guidelines the Planning Commission wishes to use.
 - b. After such review, the Planning Commission shall forward written comments and recommendations, along with the written comments of the Township Engineer, any state or county agencies, and any other review agencies who have submitted

comments with respect to any such application, to the Board of Supervisors within five (5) days of completion of the Planning Commission's review. The Planning Commission's recommendations for plan approval shall include any suggested conditions, changes, modifications, or additions required to be addressed at the final plan stage and, if applicable, an explicit listing of all ordinance requirements being recommended for waiver. Recommendations for plan denial shall include a listing of the specific areas in which the Planning Commission deems the plans deficient. The Report to the Supervisors, see Section 302.B., shall include the reasons therefore, citing specific sections of the statutes or ordinances relied upon.

3. <u>Board of Supervisors.</u>

- a. When the Planning Commission submits its recommendations to the Board of Supervisors, such plan may be placed on the Board of Supervisors' agenda for review and action.
- b. In acting on the preliminary subdivision or land development plan, the Board of Supervisors may review the plan and the written comment of the Township Engineer, the Report to the Supervisors from the Planning Commission, the CCPC, and all other reviewing agencies, and comments from public hearings, if any, to determine its conformance to existing ordinances.
 - 1) The Board of Supervisors may request the modification of any subdivision or land development plan and specify conditions, changes, modifications, or additions thereto, which it deems necessary, and may make its decision to grant preliminary plan approval subject to such conditions, changes, modifications, or additions.
 - 2) Notwithstanding the foregoing procedure, the Board of Supervisors shall act on all preliminary plans within the specified review period, see Section 302, unless the applicant agrees in writing, to an extension of time in accordance with Section 302.C.4.
 - Whenever the approval of a preliminary plan is subject to conditions, the written action of the Board of Supervisors, as prescribed herein, shall:
 - a) Specify each condition of approval, citing relevant ordinance provisions; and
 - b) Require the applicant's written agreement to the conditions.

Where the applicant's written agreement is not received within thirty (30) days from the date the written action of the Board of Supervisors is issued, the Board of Supervisors shall be deemed to have denied the application.

4) A decision for plan denial shall include a listing of the ways in which the Board of Supervisors deems the plans deficient and shall cite specific sections of the statutes or ordinances relied upon in the decision.

C. The Board of Supervisors may, before acting on the subdivision or land development plan, arrange for a public hearing thereon subject to public notice.

SECTION 305. FINAL PLAN SUBMISSION AND REVIEW.

A. Submittal Procedure.

- 1. A final plan shall be considered officially submitted only upon the receipt by the Township Secretary of the appropriate number of plan copies with supporting documents, a completed official application form, a signed Professional Plan Review and Escrow Agreement, and the correct application fee. Official application forms may be obtained at the Township Office.
- 2. Fourteen (14) copies of final plans for subdivision or land development, as further described in Section 402, shall be submitted to the Board of Supervisors, including all sheets, drawings and notes of the approved preliminary plan, and shall be in accordance with Section 402 and the Final Plan Information Checklist (Appendix A), to permit the distribution specified in Table 3-4, below.

Table 3-4
Final Plan Distribution

Agency or Person	Number of Copies			
Township Secretary	1			
Board of Supervisors	1			
Township Engineer	11			
Zoning Officer	11			
Planning Commission	3			
Township Solicitor	1			
CCPC	2			
CCHD	2			
CCCD	1			
Chester County Fire Marshall *	1			
Total 14				
Additional copies as required by the Board of Supervisors				

^{*} For any subdivision and/or land development proposing commercial or industrial use and any use served by a public water supply.

- 3. At the time of final plan submission, the applicant shall provide executed deeds of dedication for all improvements and a title report showing clear and marketable title. Additionally, the applicant shall be responsible to provide an updated report when requesting dedication/acceptance.
- 4. Prior to final approval of a subdivision or land development plan, the applicant shall also submit to the Township deed descriptions, prepared by a registered land surveyor, including but not limited to:
 - a. Any road and road right-of-way to be offered for dedication to the Township for public ownership;

- b. Any areas reserved for common open space;
- c. Any lots on which deed restrictions or easements are a condition for final Township approval of the subdivision or land development; and
- d. Legal agreements pertaining to open space, spray irrigation, homeowners' association and related responsibilities, and other applicable facilities.
- B. **Township Review Procedure**. Before acting on any final plan, the Board of Supervisors shall refer such plan to the Township Engineer and Planning Commission for review and recommendation. The Board of Supervisors shall not act on a final plan until the Township Engineer has made his or her comments. See Subsection 1 below.
 - 1. Township Engineer. The Township Engineer shall review the final plan to determine that the information and contents required by this Ordinance, the Elk Township Zoning Ordinance, any other Township, county, state, and federal laws or regulations, accepted engineering standards, and the conditions for preliminary plan approval, when applicable, are presented in the submitted plans. The Township Engineer shall confer with the applicant to the extent necessary to obtain conformity of the final plan with these regulations and to comment upon the matter subject to his review and shall forward their findings to the Planning Commission and Board of Supervisors for their consideration during review of the final plan.

2. Township Planning Commission.

- a. Prior to reviewing the final plan, the Planning Commission shall ensure that the applicant has agreed with the Township to install all improvements on the Plan and those required by the regulations herein, in accordance with Section 600.B.
- b. The Township Planning Commission shall review all plans referred to it by the Board of Supervisors. The Planning Commission shall not submit their recommendation to the Board of Supervisors until they have reviewed any comments from the Township Engineer, any state or county agencies, and any other review agencies that have submitted comments with respect to any such application. The Planning Commission shall review the plans as to overall conformance with this Ordinance, the Elk Township Zoning Ordinance, the Elk Township Comprehensive Plan, the Elk Township Open Space Plan, the Elk Township Official Map and Ordinance, the Elk Township Post Construction Stormwater Management Ordinance, any other applicable Township documents or ordinances and any other applicable plans, practices, and guidelines the Planning Commission wishes to use.
- c. After such review, the Planning Commission shall forward written comments and recommendations, along with the written comments of the Township Engineer, and any state or county agencies, and any other review agencies who have submitted comments with respect to any such application, to the Board of Supervisors within five (5) days of completion of the Planning Commission's review. The Planning Commission's recommendations for plan approval shall include any suggested conditions, changes, modifications, or additions required to be addressed at the final plan stage and, if applicable, an explicit listing of all ordinance requirements being recommended for waiver. Recommendations for

plan denial shall include a listing of the specific areas in which the Planning Commission deems the plans deficient. See Section 302.B. The Report to the Supervisors, see Section 302.B., shall include the reasons therefore, citing specific sections of the statutes or ordinances relied upon.

3. Board of Supervisors.

- a. Upon receipt of the recommendations of the Planning Commission, Township Engineer, and all other applicable reviewing agencies, and any other supporting information, the Board of Supervisors shall, at one or more regular or special meetings, review and act on the final plan in accordance with Section 302. The Board of Supervisors shall notify the applicant as to their decision to approve or deny the plan in accordance with Section 302.C.2.
- b. The Board of Supervisors may specify conditions, changes, modifications, or additions to the application which it deems necessary and may make a decision to grant final approval subject to such conditions, changes, modifications, or additions. Whenever the approval of a final plan is subject to conditions, the written action of the Board of Supervisors as prescribed herein shall:
 - 1) Specify each condition of approval, citing relevant ordinance provisions in each case; and
 - 2) Require the applicant's written agreement to the conditions within fifteen (15) days from the date the written action of the Board of Supervisors is issued. Where the applicant's written agreement is not received within the time allotted, the Board of Supervisors shall be deemed to have denied approval.
- c. Additional Conditions of Approval. The following conditions shall also be met prior to final plan approval:
 - 1) Development Agreement. No subdivision plan or land development plan shall have final Township approval until the applicant and the Township Board of Supervisors enter into a written Development Agreement, approved by the Township Solicitor, setting forth the applicant's obligations, including but not limited to, compliance with all Township ordinances, regulations and resolutions, all applicable state and federal laws and regulations, and all conditions and safeguards specific to the development in accordance with Section 600.B. The Development Agreement shall be recorded with the final plan in the County Office of the Recorder of Deeds. The applicant shall comply with all terms of the Development Agreement, with all applicable laws, ordinances, regulations, resolutions and permits, and with all approved plans, except only where changes to such plans are authorized and approved in writing by the Township.
 - 2) Financial Security Agreement. In the event that the subdivision or land development requires improvements not already installed, the plan shall not have final Township approval until the applicant and the Board of Supervisors enter into a Financial Security Agreement setting forth the

applicant's obligations. These obligations shall include, but not be limited to, completion of the planned improvements, immediate correction of all foreseen and unforeseen soil erosion and stormwater runoff problems that arise during development, and immediate posting of an escrow account or other acceptable financial security sufficient to guarantee construction of all required improvements. Such Financial Security Agreement shall be in accordance with Section 603 and shall be recorded with the final plan in the County Office of the Recorder of Deeds.

- d. Eight (8) copies of the final plan as approved, with the appropriate endorsement of the Board of Supervisors, shall be distributed as follows:
 - 1) Two (2) shall be recorded in accordance with Subsection C below, by the applicant.
 - 2) One (1) copy distributed to the CCPC, by the applicant.
 - 3) One (1) copy distributed to the CCHD, by the applicant.
 - 4) Three (3) copies to be retained in the Township files, together with one (1) copy of all supporting materials.
 - 5) One (1) copy to the Township Engineer, along with all supporting materials, for construction inspection purposes.
- e. Before acting on a plan, the Supervisors may hold a public hearing thereon, after giving proper public notice.

C. Recording of Final Plan.

- 1. The final plan shall be acknowledged and recorded in the Chester County Office of the Recorder of Deeds within ninety (90) days of final Township approval, or the approval shall be null and void. No subdivision plan or land development plan shall be signed or released by the Township, or recorded in the County Office of the Recorder of Deeds, until and unless it has final Township approval in accordance with Subsection 305.B.3.c.1).
- 2. Within fifteen (15) days of recording by the Chester County Office of Recorder of Deeds, the applicant shall submit two (2) copies of the recorded plan and related agreements to the Township until which time no permits shall be issued.

SECTION 306. TIME LIMITATIONS ON APPROVED PLANS.

A. From the time an application for approval of a preliminary or final plan is duly filed as provided in this Ordinance, and while such application is pending approval or disapproval, no change or amendment of the zoning, subdivision and land development or other governing ordinance or plan shall affect the decision on such application adversely to the applicant and the applicant shall be entitled to a decision in accordance with the provisions of the governing ordinances or plans as they stood at the time the application was duly filed.

- B. In addition, when a preliminary application has been duly approved, the applicant shall be entitled to final approval in accordance with the terms of the approved preliminary application as hereinafter provided. However, if an application denied, any subsequent application shall be subject to the intervening change in covering regulations.
- C. When an application for approval of a preliminary or final plan has been approved or approved subject to conditions acceptable to the applicant, no subsequent change or amendment in the zoning, subdivision and land development or other governing ordinance or plan shall be applied to affect adversely the right of the applicant to commence and to complete any aspects of the approved development in accordance with the terms of such approval within five (5) years from such approval. Where final approval is preceded by preliminary approval, the five (5) year period shall be counted from the date of the preliminary approval.
- D. In the case of any doubt as to the terms of a preliminary approval, the terms shall be construed in the light of the provisions of the governing ordinances or plans as they stood at the time when the application for such approval was duly filed.
- E. If a subdivision or land development in accordance with an approved plan does not begin within five (5) years of the date of the preliminary plan approval, said approval shall expire and the submission of new plans shall be required.

SECTION 307. PLAN AMENDMENTS.

- A. Major modification of an approved final plan, as determined by the Board of Supervisors, shall be resubmitted and reprocessed in the same manner as the original plan. All site disturbance activities shall cease pending approval of such amended plan by the Board of Supervisors.
- B. Applicability of Ordinance Amendments. Sections 508 and 917 of the Act 247 provide an applicant with rights to proceed with the plan approved according to the limitations and authority described in each. In the event an applicant modifies any preliminary or final plan after the date of approval providing the protections described in Section 508, the applicant must submit a new application and comply with the terms of this Ordinance as a new submission.
 - In the event the Zoning Hearing Board or Board of Supervisors has approved an application for either a special exception or a conditional use, and the subject matter constitutes either a land development or subdivision, no change or amendments of the Zoning Ordinance or Subdivision and Land Development Ordinance shall affect the decision on such application in accordance with the provisions of those Ordinances as existed at the time the application was filed to either Board. In the event the applicant changes any use, density, or configuration described in the approval by that Board, all changes to any ordinance will apply to the modified plan.

ARTICLE IV PLAN INFORMATION REQUIREMENTS

SECTION 400. SKETCH PLAN REQUIREMENTS.

- A. A sketch plan may be submitted at the discretion of the applicant, but is strongly recommended as a basis for informal discussion with the Township Planning Commission and the Chester County Planning Commission (CCPC) in accordance with Section 303.A.1.
- B. Recommended Sketch Plan Information. Information furnished in a sketch plan shall be at the discretion of the applicant. Although a sketch plan need not be to exact scale, nor are precise dimensions required, it is recommended that a sketch plan include the following information in order to provide sufficient subject matter for discussion:
 - 1. Name, address, phone number, and email address of the applicant and of the applicant's engineer, surveyor, planner, architect, or landscape architect responsible for the plan.
 - Tract boundaries.
 - Location map indicating the nearest roadway intersection, zoning district, size of the tract, and any applicable overlay districts.
 - 4. North arrow, scale (if applicable), and date of plan preparation.
 - 5. Streets on and adjacent to the tract, property named and identified.
 - 6. Topographical and physical features such as steep slopes, floodplains, and wetlands. United States Geological Survey (USGS) and Soil Conservation Service information may be used but should be plotted to appropriate scale.
 - 7. Proposed general street layout.
 - 8. Proposed general lot layout.
 - 9. Method of water supply and sewage treatment proposed.
 - 10. In the case of land development plans, proposed general layout including building locations, parking lots and open spaces.
 - The plan should be clearly labeled "Sketch Plan."

SECTION 401. PRELIMINARY PLAN REQUIREMENTS.

The preliminary plan information shall consist of and be prepared in accordance with the following standards. The initial submittal of the preliminary plan for review by the Township shall contain the minimum plan information outlined in the Preliminary Plan Information Checklist located in Appendix A.

A. Drafting Standards.

- 1. The preliminary plan shall be drawn at a scale of at least fifty (50) feet to the inch. A larger scale of twenty (20), thirty (30), or forty (40) feet to the inch shall also be permitted as determined by the applicant.
- 2. Preliminary plans shall be on sheets not larger than thirty-six (36) inches by forty-eight (48) inches overall. As far as practicable, plans shall be drawn on standard sheet sizes such as: eighteen (18) inches by twenty-four (24) inches, twenty-four (24) inches by thirty-six (36) inches, thirty (30) inches by forty-two (42) inches, or thirty-six (36) inches by forty-eight (48) inches.
- 3. If the preliminary plan requires more than one (1) sheet, a key map showing the relative location of the sections shall be included. The scale of such a key map shall not be less than two hundred (200) feet to the inch.
- 4. Dimensions shall be in feet and decimal parts thereof, bearings in degrees, minutes, and seconds. Errors of closure shall not be more than one (1) part per ten-thousand (10,000).
- 5. Each sheet shall be numbered and shall show its relationship to the total number of sheets. The first sheet of each submittal shall include a table of contents listing the sheet number and title of each sheet in the set.
- 6. Plan revisions shall be numbered "00" and dated on the first submission, and consecutively numbered "01", then "02", and so on, and dated for each of the subsequent revisions. Alternative alpha-numeric systems may also be used.
- 7. The plan shall bear an adequate legend that indicates clearly which features are existing and which are proposed.
- 8. The boundary line of the subdivision shall be shown as a solid heavy line.
- 9. All plans and surveys shall be prepared by a registered professional engineer or a registered surveyor in accordance with the Act of May 23, 1945 (P.L. 913, No.367, 63 P.S. § 148 et seq.), known as the "Engineer, Land Surveyor, and Geologist Registration Law," except that this requirement shall not preclude the preparation of a plan in accordance with the Act of January 24, 1966 (1965 P.L. 1527, No. 535, 63 P.S. § 901), known as the "Landscape Architects' Registration Law," when it is appropriate to prepare the plan using professional services as set forth in the definition of the "Practice of Landscape Architecture" under Section 2 (63 P.S. § 902) of that Act.

- B. Basic Information. All preliminary plans shall include the following basic information:
 - 1. Name of the proposed subdivision or land development or other identifying title and the name of the township(s) in which the subdivision or land development is located.
 - Name, address, telephone number, and email address of the applicant and the name and address of the landowner of the tract, if different than the applicant.
 - Name, seal, address, telephone number, and email address of the registered engineer, surveyor, planner, architect, or landscape architect responsible for the plan.
 - 4. North arrow.
 - 5. Scale of the plan, both written and graphic.
 - 6. Original date of preparation and any subsequent revision dates.
 - 7. A location map drawn at a scale of not less than eight hundred (800) feet to the inch, showing the relationship of the tract to surrounding properties, roads, and watercourses within one thousand (1,000) feet of any part of the property. Zoning boundaries that traverse or are within three hundred (300) feet of the tract, including overlay district boundaries.
 - 8. Tract boundaries with tax parcel number(s) and approximate acreage(s).
 - 9. Names of owners of properties adjacent to the tract.
 - 10. As a plan note or table, existing township zoning regulations applicable to the tract including district designation, lot area, building setback lines, dimensional requirements, and average proposed lot size.
 - Proposed method of water supply and sewage disposal, as a note on the plan. If on-site sewage disposal is proposed, a table shall be provided summarizing the minimum isolation distances for sewage treatment tanks and for sewage absorption areas. Isolation distances shall be based on Pennsylvania Department of Environmental Protection (PaDEP) Chapter 73, latest revision.
 - 12. If any element of the plan is not in conformance with Township ordinances and regulations, a plan note or table shall indicate the nonconformity and the reason for requesting an exception.
 - 13. An approval block for signatures of the Board of Supervisors, Planning Commission Chairman, Township Secretary, Township Engineer, the Applicant, the Applicant's Surveyor and/or Engineer, and the CCPC.
 - 14. Statement identifying the plan as "preliminary" and not to be recorded.

- C. **Existing Features Plan**. The applicant shall identify the following existing site features, as applicable, on a single plan map, or maps, depending on the tract size and scale of the drawing.
 - 1. Complete current perimeter boundary survey of the property to be subdivided or developed prepared by a registered surveyor, showing all courses, distances, and area and tie-ins to all adjacent intersections.
 - 2. <u>Natural Features.</u> Natural Features, both on-site and within two hundred (200) feet of the property boundary, including:
 - a. Contour lines at intervals of not more than two (2) feet for land with average natural slope of twenty-five (25) percent or less, and at intervals of not more than five (5) feet for land with average natural slope exceeding twenty-five (25) percent. Contours lines shall be based on information derived from a topographic survey for the property, evidence of which shall be submitted including the date and source of the contours. Datum to which contour elevations refer and references to known, established benchmarks and elevations shall be included on the plan. The Township elevations are based on the 1929 mean sea level datum. All contours and elevations shown on plans submitted to the Township must be based on this system.
 - b. Areas within the Floodplain Conservation Overlay District, as defined in Section 1101 of the Elk Township Zoning Ordinance, including the floodway, flood fringe, and approximated flood plain.
 - c. Watercourses, either continuous or intermittent, and lakes, ponds or other water features as depicted on the applicable U.S.G.S. Quadrangle Map, dated 1973 or most current edition.
 - d. Wetlands and wetland margins per county, state, and federal regulations as prepared by a professional engineer with qualifications, subject to the approval of the Board of Supervisors upon the recommendation of the Township Engineer;
 - e. Soil types and their boundaries, as mapped by the USDA Soil Conservation Service, including a table listing the soil characteristics pertaining to slope, depth to seasonal high water table, and depth to bedrock, flood hazard potential, and hydric soils. Alluvial and hydric soils shall specifically be depicted on the plan.
 - f. Existing vegetation, denoted by type, including woodlands, as defined in the Elk Township Zoning Ordinance, tree masses, tree lines and hedgerows, wetland vegetation, riparian buffer, pasture or croplands, orchards, and any other notable vegetative features on the site.
 - g. Any portion of the tract identified as a Pennsylvania Natural Diversity Inventory (PNDI) site.
 - h. Any other information as may be required to determine compliance with the Elk Township Zoning Ordinance, including associated impact statements (Section 1303).

- 3. <u>Man-Made Features</u>. Man-Made Features, both on-site and within two hundred (200) feet of the property boundary, including:
 - a. Location, dimensions, and use of existing buildings and driveways.
 - b. Location, names, widths, centerline courses, paving widths, identification numbers, and rights-of-way, of existing streets and alleys.
 - c. Location and size of existing sanitary sewer and storm drains, and water supply facilities.
 - d. Location and dimensions, where applicable of existing easements, deed restrictions, rights-of-way, or any other encumbrances upon the land, including location, size, and ownership.
 - e. Site features or conditions such as hazardous waste, dumps, underground tanks, active and abandoned wells, quarries, landfills, and artificial land conditions.
 - f. Cultural or historical resources as identified in the Elk Township Open Space Plan.
 - g. Any features designated on the Elk Township Official Map.
- D. **Site Design and Layout Plan**. The following information shall be provided with the Site Design and Layout Plan:
 - 1. Layout and dimensions of proposed lots, including:
 - a. Area of each proposed lot, including gross lot area and net lot area.
 - b. Building envelope showing setback lines and yard area requirements.
 - c. The location of all percolation tests and test pits observed by the PaDEP and the Chester County Health Department (CCHD), including both primary and replacement specific sewage absorption area configurations.
 - d. Location of proposed water supply.
 - e. Location and width of all private driveways.
 - 2. Location, width, and name of all proposed streets including all street extensions or spurs as are reasonably necessary to provide adequate street connections and facilities to adjoining developed or undeveloped areas, preliminary profiles for proposed streets, proposed minimum setback lines for each street, right-of-way width, cartway width, and names of all proposed streets within the subdivision or land development.
 - 3. Clear sight triangles at all proposed intersections, as required by Section 510.

- 4. For residential subdivisions, parcels of land to be dedicated or reserved for non-residential use. Statements shall also be included indicating the intended use of all non-residential lots and the proposed or existing restrictions of any type which will exist as covenants in the deed(s) for all non-residential lots.
- Location, if any, of parks, playgrounds, and other areas or buildings dedicated or reserved for public use, with any conditions governing such use.
- 6. A preliminary land development plan shall show proposed building locations, location and size of parking lot, provisions for access and traffic control, locations of loading docks and provisions for landscaping and lighting of site. The plan shall conform to the requirements of the Elk Township Zoning Ordinance with regard to use, area and width regulations for the district in which the proposed Land development is located
- 7. Proposals for development (including twins, townhouses, duplexes, and apartments) shall provide the following information as applicable:
 - a. Total number of dwelling units, by type; number of buildings and distances between buildings; proposed density; and total parking spaces;
 - b. Total building coverage and impervious surface coverage;
 - c. Areas that are proposed to remain open including the intended use of the open space (recreation, agriculture, etc.); and
 - d. Identification of areas with the best draining soils or soils identified as Class I, Class II, or Class III Agricultural soils.
- 8. Location of easements or rights-of-way necessary for any purpose, including but not limited to utilities, drainage, and grading.
- 9. If land to be subdivided or developed lies partly in another municipality, the applicant shall submit information concerning the location and design of streets, layout and size of lots and provision of public utilities on lands subject to his control within the adjoining municipalities. The design of public improvements shall provide for a smooth, practical transition where specifications shall vary between municipalities. Evidence of approval of this information by appropriate officials of the adjoining municipalities shall also be submitted.
- E. **Construction Improvements Plan**. The Construction Improvements Plan shall contain sufficient information to provide working plans for the layout and construction of proposed streets, utilities, stormwater retention facilities, and other improvements. Information shall include, but not be limited to the following:
 - 1. A statement describing proposed public improvements including: streets, curbs, sidewalks, and the means of water supply and sewage disposal to be provided.
 - 2. The Construction Improvements Plan shall include a timetable for the proposed sequence of development.

- 3. <u>Water Supply and Sewage Facilities</u>. Planning Modules shall accompany all plans for Land Development provided by the PaDEP, including information with regard to the means of sewage disposal and provision of water supply.
 - a. Water Supply.
 - 1) Where individual on-site water service is proposed, approximate location of well sites.
 - 2) Where off-site or central water service is proposed, the preliminary design of water distribution facilities including the size and location of water mains, fire hydrants, storage tanks, and, where appropriate, wells or other water sources.
 - 3) Results and implications of the Water Availability Study in accordance with Section 520.E.
 - b. Sewage Facilities. Sufficient information shall be provided to determine that the proposed subdivision or land development meets the recommendations and intent of the Township Wastewater Facilities Plan (Act 537 Plan) and the Township's hierarchy of preferred systems which is as follows:
 - Individual On-site Sewage Facilities. Where individual on-lot sewage facilities are proposed, the applicant shall submit documentation verifying soil suitability for the proposed use. A statement from the CCHD concerning soil suitability for all proposed sewage system areas shall be required. Test pit and percolation test information in accordance with all CCHD and PaDEP requirements shall be provided and the dimensions of both primary and replacement permissible sewage system shall be located on the plan. All sewage systems shall be located entirely upon the same parcel as the use which is served, unless otherwise approved by the Board of Supervisors under the provisions of Section 521.B.1.e. Minimum horizontal isolation distances for treatment tanks and absorption areas as required by PaDEP Chapter 73 shall be accommodated.
 - 2) Community Sewage System. Where a community sewage system is proposed, the applicant shall include the preliminary design of the proposed system showing the size, capacity, and location of treatment facilities and, where applicable, wastewater reclamation/land application sites. The design of community sewage facilities shall be in accordance with the regulations set forth in Section 521 of this Ordinance and any other Township regulations.
 - Off-site Sewer Service. Where off-site sewer service is determined to be feasible and consistent with the Township Sewage Facilities Plan, the preliminary design of sewage systems, including but not limited to: the location and grade of sewers, pumping stations, sewer mains, and, where applicable, sewage treatment plants, showing the type and degree of treatment intended and the size, capacity and the location of treatment facilities. Existing sewage systems must be protected at all times.

- 4. For on-site water supply and sewage facilities, the final location of wells and all sewage systems, both primary and replacement.
- F. Natural Resource Protection Plan. The following information is required to ensure compliance with Section 1100 of the Elk Township Zoning Ordinance:
 - 1. An encroachment map shall be provided which includes the natural features information required by Section 401.C.2. of this Ordinance and a preliminary grading plan illustrating proposed disturbance or removal of the identified natural features. The encroachment map shall also include the plan information required by Section 401, and the table of calculations required by Section 1103.F. of the Elk Township Zoning Ordinance indicating the total amount of land in each protected resource, the maximum disturbance allowed for the resource, and the disturbance proposed by the plan.
 - 2. The plan shall indicate the location of the Tree Protection Zone for those trees or woodlands to be retained on the site, together with information indicating how the woodland protection requirements of Section 1103.E.5. of the Elk Township Zoning Ordinance are being met.
- G. Stormwater Management Plan. A preliminary Stormwater Management Plan in accordance with the provisions of the Post-Construction Stormwater Management Ordinance.
- H. Soil Erosion and Sediment Control Plan. Details of the methods to be used to prevent erosion and discharge of sediments from the property both during and following construction including, but not limited to the surface grading, limitation on slopes, and sedimentation basins. The Soil Erosion and Sediment Control Plan shall be submitted to the Chester County Conservation District for review and comment in accordance with Section 304 of this Ordinance.
- I. Landscaping Plan. When applicable, a Landscaping Plan, consistent with the requirements of Section 1301 E. (Landscaping and Screening) of the Elk Township Zoning Ordinance and Section 523 of this Ordinance, shall be provided.
- J. Profile Plan For Streets. Profile Plan for Streets with details of the horizontal layout including:
 - 1. The horizontal scale on the profile plan shall not be less than one (1) inch equals fifty (50) feet, and the vertical scale shall be not less than one (1) inch equals ten (10) feet or in cases where larger scales are used, the ratio shall be 1:10 vertical to horizontal or as required by the Township;
 - 2. Centerline with bearings, distances, curve data, and stations corresponding to the profile.
 - 3. Right-of-way and curb lines with radii at intersections.
 - 4. Tie-ins by courses and distances to intersection of all public roads, with their names and widths.
 - 5. Location of all monuments and other boundary markers by bearing and distances.
 - 6. Location and size of all drainage facilities, sidewalks, public utilities, fire hydrants, lighting standards, and street name signs.

- 7. Typical street cross-section indicating typical cross slopes.
- 8. Existing and proposed grades.
- 9. Road elevations every fifty (50) feet, with the exception of vertical curves when road elevations shall be shown every twenty-five (25) feet.
- K. Profile Plan for Storm Water Management and Sanitary Sewer Facilities. A profile plan for stormwater management and sanitary sewer facilities in accordance with the provisions of the Post-Construction Stormwater Management Ordinance and Section 521 and 521.A. of this Ordinance which shall include the following:
 - 1. Location and size of line with stations corresponding to the profile.
 - 2. Location of manholes or inlets with grade between and elevation of flow line and top of each manhole or inlet.
 - 3. Location of laterals.
 - 4. Location of other drainage facilities and public utilities in the vicinity of storm and/or sanitary sewer lines.
 - 5. Hydraulic design data and calculations for storm sewers, inlets, culverts, and bridge structures.
- L. Where subdivision of land is proposed as a part of land development because of the creation of mortgages encumbering less than the entire tract, a plan shall be submitted showing the proposed division of property including easements for access to all parcels not fronting on public roads. Such easement shall be a minimum of twenty-five (25) feet wide, except the Board of Supervisors require greater width.

SECTION 402. FINAL PLAN REQUIREMENTS.

A. Drafting Standards.

- 1. The drafting standards of Section 401.A shall apply to final plans.
- 2. Plans submitted for final plan review shall be clear and legible black or blue on white prints.
- B. **Basic Information**. Basic information, as required by Section 401.B, shall apply to final plans except that plan shall be identified as "final."
- C. **Existing Features Plan**. The Existing Features Plan information as required by Section 401.C shall apply, consistent with the terms of preliminary plan approval.
- D. Site Design and Layout Plan. The following information relating to the layout shall be shown on the final plan:

- 1. Information required in Section 401.D consistent with the terms of preliminary plan approval.
- 2. Sufficient data to determine readily the locations, bearing and length of every street, lot, easement, and boundary line and to reproduce such lines upon the ground, including all dimensions, angles, or bearings of the lines and areas of each lot and of each area proposed to be dedicated to public use. The gross and net area of the tract shall be included.
- For residential subdivisions or land developments, the house locations, driveway locations, and names of all streets. The Township shall assign house numbers and the applicant shall include these numbers on the final plan.
- 4. <u>House Numbers</u>. The plan for lots within a subdivision shall show the 911 house numbers as assigned by the Township Secretary. The assigned house numbers shall be used on all paperwork after the plan is approved. The house numbers shall be displayed on a three-foot high stake, on the mailbox, or on the house to obtain full view from the center of the adjacent roadway coming from any direction.
- 5. The location of all existing and proposed permanent reference monuments and the locations of lot corner markers. All property corners shall be marked as existing, proposed, or not found.
- 6. Lots and blocks within a subdivision numbered in a logical sequence.
- 7. The building setback line for each proposed street per Act 60, latest revision.
- 8. Street Names. Street names shall be approved by the Board of Supervisors.

E. Construction Improvements Plan. The following shall be included:

- 1. Information required in Section 402.E consistent with the terms of preliminary plan approval.
- 2. Where off-site or community sewer service is to be provided, the final design of all facilities, including but not limited to sewer mains, manholes, pumping stations, and sewage treatment facilities.
- 3. Where off-site or central water service or water supply is to be provided, the final design, including location and size of all water service facilities within the subdivision, shall be shown, including wells, storage tanks, pumps, mains, valves, and hydrants. The plan shall contain a statement that the placement of fire hydrants and the components of the system have been reviewed by the Fire Marshall and that both are compatible with the firefighting methods and equipment used by local fire companies.
- 4. For on-site water supply and sewage facilities, the final location of wells and sewage systems, both primary and replacement.
- 5. A final land development plan shall show proposed building locations, location and size of parking lots, provisions for access and traffic control, locations of loading docks and provisions for drainage, landscaping and lighting of site. The plan shall be in

conformance with the requirements of the Elk Township Zoning Ordinance. Where subdivision of land is proposed as a part of land development because of the creation of mortgages encumbering less than the entire tract, the final plan shall be submitted showing the proposed division of property including easements for access to all parcels not fronting on public roads.

- 6. A timetable for the proposed sequence of development.
- F. Natural Resource Protection Plan. A final Natural Resource Protection Plan consistent with Section 401.F and with the terms of preliminary plan approval shall be required.
- G. **Stormwater Management Plan**. A final Stormwater Management Plan in accordance with the provisions of the Post-Construction Stormwater Management Ordinance.
- H. **Erosion and Sediment Control Plan.** A final Erosion and Sedimentation Control Plan, consistent with Section 401.H. and with the terms of preliminary plan approval shall be required.
- I. Landscaping Plan. A final Landscaping Plan, consistent with Section 401.I. and the terms of preliminary plan approval shall be required.
- J. **Profile Plan**. A profile plan indicating final grades of streets, sanitary sewers, stormwater management facilities, and the extent of cut and fill operations.
 - 1. The profile plan shall show the vertical section of the existing grade and proposed grade along the centerline 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.
 - 2. The horizontal scale on the profile plan shall be not less than one (1) inch equals fifty (50) feet and the vertical scale shall not be less than one (1) inch equals ten (10) feet or in cases where larger scales are used, the ratio shall be 1:10 vertical to horizontal.
 - 3. A typical cross-section of street construction shall be shown on the profile plan and shall indicate the following:
 - a. Right-of-way width and the location and width of paving within the right-of-way;
 - b. Type, thickness, and crown of paving;
 - c. The location, width, type, and thickness of curbs and sidewalks to be installed, if any;
 - d. Grading of sidewalk area;
 - e. Typical location, size, and depth of any underground utilities that are to be installed in the right-of-way where such information is available;
 - f. If required, a plan for location and type of street lights to be installed, together with the necessary contract for street light installation for approval by the Township;

- g. Certification by the engineer, land surveyor or landscape architect who prepared the plan that the plans are in conformity with zoning, building, sanitation and other applicable Township ordinances and regulations. In any instance where such plans do not comply, evidence shall be presented when the Board of Supervisors has officially authorized an exception;
- h. Typical cross slope;
- i. Existing and proposed grades; and
- j. Road elevations every fifty (50) feet, with the exception of vertical curves when road elevations shall be shown every twenty-five (25) feet.
- 4. Detail sheet(s) providing sufficient details and notes to define the construction methods and materials of proposed improvements. Details shall include but not be limited to:
 - a. A cross-section of each utility trench, showing proposed bedding and backfill material as well as the required compaction methods.
 - b. Erosion and sediment control methods and materials.
 - c. Stormwater management facilities.
- K. Open Space Management Plan. The applicant shall provide a plan for the long-term management of the designated open space which is to be created as part of the development, including maintenance and management of any wastewater disposal, water supply, stormwater management, or any other common facilities which may be located within areas of designated open space.
 - 1. Open Space Management Plan Information. Such a plan shall include a narrative discussion of the following items:
 - a. The manner in which the designated open space and any facilities included therein will be owned and by whom it will be managed and maintained.
 - d. The conservation, land management, and agricultural techniques and practices which will be used to conserve and perpetually protect the designated open space. Including any necessary conservation plan(s) approved by the Chester County Conservation District (CCCD).
 - e. The professional and personnel resources that will be necessary in order to maintain and manage the property.
 - f. The nature of public and private access that is planned for the designated open space.
 - g. The source of money that will be available for such management, preservation, and maintenance on a perpetual basis.
 - h. A budget, which will be included as a part of any homeowners' agreement and obligations, projecting the life of all common assets, systems, and facilities, the

annual costs for maintenance and operation, and including a monthly financial obligation sufficient to assure the proper maintenance, repair, and replacement, of all of these assets, systems, facilities, and functions. The applicant and/or the entity created for the ownership and operation of these assets shall include a copy of the budget amounts, and a statement that the annual assessment for each resident is sufficient to satisfy the obligations to comply with these budgeted amounts, subject to Township engineer approval. The applicant and/or responsible entity must provide an annual financial report to Elk Township which discloses the amounts required for all of these obligations, the amount assessed to each residence, and the balance of the account maintained for these purposes. The amount retained for capital replacement costs shall be maintained in a separate account as a federally insured and licensed institution, and not removed without Township approval. No document concerning the obligations of the homeowner's and/or Township rights may be amended and/or terminated without Township approval.

- 2. Recording of Plan. The Open Space Management Plan shall be recorded with the Final Subdivision and Land Development Plans, in the Chester County Office of the Recorder of Deeds of Chester County, Pennsylvania.
- 3. The Board of Supervisors may require, as a condition of subdivision and/or land development approval, that appropriate management contracts be established as evidence of the ability to adhere to the provisions of the approved Open Space Management Plan.
- 4. Open Space Management Plan Revisions. In order to allow for the changing needs inherent in the perpetual management of land, the management plan shall contain a provision to the effect that it may be changed by written application to the Board of Supervisors. Approval of such application by the Board of Supervisors shall not be unreasonably withheld or delayed, so long as:
 - a. The proposed change is feasible and is consistent with the purposes of preservation of open space set forth in this Section, the Elk Township Zoning Ordinance, and with the approved subdivision and land development plans; and
 - b. The plan for such change avoids a likelihood of the obligation for management and maintenance of the land falling upon the Township without the consent of the Board of Supervisors.
- 5. The Open Space Management Plan shall be in accordance with the provisions of Section 1301.A. Open Space, of the Elk Township Zoning Ordinance.

L. Approvals, Certificates, Documents, and Disclosures.

1. Certification by the engineer, land surveyor, landscape architect, or land planner who prepared the plan that the plans are in conformity with zoning, subdivision, building, fire, and other applicable township ordinances, codes, and regulations. In any instance where such plans do not conform, evidence shall be presented that an exception has been officially authorized. In addition, a certification of accuracy indicating compliance with State law and signed by the design professional shall be included on the final plan.

- 2. A certificate of title showing the ownership of the land to be vested in the subdivider or other applicant for plan approval.
- 3. A statement duly acknowledged before an officer authorized to take acknowledgments of deeds and signed by the owner or owners of the property, to the effect that the subdivision or land development shown on the final plan is made with his or their free consent and in accordance with his or their desires, and it is desired to record the same.
- 4. All offers of dedication and covenants, including homeowner association documents, governing the reservation and maintenance of undedicated open space, which shall bear the certificate of approval of the Township Solicitor as to their legal sufficiency. Any other restrictive covenants and/or trusteeships and their period of existence shall be indicated on the final plan wherever applicable.
- A copy of such private deed restrictions, including building setback lines, as may be imposed upon the property as condition to sale, together with a statement of any restrictions previously imposed which may affect the title to the land being subdivided.
- 6. Such certificates of approval (or of preliminary and/or conditional approval) by proper authorities of the Commonwealth as may have been required by the Board of Supervisors or by this Ordinance. Final plan approval shall be conditioned upon receipt of an approved Sewage Facilities Planning Module from the PaDEP or approval of a planning exemption.
- 7. Where access is required to a highway under the jurisdiction of the Pennsylvania Department of Transportation (PennDOT), 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 driveway access to a state highway is permitted.
- 8. A copy of all easements executed with private property owners, utilities, or municipalities, in a form approved by the Township Solicitor.
- 9. Upon completion of review and approval, and for the affixing of signatures, fully legible prints for all plans shall be submitted. Signature blocks for the Board of Supervisors, Planning Commission, Township Engineer, Township Secretary, and CCPC shall be provided on the face of the plans.
- 10. A copy of the disclosure to be forwarded to all prospective homeowners that school bus service and municipal maintenance are not available until all improvements are offered to and accepted by the Township.
- 11. The following note shall be provided on the face of the plans:
 - NOTICE TO ALL PROPERTY OWNERS AND PROSPECTIVE PURCHASERS OF LAND DESCRIBED IN THIS PLAN:
 - 1. THIS APPROVED FINAL PLAN CONTAINS IMPORTANT INFORMATION CONCERNING THE USE AND OWNERSHIP OF THE LOTS AND/OR REAL PROPERTY DESCRIBED IN THIS PLAN.

- 2. EVERY PROSPECTIVE BUYER/USER OF ANY REAL PROPERTY SHOULD REVIEW ALL PAGES CONTAINED IN THIS PLAN, AND ALL WRITTEN INFORMATION CONCERNING THE USE, DEVELOPMENT OF THE REAL PROPERTY, COVENANTS, EASEMENTS AND RESTRICTIONS WHICH MAY AFFECT PART OF AND/OR THE ENTIRE PARCEL OF REAL ESTATE SHOWN IN THIS PLAN.
- 3. RESTRICTIONS, PROMISES, COVENANTS, EASEMENTS AND/OR OTHER LANGUAGE CONTAINED IN THIS PLAN MAY LIMIT, RESTRICT AND/OR EXCLUDE CERTAIN OWNERSHIP RIGHTS; INCLUDE ADDITIONAL OBLIGATIONS, AND/OR GRANT RIGHTS TO OTHER PERSONS/ENTITIES TO A PORTION AND/OR ALL THE REAL PROPERTY DESCRIBED IN THIS PLAN.
- 4. THIS LANGUAGE AND INFORMATION AFFECTS AND CONTROLS THE TRANSFER (OWNERSHIP) OF ANY LOT OR REAL PROPERTY SHOWN IN THIS FINAL PLAN AS OF THE DATE OF ITS RECORDING, AND EVERY OWNER IN THE FUTURE.
- 5. THE TOWNSHIP'S APPROVAL OF THIS PLAN INCORPORATES ALL NOTES, CONDITIONS, RESTRICTIONS AND LANGUAGE AS CONTAINED ON THIS PLAN, AND PROVIDES THE TOWNSHIP WITH THE RIGHT TO ENFORCE ALL SUCH TERMS AND CONDITIONS.
- 6. THE INFORMATION CONTAINED IN THIS FINAL PLAN CONTROLS ALL USE AND OWNERSHIP OF THE REAL PROPERTY DESCRIBED IN THIS PLAN EVEN IF A DEED TO AN OWNER DOES NOT CONTAIN AND/OR EXPRESSLY REFER TO THE LANGUAGE DESCRIBED ON THIS FINAL PLAN.

M. Other Requirements.

- 1. In the preparation, submission, recording and implementation of any subdivision or land development plan, the subdivider or land developer shall comply with all applicable Township ordinances, Township resolutions, written agreements between the Township and the developer, Chester County regulations, laws of the Commonwealth of Pennsylvania, and laws of the United States of America.
- 2. When filed with the Chester County Office of the Recorder of Deeds, each and every deed for a lot, street, open space area or other element of any approved subdivision or land development plan shall conform fully to the requirements, restrictions, provisions and easements shown on the plan, and to any other conditions placed on the plan as part of final plan approval by the Board of Supervisors.
- 3. A copy of the Homeowners' Association standards in accordance with the specifications set forth in Section 1216 of the Elk Township Zoning Ordinance shall be submitted to the Township Engineer for their review and comment. Additionally the Homeowners' Association will be required to provide an annual report that shall follow the suggested format (Minimum Requirements) in Appendix A of this Ordinance.

ARTICLE V DEVELOPMENT AND DESIGN STANDARDS

SECTION 500. PURPOSE.

This Article establishes and defines the public improvements and development and design standards that Elk Township shall require in the review, approval, and construction of any subdivision or land development.

SECTION 501. APPLICATION.

- A. Applicants in preparing plans for proposed subdivisions and land development shall meet the following principals, standards, and requirements.
- B. When other applicable regulations impose more restrictive standards than those specified herein, the more restrictive standards shall apply.
- C. The standards set forth in the Elk Township Zoning Ordinance for the particular district in which the subdivision or land development is taking place shall govern the layout of lots and design of buildings, parking lots, and other facilities.
- D. The standards and requirements outlined herein shall be considered minimum standards. The requirements shall promote public health, safety, and general welfare of residents of Elk Township.

SECTION 502. LAND REQUIREMENTS.

- A. The proposed use shall be suited to the land to be subdivided and developed in conformance with the Elk Township Comprehensive Plan, the Elk Township Open Space Plan, and the Elk Township Zoning Ordinance and any other applicable regulations.
- B. Land or properties subject to life, health, or safety hazards shall not be subdivided or developed for residential purposes until all such hazards have been eliminated or unless adequate safeguards against such hazards are provided by the plan.
- C. The design of the proposed subdivision and land development shall limit the impact on and preserve natural features and topography of the site, to the greatest extent possible
- D. No parcel of land shall be created, either by inclusion or exclusion from a proposed subdivision or land development, which cannot be properly used for a permitted use under the existing zoning regulations for that district.

SECTION 503. BLOCKS.

- A. The length, width, and shape of blocks shall be determined with due regard to the following:
 - 1. Provision of adequate sites for buildings of the type proposed.
 - 2. Least adverse impact to topography and natural features.
 - 3. Requirements for safe and convenient vehicular and pedestrian circulation.
 - 4. Thoughtful and innovative design to create an attractive community.
- B. Blocks shall not exceed a maximum length of sixteen hundred (1,600) feet and, as far as practicable, a minimum length of five hundred (500) feet. In design of blocks longer than eleven hundred (1,100) feet, special consideration shall be given to access for fire protection and emergency vehicle access.
- C. Wherever practicable, blocks shall be two (2) lot depths wide. Except for lots located at street intersections or where reverse frontage lots are approved, no blocks shall have lots that front on more than one (1) street.

SECTION 504. LOTS AND LOT SIZES.

A. General Lot Design Standards.

- 1. Lot dimensions, areas, and minimum standards shall be in accordance with the provisions of the Elk Township Zoning Ordinance.
- 2. Lot dimensions, areas, and orientation shall be appropriate for the type of development and use contemplated, and sufficient to provide satisfactory space for required off-street parking, accessory uses, and other applicable standards of Township codes and ordinances.
- 3. Wherever practicable, the side property lines of lots shall be at right angles or radial to the right-of-way line.
- 4. In order to avoid jurisdictional problems, lot lines shall follow municipal boundaries rather than cross them, to the greatest extent feasible.
- 5. The Township Secretary shall assign house numbers to each lot. The house numbers shall be displayed on a three-foot high stake, on the mailbox, or on the house to obtain full view from the center of the adjacent roadway coming from any direction.
- 6. Remnants of land that do not meet minimum area and bulk requirements for the applicable zoning district shall not exist after subdivision. 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 as part of a land development proposal.

B. Lot Frontage Standards.

- 1. All lots shall have frontage along the right-of-way of a street and have direct access to a street, existing or proposed. Each lot shall have, in addition to the minimum width at the front lot line, 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 street.
- 2. Reverse Frontage Lots. Proposed subdivisions involving the creation of three (3) or more residential lots (in total) abutting an existing or proposed arterial or major collector, or the creation of five (5) or more lots abutting an existing or proposed minor collector, shall be designed as reverse frontage lots. The applicant shall be required to provide a local access street to connect the reverse frontage lots to the arterial or collector. Where a choice exists, the applicant shall connect to the street with the lowest functional classification, in accordance with the Elk Township Comprehensive Plan. Access and design for new residential streets shall be consistent with the requirements of Section 511.
- 3. <u>Flag (Interior) Lots.</u> Lots for which the only frontage on a street is by an access strip the sole purpose of which is to provide fee-simple access from that street to the principle part of the lot, shall be permitted only if all of the following requirements are satisfied:
 - a. The Board of Supervisors grants permission based on topographical or other conditions unique to the site;
 - b. The lot involves no more than one (1) single-family detached dwelling;
 - c. The flag lot access strip to the public street has a minimum width of twenty-five (25) feet for its entire length;
 - d. The minimum lot area, lot width, lot depth, and setback of the district are met, exclusive of the access strip;
 - e. All structures are located on the lot so as to provide the district's required setback, should the access strip later become a street;
 - f. The access to a flag lot is not off of a cul-de-sac turn around or within two hundred (200) feet of a cul-de-sac turn around;
 - g. A minimum of four (4) road frontage lots shall be located between interior of flag lots; and
 - h. The lot is not a reverse frontage lot.

SECTION 505. STREET SYSTEM.

- A. Proposed streets shall be properly related to such street plans or parts thereof as have been officially prepared and adopted by the Township, including recorded subdivision plans and facilities included in the Elk Township Official Map and Ordinance.
- B. Proposed streets shall further conform to such Township, county, and state road and highway plans as have been prepared, adopted, or filed as prescribed by law.
- C. Streets shall be logically related to the topography so as to produce usable lots, reasonable grades, proper alignment and drainage, and to provide for adequate sight distances. The rectilinear design of streets and lots involving long straight sections of street should be avoided, except where applicable in the Lewisville Village District.
- D. Minor collector and local streets shall be laid out as to discourage through traffic, but provision for street connections into and from adjacent areas may be required. Major collectors shall be connected with such existing streets and highways to form continuations thereof.
- E. If lots resulting from original subdivisions are large enough to permit further subdivision or if a portion of the tract is not subdivided, street rights-of-way to permit further subdivision shall be provided as necessary, to be no less than the right-of-way for minor or collector streets. Remnants and landlocked areas shall not be created.
- F. Where a proposed subdivision abuts or contains an existing or proposed major thoroughfare, the Board of Supervisors may require dedication of additional right-of-way to provide the minimum right-of-way specified hereinafter and marginal access streets, rear service alleys, reverse frontage lots, or such other treatment, such as deceleration lane, as will provide protection for abutting properties, reduction in the number of intersections with the major thoroughfare and separation of local and through traffic.
- G. New half or partial streets shall not be permitted.
- H. Continuations of existing streets shall be known by the same name, but names for other streets shall not duplicate or closely resemble names for existing streets in the Township and/or post office district. The Board of Supervisors may reject street names and suggest alternate names.
- I. Where streets and other public improvements 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.
- J. New streets shall be laid out to continue existing streets at equal or greater width, in regard to both cartway and right-of-way, where such continuations are reasonable and practical. Minimum widths shall be as established in Section 507.
- K. Attempts shall be made to connect lower order streets to the lesser of higher order streets.

SECTION 506. CUL-DE-SAC STREETS.

- A. Dead-end streets shall be prohibited except as stubs to permit future street extension into adjoining tracts, and when designed as a cul-de-sac in accordance with the provisions of this section.
- B. Unless future extension is clearly impractical and undesirable, the cul-de-sac turnaround right-of-way shall be placed adjacent to a property line, and a right-of-way of the same width as the street shall be carried to the property line in such a way as to permit future extension of the street into the adjoining tract. The applicant shall have the burden of showing the impracticality of extending a street to a property line in order to justify a shorter street.
- C. A cul-de-sac street, permanently terminated, is not permitted when, in the determination of the Township, a through street is feasible and more desirable. In order to justify a cul-de-sac street, permanently terminated, the applicant shall have the burden of showing the infeasibility of a through street.
- D. Each permanently terminated cul-de-sac street shall serve not more than twenty-four (24) single-family residential dwellings, not more than fifty (50) two-family or multiple family dwellings, and not more than six (6) non-residential lots. The cul-de-sac street shall be a minimum of two hundred and fifty (250) feet in length and a maximum of one thousand (1,000) feet in length.
- E. Permanently terminated cul-de-sac streets shall have a circular turnaround with minimum rights-of-way and paving radii as prescribed in Table 5-1.
- F. The turn-around area at the end of a proposed cul-de-sac street in a residential subdivision is encouraged to have a center island to reduce impervious coverage in accordance with the specifications in Table 5-1. Cul-de-sac streets proposed in commercial and industrial land developments are encouraged to provide center islands in accordance with the specifications in Table 5-1.

Table 5-1 Cul-De-Sac Dimensions

Type Cul-de-Sac	Minimum Right-of- Way Radius (feet)	Minimum Cul-de-sac Paving Radius (feet)	Maximum Cul-de-Sac Paving Radius (feet)	Minimum Island Radius (feet)	Maximum Island Radius (feet)	Minimum Cartway width (feet)
Residential	50	40	44	N/A	N/A	N/A
Residential w/Island	50	40 ¹	44	16	20	24
Commercial	50	40	42	N/A	N/A	N/A
Commercial w/Island	50	40	44	16	20	24
Industrial	60	46	50	N/A	N/A	N/A
Industrial w/Island	60	46	50	16	20	30

- 1. Center islands in the cul-de-sac turnaround shall have rolled curbs as shown in Figure 5-3 to allow stormwater to flow into the island for infiltration and to provide access to emergency vehicles.
- 2. Maintenance responsibility of such islands shall be determined prior to final plan approval and recorded on the deed.

Minimum cartway width as specified by the Pennsylvania Department of Transportation (PennDOT).

- 3. The island shall be landscaped with a permanent groundcover, subject to approval by the Township, that will accommodate access or impact from motor vehicles.
- G. No more than four (4) lots shall have frontage on the cul-de-sac turnaround and no more than four (4) driveways shall have access to the cul-de-sac turnaround.
- H. Greater cul-de-sac radii may be used, such as when parking is to be permitted, based on the recommendation of the Township Planning Commission and approval of the Board of Supervisors.
- I. The maximum slope across the diameter of a cul-de-sac turnaround shall not exceed five (5) percent. The minimum grade around the curbing shall not be less than one (1) percent.
- J. Any street temporarily dead-ended either for access to an adjoining property or for authorized stage development shall be provided with a temporary all-weather turnaround within the subdivision or land development. The use of such a turnaround shall be guaranteed to the public until such time as the street is extended. The temporary turnaround shall be circular, with a minimum cartway radius of forty (40) feet, and shall remain completely within the right-of-way. The turnaround right-of-way shall be placed adjacent to the property line and a right-of-way of the same width as the street shall be carried to the property line in such a way as to permit future extension of the street into the adjoining tract
- K. The street grade requirements of Section 509 shall apply to cul-de-sac streets.

SECTION 507. STREET WIDTHS.

- A. New Residential Streets. New residential streets shall be classified according to the expected Average Daily Trips (ADT) level of the street (See Sub-Section 507.A.4. for ADT rates). If subdivision lots are of sufficient area for further subdivision, the Township may require that the street be constructed to the standards of a higher classification, unless deed restricted against further subdivision.
 - 1. <u>Purpose</u>. The purpose of these provisions is to establish appropriate standards for the design of streets in residential subdivisions that will:
 - a. Protect the safety of neighborhood residents;
 - b. Protect the residential qualities of neighborhoods by limiting traffic volume, traffic speed, and associated noise and pollution;
 - c. Minimize maintenance and repair costs of streets;
 - d. Minimize impervious coverage, thereby protecting the quantity and quality of the Township's groundwater resources;
 - e. Promote the safety and convenience of vehicular and pedestrian traffic; and
 - f. Encourage the efficient use of land.

- 2. <u>Applicability</u>. The provisions of this section shall be applicable to all new residential streets. Except as otherwise stated in this section, new residential streets shall be constructed in accordance with the sections of this Article applicable to local road design standards.
- 3. <u>Street Hierarchy</u>. Proposed residential streets are classified under the overall category of "local roads" as defined in the Elk Township Comprehensive Plan. Each proposed residential street shall be further classified under the following sub-categories of local roads and designed for its entire length to meet the minimum standards for one of the street types listed below. The specific criteria used for determining street classification and the minimum required street widths are located in subsections 5, 6, 7, and 8, below:
 - a. Local Access Street. This is the lowest order residential street in the hierarchy and is intended to carry the least amount of traffic at the lowest speed. It will provide the safest and most desirable environment for a residential neighborhood. Developments should be designed so that all, or the maximum number possible, of homes front on this class of street. (See Section 507.A.5.)
 - b. Secondary Distributor Street. This is the middle order residential street in the hierarchy and will carry more traffic than the local access street. It should provide an acceptable if not optimum environment for a residential neighborhood. (See Section 507.A.6.)
 - c. Primary Distributor Street. This is the highest order of street that can be classified as residential and will carry the largest volume of traffic at higher speeds. In large residential developments, this class of street may be necessary to carry traffic from one neighborhood to another or from the neighborhood to streets connecting other areas in the community. This level of street is the least suitable for providing direct access to homes and should be avoided to the extent possible. (See Section 507.A.7.)
 - d. Special Purpose Streets.
 - 1) Alleys An alley provides a secondary means of access to lots. It will normally be on the same level in the hierarchy as a local access street, although different design standards apply. (See Section 507.A.8.)
 - 2) Marginal Access Streets A marginal access street is a street parallel and adjacent to a collector or higher level street and provides access to abutting properties and separation from through traffic. It may be designed according to the standards for a local access street or a secondary distributor street, as traffic volumes dictate.
- 4. <u>Trip Generation Rates</u>. Table 5-2 shall be used to determine the ADT levels of proposed residential developments and streets. Any dwelling type not listed below shall use the traffic volume estimates based on the most current edition of the Institute of Transportation Engineer's (ITE) publication, *Trip Generation*.

Table 5-2 ADT Levels for Residential Development

Housing Type	Average Weekday Trip Generation Rates
Single-Family Detached	9.6 trips/dwelling unit
Single-Family Semi-Detached (twin), Duplex,	
Attached (townhouse)	5.9 trips/dwelling unit
Multi-Family (apartments)	6.6 trips/dwelling unit
Mobile Home Park	4.8 trips/dwelling unit
Retirement Community	3.3 trips/dwelling unit

5. Local Access Street Standards.

- a. Service Restrictions. A local access street is a frontage street which provides access to abutting properties; it shall be designed to carry no more traffic than is generated on the street itself. Each local access street shall be designed so that no section of the street carries an ADT volume of greater than two hundred (200). Each half of a loop street may be regarded as a single local access street and the total calculated traffic volume generated on a loop street shall not exceed four hundred (400) ADT.
- b. Street Access. Local access streets may take access from any street type. Both ends of a loop street, however, must intersect the same collecting street and be laid out to discourage through traffic. Grid street patterns shall be laid out to discourage traffic other than those residents of the immediate neighborhood.
- c. Street Design Standards. Travel lane widths shall be determined on the basis of the intensity of development proposed and the manner in which parking shall be provided in Table 5-3.
- d. *Travel Lanes*. All local access streets shall provide at least two (2) travel lanes. Where a parking lane is not required to accommodate spillover parking, occasional short-term parking for service pick-up or delivery shall be permitted within the travel lanes.
- e. Minimum Right-of-Way Width: 50 feet.
- f. Cul-de-Sac Turnarounds shall be designed in accordance with the requirements of Section 506.
- g. Engineering Criteria. Unless otherwise specified herein, local access streets shall meet the applicable design and construction standards of this Ordinance.
- h. Alternative On-Street Parking Design. The Township encourages the design of alternative on-street parking facilities that provide necessary additional parking areas along local streets while reducing the amount of necessary impervious coverage. These alternative designs shall be subject to approval by the Board of Supervisors upon the recommendation of the Township Engineer.

Table 5-3
Local Access Streets

LOCAL ACCESS STREETS DESIGN FACTORS STREET STANDARDS							
	FACTORS Parking Requirements ³		Right of	Travel	Parking	Total	Individual Driveway
Development Type	Off-Street	On-Street	Way Width	Lane Width ¹	Lane Width	Cartway Width	Access Permitted
Permanent open space, no residential frontage	None	None	50 feet	9 feet	n/a	18 feet	n/a
Lots 3 acres or more, deed restricted against further subdivision	Off-Street	None	50 feet	9 feet	n/a	18 feet	Yes
Lot widths 100 feet or greater	Off-Street	None	50 feet	9 feet	n/a	18 feet	Yes
Lot widths 40 to 100 feet	Off-Street	One Side	50 feet	10 feet	8 feet (one side)	28 feet	Yes
Lot widths less than 40 feet w/ rear alley access	Off-Street using rear alley	Two Sides ²	50 feet	10 feet	8 feet (both sides)	36 feet	No
Lot widths less than 40 feet or no individual lots (i.e. apartments)	Off-Street or parking lot provided	Parking lot provided for spillover parking	50 feet	10 feet	n/a	20 feet	Yes (for parking lots)

Where raised curbing is proposed, one (1) additional foot shall be added to the <u>minimum</u> travel lane width. Where no curbing or flush curbing is being used, the minimum travel lane width shall be used.

6. Secondary Distributor Street Standards.

a. Service Restrictions.

- 1) A secondary distributor street is a frontage street that provides access to abutting properties and also conducts traffic from local access streets intersecting it.
- 2) Each secondary distributor street shall be designed so that no section of it will convey a traffic volume greater than five hundred (500) ADT. Each half of a loop secondary distributor street and the total traffic volume conveyed on a loop street shall not exceed one thousand (1,000) ADT.
- 3) Secondary distributor streets shall be designed so as not to encourage external through traffic which has neither origin or destination on the secondary distributor or its tributary local access streets.
- b. Street Access. Every secondary distributor must be provided with no fewer than two (2) access intersections to streets of higher classification in the streets hierarchy if the traffic volume exceeds five hundred (500) ADT on the street. For secondary distributor streets designed for five hundred (500) ADT or less, one (1) access intersection to a street of higher order is allowed.

For this development type, a single parking lane may be provided if houses front on only one side of the street. In such cases, the total cartway width may be reduced by eight (8) feet to a total width of twenty-eight (28) feet.

These columns indicate the combination of off-street and on-street parking to be provided for each development type.

- c. Street Design Standards Secondary Distributor Streets. Travel lane widths shall be determined on the basis of the intensity of development proposed and the manner in which parking shall be provided in Table 5-4.
- d. *Travel Lanes*. All secondary distributor streets shall be provided with two (2) continuous travel lanes within which parking is not permitted.
- e. Minimum Right-of-Way Width: 50 feet.

Table 5-4 Secondary Distributor

SECONDARY DISTRIBUTOR STREETS							
DESIGN FACTORS			STREET STANDARDS				
Davidson of Turns	Parking Requirements ³		Right of Way	Travel Lane	Parking Lane	Total Cartway	Individual Driveway
Development Type	Off-Street	On-Street	Width	Width ¹	Width	Width	Access Permitted
Permanent open space, no residential frontage	None	None	50 feet	10 feet	n/a	20 feet	n/a
Lots 3 acres or more, deed restricted against further subdivision	Off-Street	None	50 feet	10 feet	n/a	20 feet	Yes
Lot widths 100 feet or greater	Off-Street	None	50 feet	10 feet	n/a	20 feet	Yes
Lot widths 40 to 100 feet	Off-Street	One Side	50 feet	11 feet	8 feet (one side)	30 feet	Yes
Lot widths less than 40 feet w/ rear alley access	Off-Street from alley	Two Sides ²	50 feet	11 feet	8 feet (both sides)	38 feet	No
Lot widths less than 40 feet or no separate housing lots (apartments)	Off-Street or parking lot provided	Parking lot provided for spillover parking	50 feet	11 feet	n/a	22 feet	Yes (for parking lots)

Where raised curbing is proposed, one (1) additional foot shall be added to the minimum travel lane width. Where no curbing or flush curbing is being used, the minimum travel lane width shall be used.

f. Cul-de-Sac.

- 1) Cul-de-sac turnarounds shall be designed in accordance with the requirements of Section 506.
- 2) Cul-de-sac secondary distributor streets with an anticipated traffic volume exceeding five hundred (500) ADT shall be prohibited.
- In no case shall a secondary distributor cul-de-sac exceed one thousand (1,000) feet in length.

For this development type, a single parking lane may be provided if houses front on only one (1) side of the street. In such cases, the total cartway width may be reduced by eight (8) feet to a total width of thirty (30) feet.

These columns indicate the combination of off-street and on-street parking to be provided for each development type.

- g. Engineering Criteria. Unless otherwise specified herein, secondary distributor streets shall meet the applicable design and construction standards of this Ordinance.
- h. Alternative On-Street Parking Design. The Township encourages the design of alternative on-street parking facilities that provide necessary additional parking areas along local streets while reducing the amount of necessary impervious surfaces. These alternative designs shall be subject to approval by the Board of Supervisors upon the recommendation of the Township Engineer.

7. Primary Distributor Street Standards.

- a. Service Restrictions. A primary distributor street is a street that carries residential neighborhood traffic but provides limited or no residential frontage.
 - 1) Primary distributor streets shall be required when the average daily traffic anticipated on the street exceeds the limits for residential secondary distributor streets.
 - Whenever possible, primary distributor streets shall be designed so that no residential lots directly front on them. When this is not possible, the amount of residential frontage shall not exceed the limits set forth in Table 5-5. In addition, only lots having frontages of one hundred (100) feet or greater may front on primary distributor streets and space shall be provided on these lots for turnarounds so that vehicles do not have to back out onto primary distributor streets.
 - 3) Primary distributors shall be laid out to discourage through traffic unless linkage between streets outside of the subdivision is determined by the municipality to be desirable.

Table 5-5 Residential Frontage

Percent of Total Length of Primary Distributor Streets Permitted to Have Residential Lots						
Fr	Fronting On and Taking Access From the Primary Distributor Street					
ADT level	1,000 to 1,199 1,200 to 1,599 1,600 to 1,999 2,000+					
Allowable Access						
Frontage	20%	10%	5%	0%		

- 4) If the anticipated ADT exceeds three thousand (3,000), the street shall be classified as a higher order than a primary distributor. The municipality, upon recommendation of their engineer, shall determine the required design standards. These standards may be in excess of the minimum standards established for primary distributors by this Ordinance.
- 5) On-street parking shall be prohibited on primary distributor streets.
- b. Street Access. Every primary distributor shall have no fewer than two (2) access intersections to streets of equal or higher classification in the streets hierarchy.

- c. Street Design Standards. Travel lane widths shall be based upon anticipated average daily trips provided in Table 5-6.
- d. *Travel Lanes*. Primary distributor streets shall be provided with two continuous travel lanes. Parking shall not be permitted on primary distributor streets.
- e. Minimum Right-of-Way Width: 60 feet.
- f. Engineering Criteria. Unless otherwise specified herein, primary distributor streets shall meet the applicable design and construction standards of this Ordinance.

Table 5-6
Anticipated Average Daily Trips

ADT	Travel Lane Width	Total Cartway Width
2,000 ADT or less	10 feet (no or flush curbs)	20 feet
	11 feet (raised curbs)	22 feet
More than 2,000 ADT	11 feet (no or flush curbs)	22 feet
, , ,	12 feet (raised curbs)	24 feet

8. Alley Standards.

- a. Service Restrictions. Alleys are permitted under the following circumstances:
 - 1) Frontage lot widths are less than seventy-five (75) feet.
 - 2) Frontage on an alley shall not be construed to satisfy the requirements of this Ordinance for frontage on an approved street.
 - 3) No parking shall be provided for or permitted within the right-of-way of the alley.
 - 4) Street systems within which alleys are a part shall be designed to discourage through traffic on alleys.
- b. Street Access. Alleys may only intersect local access or secondary distributor streets.
- c. Alley Length. Alley length shall not exceed a distance of eight hundred (800) feet.
- d. Alley Width. Alleys to be dedicated to the Township shall have a minimum paved width of sixteen (16) feet. Alleys not proposed for dedication shall have a minimum paved width of twelve (12) feet.
- e. Minimum Right-of-Way Widths:

Dedicated 33 feet Undedicated 16 feet

- f. Building Setback from Alley. Garages or parking stalls shall be set back a minimum of twenty (20) feet from the centerline of any alley. In no case shall garages be located within the required right-of-way.
- B. **Existing Residential Streets and New Non-Residential Streets.** Existing streets shall be as classified in the Elk Township Comprehensive Plan, as amended. New non-residential streets shall be classified by the Township Engineer according to their function.
 - 1. Minimum right-of-way and cartway widths for existing streets or new non-residential streets shall be as follows:
 - a. Local streets in all districts and marginal access streets in all districts; fifty (50) foot right-of-way and thirty (30) foot cartway.
 - b. Minor collector streets: fifty (50) foot right-of-way and thirty-four (34) foot cartway.
 - c. Major collector streets: eighty (80) foot right-of-way and forty (40) foot cartway.
 - 2. Where a subdivision or land development abuts or contains an existing street that does not meet the minimum requirements of this section the applicant shall be responsible to improve said streets to meet the standards for new streets. The improvements may include the installation of curbs, widening and paving of the cartway, grading of shoulders, and the installation of stormwater management facilities. The improvement of one (1) or both sides of the existing street shall be at the discretion of the Board of Supervisors. The Board of Supervisors may approve, in lieu of immediate construction of the public improvements, a cash payment sufficient to cover the costs of the public improvements. The amount of such cash payment shall be determined by the Board of Supervisors in consultation with the Township Engineer. Any such payment shall be set-aside in a Township fund for public improvements.
 - 3. Public streets shall be constructed or improved in accordance with the applicable design and construction standards of this Article.
 - 4. Where it is necessary to relocate existing utility poles to make room for new or improved roads or for other improvements related to a subdivision or development, the developer shall be fully responsible for relocating the utility poles and the associated costs. Utility poles shall be located as far away from the cartway as possible to reduce hazards to associated vehicular traffic.

SECTION 508. STREET ALIGNMENT.

- A. Whenever street lines are deflected in excess of five (5) degrees, connection shall be made by horizontal curves.
- B. To ensure adequate sight distance, minimum centerline radii for horizontal curves shall be as follows:
 - 1. Local Streets.
 - a. Local streets (existing or non-residential): One hundred fifty (150) feet.
 - b. Local streets (new residential):
 - 1) Local Access Street: One hundred (100) feet.
 - 2) Secondary Distributor Street: One hundred fifty (150) feet.
 - 3) Primary Distributor Street: Three hundred fifty (350) feet.
 - 2. <u>Collector streets</u>: Three hundred (300) feet.
 - 3. Arterial streets: Five hundred (500) feet.
- C. Except on local streets, a tangent shall be required between curves. A long radius curve shall be preferred in all cases to a series of curves and tangents. In addition, compound curves may be satisfactory in some instances. A tangent of at least one hundred (100) feet measured at the center line shall be required between reverse curves, except as follows for new residential streets:
 - 1. <u>Local access streets</u>: fifty (50) feet.
 - 2. Secondary distributor streets: one hundred (100) feet.
 - 3. Primary distributor streets: one hundred fifty (150) feet.
- D. Superelevation (commonly known as "banking a curve") shall be required when curve radii are less than six hundred (600) feet on arterial or collector streets or as most currently specified by PennDOT.

SECTION 509. STREET GRADES.

- A. Centerline grades shall not be less than one (1) percent.
- B. Centerline grades in excess of five (5) percent shall be avoided wherever possible.

- C. Centerline grades shall be in conformance with the American Association of State Highway and Transportation Officials (AASHTO) recommendations but, in no case shall they exceed the following:
 - 1. <u>Local street</u>: Eight (8) percent.
 - 2. Collector: Seven (7) percent.
- D. Vertical curves shall be used at changes of grade exceeding one (1) percent and shall be designed in relation to the extent of the grade change (at a rate no more abrupt than one (1) percent change in grade per twenty-five (25) feet along centerline) provided that the following minimum sight distances are maintained. If the minimum sight distances using AASHTO formulas are greater than those listed below, the greater sight distances shall apply.
 - 1. <u>Local street</u>: Two hundred (200) feet.
 - 2. <u>Collector street</u>: Three hundred (300) feet.
- E. Where the grade of any street at the approach to an intersection exceeds four (4) percent, a leveling area shall be provided, having not greater than four (4) percent grades for a distance of fifty (50) feet measured from the nearest right-of-way line in the intersecting street.
- F. Under no conditions shall maximum grades be permitted with minimum curve radii.
- G. Grading of one quarter (1/4) of an inch per one (1) foot shall be provided in the area from the back of the curb to at least ten (10) feet from the face of the curb, or in the full right-of-way width from the back of the curb, whichever area is greater. This grading width shall be increased as necessary where sidewalks or planting strips, or sidewalks and planting strips, are to be provided. Beyond the limits of this grading, banks shall be sloped to prevent erosion, but this slope shall not exceed two (2) horizontal to one (1) vertical.
- H. All streets shall be graded to the grades shown on the street profile and the cross-section plan submitted and approved with the final plan. All grading of streets also shall meet the requirements of all Township ordinances in the judgment of, and after inspection by, the Township Engineer or other person designated by the Board of Supervisors to inspect and check the grading of streets for accuracy.

SECTION 510. STREET INTERSECTIONS.

- A. Streets shall be laid out to intersect at right angles. There shall be no intersection angle measured at the centerline of less than sixty (60) degrees.
- B. Multiple intersections involving the junction of more than two (2) streets shall not be permitted.
- C. Clear Sight Triangle. Clear sight triangles, as shown in Article II (Figure 2-B), shall be provided at all street intersections and driveway intersections with streets and shall be shown on the subdivision or development plan. Each side of the sight triangle shall be a minimum of seventy-five (75) feet, measured from the point of intersection along each road centerline. Within such triangle, no vision-obstructing object shall be permitted which obscures vision above the height of

- thirty (30) inches and below ten (10) feet, measured from the centerline grade in intersecting streets. Deed restrictions shall be recorded to ensure that clear sight triangles are maintained.
- D. Intersections with arterial streets shall be located not less than one thousand (1,000) feet apart, measured from centerline to centerline.
- E. Streets entering opposite sides of another street shall be laid out either directly opposite one another or with a minimum offset of at least two-hundred (200) feet, measured from centerline to centerline.
- F. All street intersections shall have a minimum paving radius corresponding to the following corner curb radii: Twenty-five (25) feet for local streets and thirty (30) feet for collector streets. Where streets of different functional classifications intersect, the requirements for the higher classification shall hold.
- G. In designing street intersections, the sight distance dimensions most currently recommended by PennDOT shall be used. Sight distance shall be measured from a point set back fifteen (15) feet from the intersected pavement edge on the street controlled by a stop sign or signal.
- H. All necessary street name signs and traffic control signs shall be the responsibility of the applicant to provide and erect. The street signs shall meet PennDOT safety standards, and shall be subject to approval by the Board of Supervisors. Street signs and traffic control signs shall be erected before the issuance of any certificates of occupancy on that street.

SECTION 511. STREET CONSTRUCTION STANDARDS.

All streets of any new subdivision or land development shall be built to the standards and specifications contained herein, and to applicable state and federal highway department specifications (e.g., Pennsylvania Department of Transportation Specifications (PennDOT), Publication 408, latest revision)

A. Subgrade.

- 1. The area within the limits of the proposed road surface shall be shaped to conform to the line, grade and cross-section of the proposed road.
- 2. Remove or stabilize all unsuitable subgrade materials.
- 3. Encroachment into wetland areas or the Floodplain Conservation Overlay District (See Section 1101 of the Elk Township Zoning Ordinance), where unavoidable, shall be done only after required permits for such encroachment are obtained from the Pennsylvania Department of Environmental Protection (PaDEP), the Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers, or other agency having jurisdiction over such areas. Where permitted, such areas shall be permanently drained and stabilized. Sub-base drains shall be installed where deemed necessary by the Township Engineer during construction. The proposed method of subgrade preparation for such areas shall be detailed on the subdivision and land development plan.
- 4. Fills shall be made with suitable materials and thoroughly compacted for full width in uniform layers of not more than eight (8) inches thick.

- 5. The subgrade beneath cartways, shoulders, and sidewalks shall be thoroughly compacted by rolling with a minimum ten-ton roller or to not less than one hundred (100) percent of the maximum modified proctor density. Any soft or yielding areas should be under cut and backfilled with suitable material.
- 6. Backfill of trenches within the cartway and curb area shall be thoroughly compacted prior to application of the base course.
- 7. The subgrade shall be checked and approved by the Township Engineer for lines, grade, crown, contour, suitable materials, and compaction before succeeding courses are applied.
- 8. Crown board and straight edge shall be used for checking road and street construction. Maximum deviation shall not exceed one-quarter (1/4) of an inch.
- B. Pavement. Any new street within a development should provide a pavement section in accordance with the following regulations. A lesser pavement section may be provided if soil testing is performed and it is proven that a lesser pavement section will be adequate. The soil tests for the pavement design shall be performed by a Pennsylvania Soil Scientist or registered professional engineer every 200 feet (maximum) or hear any physical changes that will affect road construction. The results shall be submitted to the Township Engineer for review and approval.

1. Base Course.

- a. The base course shall consist of eight (8) inches of PennDOT 2A Aggregate, installed as specified by PennDOT.
- b. The base course shall be spread uniformly on the prepared bed and thoroughly compacted with a ten-ton roller or in accordance with the requirements of PennDOT Publication 408, as amended. Rolling shall continue until the material does not creep or wave ahead of the roller wheels. Coarse aggregate shall be choked with fines and compacted in accordance with PennDOT specifications.
- c. The base course shall, at a minimum, extend twelve (12) inches beyond the edge of paving on all streets constructed without a curb. When possible, the base course shall be continued beyond this minimum as far as practical prior to the placement of bituminous surface.
- d. In fill areas over three (3) feet thick, compaction tests are required in each eight (8) inch layer at one hundred fifty (150) foot intervals. The tests must be performed by a certified testing laboratory and results submitted to the Township engineer. All compaction must be one hundred (100) percent of the maximum modified proctor density. Any layer not meeting this standard shall be removed or rerolled until suitable compaction is obtained.
- e. After compaction of the base stone, dry screenings shall be applied in sufficient quantity to fill all of the voids in the rolled stone base. A vibratory roller, of PennDOT approved design, must be used in this step of construction and rolling shall continue until all voids are filled. Small areas around inlets and manholes

- that cannot be reached by the vibratory roller shall be compacted with a mechanical tamper or whacker.
- f. When the stone surface is tight and will accept no more screenings, all loose screenings shall be broomed from the surface to expose the top one-half (1/2) inch of aggregate over at least seventy-five (75) percent of the road.
- g. No base material shall be placed on a wet or frozen subgrade.
- h. When so required by the Township Engineer, a tack coat shall be applied.

2. Hot Mix Asphalt.

- a. Bituminous material shall be two and one-half (2 ½) inches of nineteen (19) millimeter Superpave base course placed in two (2) equal layers and one and one-half (1 ½) inches of nine and one-half (9 ½) millimeter Superpave surface course.
- b. The completed road surface shall have a uniform slope of one-quarter (1/4) inch per foot from edge to center line, except that on super-elevated curves, this slope shall not be less than one-quarter (1/4) inch per foot and shall extend up from the inside slope to the outside edge of the paving.
- c. No visible moisture shall be present prior to the laying of each course. Road surface temperature shall be fifty (50) degrees Fahrenheit or greater prior to laying of the bituminous surface, with the air temperature rising.
- d. All wearing surface courses shall be sealed to the concrete curb and its joint with existing streets and driveways with a one (1) foot wide Class BM-1 asphalt gutter seal.
- e. Application of all bituminous layers of roadway shall require full-time inspection by the Township or its authorized representative.
- C. As an alternate, the road may be constructed of five (5) inches of 2A aggregate and five (5) inches of compacted aggregate bituminous base course and base course and one and one-half (1 1/2) inches wearing course. The type of installation of road material shall be equal or superior to that required in the PennDOT Specifications, Form 408.

D. Grading and Shoulders.

- 1. Supporting shoulders shall be constructed on all sections of projects where a base course or pavement is to be constructed without other permanent support along the sides.
- 2. Roadways shall be graded for not less than eight (8) feet beyond the edge of the Proposed paving on each side. This grading width shall be increase as necessary where sidewalks and/or planting strips are to be provided. Shoulders shall be graded with a slope of one (1) inch per foot, unless otherwise specified in sub-section 7.c. below. Beyond the limits of this grading, banks shall be sloped to prevent erosion but this slope shall be less than two (2) horizontal to one (1) vertical with tops of slope in cuts rounded. Steeper slopes shall only be permitted where excessive cut or fill would otherwise be required.

- E. Backfilling of Road Excavations. All trenches or other excavations in existing or proposed roads shall be backfilled in accordance with the following:
 - 1. Backfilling shall be done as promptly as possible.
 - 2. The trench shall be backfilled with coarse aggregate consisting of screenings, 2RC, 2A modified or other aggregate as approved by the Township Engineer to a height of at least one (1) foot above the top of the conduit, pipe, or pipe bell. These screenings shall be placed with the hand shovels and not from trucks or with the use of power equipment and shall be free from refuse, boulders, rocks, unsuitable organic material or other material which, in the opinion of the Township, is unsuitable.
 - 3. When the pipe is located in a dedicated street or any place where paving (including driveways) may be placed, the remainder of the trench shall be backfilled with 2RC or other approved materials and promptly compacted. The backfill material shall be mechanically tamped in approximately six (6) inch layers.
 - 4. Where openings have been made in existing Township roads, paving shall be restored in accordance with the paving standards contained in this Ordinance. Openings made in state roads shall be restored in accordance with PennDOT specifications. Permits shall be obtained before paving is opened in any existing state or Township road.
 - 5. Where openings are made behind the curb line, work shall be as specified below. The opening shall be covered with good topsoil to a depth of six (6) inches and seeded or sodded to the satisfaction of the Township Engineer.
 - 6. Whenever the trenches have not been properly filled or if settlement occurs, they shall be refilled, compacted, and graded to conform to the surface of the ground.
 - 7. Frozen earth shall not be used for backfilling, nor shall any backfilling be done when materials already in the trench are frozen.
 - 8. Where excavated material, or any portion thereof, is deemed by the Township Engineer to be unsuitable for use as backfill, the applicant or applicant's agent shall replace backfill material with material approved by the Township.
- F. The applicant shall be responsible for notifying all emergency service agencies when construction will impact accessibility on existing roads.

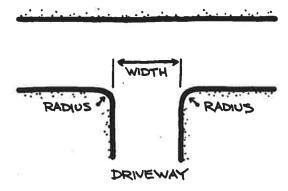
SECTION 512. ALLEYS.

- A. Alleys shall be permitted in the R-H and R-1 District, the Lewisville Village District (LV), the Village Commercial District (C-1), and the General Commercial District (C-2).
- B. Alleys proposed for new residential development shall be consistent with the standards of Section 507.A.8. of this Ordinance.
- C. Where alleys are permitted and are intended to be dedicated to the Township, they shall have a minimum right-of-way of thirty-three (33) feet and have a minimum paved cartway width of sixteen (16) feet.
- D. Dead-end alleys shall be prohibited.
- E. Construction standards shall be the same as that required for streets. Where alleys intersect other roads, such intersections shall be consistent with the standards for road intersections in Section 510.

SECTION 513. DRIVEWAYS.

- A. All driveways require a Township or state permit prior to connecting to a roadway.
- B. Private driveways, where provided for corner lots, shall be located not less than forty (40) feet from the intersection corner.
- C. Private driveways shall have such grades as to furnish a safe and convenient parking space.
- D. All driveways shall be paved with concrete or bituminous materials from the edge of the street cartway to a point in the lot fifteen (15) feet from the right-of-way line of any public or private road. The remainder of the driveway may be constructed of any suitable stone, pavement, or all-weather surface. The slope of the portion of the driveway required to be paved shall not exceed five (5) percent grade. The Township may consider waiving this requirement if the road to which the driveway connects is not paved.
- E. The width of individual residential driveways within the legal right-of-way of the public road shall be a minimum of ten (10) feet and shall be a minimum of eight (8) feet at all other points within the property line. Please refer to Figure 5-1, below.
- F. Where private driveways cross a bridge, said bridge shall be a minimum of ten (10) feet in width.

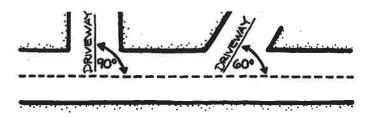
Figure 5-1
Width of Driveway



Source: A Handbook on Circulation as it Relates to Land Development. Chester County Planning Commission. 1994

- G. Driveway entrances into multi-family developments (with shared parking areas) or into non-residential properties shall be no less than twenty-four (24) feet in width, shall not exceed thirty (30) feet in width at the street line unless provided with a median divider, and shall be clearly defined by the use of curbing. The curbs of these driveway entrances shall be rounded with a minimum radius of twenty (20) feet where they intersect a street. Driveways into such uses shall have a minimum depth of forty (40) feet before accessing an internal access aisle.
- H. Adequate turnaround surface shall be provided on the property so that egress to the street is in a forward direction.
- I. The sight distance at the intersection of the driveway with the public road shall be as required by Section 510 of this Ordinance.
- J. Driveways to single-family residences shall intersect streets at angles of no less than sixty (60) degrees. All other driveways shall intersect streets at right angles, where practicable, and in no case less than seventy-five (75) degrees. (The angle of intersection is the acute angle made by the intersection of the centerline of the driveway with the centerline of the road). Please refer to Figure 5-2 below.

Figure 5-2 Angle of Driveway



Source: A Handbook on Circulation as it Relates to Land Development. Chester County Planning Commission. 1994

K. Driveways shall be graded so that, wherever possible, surface drainage will remain on the owner's property; otherwise, adequately sized pipes, inlets, and/or headwalls shall be installed and gutter improvements shall be made to direct surface drainage into the road drainage system and not onto the paving of the intersecting road.

L. The area of any driveway located in the right-of-way shall be paved with asphalt or a similarly stable paving material.

SECTION 514. EASEMENTS.

- A. Where easements are required for utilities, such as water and/or sewer facilities intended for dedication, the requirements for easement shall be determined by the Board of Supervisors. Easement requirements for other utilities, and road construction and maintenance shall be similarly established.
- B. Utility easements and easements to community facilities shall be at least twenty (20) feet wide to provide access for maintenance vehicles. Local utility companies shall be consulted when locating easements. Storm drainage easements shall be provided as required the Elk Township Post-Construction Stormwater Management Ordinance.
- C. To the fullest extent possible, easements shall be centered on or adjacent to rear or side lot lines.
- D. The required minimum setback and yard dimensions for any lot shall be measured from the lot line, except where the Township makes a determination that such dimension shall be measured from the edge of an easement.
- E. Except for driveways, nothing shall be constructed, placed, planted, set or installed within the area of an easement. The area shall be kept as lawn or, where required, vegetative buffer.
- F. Where a subdivision or land development is traversed by a watercourse, there shall be provided a drainage easement or right-of-way conforming substantially with the line of such watercourse and of such width as will be adequate to preserve natural drainage and provide sufficient width for maintenance, as approved by the Township Engineer.
- G. No right-of-way or easement shall be recited or described in any deed unless the same has been shown on the approved plan. Any easement or right-of-way required herein shall be made part of the deeds of all affected properties. Any error found in a deed shall be immediately corrected and re-recorded in the Chester 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 realized.

SECTION 515. SIDEWALKS AND TRAILS.

A. Sidewalks.

- 1. Applicability.
 - a. Sidewalks may be required for low-density residential areas (less than one (1) dwelling unit per acre) on one (1) side of the street, at the discretion of the Board of Supervisors, unless that area is within one thousand (1,000) feet of any school, where sidewalks shall be required on both sides of the road.

- b. Sidewalks shall be provided for medium and high-density residential areas (more than one (1) dwelling unit per acre) on at least one side of the street.
- c. Sidewalks shall be required in the Commercial Districts (C-1 and C-2) and the Lewisville Village (LV) District on at least one (1) side of the roads.
- d. Sidewalks may be required in non-residential developments unless it can be shown to the satisfaction of the Board of Supervisors that pedestrian traffic does not follow or mix with vehicular traffic and is not likely to do so in the future.
- 2. <u>Width of Sidewalks</u>. Sidewalks shall have a minimum width of four (4) feet except along collector and arterial streets and adjacent to schools, shopping centers, and community facilities, where they shall have a minimum width of five (5) feet.
- Location of Sidewalks. Sidewalks shall be placed within the street right-of-way not less than three (3) feet from the cartway and a minimum of one (1) foot from the right-of-way line; gradient and paving of such sidewalks shall be continuous across all private driveways. A grass-planting strip shall be provided between the curb and sidewalk appropriately designed to accommodate street tree planting or other landscaping in accordance with Section 523.A. of this Ordinance.
- Thickness of Materials. All sidewalks shall conform to the PennDOT Roadway Specifications, *Publication 408*, latest edition. Unless otherwise approved, concrete sidewalks shall be constructed on a four (4) inch crushed stone or gravel base to ensure proper drainage except at driveway crossings where it shall be six (6) inches thick. Concrete thickness shall be four (4) inches except at driveway crossings where it shall be six (6) inches thick. Welded wire fabric shall be provided in all sidewalks constructed at driveways.
- <u>Expansion Joints</u>. Expansion joints shall be placed at least every twenty (20) feet and the sidewalk shall be scored at five (5) foot intervals between such expansion joints.
 Expansion joints shall also be placed between all points where the concrete sidewalk abuts a concrete curb and as otherwise required by the Township Engineer.

B. Trails.

- 1. <u>General</u>. At the discretion of the Board of Supervisors, with recommendations from the Planning Commission and Open Space Committee, a system of publicly accessible, unpaved bicycle, equestrian, and/or pedestrian trails, generally unrelated to and separate from streets, shall be established and secured by dedication and easement. The planning, design, construction, operation/ownership, and maintenance of existing trails shall be consistent with the specifications for such facilities as stipulated in the following:
 - a. This Ordinance:
 - b. The Elk Township Zoning Ordinance;
 - c. The Elk Township Open Space Plan;
 - d. The Elk Township Official Map and Ordinance;

- e. Standards of the Chester County Parks and Recreation Department;
- f. Trail Construction and Maintenance Notebook (US Department of Transportation/Federal Highway Administration, 2004); or
- g. Any other applicable documents specified by the Township.
- 2. Purpose and Intent. The intent of these standards is to facilitate creation of an interconnected trail network both within and beyond the boundaries of Elk Township. In addition and to aid circulation, trials will be required to serve the interior of subdivisions and serve as links to or within the outside trail networks, where necessary.
- 3. <u>Impact Statement</u>. An Impact Statement, as established in Section 1303 of the Elk Township Zoning Ordinance, shall address the requirements of this section relative to trails and their recreation benefits consistent with the Elk Township Zoning Ordinance, the Elk Township Open Space Plan, and any other applicable Township documents.
- 4. <u>Open Space Management Plan</u>. As applicable, the Open Space Management Plan (see Section 402.K. of this Ordinance) shall address the requirements of this section relative to trail ownership, operation, and maintenance.
- 5. Existing Trails. When land subject to a subdivision and land development proposal is traversed by or abuts an existing trail customarily used by bicyclists, pedestrians, and/or equestrians, the applicant shall make provisions for continued use, and any necessary upgrade of the trail by these users. Existing trails may be relocated if:
 - a. A connection with a trail on an adjoining property is thereby established;
 - b. The points at which the trail enters and exits the tract remain largely unchanged;
 - c. Where determined by the Board of Supervisors, the proposed alteration may parallel at a safe distance from, but may not be within the same paved area as, a road used, or intended for use, by motorized vehicles.
- 6. New Trails. When land subject to a subdivision and land development proposal is not traversed by an existing trail, the applicant shall make provisions for:
 - A system of trails for bicycle, equestrian, and/or pedestrian uses that will be internal to the proposed subdivision or land development and typically located in the common or dedicated open space of such a subdivision or land development; and
 - b. Connection of the internal trails to existing and/or construction of appropriate sections of an interconnected trail network planned both within and beyond the Township.
- 7. <u>Timing of Trail Planning, Construction, and/or Upgrades</u>. An applicant shall propose at the earliest possible stage in the Township's subdivision and review process (i.e., sketch plan where applicable, or preliminary plan), the location of new trails within the subdivision as well as any connections to or construction of components of an interconnected trail network both within and beyond the Township.

- a. All new owners of lots within a subdivision shall be notified, in writing at the time of lot purchase, of the existence of the publicly accessible trail within their subdivision.
- b. All trails shall be fully constructed or upgraded pursuant to the requirements of this section at the same time as infrastructure construction (e.g., stormwater management facilities, roads) within the subdivision, so that the trail system will be a widely-used amenity from the beginning of the subdivision or land development.
- 8. Trail Easements and rights-of-Way. Relocated or new trails shall be located in an easement or right-of way with a minimum width of twenty (20) feet. The trail easement or right-of-way width may be decreased at the discretion of the Board of Supervisors. If applicable, the easement for said trail may be credited toward the open space requirements established in the Elk Township Zoning Ordinance, subject to the approval of the Board of Supervisors. Regardless of the trail operation and maintenance requirements cited in Subsection 9 below of this Ordinance, any trail easement shall be dedicated to the Township regardless of its location in common or dedicated open space areas within a subdivision. A trail right-of-way (vs. trail easement) is reserved for those rights-of-way that will be owned outright by the Township.
- 9. <u>Trail Operation and Maintenance</u>. All trails shall be operated and maintained so as to preserve the design parameters applicable to a new or existing trail planned, designed, upgraded, and/or constructed in accordance with this section.
 - a. Where trails in subdivisions traverse common or open space areas, the trails shall be operated and maintained by the homeowners' association (HOA). Where new trails in subdivisions traverse building lots, the trails shall be maintained by the owners of those lots, unless operation and maintenance will be undertaken by the HOA by written agreement. In either case, a plan and schedule for trail operation and maintenance shall be established at the time of subdivision approval.
 - b. Trails located in right-of-way shall be operated and maintained by the Township.
- 10. <u>Trail Design Standards, General</u>. All relocated, upgraded, or new trails shall be in accordance with the trail design standards set forth in Section 515 B.1. and the following criteria:
 - a. Thoughtful and imaginative design of trails and their relationship to the arrangement and shape of lots and common open space areas, as applicable, is required.
 - b. Trails shall be logically related to environmental features so as to minimize disturbance to such features while permitting observation of such features.
 - c. Trails shall be curvilinear in design, constructed on reasonable grades, and have adequate drainage.

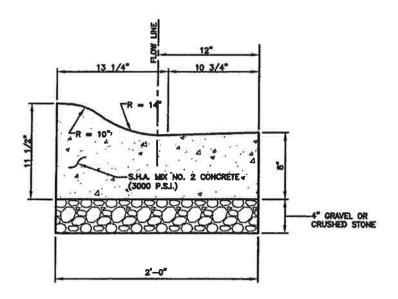
- d. Trails shall provide for adequate vision and sight distances, and shall include design features, as determined appropriate by the Township, to notify trail users of conditions including, but not limited to, road crossings, other potentially hazardous locations, or usage limitations. Such required features may include signage, bollards, fencing, gates, striping, or other trail surface treatment or other measures determined necessary by the Township.
- e. Adequate separation (e.g., existing or new landscaping, berms, fencing) shall be provided for proposed trail rights-of-way where generally paralleling the rear or side lot lines of proposed residential lots.
- 11. <u>Trail Design Standards, New or Upgraded Subdivision Trails</u>. Trails constructed for use internal to a subdivision (Section 515.B.5.a.) shall be planned, designed, and constructed according to the following standards, unless they comprise a section or sections of the Township-wide trail network, in which case trails shall be in accordance with the requirements of Subsection 12, below:
 - a. A vertical clearance of no less than ten (10) feet;
 - b. A minimum of four (4) feet in width plus one (1) to two (2) foot shoulders on either side of the trail;
 - c. An unpaved, durable surface (e.g., mowed grass path, crushed stone, or dirt path, boardwalk) both satisfactory to the Board of Supervisors and consistent with the trail usage parameters established by the trail design standards in the references cited in Section 515.B.1; and
 - d. No trail shall be designed with the intent to accommodate motorized vehicles.
- 12. <u>Trail Design standards, Township-Wide Trails</u>. Trails constructed for use within the Township and/or connecting to the Township shall be planned, designed, and constructed in accordance with the following:
 - a. A vertical clearance of no less than ten (10) feet;
 - b. A minimum of eight (8) feet in width with two (2) foot shoulders on either side of the trail;
 - c. An unpaved, durable surface (e.g., mowed grass path, crushed stone, or dirt path, boardwalk) both satisfactory to the Board of Supervisors and consistent with the trail usage parameters established by the trail design standards in the references cited in Section 515.B.1; and
 - d. No trail shall be designed with the intent to accommodate motorized vehicles.

SECTION 516. CURBS.

Grassed swales shall be the preferred method of accommodating drainage along streets in new developments; however, curbs may be required for new developments where necessary to facilitate drainage control, access control, pavement edge support, and the protection of pedestrians, signs, and vegetation at the discretion of the Township Engineer and the Board of Supervisors.

- A. Where curbs are determined to be necessary, the minimum requirements shall include the following:
 - 1. Curbs shall be provided along all streets and at all intersections of streets where centerline grades are seven (7) percent or greater;
 - 2. Concrete curbs shall be installed along each side of all streets and along the median island of divided streets. Curbs shall be required along the inner island radius of any culde-sac with an island;
 - 3. All curbs shall be constructed in accordance with the PennDOT Roadway Specifications (Publication 408) and the PennDOT Standards for Roadway Construction (Publication 72M), latest editions;
 - 4. Rolled curbs, as illustrated in Figure 5-3 below, shall be used in all residential developments; and
 - 5. Additional requirements may apply where site conditions merit, as determined by the Township Engineer.

Figure 5-3 Rolled Curb Detail



Source: URS Corporation.

B. Where, in the opinion of the Board of Supervisors and upon recommendation of the Township Engineer, curbs are determined to be unnecessary, a stabilized shoulder shall be provided. The stabilized shoulder shall be subject to approval by the Township Engineer. In areas where curbs are not used, satisfactory provisions, such as drainage swales, shall be installed to prevent erosion. Unless otherwise approved, the use of drainage swales in lieu of curbs shall be allowed only on streets with a grade of less than seven (7) percent.

SECTION 517. MONUMENTS AND MARKERS.

- A. Monuments or markers shall be placed in accordance with the requirements of this section.

 Monuments and markers shall be installed flush with the ground and meet the following minimum criteria:
 - 1. A monument shall be a stone or concrete post, with a flat top at least four (4) inches across and at least twenty-four (24) inches in length with a permanently inscribed center mark on the top.
 - 2. A marker shall be a metal pipe or pin of at least one-half (½) inch diameter and at least twenty-four (24) inches in length.

B. Placement.

- 1. Monuments shall be placed at all corners and angle points of boundaries of the original tract to be subdivided; and at each intermediate point as may be required to facilitate the location of lots and streets, except as follows:
 - a. Lot line change plans shall require monuments only along the boundary line being changed.
 - b. Subdivisions with residue lots shall require monuments only on the boundary corners of the new lots, but not on the residue lot corners.
 - c. Two (2) monuments shall be placed at each location where streets intersect and one (1) on one (1) side of each street at angle points and at the beginning and end of street curves.
- 2. Easements, such as for utilities, shall be monumented at their beginning and their end; and areas to be conveyed for public use shall be fully monumented at their external boundaries.
- C. Markers may be substituted for monuments only when placed at individual lot corners within a subdivision.
- D. All monuments and markers shall be set by a registered professional surveyor and placed in the ground after final grading is completed, at a time agreeable to the Township Engineer.
- E. All monuments and markers shall have their accuracy certified by the applicant's engineer and be checked for accuracy by the Township Engineer. Accuracy of monuments shall be within three one-hundredths (3/100) of a foot.

F. **Benchmarks**. The Township elevations are based on the 1929 mean sea level datum. All contours and elevations shown on plans submitted to the Township must be based on this system.

SECTION 518. STORMWATER MANAGEMENT.

Stormwater management regulations shall be in accordance with the provisions of The Elk Township Post-Construction Stormwater Management Ordinance.

SECTION 519. SOIL EROSION, SEDIMENT CONTROL, AND GRADING REQUIREMENTS.

- A. **Purpose**. The purpose of this section is to regulate modification of natural terrain and alteration of drainage by providing for certain run-off, erosion and sediment control measures, as well as to regulate the maintenance of grading: excavation and fill.
- B. Applicability. The requirements of this section shall apply to all proposed subdivision or land development involving any land disturbance activity, including but not limited to: grading, excavating, or disturbance of the topsoil, trees, or other vegetative cover, or introduction of fill material. Where the regulations contained in this section conflict with regulations of the Chester County Conservation District (CCCD), the more restrictive regulations shall apply.
- C. Soil Erosion and Sediment Control Requirements. All land disturbance activities shall be conducted in such a way as to minimize erosion and sedimentation on adjoining and downslope properties.
 - 1. <u>Pre-Construction Meeting</u>. Designated representatives of the Township and other governing authorities shall be invited to a pre-construction meeting by the applicant to discuss adherence to the regulations set forth in this section.
 - 2. <u>Surface Water</u>. The applicant or applicant's agent undertaking land disturbance activity including, but not limited to grading, excavating, or disturbance of topsoil or vegetative cover, or introduction of fill material that may affect the existing flow of surface water within or downslope from the subject parcel, shall be required to:
 - a. Collect on-site run-off and manage its release to a point of discharge into a natural watercourse of the drainage area;
 - b. Protect and clean the downslope, and adjoining properties of silt and debris washed from the subject property as a result of land disturbance activities on the subject property; and
 - c. Install all drainage and erosion control improvements as required by the approved soil erosion and sediment control plan.

- 3. <u>Stabilization of Disturbed Area.</u> The disturbed area and the duration of exposure shall be kept to a practical minimum and the disturbed soils shall be stabilized as quickly as practical in accordance with the following:
 - a. The permanent vegetation and temporary erosion control and stormwater management structures and systems shall be installed within twenty (20) days of the initial ground breaking. Permanent vegetation shall consist of a mix of plant species that will provide stabilization of disturbed areas during construction and following the completion of construction. Approved seed mixes for the stabilization of disturbed areas are included in Sections B-1 and B-2 of Appendix B.
 - b. If located within a watershed classified as High Quality or Exceptional Value (Elk Creek Watershed) as designated by Pennsylvania Code 25, Chapter 93; Water Quality Standards, as amended, all graded surfaces shall be stabilized whether temporary or permanent, within three (3) days of the initial ground breaking and shall be watered, tended, and maintained until growth is well established.
 - c. Existing Vegetation. Whenever feasible, existing vegetation shall be retained, protected and supplemented as required in Section 1103.E.5, Section 1105.E.6, and Section 1301.E. of the Elk Township Zoning Ordinance
- 4. Roads and parking areas shall be completed (with the exception of the wearing course) prior to building construction. The binder course shall be repaired and leveled before installing the wearing course near the completion of the subdivision or land development.
- 5. <u>Sediment</u>. Sediment in the run-off water shall be trapped until the disturbed area is permanently stabilized by the use of measures such as debris basins, sediment basins, silt traps, or similar measures. Accumulated sediment shall be kept removed to ensure continued adequate capacity in the basins or traps.
- 6. <u>State Regulations</u>. Measures to minimize soil erosion and sedimentation shall meet the standards and specifications contained in the PaDEP, *Soil Erosion and Sediment Pollution Control Manual*, as amended, and the Pennsylvania Clean Streams Law, Chapter 102, Erosion and Sedimentation Control Rules and Regulations, as amended, and the specifications contained herein. The Township Engineer or other duly authorized agent shall ensure compliance with the appropriate specifications.
- 7. <u>Construction in Phases</u>. In order to minimize the area of disturbance during construction, the applicant shall complete the construction in phases with each phase stabilized prior to progressing to the next phase. A maximum disturbed area not to exceed twenty-five (25) percent of the tract shall be required.

D. Construction Entrance Requirements.

1. <u>Subdivision Entrance</u>. During Construction, the deposition of mud on existing roads shall be minimized by the implementation of a one-hundred (100) foot construction entrance with a width equal to the proposed entrance (fifteen (15) foot minimum width) and an adequate flare to meet the existing road.

- 2. <u>Single Family Home Entrance</u>. Construction entrances serving only one (1) single-family home may be reduced to fifty (50) feet long and twelve (12) feet wide when serving a lot of one half (½) acre or less and twenty-five (25) feet long and ten (10) feet wide when serving a lot of ten thousand (10,000) square feet or less.
- 3. <u>Violation</u>. All vehicles and equipment entering a paved surface must cross the full length of the required construction entrance. If one or more violations of this section are witnessed by the Township, the Township may require that the sides of the construction entrance and any other access points to the lot be blocked with safety fence or silt fence, along with other enforcement remedies.

E. Standards for Grading: Excavation and Fill Requirements

- 1. No excavation or fill shall be made with an exposed face steeper in slope than three (3) horizontal to one (1) vertical, except under one (1) or more of the following conditions:
 - a. The material in which the excavation or fill is to be made is sufficiently stable to sustain a slope of steeper than three (3) horizontal to one (1) vertical, and a written statement to that effect by a licensed professional engineer experienced in erosion control is submitted and approved by the Township Engineer. The statement shall certify that the site has been inspected and that the deviation from the slope specified will not result in injury to persons or damage to property or increased erosion and resulting sedimentation.
 - b. When a retaining wall is provided to support the face of the excavation at a maximum height of three (3) feet or a stepped level or terraced retaining wall system with a combined maximum height of six (6) feet.
- 2. The Township Engineer may require a flatter slope when it is found that the material in which the excavating is to be made is unusually subject to erosion or if other conditions exist which make such a shallower slope necessary for stability and safety.
- 3. The top or bottom edge of slopes shall be located at least ten (10) feet from property lines or from any ultimate right-of-way, whichever is more restrictive, in order to permit a gradual rounding of the edge without encroaching onto the abutting property. At property lines where resulting slopes are steeper than three (3) horizontal to one (1) vertical or a retaining wall system is three (3) feet or more in height, a protective fence shall be located on top of the slope or retaining wall system. The fence shall be a minimum of four (4) feet in height.
- 4. Excavation shall not exceed below the angle of repose or natural slope of the soil under the nearest point of any footing or foundation or any existing building or structure unless such footing or foundation is first properly underpinned or protected against settlement.
- 5. Grading shall not redirect or concentrate surface water onto an adjacent property.
- 6. During grading operations, necessary measures for dust control to prevent particulate matter from becoming airborne shall be followed. These measures shall include, but not be limited to the following:

- a. A tire cleaning area shall be provided and maintained at each point of egress from the development areas, as approved by the Township Engineer.
- b. Use, where possible, of water or other method approved by the Township Engineer for control of dust during any land disturbance activity.
- c. Prompt removal of earth or other material from paved streets.
- 7. Grading equipment shall not be allowed to cross permanent or intermittent streams without first obtaining appropriate permits from the PaDEP.
- 8. No applicant shall engage in land disturbance activities that endanger any adjoining property, public street, sidewalk, alley or other property from settling, cracking or other damage which might result from such land disturbance. If, in the opinion of the Township Engineer, the land disturbance would create a hazard to life or property unless adequately safeguarded, the applicant shall construct walls, fences, guardrails, or other structures to safeguard the adjoining property, public street, sidewalk, alley, or other property and persons.
- Excavations or fills shall not encroach on natural watercourses, flood plain areas, constructed channels, or wetlands without the necessary state and federal permits.
 Excavations or fills located adjacent to natural watercourses or constructed channels shall have suitable protection against erosion.
- 10. All fill shall be compacted to provide stability of material and to prevent undesirable settlements. The fill shall be spread in a series of layers, not exceeding twelve (12) inches in thickness, and be compacted by a sheepsfoot roller or other approved method after each layer is spread. The Township Engineer may require compaction tests and reports.
- 11. Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloping surface of a fill within the area of a proposed subdivision or land development. Slopes of more than ten (10) feet in vertical height shall be separated by level berms of at least four (4) feet in width within which ditches shall be constructed where necessary to prevent erosion and as a safe place to deposit and receive such water. The Township Engineer may require such drainage structures or pipes to be constructed or installed which are perceived necessary to prevent erosion damage and to satisfactorily carry off surface waters.
- 12. When excavation or fill is proposed, all retaining walls, cribbing, drainage structures, fences or other protective devices shall be maintained in good condition and repair.

F. Grading for Drainage.

- 1. All lots, tracts or parcels shall be graded to provide proper drainage away from buildings, to dispose of water without ponding, and provide infiltration to the greatest extent possible. All land within a development shall be graded to drain and dispose of surface water without ponding, except where ponding as in the case of detention basins, is part of the stormwater management system for the proposed subdivision or land development.
- 2. All drainage provisions shall be of such design to adequately handle the surface run-off and carry it to the nearest suitable outlet. Where drainage swales are used to direct surface waters away from buildings, they shall be sodded or planted as required.

G. Natural Ground/Vegetative Cover.

- In no event shall the natural ground cover at a site be disturbed between October 15 and February 15 of the succeeding year, other than that necessary for preparation of sites for building foundations, stormwater and sediment control devices, and on-site sewage disposal systems. In order for a building site to be disturbed during the referenced period, it must have access from a street which has been graded and stabilized with a minimum of pavement base material in place and protected against contamination by dirt or salt.
- Removal of trees, tree clusters, and associated vegetation layers as a result of earth movement shall be kept to the absolute minimum. Wherever possible, existing vegetation shall be retained and protected in accordance with the provisions of Section 1103.E.6.of the Elk Township Zoning Ordinance.
- 3. Removal of any portion of existing vegetation shall be done in such a manner as to minimize erosion and sedimentation.
- H. **Grading, Excavation, Erosion, and Sediment Control Plan.** A grading, excavation, erosion and sediment control plan shall be submitted with the preliminary and final plan applications. The applicant or applicant's agent shall prepare the plan in accordance with the provisions of this Section and in compliance with the Elk Township Post-Construction Stormwater Management Ordinance and in accordance with the PaDEP Erosion and Sediment Pollution Control Manual, as amended, and the Special Protection Waters Implementation Handbook, as amended, and in compliance with the most current review requirements of the CCCD.
 - 1. When required by the most current regulations of the PaDEP, development plans will be submitted to the CCCD and the PaDEP for issuance of a National Pollutant Discharge Elimination System (N.P.D.E.S.) permit.
 - 2. Soil erosion and sediment control plans shall incorporate facilities for stormwater management in accordance with the policies and regulations of the CCCD and the stormwater management plan required by Section VI of this Ordinance.
 - 3. Upon recommendation from the Township Engineer, the Township may require the submission of plans, regardless of their size or other outside review requirements, to the CCCD for review and approval. In such a case, approval by the CCCD shall be required before final approval of a subdivision or land development, or the issuance of a building permit in the case of a minor subdivision.

I. Responsibility.

- 1. Whenever sedimentation that occurs on adjacent properties is caused by the removal of vegetation, regrading or other development, it shall be the responsibility of the applicant or applicant's agent causing such sedimentation to remove it from all adjoining surfaces, drainage systems and watercourses and to repair any damage at their expense within a time period acceptable to the Board of Supervisors.
- 2. No applicant shall block, impede the flow of, alter, construct any structure, or deposit any material or thing, or commit any act which will affect normal flood flow in any stream of watercourse without having obtained prior approval from the PaDEP, and the Township. All such activity shall be in compliance with applicable provisions of the Elk Township Zoning Ordinance.
- 3. Where a subdivision or land development is traversed by a watercourse, a drainage easement or right-of-way shall be established along the line of such watercourse, and of adequate width to preserve the natural drainage.
- 4. All required drainage and erosion control improvements, whether temporary or permanent, shall be installed by the applicant or applicant's agent, at their expense, and in accordance with applicable requirements.
- 5. All erosion and sediment control facilities shall be routinely inspected at the end of each day and following significant rainfall events.

J. Compliance with Regulations and Procedures.

- 1. The Township, in considering preliminary subdivision and land development plans shall condition its approval upon the execution of soil erosion and sediment control measures as required by this Ordinance.
- 2. Should the proposed plan prove to be inadequate prior to final release of escrow and dedication of improvements, a modified soil erosion and sediment control plan shall be submitted.

SECTION 520. WATER SUPPLY.

- A. General. Adequate and potable water supply system(s) shall be installed consistent with design principles and requirements contained in this Ordinance and Township standards, which are the U.S. Public Health criteria for drinking water, as administered by the Environmental Protection Agency (EPA)'s Safe Drinking Water Act.
 - 1. Where public water is available, the applicant or applicant's agent shall make use of such public water service to supply each lot in the subdivision or the land development.

 Utilization of a public water supply is limited to those areas as may be defined for such facilities in the Elk Township Zoning Ordinance, unless otherwise approved by the Board of Supervisors.
 - 2. Where no public water supply is available, the applicant or applicant's agent, upon approval of the Township, may be permitted to construct a well on each lot exclusively to

serve that lot or a shared well or wells to exclusively serve that development. All wells shall be constructed according to all applicable rules and regulations of the PaDEP, the CCHD, and the Township. The Township may also impose additional requirements to accommodate or mitigate the impacts of the proposed development.

- 3. The applicant or applicant's agent shall submit proof of the quality and adequacy of the water supply proposed to be utilized by the subdivision or land development, and shall submit approval by the CCHD and PaDEP (if applicable) of the type and construction methods to be employed in the installation of the water supply systems.
- 4. <u>Well Locations</u>. The proposed location of all wells shall be shown on the preliminary plan for each lot and shall be consistent with all CCHD and PaDEP requirements. Where there are existing wells, whether functional or abandoned, on the property or adjoining lots, they shall also be shown.
 - a. The circular area with a radius conforming to the rules and regulations of the PaDEP, the CCHD, and the Township, shall be shown around each well to denote an area in which a sewage disposal system shall not be located.
 - b. Where public water is provided, depiction of the circular areas is not necessary except where existing wells on parcels adjacent to the subdivision may be affected by proposed on-site sewage disposal facilities. In any case, the usable area for on-site sewage disposal systems would still be limited by a clear zone surrounding the water service line to each house, as required by the PaDEP, the CCHD, and the Township.

B. Water Availability and Impact Study

- 1. Purpose. The purpose of the Study will be to determine whether there is an adequate supply of groundwater for the proposed use, without adversely effecting existing uses. Failure to adequately demonstrate through a Water Availability and Impact Study conducted in accordance with the provisions hereof that an adequate groundwater supply will be available for the proposed subdivision or land development without negatively impacting existing water supplies shall be cause for denial of the subdivision or land development.
- 2. <u>Applicability</u>. A Water Availability and Impact Study shall be required for the following:
 - a. Residential subdivisions proposing individual water supplies and greater than twenty (20) dwelling units with a gross density of greater than 0.5 dwelling units per acre.
 - b. Community or public water supply systems which will draw in excess of 5,000 gallons of water per day.
 - c. Non-residential subdivision or land development proposals which will draw in excess of 5,000 gallons of water per day.
 - d. Projects proposing connection to a public water source beyond the boundaries of the Township are exempt from this requirement.

- 3. <u>Study Requirements</u>. The Study shall be prepared under the direction of a Pennsylvania licensed geologist qualified to conduct groundwater investigations in the Commonwealth of Pennsylvania. The Water Availability Study shall be signed by the person(s) preparing the study and shall include the following information:
 - a. Calculations of the projected water needs using the criteria set forth in the following references:
 - 1) *Public Water Supply Manual*, Bureau of Water Quality Management Publication No. 15 by the PA DEP, as amended.
 - 2) Guide for Determination of Required Fire Flow by the Insurance Services Office, as amended.
 - 3) American Water Works Association, Standards and Manuals for the American Water Works Association, Denver, Colorado, as amended.
 - b. A geologic map of the area within a ½ mile radius of the site.
 - c. The location of all faults, lineaments, and fracture traces on and within ½ mile of the site.
 - d. The location of all existing and proposed wells on and within ½ mile of the site, including a description of the methods and data used to identify such wells.
 - e. The location of all existing and proposed sewage systems on the site and within one hundred (100) feet of the property boundaries.
 - f. The location of all streams, perennial and intermittent on and within ½ mile of the site.
 - g. A discussion of the aquifer(s) underlying the site and their long-term drought recharge capability based on accepted published data or detailed site-specific investigations.
 - h. Based on the drought recharge capability of the underlying aquifer(s), incorporating existing groundwater withdrawals in the area and the calculated daily groundwater withdrawals of the project, a hydrologic budget shall be calculated for the site and for the area within ½ mile of the site.
 - i. Based on the results of the hydrologic budget, a determination shall be made as to the long-term adequacy of the available groundwater supply to serve the proposed use and existing use(s) on all properties. The proposed use shall not adversely affect existing use(s) from the same aquifer or surface water body. This determination shall be subject to approval by the Township Engineer.
 - j. Test well(s) shall be a required component of the Water Availability and Impact Study whenever determined necessary by the Township to adequately determine the long term groundwater availability and impacts, and must be constructed by a CCHD licensed well driller. For each test well that is constructed:

- An accurate geologic log should be prepared during the drilling of the well giving a detailed description of the type and thickness of rock strata encountered. Additionally, the log must contain information on the depth and thickness of all water bearing zones encountered and the yield from each zone. Yield must be measured using a quantitative method.
- 2) A pumping test of not less than forty-eight (48) hours duration shall be conducted at a rate of not less than one hundred and fifty (150) percent of the intended long term withdrawal from the well. This rate must be determined by a step test and approved by the Township before the start of the pumping test. The pumping test shall be conducted at a constant rate that should not deviate greater than five (5) percent during the test. The Township shall be notified at least three (3) working days before the start of a pumping test.
- 3) A means of accurately measuring well discharge shall be provided and is subject to approval by the Township.
- 4) Well discharge shall be directed away from the site by a method suitable to the Township and to a point suitable to the Township.
- 5) Records shall be compiled in typewritten form to include the following information:
 - a) Name of driller, personnel conducting test, and the name of the Pennsylvania licensed geologist overseeing the test;
 - b) Description of test well to include horizontal and vertical dimensions, casing installed, and grouting details;
 - c) List of formation samples;
 - d) Static water level for an extended period for the twenty-four (24) hours immediately prior to yield testing;
 - e) Hydrograph of depth to water surface during test pumping and recovery period at the test well showing corresponding pump and discharge rate in gallons per minute and time readings were taken;
 - f) Log of depth to water surface at all test wells during test pumping period showing time readings were taken; and
 - g) Results of a water quality analysis conducted by a PaDEP certified laboratory encompassing all parameters required for the intended use by the CCHD and the PaDEP.
- 6) A minimum of three (3) on site observation wells shall accompany each test well.

- 7) In order to determine the impact of the project well(s) on existing wells, a representative sampling of existing wells, evenly spaced around the pumping well, shall be monitored for changes in water level. The number and location of monitoring wells shall be subject to approval by the Township before conducting a step test. Sufficient well monitoring shall be performed to allow for the construction of hydrographs showing a continuous record of well levels before, during, and after the pumping test.
- k. The study accompanying the test well data shall analyze and interpret all data regarding the long-term adequacy of the available groundwater supply to meet the intended use and document the effect, if any, on existing uses on adjacent properties. Any computer codes used shall include detailed, plain language, discussion and basis of the code including an expanded example of the code itself. The credentials of the individual(s) preparing the report shall be included.
- 1. The Water Availability and Impact Study shall be submitted to the Township with the preliminary plan, and shall include any and all applications, reports, or supplemental information submitted to the PaDEP and/or the CCHD..

C. Public and Community Water Supplies.

- 1. If off-site water service from a private public utility or association is to be used, mains must be sized to provide for adequate pressure and supply for the anticipated demands of the subdivision and land development and to meet the minimum requirements for fire protection established by the *Guide for Determination of Required Fire Flow* by the Insurance Services Office, as amended.
- 2. Public water supply minimum main size shall be eight (8) inches.
- 3. All public water systems must provide a minimum of five hundred (500) GPM at a residual pressure of twenty (20) psi (pounds per square inch) for a two (2) hour period.
- 4. Where a permit is required by the PaDEP, it shall be presented as evidence of such review and approval in the case of private or public systems before construction commences.
- 5. Public and Community water supply well systems are further subject to the requirements of Section 520.B.
- 6. Community water supplies are further subject to the provisions of Section 521A.
- 7. Two (2) sources of groundwater are required for each public or community water system due to the unusual density and demand served by such systems. Each should be capable of supplying the peak daily demand of the proposed dwelling units and all fire flow requirements as specified in Section 520.C.1. A two (2) well system is preferred, however, the following alternatives, which would ensure an adequate water supply, may be acceptable:
 - a. A single well, capable of providing twice the daily average demand, as demonstrated by a pumping test of at least forty-eight (48) hours duration,

- producing a stabilized drawdown of unchanging water level for at least five (5) hours duration.
- b. A single well capable of supplying the average daily demand and an additional reliable surface water source.
- c. A single well capable of supplying the average daily demand, plus a dependable connection to another satisfactory public water supply system.
- d. A second well is recommended for use as a monitor of the aquifer and as a standby in the event of emergency.
- 8. Where water is to be provided by means other than private wells owned and maintained by the individual owners of lots within the subdivision or land development, the applicant or applicant's agent shall present evidence to the Township prior to final plan approval, that the subdivision or land development is to be supplied by a certified public utility, a bona fide cooperative association of homeowners, or by a municipal corporation, authority or utility. Written approval as required by Subsection I.1. below for capacity and construction methods and details shall be provided prior to final plan approval. A copy of Certificate of Public Convenience from the Pennsylvania Public Utility Commission (PUC) or an application for such certificate, a cooperative agreement or a commitment or agreement to serve the area in question, whichever is appropriate, shall be acceptable evidence.
 - a. The design, installation, and construction of any such system shall be in accordance with the standards of the applicable authority or utility company and the American Water Works Association and shall be further subject to the approval of the PaDEP, the CCHD, and the Township. Construction details for all facilities shall be shown on the Final Plan. Such system shall be further subject to satisfactory provision for the maintenance thereof as approved by the Township Engineer.
 - b. Where a permit is required by the PaDEP or CCHD, it shall be presented as evidence of such review and approval in the case of private or public systems before construction commences.
- D. **Fire Hydrants**. Where a public or community water system is provided, fire hydrants or acceptable alternatives shall be installed for fire protection, as approved by the Board of Supervisors and Township Engineer.
 - 1. Where fire hydrants are installed, water supply requirements, number, location, design, and installation shall meet all pertinent specifications of the Union Fire Company, the Insurance Services Offices of Pennsylvania, the American Water Works Association, NFPA 1142, and are further subject to approval by the Board of Supervisors upon recommendation of the Township Engineer.
 - 2. Fire hydrants, in general, will be located on an eight (8) inch line or looped six (6) inch line. Where a dead end line is required to contain a fire hydrant, the portion of the line between the main loop and the hydrant shall be an eight (8) inch minimum diameter.

- 3. Fire hydrants shall be spaced in a development so that all proposed building(s) shall be no more than six hundred (600) unobstructed feet from the hydrant measured along traveled ways to be used by fire apparatus.
- 4. To provide additional protection, the Fire Marshall may require the incorporation of a dry hydrant into existing and proposed ponds or reservoirs and an access easement be provided for emergency use.
- 5. If adequate supply is not available, hydrant connectors shall be provided for future installation. System design and the design and development of water sources shall conform to the requirements of the PaDEP.

SECTION 521. SEWAGE DISPOSAL FACILITIES.

A. General.

- 1. Each lot shall have a permitted sewage disposal facility in accordance with the PaDEP rules and regulations.
- 2. Documented approval of the Sewage Facilities Planning Module for Land Development by the PaDEP shall be required prior to final plan approval.
- The proposed sewage disposal facilities shall be in accordance with the Township's Act 537 Sewage Facilities Plan or the Chester County Sewage Facilities Plan, whichever is applicable.
- 4. Sewage facilities shall be designed and constructed in strict accordance with PaDEP, CCHD, and Township requirements and specifications. A copy of the approval of such systems and all required permits shall be submitted prior to Final Plan approval.
- Prior to the issuance of any permit for construction in any subdivision or land development, 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 Supervisors, that other suitable toilet facilities will be made available during construction.
- B. **Hierarchy of Sewage System Options**. The following regulations pertaining to Individual, Public, and Community sewage systems are listed in order of preference by the Board of Supervisors. Individual sewage systems represent the most preferred systems to be utilized in Elk Township; Community sewage systems represent the least preferred.
 - 1. Individual Sewage System.
 - a. Where lots are to be served by individual on-site sewage facilities, a primary area and replacement area for the sewage disposal shall be identified on the preliminary plan, or final plan in the case of a minor subdivision, for every proposed building lot. Sewage disposal system absorption areas shown shall be of a specific permissible design consistent with all PaDEP and CCHD requirements. No construction or paving shall be permitted on or within ten (10)

- feet of the primary or replacement on-site disposal areas and the final subdivision or land development plan shall note this deed restriction.
- b. Where individual on-lot sewage systems are to be used, each lot so served shall be the necessary size and shape to accommodate the required dimensions of both a primary and a replacement absorption area in accordance with all minimum isolation distances specified by the PaDEP. Both primary and replacement areas for individual sewage systems shall be located entirely upon the same parcel as the use which is served, unless otherwise approved by the Board of Supervisors under the provisions of subsection 521.b.1.e, below.
- c. The surveyed location of the primary and replacement sewage disposal system absorption areas and the well shall be shown prior to final plan approval.
- d. Unless served by a public or community sewer system, the applicant or applicant's agent shall install or shall require by deed restriction, the installation of an approved system prior to the sale of each lot or parcel within the subdivision.
- e. The individual sewage disposal system replacement areas serving the lots of a cluster subdivision or land development designed in accordance with the clustering option contained in the Elk Township Zoning Ordinance, may, upon approval of the Board of Supervisors, be located in the common open space. Such location shall only be considered when in accordance with the following:
 - 1) Soils testing shall be sufficient to document to the satisfaction of the Township Engineer that it is not possible to locate all sewage systems entirely upon the same parcel as the use which is served and provide for the density permitted by the applicable zoning district.
 - 2) To facilitate reasonable owner oversight and maintenance, no sewage system component shall be located greater than two hundred (200) feet from the parcel which is served by the system.
 - 3) Any sewage disposal system absorption area located in open space shall be encompassed by an easement to be recorded with the deed of the lot being served and extending at least fifteen (15) feet from the perimeter of said area. The applicant or applicant's agent shall be responsible for securing and recording all maintenance and access easements.
- f. Soil Percolation Test Requirements.
 - Unless served by a public or community sewer system, soil percolation tests shall be performed to determine site suitability of every sewage disposal system absorption area, primary and replacement, for all subdivision or land developments. Where technology that does not utilize percolation testing is proposed, all soils testing required by the PaDEP and CCHD to determine suitability must be conducted.
 - 2) Soil test pit examinations and percolation tests shall be made in accordance with the procedure required by the PaDEP and the CCHD by

- either a licensed professional engineer, a Pennsylvania Sewage Facilities Act sewage enforcement officer, or similarly qualified professional.
- 3) Soil percolation tests shall be performed within the site of the proposed on-site sewage facilities. Soil test pits shall be within ten (10) feet of the absorption area.
- The results of the soil test pit examinations and percolation tests shall be analyzed in relation to the physical characteristics of the tract being subdivided or developed and of the general surrounding area. These factors shall be utilized in conjunction with all applicable PaDEP and CCHD requirements to determine the specific permissible dimensions of all sewage disposal systems. The final plan lot layout shall be based on this analysis.

2. <u>Public Sewage System.</u>

- a. In all cases where sanitary sewer facilities are available, the applicant shall be required to install sanitary sewers and connect the same to such facilities, irrespective of the size of the lots included on said plot plan, in accordance with the Township Sewage Facilities Plan or Chester County Sewage Facilities Plan, whichever is applicable.
- b. Where the public sewer system is not yet accessible, as defined by ordinance, but is planned for extension to the subdivision or land development, the applicant or applicant's agent shall install sewer lines, including lateral connections, as may be necessary to provide adequate service to each lot when connection with the public sewer system is made in accordance with the following:
 - 1) The sewer lines shall be suitably capped at the limits of the subdivision or land development, and the laterals shall be capped at the street right-of-way. When capped sewers are provided, individual or community sewage disposal facilities shall be provided in the interim.
 - Where studies by the Township indicate that construction or extension of sanitary trunk systems to serve the property being subdivided, appear probable within a reasonably short time (ten (10) years or less), the Township shall require the installation and capping of sanitary sewer mains and house connections, in addition to the installation of temporary individual sewage systems. The Township shall review and approve the design and installation of such sewers.
 - Design of capped sewer systems and the interim sewage facilities shall be subject to approval by the PaDEP, the CCHD, the Municipal Authority (if applicable) and the Township.
- c. All lots which cannot be connected to a public sewage system in operation at the time of construction shall be provided with an individual sewage system meeting the design standards set forth by the PaDEP, the CCHD and the Township.

d. Requirements relating to design, construction and dedication of sanitary sewers shall be determined by the PaDEP and shall also be subject to the review and approval of the Township Engineer and such County and state regulatory authorities as have jurisdiction in such matters. Permits, where required, shall be obtained before construction of a sanitary sewer system is started.

3. Community Sewage System.

- a. The planning, design and construction of any community sewage system shall be subject to the review and approval of the PaDEP, CCHD, and the Township Engineer and shall further be in accordance with Section 521.A.
- b. Where surface or subsurface disposal of wastewater effluent is proposed, preliminary hydrogeologic and permeability testing, consistent with PaDEP standards and subject to Township Engineer approval, shall be required as part of the planning module submission.
- c. A detailed hydrogeologic study, consistent with PaDEP standards and subject to Township Engineer approval, shall be required for all community wastewater disposal sites underlain by serpentine stone or within one quarter mile of this geologic formation, as determined by United States Geological Survey mapping, as amended. This requirement may be waived if the Applicant can demonstrate to the satisfaction of the Township Engineer that the proposed site is not underlain by serpentine stone and is a sufficient distance to preclude affect on the wastewater disposal site.

d. Replacement Disposal Area

- A primary area and replacement area for community wastewater disposal shall be identified on the preliminary plan. Primary and replacement wastewater disposal areas shown shall be of a specific permissible design consistent with all PaDEP, CCHD, and Township Engineer requirements. No construction or paving shall be permitted on or within ten (10) feet of the primary or replacement disposal areas and the final subdivision or land development plan shall note this deed restriction.
- 2) All soils testing, hydrogeologic studies, and design necessary to document the adequacy of both primary and replacement sites shall be provided, consistent with all PaDEP, CCHD, and Township Engineer requirements.
- The Applicant shall obtain concurrent approval for both primary and replacement disposal sites from PaDEP and CCHD.
- 4) Applicant shall provide financial security, in an amount to be approved by the Township Engineer, for the installation cost of the replacement wastewater disposal facility to the Township, which the Township shall retain in escrow.
- e. A Sewage Management Program shall be prepared by the applicant or applicant's agent indicating the ownership, operation and maintenance responsibilities for

the proposed system in accordance with the Title 25 of the Pennsylvania Code. This program shall be subject to Township approval based on the recommendation of the Township Engineer.

SECTION 521.A. ADDITIONAL COMMUNITY WATER SUPPLY AND SEWAGE TREATMENT/DISPOSAL FACILITY REQUIREMENTS.

- A. **Review and Approval**. All community water supply and sewage treatment/disposal facilities shall be subject to the approval of and licensure by all regulating agencies, including, but not limited to:
 - 1. Chester County Health Department (CCHD).
 - 2. PaDEP.
 - 3. PUC.
 - 4. The Township Engineer.
 - 5. All interstate and/or federal agencies, commission and /or boards, which oversee the use of subsurface waters, watershed and/or water basins and sewage treatment facilities located in the Commonwealth and/or affecting those similar resources regulated by each agency.
- B. Operation. Only a licensed operator may operate either system.
- C. Initial Cost of Operation. An applicant or applicant's agent shall be responsible for the cost of the operation of the water system and sewage disposal system, including a capital reserve fund, until such time that the facilities have operated for three consecutive months or two consecutive quarters with the income being equal to or greater than the operating and maintenance costs including capital reserve. The applicant may charge for the pro-rata costs of operation for each unit receiving these services on a direct cost basis only.
- D. Continuing Offer of Dedication. An applicant or owner shall make a continuing offer of dedication of community water supply and sewage facilities and land on which these facilities are located, and the Township may accept dedication of the facilities by resolution at any time. The applicant will provide a maintenance security for not less than ten (10) percent of the costs of this facility for a period of eighteen (18) months after acceptance of dedication to the Township. The applicant and/or subsequent owner/operator may not transfer this utility unless first offering it to the Township under this paragraph. Ownership of community facilities shall be at the discretion of the Board of Supervisors.
- E. **Township Engineer Review and Approval**. The Township Engineer must approve the design of any community water supply system and sewage disposal system prior to final plan approval.
- F. Maintenance Contract. The applicant/owner shall provide a contract annually for the maintenance and/or replacement of the community water system and sewage treatment and disposal facilities, and provide assurances that the systems are maintained and/or upgraded according to the manufacturer's requirements at the time of installation, as well as that schedule

- of maintenance and/or replacement, which the Township requires the designer of this system to provide at the time of submission of approval for this system.
- G. Creation of a Municipal Authority. Should the Township create a municipal authority for the operation of water supplies and sewers in the Township, all benefits and/or obligations contained in this Ordinance will accrue to any entity the Township creates for this purpose.
- H. **Financial Security.** The applicant or applicant's agent shall provide financial security, in the amounts approved by the Township Engineer, to assure the proper installation of community water and sewer systems, which the Township will release, according to the procedures established in Act 247. The applicant will also provide financial security, in an amount to be approved by the Township Engineer, to assure the maintenance of both systems upon completion of all improvements.
- I. Back up Power Source(s). A system for backup power sources shall be designed and installed to the satisfaction of the Township Engineer.

SECTION 522. PARK LAND AND OTHER COMMUNITY FACILITIES.

A. Community Facilities.

- 1. In reviewing the subdivision and land development plans, the Township shall consider the adequacy of existing or proposed community facilities to serve the additional dwellings proposed by the subdivision or land development.
- 2. The applicant or applicant's agent and Township officials shall consider providing or reserving areas for community facilities normally required in residential neighborhoods including churches, libraries, schools, and other public buildings, parks, playgrounds, and play fields.
- 3. Areas provided or reserved for such community facilities should be adequate to provide for building sites, landscaping and off-street parking as appropriate to the use proposed. Such areas should be located in a manner to best serve the public likely to use the same and to utilize to the greatest extent, any topographical features.

B. Park, Recreation Land, and Open Space.

- 1. Subdivisions and land developments shall meet the provisions of this subsection for providing suitable land for public recreation and open space.
- 2. Subdivisions and land developments that use the lot clustering development options of the Elk Township Zoning Ordinance are excluded from the open space requirements of this section. In terms of park, recreation land and open space, these subdivisions and land developments shall comply with the applicable provisions of Article XIII of the Elk Township Zoning Ordinance.
- 3. The applicant or applicant's agent shall offer for public dedication, or reserve and restrict in perpetuity, an amount of land for park or open space in accordance with the requirements of this section.

- 4. The preliminary and final subdivision and land development plan submitted by the applicant or applicant's agent shall contain a separate sheet depicting and describing the land and facilities proposed to be dedicated or reserved in compliance with the requirements of this section.
- 5. The dedications or reservations shall be consistent with the Elk Township Open Space Plan for future parks, recreational facilities and open space needs.

Table 5-7
Amount of Land to be Dedicated

Net residential acres ² per dwelling unit (d.u.)	Minimum required percentage of net residential acreage which must be dedicated or reserved
More than 1.1 acres of land per d.u.	12 percent
One-half (.5) to 1.1 acres per d.u.	15 percent
Less than one-half (.5) acre per d.u.	20 percent

- 6. The amount of land to be dedicated or reserved shall be in accordance with Table 5-7 and as specified in the Elk Township Open Space Plan. Minor subdivisions, as defined herein, are excluded from this requirement. In lieu of dedicating parkland and open space to the Township, the applicant or applicant's agent may elect to pay a fee to the Township in accordance with subsection G, below.
- 7. The provisions of this section are minimum standards and shall not be construed as prohibiting a developer, with the approval of the Township, from dedicating or reserving other land for parkland or open space, in addition to the requirements of this section.

C. Park, Recreation Land, and Open Space Designation.

- 1. The subdivision or land development plan shall contain the following statement for land designated as open space: "Open space land may not be separately sold, nor shall such land be further developed or subdivided."
- 2. All subdivision plans shall designate the use of parkland and open space and the type of maintenance to be provided. Use permitted within the common open space shall be in accordance with the provisions of Section 1301.A.10 of the Elk Township Zoning Ordinance.
- D. **Park and Open Space Design Standards**. The land dedicated for parkland and open space shall meet the requirements of Article XIII of the Elk Township Zoning Ordinance.
- E. Park and Open Space Ownership. The terms and arrangement for ownership of any park land or open space created under the requirements of this section shall be in accordance with the Elk Township Zoning Ordinance, Article XIII, Section 1301.A.12. The terms and arrangement of the ownership shall be established at the time of final plan approval and incorporated into the development agreement. Where land is to be deed restricted in perpetuity as parkland or open space, the Township shall be named as a third party.

² Net residential acres per dwelling equals the total net lot areas of those portions of the tract devoted to residential uses divided by the total number of dwelling units. Net lot area is as defined in Article II of this Ordinance.

F. Management and Maintenance of Park, Recreation Land, and Open Space.

- 1. A subdivision or land development application that includes permanent park land or open space shall include a plan for the long term management and maintenance of such land, in accordance with the requirements contained in Article XIII, Section 1301.A.9. of the Elk Township Zoning Ordinance.
- 2. The Township shall be responsible for maintenance of all lands dedicated to the Township under the provisions of this section. This function may be delegated to a homeowners' association or other entity at the discretion of the Board of Supervisors. Maintenance may entail leaving the parcel in its natural condition.

G. Fee-In-Lieu Dedication.

- 1. If the applicant or applicant's agent chooses to provide a fee-in-lieu of dedication or reservation of park land or open space to satisfy the requirements of this section, as authorized by Act 247, the amount of the fee shall reflect the fair undeveloped market value of the required land dedication or reservation.
- 2. When such a fee is required, it shall be equal to the average fair market value per acre of the land being developed (determined at the time of filing of the application for subdivision approval), multiplied by the acreage of land that would have been required for dedication or reservation.
- 3. Determination of the total fair market value of the land shall be the responsibility of the applicant or applicant's agent and shall result in a reasonable value acceptable to the Township.
- 4. In the event the applicant or applicant's agent, upon agreement of the Township, selects a combination of payment of fee-in-lieu and the dedication or reservation of parkland or open space, the amount of the fee-in-lieu shall be prorated with the value of land provided. The applicant or applicant's agent shall not, however, be permitted to dedicate or reserve land that is deemed by the Township inadequate to be used as parkland or open space.
- 5. Any such fees received by the Township in lieu of park and open space lands shall be deposited in a special account to be maintained by the Township and to be used for obtaining future park or open space lands. Fees deposited to this account shall be administered as required by Act 247.
- 6. Subdivisions that use the lot clustering or unified residential development options of the Elk Township Zoning Ordinance are not eligible to use the fee-in-lieu provisions of this section.

SECTION 523. LANDSCAPING, SCREENING, AND RIPARIAN BUFFER ESTABLISHMENT.

In addition to the street tree requirements and riparian buffer establishment requirements listed below, Landscaping and Screening shall be in accordance with the provisions of Section 1301.E. of the Elk Township Zoning Ordinance and plant selection shall be in accordance with the Approved Plant Materials List in Section 1301.E.7. of the Elk Township Zoning Ordinance.

A. Street Trees.

- 1. <u>Applicability</u>. Within any proposed subdivision or land development where new streets are to be constructed, street trees shall be provided. In addition, within any subdivision and land development fronting on an existing street or streets where there are no existing trees, street trees shall be provided along the frontage of the developed area.
- 2. <u>Street Tree Spacing and Pattern: Informal (preferred).</u>

Trees may be planted in groups with regular or random spacing between the individual trees and between groups of trees. The number of trees required under the informal arrangement shall be based on the following criteria:

- a. One (1) large deciduous street tree will be provided for each forty (40) feet of street frontage.
- b. One (1) medium deciduous street tree will be provided for each twenty-five (25) feet of street frontage.
- 3. Street Tree Spacing and Pattern: Formal.
 - a. Large deciduous street trees shall be planted at intervals of not more than thirty-five (35) feet and medium street trees shall be planted at intervals of not more than twenty (20) feet along the frontage of roadways within the proposed subdivision or land development.
 - b. If development occurs on both sides of new or existing streets, trees may be planted opposite each other or in an alternate spacing alignment. The pattern shall be consistent throughout the development. Should the development occur on only one (1) side of new or existing streets, street trees shall be planted on the development side using the arrangement and spacing specified herein.
- 4. Heatlthy, non-invasive existing trees shall be preserved and included in the street trees to the greatest extent possible, in accordance with the provisions of Section 1301.E.7. of the Elk Township Zoning Ordinance. Where there are existing trees along new or existing roadways, the arrangement and spacing of new trees shall conform as closely as possible to the requirements of this section.
- 5. <u>Minimum Street Tree Caliper Requirements</u>.
 - a) Large deciduous street trees three and one-half $(3\frac{1}{2})$ inch to four and one-half $(4\frac{1}{2})$ inch caliper.

- b) Medium deciduous street trees two and one-half $(2\frac{1}{2})$ inches to three and one-half $(3\frac{1}{2})$ inch caliper.
- B. **Riparian (Forest) Buffer Establishment.** When a subdivision or land development is proposed where there is no established vegetated or wooded riparian buffer (such as in areas previously cultivated for agriculture) a one hundred (100) foot riparian buffer shall be established and maintained in accordance with Section 1103E.2. of the Elk Township Zoning Ordinance and the following regulations:
 - 1. Forested and unforested vegetation shall be established through natural succession. Selective planting shall be incorporated on sites devoid of vegetation to stimulate native species and discourage invasive species.
 - 2. Plant selection and planting shall be consistent with the CCCD, the PaDEP or USDA riparian forest buffer guidance (The applicant is encouraged to involve local volunteer groups in the buffer planting).
 - 3. <u>Riparian Buffer Deciduous Trees and Shrubs.</u> See Section B-3 in Appendix B.
 - 4. Riparian Buffer Evergreen (Conifers) Trees and Shrubs. See Section B-3 in Appendix B.
 - 5. Riparian Buffer Forbs and Grasses (Warm Season). See Section B-3 in Appendix B.

SECTION 524. STRIPPING, REPLACEMENT, OR REMOVAL OF TOPSOIL.

Initial construction on the subdivision site shall consist of stripping and stock piling of topsoil from all areas to be disturbed. Upon completion of other construction, the entire amount of topsoil stripped shall be replaced on the subdivision site.

- A. No topsoil shall be disposed of, by sale or otherwise, off the site of the subdivision or land development. No topsoil shall be removed from within the boundaries of Elk Township, in accordance with the provision of Section 1302.H. of the Elk Township Zoning Ordinance.
- B. Subsoil may be disposed of at the option of the applicant or applicant's agent.
- C. Topsoil and subsoil shall be piled separately and not intermixed.

SECTION 525. LIGHTING.

Lighting shall be designed and installed in accordance with the provisions of Section 1301.F of the Elk Township Zoning Ordinance.

SECTION 526. PARKING.

Parking facilities shall be designed in accordance with the provisions of Section 1304 of the Elk Township Zoning Ordinance, and parking areas shall be landscaped in accordance with the provisions of Section 1301.E.6. of the Elk Township Zoning Ordinance.

SECTION 527. MOBILE HOME PARK REGULATIONS.

Mobile home parks shall be subject to the following regulations in addition to those set forth in Section 1218 of the Elk Township Zoning Ordinance:

- A. **Roadway Standards**. Roadways within mobile home parks shall conform to the minimum roadway standards specified in this Ordinance
- B. **Storm Drainage and Erosion Control.** The management of stormwater runoff shall be incorporated in all mobile home park designs in accordance with the Post-Construction Stormwater Management Ordinance and erosion control shall be installed in accordance with Section 519 of this Ordinance.
- C. Fuel Supply and Storage and Other Utility Related Standards
 - 1. Natural gas.
 - a. Any mobile home provided with piped gas shall be required to have an emergency shutoff valve installed out of doors.
 - b. The design of natural gas systems shall be in accordance with all applicable state and federal standards.
 - 2. Liquefied petroleum gas systems provided for mobile homes, community buildings, or other structures shall be maintained in conformity with the rules and regulations of the Pennsylvania Department of Labor and Industry and shall include the following:
 - a. Systems shall be provided with safety devices to relieve excessive pressures and shall be arranged so that the discharge terminates at a safe location.
 - b. Systems shall have at least one accessible means of shutting off gas. Such means shall be located outside the mobile home and shall be maintained in effective operating condition.
 - c. All liquefied petroleum gas piping outside of the mobile home shall be well supported and protected against mechanical injury. Liquefied petroleum gas shall not be conveyed through piping equipment or systems within mobile homes.
 - d. Storage vessels of at least twelve (12) gallons and less than sixty (60) gallons gross capacity shall be maintained in a vertical position and shall be securely, but not permanently, fastened to prevent accidental overturning. No vessel shall be placed any closer than ten (10) feet to the exterior door of a mobile home and not less than six (6) feet to any window.
 - e. No storage vessel shall be stored or located in or beneath any storage cabinet, carport, mobile home, or any other structure. Storage vessels shall be screened in accordance with the requirements of the Elk Township Zoning Ordinance.
 - 3. Fuel oil supply systems. The following provisions shall apply to all mobile home parks utilizing fuel oil supply systems:

- a. All fuel oil supply systems provided for any structure in a mobile home park shall be installed and maintained in conformity with the rules and regulations of all authorities having jurisdiction.
- b. All piping from outside fuel storage tanks to mobile homes shall be securely, but not permanently, fastened in place.
- c. All fuel oil supply systems provided for mobile homes, service buildings, and other structures shall have shut-off valves located within 5 inches of storage tanks.
- d. All fuel storage tanks shall be securely placed and shall not be less than 5 feet from any exterior door of a mobile home, and not less than 3 feet from any window.
- e. Storage tanks located in areas subject to traffic shall be protected against physical damage. Storage tanks shall be screened in accordance with the Elk Township Zoning Ordinance
- 4. All other utilities and utility infrastructure, such as pipeline and wiring, shall be placed underground in accordance with all applicable state and federal standards.
- D. Open Space Standards. Mobile home parks or mobile home park expansions shall include a minimum of thirty (30) percent of the gross area after subtraction of buffer areas, as restricted open space for the enjoyment of mobile home park residents. A minimum of twenty-five (25) percent of the common open space shall be usable for active recreation. Restricted open space areas shall be administered and maintained by the park management or owner.
- E. Landscaping and Buffering. Landscaping and buffering shall be required as an essential feature of each mobile home park. The use of naturally occurring and existing vegetation shall be encouraged. Specific landscaping and screening requirements shall be in accordance with the provisions of Section 1301.E. of the Elk Township Zoning Ordinance.
- F. Service Buildings and Facilities. No mobile home park service building or associated facility shall be closer than seventy-five (75) feet to an existing or proposed public street right-of-way. Suitable uses related to service buildings may include the management office, laundry facilities, and repair shop and/or commercial uses to supply essential goods to park residents only in accordance with the provisions of the Elk Township Zoning Ordinance.
- G. Sidewalks. Sidewalks shall be required in accordance with Section 515 of this Ordinance
- H. **Lighting**. Lighting shall be in accordance with the provisions of Section 1301.F. of the Elk Township Zoning Ordinance.
- I. Parking. Parking facilities shall be provided in accordance with the specifications set forth in Section 1304 of the Elk Township Zoning Ordinance.
- J. **Skirting**. Every mobile home placed shall, prior to occupancy or other use, have a skirt installed which is designed to complement the appearance of the mobile home. Skirting material shall be specifically designed for this purpose and adequately vented to allow for access to all utility connections. In no instance shall be the area beneath the mobile homes be used for storage.

K. Additions and Alterations. Permanent additions shall not be built onto or become part of any mobile home unless they are in accordance with the Elk Township Zoning Ordinance and/or any other applicable state and local laws or regulations.

L. Mobile Home Pad and Anchoring.

- 1. <u>Mobile Home Pad.</u> A concrete pad, with proper sub-grade, shall be placed and compacted so as to be durable and adequate for the support of the maximum anticipated loads during all seasons, shall be used for all mobile homes, and shall be in compliance with applicable Building and Construction Codes.
- Anchoring. Every mobile home placed shall be anchored to the mobile home pad, in accordance with the Building Code, where it is located prior to the unit being occupied or used in any other way, or the expiration of seven (7) days, whichever occurs first. The anchoring system shall be designed to resist a minimum wind velocity of ninety (90) miles per hour.
- 3. <u>Stability</u>. Every mobile home placed shall, prior to occupancy or any other use, be affixed to its mobile home pad in such a way as to prevent tilting of the unit.
- M. Accessory Structures. Patios, carports, and other similar accessory structures shall be in accordance with the provisions of Elk Township Zoning Ordinance.
- N. **Hitch or Tongue**. If removable by manufacturer's design, the hitch or tow bar attached to a mobile home for transport purposes shall be removed and remain removed from the mobile home when it is placed on its mobile home pad.
- O. **Permits**. It shall be unlawful for any person to construct, maintain, alter, extend, or operate a mobile home park in Elk Township unless and until all Chester County Health Department permit and licensing requirements have been met.

P. Floodplain Conservation Overlay District.

- 1. Mobile homes shall be prohibited within the Floodplain Conservation Overlay District. Lawfully existing mobile homes located within the Floodplain Conservation Overlay District at the time of adoption of this Ordinance shall be considered a nonconforming structure and shall be subject to the provisions of Article XVI, Nonconforming Uses and Section 1101.L. Existing Structures in the Floodplain Conservation Overlay District, of the Zoning Ordinance.
- 2. Where a lawfully existing nonconforming mobile home is proposed to be modified, reconstructed, or improved under the provisions of Section 1101.L. of the Zoning Ordinance, the following minimum standards shall apply:
 - a. Anchored to resist flotation, collapse, or lateral movement by providing over-thetop and frame ties to ground anchors in accordance with the following:
 - 1) Over-the-top ties shall be provided at each of the four (4) corners of the mobile home, with two (2) additional ties per side at intermediate locations for units fifty (50) feet or more in length, and one (1) additional tie per side for units less than fifty (50) feet in length.

- 2) Frame ties shall be provided at each corner of the mobile home, with five (5) additional ties per side at intermediate locations for units fifty (50) feet or more in length, and for (4) additional ties per side for units less than fifty (5) feet in length.
- 3) All components of the anchoring system shall be capable of carrying a force of four thousand eight hundred (4800) pounds.
- b. Elevated in accordance with the following requirements notwithstanding any other requirements of this Ordinance:
 - 1) The stands or lots shall be elevated on compacted fill on pilings so that the lowest floor of the mobile home will be one and one-half (1½) feet of more above the elevation of the one hundred (100) year flood.
 - 2) Adequate surface drainage is provided.
 - 3) Adequate access for a delivery truck is provided.
- c. Where pilings are used for elevation, the lots shall be large enough to permit steps; piling foundations shall be placed in stable soil no more than ten (10) feet apart; reinforcement shall be provided that will extend for six(6) feet or more above the ground level.
- 3. <u>Evacuation Plan</u>. An evacuation plan indicating alternate vehicle access and escape routes shall be filed with the Board.
- Q. Layout. Groups or clusters of units, so placed as to create interior spaces and courtyards, shall be incorporated wherever feasible. Mobile homes shall also be arranged in a variety of orientations, and long uninterrupted corridors between units shall be avoided wherever feasible.

ARTICLE VI CONSTRUCTION AND ACCEPTANCE OF PUBLIC IMPROVEMENTS

SECTION 600. GENERAL REQUIREMENTS.

- A. Physical improvements to the property being developed shall be provided, constructed, and installed as shown on the Recorded Plan, in accordance with the requirements of Elk Township.
- B. The applicant shall agree to the installation of all improvements shown on the Plan and required by these regulations.
- C. All improvements installed by the applicant shall be constructed in accordance with the design specifications of the Township. If there are no applicable county or state regulations, the Township may require that specifications be prepared by a licensed and registered engineer.
- D. Supervision of the installation of the improvements required by this Ordinance shall, in all cases, be the responsibility of the Township or of the appropriate state regulatory agency.

SECTION 601. CONSTRUCTION REQUIRED.

- A. No plan shall be finally approved, and no building permits shall be issued until the applicant or applicant's agent has completed all required improvements or has provided a performance guarantee in accordance with Section 603 herein.
- B. The applicant or applicant's agent shall construct all roads, together with all other improvements including, but not limited to, grading, paving, curbs, gutters, sidewalks, trails, street lights, fire hydrants, water mains, monuments, street signs, street and shade trees, storm drainage facilities, sanitary sewers, landscaping, traffic control devices, open space and restricted areas, and stormwater management. All construction shall be in conformance with the Final Plan, the applicable provisions of the Pennsylvania Department of Transportation (PennDOT) Specifications, Form 408, the latest revision, and all other applicable regulations

SECTION 602. INSPECTIONS.

- A. The Township Engineer shall be notified by the applicant or applicant's agent at least seven (7) working days before the start of construction of any improvements requiring inspection. The construction or installation of all improvements shall at all times be subject to inspection by the Township, who shall determine that such improvements comply with approved plans. If such inspection reveals that work is not in accordance with approved plans and specifications, that construction is not being done in a workmanlike manner, or that stormwater management and erosion control facilities are failing to prevent accelerated erosion or water-borne sediment from leaving the site of construction, the said representatives may be empowered to require corrections to be made, and/or the suspension of subdivision approval, and to issue a cease and desist order which may include any or all of 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;

- 3. That no certificate(s) of occupancy shall be provided; and
- 4. That no further building permits for any lots shall be issued.
- B. The said cease and desist order shall be terminated upon determination by the Township that the said defects or deviations from plan requirements have been corrected.

C. Timing of Inspections.

- 1. After commencement of initial earth-moving operations, the Township Engineer or his designee shall inspect at the following milestones in the development of the site, or at each stage thereof. The Township Engineer may make random inspections as deemed necessary and appropriate.
 - a. Upon completion of stripping, the stockpiling of topsoil, the construction of temporary stormwater management and erosion control facilities, disposal of all unsuitable materials, and preparation of the ground.
 - b. Upon completion of rough grading, but prior to placing of topsoil, installing permanent drainage or other site improvements, or establishing covers.
 - c. During construction of the permanent facilities, at such time(s) as specified by the Township Engineer.
 - d. Upon completion of permanent stormwater management facilities, including established ground covers and planting for that purpose.
 - e. Upon completion of final grading, vegetative control measures, and all other site restoration work undertaken in accordance with the approved plan and permit.
- 2. No subgrade, base course, underground pipes, conduits, cables, or structures shall be covered until inspected and approved by the Township Engineer or designee. The applicant or applicant's agent shall be responsible for arranging for other inspections that may be required by another agency or entity. Required inspections shall occur at the following times:
 - a. Upon excavation and completion of subgrade.
 - b. Upon excavation, installation and completion of drainage structures, community sewage systems and water supply systems, and other utilities.
 - c. During backfill.
 - d. Before placing first base course and between subsequent base courses.
 - e. Before binder course.
 - f. Before wearing course.
 - g. Final inspections in accordance with Section 604.A.

- 3. The Township may require the installation of additional base, special subgrade materials, underdrains, or other facilities or materials required in order to obtain a stable road base.
- 4. The Township may elect to have the final road inspection conducted by representatives of the PaDOT and the acceptance of the road may be subject to approval of the Department.

SECTION 603. PERFORMANCE GUARANTEES/FINANCIAL SECURITY AGREEMENT.

- A. Prior to final plan approval, the Board of Supervisors shall require the applicant to install all improvements, both public and private, or to furnish the Township financial security to cover the costs and guarantee the installation of all improvements. Improvements shall be developed in conformance with the Final Plan and all applicable Township ordinances and regulations, and in accordance with applicable state and federal laws. The applicant shall not be released from all or portions of the guarantee until all improvements or portions thereof are inspected and found to be properly installed and properly functioning in compliance with Township, state, and federal laws and ordinances as determined by the Township Engineer.
- B. Financial security required to cover the cost of all improvements shall be in the form of a restrictive or escrow account with a Federal or Commonwealth chartered lending institution or such other type of financial security authorized by Act 247. The financial security shall continue for the original amount and term unless the provider requests release and termination of the financial security by written request at least sixty (60) days notice.
- C. The financial security shall provide for, and secure to the public, the completion of all improvements for which the security is being posted on or before the date of the formal action of Township approval or accompanying agreements for completion of the improvements. Any Financial Security Agreement shall require that, where the Board of Supervisors as not determined the completion of all improvements, as of the required completion date, the Township shall immediately receive in cash the full amounts guaranteed by the escrow account or other financial security, unless the Board, in its discretion, agrees in writing to an extension or other amendment to the Financial Security Agreement.
- D. The amount of financial security to be posted for the completion of the required improvements shall be equal to one-hundred and ten (110) percent of the cost of completion estimated as of ninety (90) days following the date scheduled for completion by the applicant.
 - 1. The amount of financial security required shall be based on an estimate of the cost of completion of the required improvements. This estimate shall be prepared by a professional engineer licensed as such in the Commonwealth of Pennsylvania and determined to be a fair and reasonable estimate of such costs. The Township, upon recommendation of the Township Engineer, may refuse to accept the estimate for good cause.
 - 2. If the applicant or the applicant's agent, and the Township, are unable to agree upon an estimate, then the estimate shall be recalculated and recertified by another professional engineer licensed in the Commonwealth of Pennsylvania and chosen mutually by the Township and the applicant or applicant's agent. The estimate certified by the third engineer shall be presumed fair and reasonable and shall be the final estimate. In the

event that a second engineer is so chosen, fees for the services shall be paid equally by the Township and the applicant or applicant's agent.

- E. The Township may adjust the amount of financial security on an annual basis by comparing the actual cost of the improvements which have been completed to date, and the estimated cost of completing the remaining improvements as of the expiration date or a rescheduled completion date.
 - 1. Any adjustment of the amount of financial security shall consider, among other things, the cost of completing unfinished improvements, and the cost of correcting foreseen and unforeseen problems that have arisen during development. Subsequent to said adjustment, the Township may require the applicant to post additional security in order to ensure that the financial security equals one-hundred and ten (110) percent of the remaining improvements. Any additional security shall be posted by the applicant in accordance with this subsection.
 - 2. If the applicant or applicant's agent requires more than one (1) year from the date of the posting of the financial security to complete the required improvements, the amount of the financial security may be increased by an additional ten (10) percent for each one year period, or portion thereof, beyond the first anniversary date from the posting, or to an amount not exceeding one-hundred and ten (110) percent of the cost of completing the remaining improvements.
- F. When requested by the applicant or applicant's agent, in order to facilitate financing, the Board of Supervisors shall furnish a signed copy of a resolution indicating approval of the final plan contingent upon the applicant or applicant's agent obtaining a satisfactory financial security. The final plan shall not be signed or recorded until the financial improvements agreement is executed. The resolution or letter of contingent approval shall expire and be deemed to be revoked if the financial security agreement is not executed within ninety (90) days unless a written extension is granted by the Board; such extension shall not be unreasonably withheld and shall be placed in writing at the request of the applicant. The Township will deliver plans for recordation upon compliance with the provisions of this paragraph.
- G. In a case where development is projected over a period of years, the Township may authorize submission of final plans by section or stages of development, subject to such requirements or guarantees as to improvements in future sections or stages of development it finds essential for the protection of any finally approved section of the development.
- H. If any utility systems are to be installed under the jurisdiction and pursuant to the rules and regulations of a public utility or municipal authority separate and distinct from the Township, financial security to ensure proper completion and maintenance thereof shall be posted in accordance with the regulations of the controlling public utility or municipal authority and shall not be included within the financial security as otherwise required by the Township.
- I. As the work of installing the required improvements proceeds, the applicant or applicant's agent may request the Board of Supervisors to release or authorize the release from time to time, such portions of the financial security necessary for payment to the contractor or contractors performing the work.
 - 1. Any such request shall be in writing addressed to the Board of Supervisors. The Board of Supervisors shall have forty-five (45) days from receipt of such request within which to

- allow the Township Engineer to determine, in writing, that such portion of the work on the improvements has been completed in accordance with approved plans and agreements.
- 2. Upon such determination, the Board shall authorize release by the bonding company or lending institution of an amount as estimated by the Township Engineer as fairly representing the value of the improvements completed.
- 3. The Township Engineer, in determining the completion of the work for a partial release, shall not be bound to the amount requested by the applicant, but shall convey to the Board his independent evaluation of the proper amount of releases. The Board 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.

SECTION 604. RELEASE FROM PERFORMANCE GUARANTEE.

- A. When the applicant or applicant's agent has completed all of the required improvements, the applicant shall notify the Board in writing, by certified or registered mail, of the completion of the aforesaid improvements and shall send a copy thereof to the Township Engineer. The Board shall, within ten (10) days of receipt of such request, direct and authorize the Township Engineer to inspect all the aforesaid improvements.
 - 1. The Township Engineer, following the inspections, shall file a report in writing with the Board, and shall promptly mail a copy of the same to the applicant or the applicant's agent by certified or registered mail.
 - 2. The report shall be made and mailed within thirty (30) days after receipt by the Township Engineer of the aforesaid authorization from the Board.
 - 3. Said report shall be detailed and shall indicate approval or rejection of said improvements, either in whole or in part, and if said improvements, or any portion thereof shall not be approved or shall be rejected by the Township Engineer, said report shall contain a statement of reasons for such rejection. The Township Engineer shall maintain a permanent file of his inspections.
- B. Within fifteen (15) days of receipt of the Township Engineer's report, as provided in Section 604.A., the Board, or a representative thereof, shall notify the applicant or applicant's agent by certified or registered mail, of the action of the Board with relation to the approval, or rejection of improvements.
- C. If any portion of the said improvements shall not be approved or shall be rejected by the Board, the applicant or applicant's agent shall proceed to complete or correct same and, upon completion, the same procedure of notification as outlined in Section 604.A shall be followed.
- D. The applicant or applicant's agent shall be responsible for maintenance of all subdivision or land development improvements until such improvements are offered for dedication and are accepted by the Township, and twenty-five (25) percent of the performance guarantee shall be held back until a maintenance guarantee, as provided for in Section 607, has been posted and recorded plans are verified and accepted by the Township.

SECTION 605. CORRECTED PLANS.

Within thirty (30) days after completion and approval by the Township of public improvements as shown on final plans, and before acceptance of such public improvements, the applicant shall submit to the Board a corrected copy of said plans showing actual dimensions and conditions of streets and all other improvements, certified by the applicant to be in accordance with actual construction.

SECTION 606. DEDICATION AND ACCEPTANCE OF PUBLIC IMPROVEMENTS.

- A. Upon completion of any public improvements shown on an approved subdivision plan and within ninety (90) days after approval of such public improvements as herein provided, the applicant or applicant's agent shall submit a written offer of such public improvements for dedication to the Township. Such improvements must be found satisfactory by the Township Engineer prior to acceptance by the Board.
 - 1. Said offer shall include a Deed of Dedication covering said public improvements, together with a copy of a title insurance policy establishing the applicant's clear title to said property. Such documents are to be filed with the Township Secretary for review by the Township Solicitor.
 - 2. Deeds of Dedication for public improvements may be accepted by resolution of the Board at a regular Board meeting thereof. Prior to acceptance of dedication, the Board may require that at least seventy-five (75) percent of the lots in any approved subdivision or development (or phase thereof, if Final Plan approval has been in phases) have been issued certificates of occupancy for dwellings occupied therein.
 - 3. Should the above mentioned roads or streets, even though constructed according to these specifications, deteriorate before the said seventy-five (75) percent of the lots have dwellings occupied thereon, such roads or streets shall be repaired in a manner acceptable to the Board upon recommendation of the Township Engineer before being accepted by the Township.
- B. The Board may require that permanent stormwater facilities or other subdivision and land development improvements remain not dedicated to the Township, with maintenance the responsibility of individual lot owners, a homeowner's association or similar entity, or an organization capable of carrying out maintenance responsibilities.

SECTION 607. MAINTENANCE GUARANTEE.

The Board shall require that a two (2) year guarantee, in the form of a bond, be provided from the date of acceptance of all public improvements to be dedicated to the Township. The bond shall be furnished under such conditions and form with surety as shall be approved by the Board to guarantee the maintenance of all public improvements against failure due to improper workmanship or materials for two (2) years and shall be in an amount equal to twenty-five (25) percent of the costs of such improvements.

ARTICLE VII ADMINISTRATION

SECTION 700. ENFORCEMENT.

- A. The Board of Supervisors is authorized to enforce the provisions of this Ordinance. The Board of Supervisors may designate another party, including the Township Zoning Officer or his duly appointed assistant(s), the Township Engineer, or the Township Solicitor, to enforce the provisions of this Ordinance and the accompanying design standards and improvement specifications.
- B. The Board of Supervisors may institute and maintain appropriate legal proceedings in law or in equity to restrain, correct, or abate violations including, but not limited to, requiring compliance with the provisions of this Ordinance, to recover damages, and to prevent the illegal occupancy of a building, structure, or premises.
- C. Inspection of actual construction under any approved subdivision or land development plan shall be the sole responsibility of the Township, which may undertake any reasonable measures to provide an adequate inspection of all projects.
- D. The Township may refuse to issue any permit or grant any approval necessary to further improve or develop any real property which has been developed or which has resulted from a subdivision of real property in violation of this Ordinance. The authority to deny such a permit shall apply to any of the following:
 - 1. The owner of record at the time of such violation.
 - 2. The vendee or lessee of the owner of record at the time of such violation with regard as to whether such vendee or lessee has actual or constructive knowledge of the violation.
 - 3. The current owner of record who acquired the property subsequent to the time of violation without regard as to whether such current owner has actual or constructive knowledge of the violation.
 - 4. The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.

SECTION 701. APPLICATION FORMS AND FEES.

- A. The Board of Supervisors shall prescribe and make available to applicants a form upon which all applications for approval of subdivision and land development plans shall be made.
- B. The Board of Supervisors shall establish a schedule of fees and a collection procedure for all applications and other matters pertaining to this Ordinance. No application for preliminary or final approval shall be deemed to have been submitted until the fee and escrow deposit, as set forth below, shall have been paid, the signed Professional Plan Review and Escrow Agreement has been submitted, and the applications are properly signed and filed in the form required by this Ordinance.

- C. A subdivision or land development application fee (non-refundable) and an escrow deposit shall be submitted with any application for preliminary or final plan approval to cover the costs of plan review and processing.
 - 1. The Board of Supervisors shall fix amounts of the application fee and escrow deposit through adoption of a resolution.
 - 2. The escrowed funds shall be used to reimburse the Township for actual expenditures incident to these processes, including but not limited to fees of the Township Engineer, all other professional consultants required for Township review of the plan, and legal fees in excess of the fee for review of the Township's standard froms.
 - 3. Any costs incurred by the Township in excess of the amount held in escrow shall be fully reimbursed by the applicant prior to the issuance of any permits.
 - 4. Any unexpended balance in the escrow deposit shall become part of the second deposit required in Section 701.D, below.
- D. As a condition of final plan approval and recording and following the establishment of any required performance guarantee, a second escrow deposit shall be established to cover the cost of improvements, inspections of improvements construction, materials or site testing, and maintenance costs (e.g., snow removal), prior to acceptance of improvements by the Township.
 - 1. Any costs incurred by the Township in excess of the amount held in escrow shall be fully reimbursed by the applicant.
 - 2. Any unexpended balance in the escrow deposit following acceptance of dedication of improvements by the Township shall be returned to the applicant.
 - 3. The amount of the escrow deposit shall be fixed by resolution of the Board of Supervisors.

SECTION 702. SANCTIONS, PENALTIES, AND RESTRICTIONS.

- A. No lot in a subdivision may be sold, no permit to erect, alter, or repair any building upon land in a subdivision, or land development, may be issued, and no buildings may be erected in a subdivision or land development, unless and until a subdivision or land development plan has been approved, and where required, recorded, and until the improvements required by the Board of Supervisors in connection therewith have either been constructed or guaranteed as hereinbefore provided.
- B. 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.

SECTION 703. RELIEF FROM UNDUE HARDSHIP.

- A. The Board of Supervisors, solely at its discretion, may grant a modification of the requirements of one (1) or more provisions of this Ordinance if the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question or if an alternative standard can be demonstrated to provide equal or better results, provided that such modification will not be contrary to the public interest and that the purpose and intent of the this Ordinance is observed.
- B. In granting a modification, the Board of Supervisors may impose such conditions as will, in its judgment, secure substantially the objectives of the standards or requirements so modified.
- C. Any request for a modification shall be in writing and shall accompany the subdivision or land development application. A modification may, when authorized by the Board of Supervisors, be requested after the application has been submitted. The request shall describe the modification desired, state the rationale for approving the modification, and describe why the Ordinance provisions are unreasonable and present undue hardship.
- D. The Board of Supervisors shall refer the request to the Township Planning Commission for review and recommendation.
- E. The Township shall keep a written record of all actions on all requests for modifications.

SECTION 704. REVISION AND AMENDMENT.

- A. **Power to Amend**. The regulations set forth in this Ordinance may, from time to time, be reviewed, amended, or modified by the Board of Supervisors in accordance with Act 247.
- B. **Procedure**. The following procedure shall be observed prior to making any amendment to this Ordinance.
 - 1. Except for an amendment proposed by the Township Planning Commission, the Board of Supervisors shall submit any proposed amendment to the Planning Commission for their review and recommendation at least thirty (30) days prior to the date fixed for the public hearing on such proposed amendment. The recommendations of the Planning Commission shall be submitted to the Board of Supervisors in a written report.
 - 2. At least thirty (30) days prior to the hearing on the proposed amendment, the Board of Supervisors shall submit any proposed amendment to the Chester County Planning Commission for review and recommendation. The Board of Supervisors shall take no action to approve or deny any proposed amendment until thirty (30) days have been allowed for the receipt of such report.
 - 3. Notice of the date, time, and place of the public hearing on the proposed amendment, and the content of such notice, shall be in accordance with Section 506 of Act 247.
 - 4. In the event substantial amendments are made in the proposed ordinance or amendment, before voting on enactment, the Board of Supervisors, at least ten (10) days prior to enactment, shall re-advertise a brief summary setting forth all the provisions in

- reasonable detail together with a summary of the amendments.
- 5. Within thirty (30) days following adoption, the Township shall forward a certified copy of any amendments to this Ordinance to the Chester County Planning Commission.

SECTION 705. VIOLATIONS AND PENALTIES.

- A. Any person, partnership or corporation who or which has violated any provision of this Ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Township, shall pay a fine not exceeding five hundred (\$500) per lot or parcel or per dwelling unit or other unit of use within each lot or parcel, plus all costs and reasonable attorney fees incurred by 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.
- B. No judgment shall commence or be imposed, levied, or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the Township may enforce the judgment pursuant to the applicable rules of civil procedure.
- C. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership or corporation violating the ordinance to have believed that there was no such violation, in which event there shall have deemed to have been only one such violation until the fifth (5th) day following the date of determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.
- D. The court of common pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgment pending a final adjudication of the violation and judgment.
- E. Nothing in this section shall be construed or interpreted to grant to any person or entity other than the Township the right to commence any action for enforcement pursuant to this section.
- F. The Township may bring any action in law or in equity to enforce the provisions of this Ordinance, and is authorized to undertake any of the preventive remedies set forth in Section 515.1 of Act 247.

SECTION 706. APPEALS.

Appeals from the actions of the Board of Supervisors with respect to any application for subdivision or land development approval shall be governed by the provisions of Article X-A of Act 247.

APPENDIX A FORMS AND CHECKLISTS

This Appendix includes original copies of forms and checklists as referenced in the Elk Township Subdivision and Land Development Ordinance, including:

- Preliminary Plan Information Checklist (4 pages).
- Final Plan Information Checklist (4 pages).
- Homeowners Association Annual Report Format Minimum Requirements (2 pages)

The Materials listed above are included for the convenience of an applicant submitting a plan for subdivision or land development.

Elk Township Preliminary Plan Checklist Minimum Application Requirements

The following checklist contains the minimum information required for a preliminary plan. Section 401 should be consulted for detailed descriptions of the required information.

Drafting	Standards (Section 401.A.)
	Drawn at a scale of fifty (50) feet to the inch. Sheets no larger than thirty-six (36) by forty-eight (48) inches. Key map for plans requiring more than one (1) sheet. Dimensions in feet, degrees, minutes, and seconds. Sheets numbered, showing relationship to total number. For re-submissions, plan revisions clearly numbered and dated.
	Legend indicating existing and proposed features.
	Boundary indicated as a solid heavy line.
	Plan or survey prepared by a registered engineer, surveyor, or landscape architect.
Basic In	formation (Section 401.B.)
	Name of the proposed subdivision or land development and the township(s) in which it is located.
	Name, address, telephone number, and email address of applicant and landowner of the tract.
	Name, seal, address, telephone number, and email address of engineer, surveyor, or landscape architect responsible for the plan.
	North arrow.
	Scale of plan, both written and graphic.
	Original date of preparation and any subsequent revision dates.
_	Location map at a scale of not less than 800 feet to the inch.
	Tract boundaries with tax parcel number(s) and approximate acreage.
	Names of owners of properties adjacent to the tract.
	Existing township zoning regulations applicable to the tract.
	Proposed method of water supply and sewage disposal, as a note on the plan.
_	Table of minimum isolation distances if on-site sewage disposal is proposed.
<u></u>	Note on plan indicating any nonconformity with Township ordinances and reason for requesting such nonconformity.
	An approval block for signatures.
	Statement identifying the plan as "preliminary."

Existing	Features Plan (Section 401.C.)
	Complete perimeter boundary survey showing courses, distances, area, and tie-ins to adjacent intersections.
Natu	ral Features (Section 401.C.2.)
	Contour lines at intervals of not more than two (2) feet for land with average natural slope of twenty-five (25) percent or less, and at intervals of not more than five (5) feet for land with average natural slope exceeding twenty-five (25) percent.
	Areas within the Floodplain Conservation Overlay District.
	Watercourses, lakes, ponds, and other water features.
	Wetlands and wetlands margins.
	Soil types and their boundaries (including Alluvial and hydric soils)
	Existing vegetation included woodlands, free masses, tree line, and hedgerows, wetlands vegetation, pasture or croplands and orchard.
	Any Pennsylvania Natural Diversity Inventory (PNDI) sites on the tract.
	Any other information required by the Elk Township Zoning Ordinance.
Man	-made Features (Section 401.C.3.)
	Location, dimensions, and use of existing buildings and driveways.
	Location, names, widths, centerline courses, paving widths, identification numbers, and rights-of-way, of existing streets and alleys.
	Location and size of existing sanitary sewer and storm drains, and water supply facilities.
	Location, size, and ownership of existing easements, deed restrictions, rights-of-way, or any other encumbrances upon the land.
	Site features or conditions such as hazardous waste, dumps, underground tanks, active and abandoned wells, quarries, landfills, and artificial land conditions.
	Cultural or historical resources as identified in the Elk Township OSRERP.
	Any features designated on the Elk Township Official Map and Ordinance.
Site Des	ign and Layout Plan (Section 401.D.)
	Area of each proposed lot, including gross lot area and net lot area.
	Building envelope showing setback lines and yard area requirements.
	The location of all percolation tests and test pits observed by the Chester County Department of Health, including both primary and replacement sewage absorption areas.
	Location of proposed water supply.
	Location and Width of all private driveways.
	Location, width, and name of all proposed streets.
	Clear sight triangles at all proposed intersections.
	Parcels of land to be dedicated or reserved for non-residential use.

Site Design and Layout Plan (continued)			
Location of parks, playgrounds, and other areas or buildings dedicated or reserved for public use.			
Proposed building locations, location and size of parking lot, provisions for access and traffic control, locations of loading docks and provisions for landscaping and lighting of site.			
Any required information applicable for proposed cluster or multi-family development (Section 401.D.7.).			
Location of easements or rights-of-way necessary for any purpose, including but not limited to utilities, drainage, and grading.			
If land to be subdivided or developed lies partly in another municipality, the applicant shall submit information concerning the location and design of streets, layout and size of lots and provision of public utilities on lands subject to his control within the adjoining municipalities.			
Construction Improvements Plan (Section 401.E.)			
☐ A statement describing proposed public improvements.			
☐ A timetable for the proposed sequence of development.			
☐ Water supply and sewage facility planning modules. (See Section 401.E.3.)			
☐ Where applicable, the final location of wells and all sewage systems, both primary and replacement.			
Natural Resource Protection Plan (Section 401.F.)			
☐ An encroachment map (See Section 401.F.1.).			
☐ Location of any tree protection zone(s)			
☐ Stormwater Management Plan (Section 401.G.)			
☐ Soil Erosion and Sediment Control Plan (Section 401.H.)			
☐ Landscaping (Section 401.I.)			
Profile Plan for Streets (Section 401.J.)			
☐ The horizontal and vertical scale shall be consistent with Section 401.J.1.).			
☐ Centerline with bearings, distances, curve data, and stations corresponding to the profile. ☐ Right-of-way and curb lines with radii at intersections.			

	ian for Streets (continueu)
	Tie-ins by courses and distances to intersection of all public roads, with their names and widths.
	Location of all monuments and other boundary markers by bearing and distances.
	Location and size of all drainage facilities, sidewalks, public utilities, fire hydrants, lighting standards, and street name signs.
	Typical street cross-section indicating typical cross slopes.
	Existing and proposed grades.
	Road elevations every fifty (50) feet, with the exception of vertical curves when road elevations shall be shown every twenty-five (25) feet.
Profile P	lan for Stormwater Management and Sanitary Sewer Facilities (Section 401.K.)
_	lan for Stormwater Management and Sanitary Sewer Facilities (Section 401.K.) Location and size of line with stations corresponding to the profile.
	Location and size of line with stations corresponding to the profile. Location of manholes or inlets with grade between and elevation of flow line and top of each
	Location and size of line with stations corresponding to the profile. Location of manholes or inlets with grade between and elevation of flow line and top of each manhole or inlet.
	Location and size of line with stations corresponding to the profile. Location of manholes or inlets with grade between and elevation of flow line and top of each manhole or inlet. Location of laterals. Location of other drainage facilities and public utilities in the vicinity of storm and/or sanitary

A plan shall be submitted showing the proposed division of property including easements for access to all parcels not fronting on public roads. (See Section 401.L.)

Elk Township Final Plan Checklist Minimum Application Requirements

The following checklist contains the minimum information required for a final plan. Section 402 should be consulted for detailed descriptions of the required information.

Drafting	Standards (Section 402.A.)
	Drawn at a scale of fifty (50) feet to the inch.
	Sheets no larger than thirty-six (36) by forty-eight (48) inches.
	Key map for plans requiring more than one (1) sheet.
	Dimensions in feet, degrees, minutes, and seconds.
	Sheets numbered, showing relationship to total number.
	For re-submissions, plan revisions clearly numbered and dated.
	Legend indicating existing and proposed features.
	Boundary indicated as a solid heavy line.
	Plan or survey prepared by a registered engineer, surveyor, or landscape architect.
	Plans submitted for final plan review shall be clear and legible black or blue on white prints.
Basic In	formation (Section 402.B.)
	Name of the proposed subdivision or land development and the township(s) in which it is located.
	Name, address, telephone number, and email address of applicant and landowner of the tract.
	Name, seal, address, telephone number, and email address of engineer, surveyor, or landscape architect responsible for the plan.
	North arrow.
	Scale of plan, both written and graphic.
	Original date of preparation and any subsequent revision dates.
	Location map at a scale of not less than 800 feet to the inch.
	Tract boundaries with tax parcel number(s) and approximate acreage.
	Names of owners of properties adjacent to the tract.
	Existing township zoning regulations applicable to the tract.
	Proposed method of water supply and sewage disposal, as a note on the plan.
	Table of minimum isolation distances if on-site sewage disposal is proposed.
	Note on plan indicating any nonconformity with Township ordinances and reason for requesting such nonconformity.
	An approval block for signatures.
	Statement identifying the plan as "final."

Existing	Features Plan (Section 402.C.)
	Complete perimeter boundary survey showing courses, distances, area, and tie-ins to adjacent intersections.
Natu	ral Features
	Contour lines at intervals of not more than two (2) feet for land with average natural slope of twenty-five (25) percent or less, and at intervals of not more than five (5) feet for land with average natural slope exceeding twenty-five (25) percent.
	Areas within the Floodplain Conservation Overlay District.
	Watercourses, lakes, ponds, and other water features.
	Wetlands and wetlands margins.
	Soil types and their boundaries (including Alluvial and hydric soils)
	Existing vegetation included woodlands, tree masses, tree line, and hedgerows, wetlands vegetation, pasture or croplands and orchard.
	Any Pennsylvania Natural Diversity Inventory (PNDI) sites on the tract.
	Any other information required by the Elk Township Zoning Ordinance.
Man	-made Features
	Location, dimensions, and use of existing buildings and driveways.
	Location, names, widths, centerline courses, paving widths, identification numbers, and rights-of-way, of existing streets and alleys.
	Location and size of existing sanitary sewer and storm drains, and water supply facilities.
	Location, size, and ownership of existing easements, deed restrictions, rights-of-way, or any other encumbrances upon the land.
	Site features or conditions such as hazardous waste, dumps, underground tanks, active and abandoned wells, quarries, landfills, and artificial land conditions.
	Cultural or historical resources as identified in the Elk Township OSRERP.
	Any features designated on the Elk Township Official Map and Ordinance.
Site Des	ign and Layout (Section 402.D.)
	Area of each proposed lot, including gross lot area and net lot area.
	Building envelope showing setback lines and yard area requirements.
	The location of all percolation tests and test pits observed by the Chester County Department of Health, including both primary and replacement sewage absorption areas.
	Location of proposed water supply.
	Location and Width of all private driveways.
	Location, width, and name of all proposed streets.
	Clear sight triangles at all proposed intersections.
	Parcels of land to be dedicated or reserved for non-residential use.

Site Design and Layout Plan (continued)			
Location of parks, playgrounds, and other areas or buildings dedicated or reserved for public use.			
Proposed building locations, location and size of parking lot, provisions for access and traffic control, locations of loading docks and provisions for landscaping and lighting of site.			
Any required information applicable for proposed cluster or multi-family development (Section 401.D.7.).			
Location of easements or rights-of-way necessary for any purpose, including but not limited to utilities, drainage, and grading.			
If land to be subdivided or developed lies partly in another municipality, the applicant shall submit information concerning the location and design of streets, layout and size of lots and provision of public utilities on lands subject to his control within the adjoining municipalities.			
Sufficient data to determine the locations, bearing, and length of those facilities listed in Section 402.D.2.			
☐ Where applicable, the house locations, driveway locations, and names of all streets.			
The plan for lots within a subdivision shall show the 911 house numbers as assigned by the Township Secretary.			
The location of all existing and proposed permanent reference monuments and the locations of lot corner markers.			
Lots and blocks within a subdivision numbered in a logical sequence.			
☐ The building setback line for each proposed street per Act 60, latest revision.			
☐ Street names.			
Construction Improvements Plan (Section 402.E.)			
A statement describing proposed public improvements.			
A timetable for the proposed sequence of development.			
☐ Water supply and sewage facility planning modules. (See Section 401.E.3.)			
Where applicable, the final location of wells and all sewage systems, both primary and replacement.			
☐ Information pertaining to water and sewer service in accordance with Sections 402.E.1-4.			
☐ Information pertaining to locations of facilities in accordance with Section 402.E.5.			
☐ A timetable for the proposed sequence of development.			
☐ Natural Resource Protection Plan (See Section 402.F.)			
☐ Stormwater Management Plan (See Section 402.G.)			
☐ Soil Erosion and Sediment Control Plan (See Section 402.H.)			

☐ Landscaping Plan (See Section 402.I.)
☐ Profile Plan (Section 402.J)
☐ The vertical section of the existing and proposed grade along the centerline of proposed streets. ☐ The horizontal scale of the profile plan shall be in accordance with Section 402.J.2.
A typical cross section of street construction indicating the following:
 ☐ Right-of-way width and the location and width of paving within the right-of-way. ☐ Type, thickness, and crown of paving. ☐ The location, width, type, and thickness of curbs and sidewalks to be installed, if any. ☐ Grading of sidewalk area. ☐ Typical location, size, and depth of any underground utilities that are to be installed in the right-of-way where such information is available Grading of sidewalk area. ☐ If required, a plan for location and type of street lights to be installed, together with the necessary contract for street light installation for approval by the Township. ☐ Certification by the engineer, land surveyor or landscape architect who prepared the plan that the plans are in conformity. ☐ Typical cross slope and Existing and proposed grades. ☐ Road elevations every fifty (50) feet, with the exception of vertical curves when road elevations shall be shown every twenty-five (25) feet.
Detail sheet(s) providing sufficient details and notes to define the construction methods and materials of proposed improvements. Details shall include but not be limited to:
 A cross-section of each utility trench, showing proposed bedding and backfill material as well as the required compaction methods. Erosion and sediment control methods and materials and Stormwater management facilities.
Open Space Management Plan (Section 402.K.)
 □ The manner in which the designated open space and any facilities included therein will be owned and by whom it will be managed and maintained. □ The conservation, land management, and agricultural techniques and practices which will be used to conserve and perpetually protect the designated open space. □ The professional and personnel resources that will be necessary in order to maintain and manage the property. □ The nature of public and private access that is planned for the designated open space. □ The source of money that will be available for such management, preservation, and maintenance on a perpetual basis.
☐ Approvals, Certificates, Documents, and Disclosures (See Section 402.L.).
☐ Other Requirements (See Section 402.M.).

Elk Township Homeowners' Association Annual Report Minimum Requirements

The following checklist contains the minimum information required for a Homeowners' Association Annual Report as required by Section 402.M.of this Ordinance.

Basic In	formation
	The name and location of the subdivision and/or land development.
	The title and date of recording of all documents reviewed.
	The name and type of association or similar entity charged with the responsibilities of discharging all conditions contained in the approval of any subdivision and/or land development.
	The names, addresses, and contact information for all persons elected, appointed, and/or reserved to operate the association or similar entity, together with the identification of title and obligations for each.
	The frequency and location of meetings of the association or similar entity required for the maintenance and ownership of common property, open space, and improvements, as well as the method(s) of notification of all such meetings to the residents of the associated subdivision and/or land development.
Financia	ıl
	The location of any financial institution responsible for the accounts of the association or similar entity, together with the then current balance of each.
	The identification of all common expenses and/or capital obligations, together with a determination of the annual costs for maintenance and/or replacement, as compared to the availability of funds for these purposes.
	The procedure(s) the owner, seller, association or similar entity utilizes to assure proper notification of all existing and prospective members for the common financial obligations, and/or measures included to assure the collection of these obligations.
Mainten	ance
	A plan for the maintenance, repair, and/or replacement of all expenses and/or expenditures of obligations and/or assets in the subdivision and/or land development.
	A review of the annual assessment for each member of the association or similar entity responsible for the discharge of all conditions and/or obligations as approved as part of the subdivision and/or land development. In the event this review determines a deficiency exists, the Township shall include a recommendation for adjustment.
Inspecti	on and Condition/Status of Facilities
	A statement of condition of all roads, to the extent a responsibility of that community, signs, shrubbery, landscaping, and/or open spaces, and a recommendation for the improvement of any of these assets and/or responsibilities.
	The status of all easements included in the approval of any subdivision and/or land development plan.

L	The date for all inspection for all on-site septic systems and pumping of all on-site sewage systems. The status and/or use of any lands reserved for use by the Township as part of future expansion for the Township's wastewater facilities plan in any open space.
	In the event any portion of the stormwater collection, detention, retention, and/or infiltration is identified as an obligation of the controlling association or similar entity and/or landowners, a review of the condition and functionality of every aspect of these systems. The Township shall include recommendations for repair, replacement, and/or improvement.
	The condition of all sidewalks, paths, and trails (private or public) located in the subdivision and/or land development.
	The status and condition of all historic structures.
	The status and condition of all open space, and a determination of compliance with the terms and obligations of the open space provisions of the Zoning Ordinance and Open Space Management Plan.
Complia	nnce
	A statement of compliance with the Open Space Management Plan included in the submission with the subdivision and land development plan.

APPENDIX B APPROVED PLANT LISTS

SECTION B-1. SUGGESTED SEEDING MIXES FOR WET MEADOW, DAMP FLOOR DETENTION BASINS AND RIPARIAN SITES.

A. FACW WETLAND MEADOW MIX: ERNMX-122 BY ERNST CONSERVATION SEED COMPANY OR APPROVED EQUAL

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE
Elymus virginicus	Virginia Wild Rye	20%
Carex vulpinoidea	Fox Sedge	19%
Heliopsis helianthoides	Ox Eye Sunflower	5%
Scirpus atrovirens	Green Bulrush	5%
Verbena hastata	Blue Vervain	5%
Eupatorium perfoliatum	Boneset	5%
Euthamia graminifolia	Grass Leaved Goldenrod	5%
Juncus effusus	Soft Rush	5%
Carex lupulina	Hop Sedge	3%
Eupatorium maculatum	Spotted Joe Pye Weed	3%
Scirpus polyphyllus	Many Leaved Bulrush	3%
Carex comosa	Cosmos Sedge	2%
Scirpus cyperinus	Wool Grass	2%
Carex lurida	Lurid Sedge	2%
Bromus altissima	Wild Brome Grass	2%
Glyceria grandis	American Mannagrass	2%
Eupatorium fistulosum	Joe Pye Weed	1.5%
Vernonia noveboracensis	New York Ironweed	1%
Geum laciniatum	Rough Avens	1%
Penthorum sedoides	Ditch Stonecrop	1%
Zizia aurea	Golden Alexanders	1%
Ludwigia alternifolia	Seedbox	1%
Helenium autumnale	Common Sneezeweed	1%
Carex scoparia	Blunt Broom Sedge	1%
Aster umbellatus	Flat Topped/Umbrella Aster	1%
Cinna arundinacea	Wood Reedgrass	1%
Mimulus ringens	Square Stemmed Monkey Flower	0.5%
Senecio aureus	Golden Ragwort	0.5%
Geum aleppicum	Yellow Avens	0.5%
SEED AT 15 BULK POUNDS	S PER ACRE	

B. RETENTION BASIN FLOOR SEEDING FOR WILDLIFE & PLANT DIVERSITY MIX: ERNMX-127 BY ERNST CONSERVATION SEED COMPANY OR APPROVED EQUAL

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE
Agrostis stolonifera	Creeping Bentgrass	20%
Alopecurus arundinaceus	Creeping Foxtail	25%
Elymus virginicus	Virginia Wild Rye	25%
Festuca rubra	Creeping Red Fescue	5%
Agrostis scabra	Ticklegrass	5%
Bidens cernua	Nodding Bur Marigold	4%
Sparganium eurycarpum	Giant Bur Reed	3%
Scirpus atrovirens	Green Bulrush	3%
Scirpus polyphyllus	Many Leaved Bulrush	3%
Verbena hastata	Blue Vervain	3%
Scirpus cyperinus	Wool Grass	2%
Mimulus ringens	Square Stemmed Monkey Flower	1%
Solidago patula	Rough Leaved Goldenrod	1%
SEED AT 20 BULK POUNDS PER ACRE		

C. WILDLIFE FOOD & SHELTER SHRUB MIX: ERNMX-138 BY ERNST CONSERVATION SEED COMPANY OR APPROVED EQUAL

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE	
Cornus amomum	Silky Dogwood	21%	
Cornus racemosa	Grey Dogwood	21%	
Elymus riparius	Riverbank Wild Rye	10%	
Ilex verticillata	Winterberry	10%	
Carex vulpinoidea	Fox Sedge	9%	
Sambucus canadensis	Elderberry	7%	
Aralia spinosa	Hercules' Club/Devil's Walking Stick	5%	
Carex lupulina	Hop Sedge	5%	
Carex comosa	Cosmos Sedge	3%	
Spiraea tomentosa	Steeple Bush	3%	
Carex lurida	Lurid Sedge	2%	
Carex stipata	Awl Sedge	2%	
Carex crinita	Fringed Sedge	1%	
Rosa palustris	Swamp Rose	1%	
SEED AT 15 BULK POUNDS PER ACRE			

SECTION B-2. SUGGESTED SEEDING MIXES FOR DRY MEADOW AND DRY DETENTION BASIN SITES.

A. NATIVE UPLAND WILDLIFE FORAGE & COVER MEADOW MIX: ERNMX-123 BY ERNST CONSERVATION SEED COMPANY OR APPROVED EQUAL

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE
Tripsacum dactyloides	Eastern Gamma Grass	20%
Elymus canadensis	Canada Wild Rye	12%
Andropogon gerardii	Rountree Big Bluestem	10%
Andropogon scoparius	Little Bluestem, Camper	10%
Chamaecrista fasciculata	Partridge Pea	10%
Panicum virgatum	Switch Grass, Shelter	10%
Sorghastrum nutans	Indian Grass, Holt	10%
Coreopsis tinctoria	Plains Coreopsis	8%
Muhlenbergia schreberi	Nimble-will	5%
Poa palustris	Fowl Bluegrass	5%
SEED AT 15 BULK POUNDS PER ACRE		

B. SHOWY NORTHEAST NATIVE WILDFLOWER MIX: ERNMX-153 BY ERNST CONSERVATION SEED COMPANY OR APPROVED EQUAL

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE
Andropogon scoparius, Camper	Camper Little Bluestem	15%
Bouteloua curtipendula, Butte	Butte Side Oats Grama	10%
Elymus villosus	Silky Wild Rye	10%
Sorghastrum nutans, Tomahawk	Tomahawk Indian Grass	10%
Chamaecrista fasciculata	Partridge Pea	8%
Andropogon gerardii, Niagara	Niagara Big Bluestem	5%
Heliopsis helianthoides	Ox Eye Sunflower	5%
Rudbeckia hirta	Black Eyed Susan	5%
Senna hebecarpa	Wild Senna	4%
Zizia aurea	Golden Alexanders	3.5%
Liatris spicata	Marsh Blazing Star (Spiked Gayfeather)	3%
Penstemon digitalis	Tall White Beard Tongue	3%
Asclepias syriaca	Common Milkweed	2%
Penstemon laevigatus. PA ecotype	Appalachian Beard Tongue, PA ecotype	2%
Rudbeckia fulgida var fulgida	Orange Coneflower	2%
Silphium trifoloatum	Whorled Rosinweed	2%
Aster novae-angliae	Brown-eyed Susan	1.5%
Monarda fistulosa	Wild Bergamot	1.5%
Solidago juncea	Early Goldenrod	1.5%
Baptisia australis, WV ecotype	Blue False Indigo, WV ecotype	1%
Lupinius perennis	Wild Blue Lupine	1%

Rudbeckia triloba	Brown Eyed Susan	1%
Tradescantia ohioensis	Ohio Spiderwort	1%
Asclepias tuberosa	Butterfly Milkweed	.5%
Aster laevis	Silky Smooth Aster	.5%
Lespedeza capitata	Roundhead Lespedeza	.5%
Solidago nemoralis	Grey Goldenrod	.5%
CEED AT 15 BUILT DOUNDS	DED ACDE	

C. SHOWY NORTHEAST NATIVE WILDFLOWER MIX WITHOUT GRASSES - ERMMX-153 BY ERNST CONSERVATION SEED COMPANY OR APPROVED EQUAL

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE	
Chamaecrista fasciculate	Partridge Pea	16%	
Heliopsis helianthoides	Ox Eye Sunflower	10%	
Rudbeckia hirta	Black Eyed Susan	10%	
Senna hebecarpa	Wild Senna	8%	
Zizia aurea	Golden Alexanders	7%	
Liatris spicata	Marsh Blazing Star (Spiked Gayfeather)	6%	
Penstemon digitalis	Tall White Beard Tongue	6%	
Asclepias syriaca	Common Milkweed	4%	
Penstemon laevigatus. PA ecotype	Appalachian Beard Tongue, PA ecotype	4%	
Rudbeckia fulgida var fulgida	Orange Coneflower	4%	
Silphium trifoloatum	Whorled Rosinweed	4%	
Aster novae-angliae	Brown-eyed Susan	3%	
Monarda fistulosa	Wild Bergamot	3%	
Solidago juncea	Early Goldenrod	3%	
Baptisia australis, WV ecotype	Blue False Indigo, WV ecotype	2%	
Lupinius perennis	Wild Blue Lupine	2%	
Rudbeckia triloba	Brown Eyed Susan	2%	
Tradescantia ohioensis	Ohio Spiderwort	2%	
Asclepias tuberosa	Butterfly Milkweed	1%	
Astyer laevis	Silky Smooth Aster	1%	
Lespedeza capitata	Roundhead Lespedeza	1%	
Solidago nemoralis	Grey Goldenrod	1%	
SEED AT 15 POUNDS PER ACRE or 1/3 to 1/2 lb per 1000 sq feet			

D. NORTHEAST PERENNIAL & ANNUAL WILDFLOWER MIX - ERNMX-168 BY ERNST CONSERVATION SEED COMPANY OR APPROVED EQUAL

SCIENTIFIC NAME	COMMON NAME	PERCENTAGE
Centaurea cyanus	Cornflower/Bachelor's Button	12%
Gypsophila elegans	Annual Baby's Breath	11%
Lupinus perennis	Wild Blue Lupine	10%
Coreopsis lanceolata	Lance Leaved Coreopsis	7%

Delphinium ajacis	Rocket Larkspur	7%
Hesperis matronalis	Dame's Rocket	7%
Cheiranthus allionii	Siberian Wallflower	6%
Chrysanthemum maximum	Shasta Daisy	5%
Oenothera biennis	Biannual Evening Primrose	5%
Cosmos bipinnatus	Cosmos	3%
Cosmos sulphureus	Sulphur Cosmos	3%
Daucus carota	Queen Anne's Lace	2%
Echinacea purpurea	Purple Coneflower	2%
Gaillardia aristata	Blanket Flower	2%
Gaillardia pulchella	Annual Gaillardia/Indian Blanket	2%
Liatris spicata	Spiked Gayfeather	2%
Linaria maroccana	Spurred-Northern lights Snapdragon	2%
Linum grandiflorum rubrum	Scarlet Flax	2%
Linum perenne lewisii	Lewis Perennial Blue Flax	2%
Papaver rhoeas, Shirley Mix	Shirley Mix/Corn Poppy	2%
Phlox drummondii	Annual Phlox	2%
Rudbeckia hirta	Black Eyed Susan	2%
Silene armeria	Catchfly	2%
SEED AT 15 POUNDS PER A	CRF or 1/3 to 1/2 lb ner 1000 sa feet	

SECTION B-3. RIPARIAN BUFFER PLANTS.

Riparian Buffer Deciduous Trees and Shrubs. Required tree and shrub plantings shall be A. selected from the following list or a species hardy to the area, attractive to wildlife species (mast production), and appropriate to the use. Trees marked with a (+) before their botanical name are native species and the use of these trees is encouraged.

SCIENTIFIC NAME

Acer rubrum Alnus rugosa Amelanchier laevis Betula lutea

> Betula nigra Carya cordiformis Carya glabra Carya ovata

Cornus alternifolia Cornus amomum

Cornus florida Cornus stolinifera Fagus grandifolia Juglans nigra Prunus avium

Prunus pennsylvanica Prunus serotina Prunus virginiana Rhus glabra Rhus typhina

Quercus alba Quercus bicolor

Quercus muehlenburgii Ouercus palustris

Quercus prinus Quercus rubra Ouercus velutina

Ulmus Americana

COMMON NAME

Red Maple Speckled Alder

Alleghany Serviceberry

Yellow Birch Black Birch Bitternut Hickory Pignut Hickory Shagbark Hickory

Alternate-Leaved Dogwood

Silky Dogwood Florida Dogwood Redosier Dogwood American Beech Black Walnut Sweet Cherry Pin Cherry Black Cherry Choke Cherry Smooth Sumac

Staghorn Sumac White Oak

Swamp White Oak Chinquapin Oak

Pin Oak Chestnut Oak Northern Red Oak Black Oak

American Elm

В. Riparian Forest Buffer Evergreen (Conifers) Trees and Shrubs. Required canopy tree plantings shall be selected from the following list or a species hardy to the area and appropriate to the use. Trees and shrubs marked with a (+) before their botanical name are native species and the use of these trees is encouraged.

SCIENTIFIC NAME

Pinus strobus Pinus rigida

Juniperous virginiana Pinus Sylvestris

COMMON NAME

Eastern White Pine

Pitch Pine

Eastern Red Cedar

Scotch Pine

C. Riparian Forest Buffer Forbs and Grasses (Warm Season). Required canopy tree plantings shall be selected from the following list or a species hardy to the area and appropriate to the use.

SCIENTIFIC NAME

Aster novea angliae
Bernonia noveboracensis
Cassia fasciculata
Coreopsis lanceolata
Echinacea purpurea
Heliopsis helianthoides
Rudbeckia hirta
Verbena hastata
Andropogon gerardii

Schizachyrium scoparius or Andropogon scoparius

Sorghastrum nutans Tripsacum dactyloides

Panicum virgatum

COMMON NAME

New England Aster New York Ironweed

Partridge Pea

Lanceleaf Coreopsis Purple Cone Flower Ox-eye Sunflower Blackeyed Susan Blue Vervain Big Bluestem Switchgrass

Little Bluestem Indiangrass

Eastern gamagrass