

East Hanover Township

Subdivision

And

Land Development Ordinance



East Hanover Township

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

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CHAPTER 1 - PURPOSE AND AUTHORITY

An ordinance providing for the control of the subdivision and development of land and the approval of plats and re-plats of land within the jurisdiction of the East Hanover Township, Board Of Supervisors, as a part of the master plan for East Hanover Township, Lebanon County, Pennsylvania

Now, therefore, be it ordained by the East Hanover Township Supervisors, Pennsylvania, under authority of Article V and VII of the "Pennsylvania Municipalities Planning Code", of the Act of the 1968 General Assembly No. 247; as amended, and the Act of October 4, 1978 (Act 167), the "Storm Water Management Act".

SECTION 1.01 TITLE

These regulations, rules, and standards for planning, subdividing, and developing land within the East Hanover Township, Pennsylvania, including procedures for the application and administration, and penalties for the violation thereof, shall be known, cited, and referred to as the **SUBDIVISION AND LAND DEVELOPMENT ORDINANCE** for the East Hanover Township.

SECTION 1.02 PURPOSE

The general purpose of this ordinance shall be to guide and regulate the planning, subdividing, and development of land in order to promote and protect the public health, safety, convenience, comfort, prosperity, and general welfare of the residents and municipalities in the County of Lebanon. **This Ordinance shall be used in conjunction with the East Hanover Township Stormwater Management Ordinance.** The East Hanover Township Stormwater Ordinance, recognizing the problems associated with inadequate management of accelerated storm water runoff from uncontrolled development, intends to provide a comprehensive program of storm water management , including reasonable regulation of development and activities causing accelerated erosion which is deemed fundamental to the public health, safety, welfare, and the protection of the people of the East Hanover Township, as well as their resources and environment.

SECTION 1.03 OBJECTIVES

It is intended that the provisions of these regulations shall be applied to achieve the following objectives:

- A. Orderly development of the land to obtain harmonious and stable neighborhoods; and
- B. Safe and convenient vehicular and pedestrian circulation; and
- C. Adequate and economical provisions for utilities and public services to conserve the public funds; and
- D. Ample public open space for schools, recreational and other public purposes; and
- E. Accurate surveying of land, preparing and recording of plats; and
- F. Discouragement of premature, uneconomical, or scattered subdivision; and
- G. Maximize conservation of all forms of energy; and
- H. Maintain existing flows and quality of streams and watercourses in the municipality, county and the Commonwealth; and

- I. Preserve and restore the flood-carrying capacity of streams; and
- J. Coordination of land development in accordance with the Zoning Code, Long Range Transportation Plan, Comprehensive Plan, East Hanover Township Stormwater Ordinance, Watershed Plans, and other plans of the Municipality and County.

SECTION 1.04 APPLICATION OF REGULATIONS

No subdivision or land development of any lot, tract or parcel of land located within East Hanover Township shall be affected; no street, sanitary sewer, storm sewer, water main, storm water control facilities, or other facilities in connection therewith shall be laid out, constructed, opened, or dedicated for travel or public use, until a subdivision or land development plan has been approved in the manner prescribed herein, and recorded. Furthermore, no property shall be developed, no building shall be erected, and no site improvements shall be completed except in strict accordance with the provisions of this Ordinance.

No lot in a subdivision may be sold or transferred; no permit to erect or alter 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 any required final subdivision or land development plat has been approved and recorded, and until construction of any required site improvements in connection therewith has been completed or guaranteed in the manner prescribed herein.

Approvals issued pursuant to this Ordinance do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by other agencies or levels of government.

SECTION 1.05 JURISDICTION

Applications for subdivision and land development located within East Hanover Township shall be forwarded, upon receipt by East Hanover Township, to the County Planning Department for review and report, together with a fee as established elsewhere herein. Furthermore, East Hanover Township shall not approve such applications until the county report is received or until the expiration of thirty (30) days from the date the application was forwarded to the County.

CHAPTER 2-DEFINITIONS

SECTION.01 GENERAL TERMS

Unless otherwise expressly stated, the following words shall, for the purpose of this Ordinance, have the meaning herein indicated.

Words in the singular include the plural and those in the plural include the singular. Words in the present tense include the future tense.

The word "shall" is always mandatory; the word "may" is permissive; and the word "should" means a suggested or preferred action.

The words "person" or "subdivider" and "developer" or "owner" include a firm, association, organization, partnership, trust, company, or corporation as well as an individual.

The word "includes" or "including" shall not limit the term to the specific example, but is intended to extend its meaning to all other instances of like kind and character.

The words "used or occupied" include the words "intended, designed, maintained, or arranged to be used, occupied, or maintained".

SECTION 2.02 SPECIFIC TERMS

Unless otherwise expressly stated, the following words shall, for the purpose of this Ordinance, have the meaning herein indicated. Undefined terms or words used herein shall have their ordinarily accepted meanings or such meanings as the context of this Ordinance may imply.

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

AGRICULTURAL ACTIVITIES – the work of producing crops and raising livestock including tillage, plowing, disking, harrowing, pasturing and installation of conservation measures. Construction of new buildings or impervious area is not considered an agricultural activity.

ALTERATION – as applied to land, a change in topography as a result of the moving of soil and rock from one location or position to another; the changing of surface conditions by causing the surface to be more or less impervious; land disturbance .

APPLICANT -a land owner or developer, as hereinafter defined, who has filed an application for development, including his heirs, successors, and assigns.

ACT 247-see "Pennsylvania Municipalities Planning Code".

BEST MANAGEMENT PRACTICES (BMPs) - activities, facilities, measures, planning or procedures used to manage stormwater impacts from Regulated Activities, to meet State Water Quality Requirements, to promote groundwater recharge and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: "non-structural" or "structural". "Non-structural" BMPs are measures referred to as operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas "structural" BMPs are measures that consist of a physical device or practice that is installed to capture and treat stormwater runoff. "Structural" BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale wet ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bio-retention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. "Structural" stormwater BMPs are permanent appurtenances to the project site.

BASE FLOOD –the flood, also known as the 100-year flood, which has a 1% chance of being equaled or exceeded in any given year; the flood which has been selected to serve as the basis upon which the flood plain management provisions of this and other ordinances have been prepared.

BUILDING –a structure which has a roof supported by columns, piers, or walls, which is intended for the shelter, housing, or enclosure of persons, animals, or chattel or which is to house a use of a commercial or manufacturing activity.

BUILDING (SETBACK) LINE –a line established by municipal zoning codes or the subdivision regulations which defines the required minimum distance between any building and the adjacent public right-of-way or property line.

CARBONATE GEOLOGY -- limestone or dolomite bedrock; also marble (within graphitic felsic gneiss fin).

CART WAY – the portion of the street right-of-way, paved or unpaved, intended for vehicular use. The shoulder is not considered part of the cart way.

CHANNEL EROSION –the widening, deepening, and headward cutting of small channels and waterways, due to erosion caused by moderate to large floods.

CHECK DAM –an earthen, stone or log structure, used in grass swales to reduce water velocities, promote sediment deposition, and enhance infiltration.

CISTERN –an underground reservoir or tank for storing rainwater.

COMMISSIONERS –the governing body of the County of Lebanon.

COMMON OPEN SPACE -a parcel or parcels of land or an area of water, or a combination of land and water within a development site, designed and intended for the use or enjoyment of residents of the development, not including streets, off-street parking areas, and areas set aside for public facilities.

COMMONWEALTH – the Commonwealth of Pennsylvania.

CONSERVATION DISTRICT – the Lebanon County Conservation District (LCCD). The Lebanon County Conservation District has the authority under a delegation agreement executed with the Pennsylvania Department of Environmental Protection to administer all or a portion of the erosion and sediment control program and construction activities within the political boundaries of Lebanon County, PA.

CONSTRUCTION – the term "construction" shall include the building, reconstruction, extension, expansion, alteration, substantial improvement, erection or relocation of a building or structure, including manufactured homes, and gas or liquid storage tanks. For flood plain purposes, "new construction" includes structures for which the "start of construction" commenced on or after the effective date of a flood plain management regulation adopted by East Hanover Township.

COUNTY - Lebanon County, Pennsylvania.

CULVERT – a structure with appurtenant works which carries a stream or other surface drainage under or through an embankment or fill.

DAM – an artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or another fluid or semifluid, or a refuse bank, fill or structure for highway, railroad or other purposes which does or may impound water or another fluid or semifluid.

DESIGN STORM – the magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g., a 5-year storm) and duration (e.g., 24-hours), used in the design and evaluation of storm water management systems.

DETENTION STRUCTURE – a vegetated pond, swale, or other structure designed to drain completely after storing runoff only for a given storm event and release it at a predetermined rate. Also known as a dry pond.

DEVELOPER – any landowner, agent of such landowner or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or a land development.

DEVELOPMENT – any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, filling, grading, paving, excavating, earth disturbance activity, mining, dredging or drilling operations, the placement of manufactured homes, streets and other paving, utilities and the subdivision of land.

DISTURBED AREA – an un-stabilized land area where an earth disturbance activity is occurring or has occurred.

DOWNSLOPE PROPERTY LINE – that portion of the property line of the lot, tract, or parcels of land being developed located such that all overland or pipe flow from the site would be directed towards it.

DRAINAGE CONVEYANCE FACILITY – a Storm Water Management Facility designed to transmit storm water runoff and shall include streams, channels, swales, pipes, conduits, culverts, storm sewers, etc.

DRAINAGE EASEMENT -a right granted by a landowner to a grantee, allowing the use of private land for storm water management purposes.

EASEMENT -a right-of-way granted for limited use of land for public or quasi-public purpose.

ENGINEER, TOWNSHIP—a Registered Engineer designated by the Supervisors to perform duties as required by this Ordinance on behalf of the Township.

ENGINEER, REGISTERED —an individual licensed and registered as a Professional Engineer by the Commonwealth of Pennsylvania.

EROSION —the natural process by which the surface of the land is worn away by water, wind or chemical action.

EROSION and SEDIMENTATION POLLUTION CONTROL PLAN — a site specific plan consisting of both drawings and narrative that identifies BMP's that minimize accelerated erosion and sedimentation before, during, and after earth disturbance activities.

EXTENDED DETENTION —a storm water design feature that provides for the gradual release of a volume of water in order to increase settling of pollutants and protect downstream channels from frequent storm events.

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

FILL —any act by which earth, sand, gravel, rock or any other material is placed, pushed, dumped, pulled, transported or moved to a new location above the natural surface of the ground or on top of the stripped surface and shall include the conditions resulting there from; the difference in elevation between a point on the original ground and a designated point of higher elevation on the final grade; the material used to make fill.

FLOOD —a general and temporary inundation of normally dry land areas by water from waterway overflows or the unusual and rapid accumulation or runoff of surface waters from any source.

FLOODPLAIN —any land susceptible to inundation by water from any natural source or delineated by applicable Department of Housing and Urban Development, Federal Insurance Administration Flood Hazard Boundary —mapped as being a special flood hazard area. Included are lands adjoining a river or stream that have been or may be inundated by a 100-year flood. Also included are areas that comprise Group 13 soils, as listed in Appendix A of the Pennsylvania Department of Environmental Protection (PADEP) Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by PADEP).

FLOODWAY —the channel of a river or other watercourse and the adjacent land area that must be reserved to discharge the Base Flood without cumulatively increasing the water surface elevation of that flood more than one (1) foot at any point.

GOVERNING BODY —East Hanover Township Board of Supervisors; (the board of supervisors in townships of the second class.)

GRADE – a reference plane, usually of a road, channel, or natural ground specified in percent and shown on plans as specified herein. (To) Grade –to finish the surface of a roadbed, top of embankment or bottom of excavation.

GRADING –the act of moving earth. Changing of the earth surface by excavation or fill.

GROUNDWATER RECHARGE –replenishment of existing natural underground water supplies.

IMPERVIOUS SURFACE (Impervious Area) –a surface that prevents the infiltration of water into the ground. Impervious surfaces (or areas) shall include, but are not limited to: roofs, additional indoor living spaces, patios, garages, storage sheds, and similar structures, streets, sidewalks and vehicle and pedestrian areas that are gravel and crushed stone. Any surface area proposed to initially be gravel, crushed stone or paving shall be assumed to be impervious. Pervious paving shall be considered as an impervious surface for runoff management and storage calculations. In addition, other areas determined by the Township Engineer to be impervious within the meaning of this definition shall also be considered as contributing to total impervious cover.

IMPOUNDMENT — a retention or detention basin designed to retain storm water runoff and release it at a controlled rate.

IMPROVEMENTS –physical additions and changes to the land, necessary to produce usable and desirable lots.

INFILTRATION STRUCTURES –a structure designed to direct runoff into the ground (e.g., french drains, seepage pits, seepage trench, bio-infiltration facilities, etc...)

KARST –a type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, steep-sided hills, underground drainage and caves. Karst is formed on carbonate rocks, such as limestone, dolomites, marble, and sometimes gypsum.

LAND DEVELOPMENT –(i) the improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving (a) a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or (b) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features; (ii) a subdivision of land; (iii) development in accordance with Section 503(1.1) of the PA Municipalities Planning Code.

LAND/EARTH DISTURBANCE –any activity involving grading, tilling, digging, or filling of ground or stripping of vegetation or any activity that causes an alteration to the natural condition of the land.

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.

EAST HANOVER TOWNSHIP STORMWATER ORDINANCE – the East Hanover Township ordinance regulating storm water management, by managing accelerated runoff and erosion and sedimentation problems at their source and by regulating activities that cause these problems; and utilizing and preserving the existing natural drainage systems; and encouraging recharge of groundwater where appropriate and preventing degradation of groundwater quality; and maintaining existing flows and quality of streams and watercourses in the township and the Commonwealth; and providing proper maintenance of all permanent stormwater management facilities that are constructed in the township; and providing performance standards and design criteria for watershed-wide storm water management and planning.

LICENSED PROFESSIONAL –professional engineers, landscape architects, geologists, and land surveyors licensed to practice in the Commonwealth.

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 contained within the property line of a lot or the allocation of land, excluding space within any street right-of-way.

MANUFACTURED HOME – a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes the term "manufactured home" also includes (1) all mobile homes and (2) camping trailers, recreational vehicles, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.

MANUFACTURED HOME PARK AND/OR SUBDIVISION – a lot or area which is a planned development and designated to contain two or more manufactured homes for rent or for sale. Any lot or area proposed to utilize such design where individual manufactured home sites are proposed for sale or lease shall be known as a manufactured home subdivision.

MOBILE HOME -a transportable, single family dwelling intended for permanent occupancy, contained in one unit, or in two or more units designed to be joined into one 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.

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.

MOBILE HOME PARK –a parcel or contiguous parcels of land which has been so designated and

improved that it contains two or more mobile home lots for the placement thereon of mobile homes.

MUNICIPALITY – East Hanover Township, Lebanon County, Pennsylvania

NONPOINT SOURCE POLLUTION – pollution that enters a water body from diffuse origins in the watershed and does not result from discernible, confined, or discrete conveyances.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) – the national system for the issuance of permits under section 402 of the Federal Clean Water Act (33 u.s.c.a. 1342) including a state or interstate program which has been approved in whole or in part by the Environmental Protection Agency, including the regulations codified in chapter 92 (relating to NPDES permitting, monitoring and compliance), and as specified in title 25, chapter 102.

NRCS – Natural Resources Conservation Service (previously SCS).

OPEN CHANNEL – a drainage element in which storm water flows with an open surface. Open channels include, but shall not be limited to, natural and man-made drainageways, swales, streams, ditches, canals, and pipes flowing partly full.

OUTFALL – point where water flows from a conduit, stream, or drain: "Point Source" as described in 40 CFR § 122.2 at the point where the municipality's sewer system discharges to surface Waters of the Commonwealth.

OUTLET – points of water disposal from a stormwater conveyance system, stream, river, lake, tidewater or artificial drain.

PADEP – the Pennsylvania Department of Environmental Protection.

PARENT TRACT – all contiguous land held in single and separate ownership, regardless whether (i) such land is divided into one or more lots, parcels, purports or tracts; (ii) such land was acquired by the landowner at different times or by different deeds, devise, partition or otherwise; or (iii) such land is bisected by public or private streets or right-of-way, which was held by the landowner or his predecessor in title on the effective date of this Ordinance.

PARKING LOT STORAGE -involves the use of impervious or semi-impervious parking areas as temporary impoundments with controlled release rates during rainstorms.

PEAK DISCHARGE – the maximum rate of storm water runoff from a specific storm event.

PENNSYLVANIA MUNICIPALITIES PLANNING CODE – adopted as Act 247 of 1968, this act enables municipalities to plan for, and regulate, community development with subdivision and land development ordinances. The code also contains guidelines for subdivision and land development ordinance content. For the purpose of this Ordinance, the Code is referred to as "Act 247" and is intended to include the current code and any further amendments thereto.

PERSON –an individual, partnership, public or private association or corporation, or a governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

PERVIOUS AREA –any area not defined as impervious.

PIPE – a culvert, closed conduit, or similar structure (including appurtenances) that conveys storm water.

PLAN, FINAL – a complete and exact subdivision or land development plan prepared for recording as required by statute, to define property rights, proposed streets and other improvements; a final plat.

PLAN, PRELIMINARY –a tentative subdivision or land development plan showing proposed street and lot layout as a basis for consideration prior to preparation of a final plat. A preliminary plan shall include engineering design for all required site improvements.

PLAN, SKETCH –an informal plan, indicating existing features of a tract and the surrounding area and outlining the general layout of a proposed subdivision or land development.

PLANNED RESIDENTIAL DEVELOPMENT – an area of land, controlled by a landowner, to be developed as a single entity for a number of dwelling units, or combination of residential and nonresidential uses, the development plan for which does not correspond in lot size, bulk, type of dwelling, or use, density, or intensity, lot coverage and required open space to the regulations established in any one district created, from time to time, under the provisions of a municipal zoning ordinance.

PLAT –the map or plan of a subdivision or land development, whether preliminary or final.

RELEASE RATE –the percentage, or event criteria of, the pre-development peak rate of runoff from a site or subarea to which the post development peak rate of runoff must be reduced to protect downstream areas.

RETENTION STRUCTURE –a pond containing a permanent pool of water designed and/or constructed to store water runoff for a given storm event and release it at a predetermined rate.

RETURN PERIOD –the average interval, in years, within which a storm event of a given magnitude can be expected to recur. For example, the 25-year return period rainfall would be expected to recur on the average of once every twenty-five years.

RIGHT-OF-WAY –the total width of any land reserved or dedicated for use as street, alley, or for any public purpose.

RIPARIAN BUFFER –a permanent vegetated area bordering surface waters, that serves as a protective filter to help protect streams and wetlands from impacts of adjacent land uses.

RUNOFF –any part of precipitation that flows over the land surface.

SEDIMENT – soils or other erodible materials transported by stormwater as a product of erosion.

SEDIMENT BASIN – an impoundment being used to remove sediment from runoff.

SEDIMENT POLLUTION – the placement, discharge or any other introduction of sediment into the waters of the Commonwealth.

SEDIMENTATION – the process by which mineral or organic matter is accumulated or deposited by the movement of air or water.

SHEET FLOW – runoff that flows over the ground surface as a thin, even layer, not concentrated in a channel, and limited to a maximum of one hundred (100) feet for analysis purposes for post development calculations.

SITE IMPROVEMENTS – physical additions or changes to the land that may be necessary to provide usable and desirable lots, including but not limited to, utilities, streets, curbing, sidewalks, street lights and storm water facilities.

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

STABILIZATION – the proper placing, grading, constructing, reinforcing, lining and covering of soil, rock or earth to ensure its resistance to erosion, sliding or other movement.

STORAGE STRUCTURE - a retention or detention structure.

STORM FREQUENCY – the number of times that a given storm "event" occurs or is exceeded on the average in a stated period of years. See "Return Period".

STORM SEWER – a system of pipes, and/or open channels that convey intercepted runoff and storm water from other sources, but excludes domestic sewage and industrial wastes.

STORM WATER – runoff from precipitation, snowmelt, surface runoff, or drainage.

STORM WATER MANAGEMENT – the control of runoff to allow water falling on a given site to be absorbed or retained on site to the extent that after development the peak rate of discharge leaving the site does not exceed the allowable rate based on conditions prior to development.

STORMWATER MANAGEMENT FACILITIES (SWM BMP's) - a system designed to handle stormwater runoff, and where required, delay the peak discharge long enough to minimize the potential for downstream flooding. Any structure, natural or man-made, that, due to its condition, design, or construction; conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: detention basins, wet ponds, open channels, storm sewers, pipes, and infiltration facilities.

STORM WATER MANAGEMENT PLAN – a plan for managing storm water runoff on a watershed-wide basis, in accordance with the guidelines of Act 167 of 1978, the Pennsylvania Storm Water Management Act.

STREAM – a watercourse. A channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

STREAM BANK STABILIZATION – a collection of vegetative and/or mechanical means for stabilizing stream banks to minimize, prevent or abate degradation.

STREAM ENCLOSURE – a bridge, culvert or other structure in excess of 100 feet in length upstream to downstream which encloses a regulated water of this Commonwealth.

STREET – a strip of land including the entire right-of-way used or intended for use as a means of vehicular and pedestrian circulation, whether public or private. The word "street" includes street, thoroughfare, avenue, boulevard, court, expressway, highway, road, lane, and alley.

STREET, PRIVATE – a strip of private land providing access to abutting properties and not offered for dedication or accepted for municipal ownership and maintenance.

STRUCTURE – a walled or roofed building, including a gas or liquid storage tank (principally above ground), a manufactured home, or any other man-made object usually assembled of interdependent parts or components which is designed to have a more or less fixed location, whether or not permanently attached at that location.

SUBDIVIDER – any landowner, agent of such landowner or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or land development.

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

SURVEYOR, REGISTERED – an individual licensed and registered as a Professional Land Surveyor by the Commonwealth of Pennsylvania.

SWALE – a low lying stretch of land which gathers or carries surface water runoff. A watercourse without defined bed and banks.

TIMBER OPERATIONS/FOREST MANAGEMENT – planning and activities necessary for the management of forestland. These include conducting a timber inventory, preparation of

forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation and reforestation .

TOPOGRAPHY – a general term that includes the characteristics of the ground surface such as hills, plains, mountains, degree of relief, steepness of slope and physiographic features. The configuration of a surface area showing relative elevations.

TOPSOIL – acceptable friable loam that is free of subsoil, clay lumps, brush, roots, weeds, other objectionable vegetation, stones, other foreign material larger than 2" in any dimension, litter, and/or other material unsuitable or harmful to plant growth.

TOWNSHIP – East Hanover Township, Lebanon County, Pennsylvania

WATER QUALITY VOLUME –the total volume of water runoff that is required to be collected and treated for water quality control by direction to BMP facilities.

WATERCOURSE –a channel or conveyance of surface water, having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

WATERS OF THE COMMONWEALTH –rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs and other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of the Commonwealth of Pennsylvania.

WATERSHED –region or area drained by a river, watercourse, or other surface water, whether natural or artificial. Also synonymous with "sub-watershed" and "drainage area" referring to local drainage area of interest for site specific calculations.

WETLAND –those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas. (The term includes but is not limited to wetland areas listed in the State Water Plan, the United States Forest Service Wetlands Inventory of Pennsylvania, the Pennsylvania Coastal Zone Management Plan and a wetland area designated by a river basin commission. Wetlands include all lands regulated as wetlands by PA Department of Environmental Protection or the U.S. Army Corps of Engineers. In the event there is a conflict between the definitions of these agencies, the more restrictive definition applies).

CHAPTER 3-PROCEDURES

SECTION 3.01 INTENT

The procedures established in this Chapter are intended to define the steps by which a developer shall design, make an application, record plats, and construct improvements, and by which East Hanover Township may review, make recommendations, approve plans and otherwise administer these regulations and this Ordinance.

For those subdivisions hereinafter classified as minor subdivisions, a sketch plan and abbreviated final plan procedure is established. For all others, which are classified as major subdivisions or land development, a preliminary plan and final plat procedure is established.

SECTION 3.02 PRE-APPLICATION

East Hanover Township shall make available to developers copies of this subdivision and land development ordinance, the zoning code, the East Hanover Township Stormwater Management Ordinance, the transportation improvement plan and other adopted plans, street maps, and other information which may affect the development of the property under consideration. Applications for approval of a subdivision or land development shall be in accord with these regulations, other codes and plans as adopted and information furnished.

Prior to the formal submission of a subdivision or land development plan for review and approval, the subdivider or land developer is urged to submit a sketch plan to East Hanover Township for advice on the requirements necessary to achieve conformity to the standards of these regulations as well as to alert the subdivider or land developer as early as possible to factors which must be considered in the design of a subdivision or land development, such as pertinent elements of any County or Municipal land use, thoroughfare or other community plans. Review of a sketch plan is an informal, advisory process to guide the subdivider or land developer in eventual preparation of a formal preliminary or final plan.

Sketch plans and subsequent official minor and major subdivision and land development plans should be accompanied by any letters of transmittal or development details necessary to explain existing or proposed site conditions which are not self-explanatory on the actual sketch, minor or major subdivision or land development plan.

SECTION 3.03 MINOR SUBDIVISION OR LAND DEVELOPMENT

- A. Classification – A division of land to facilitate a lot addition or a land exchange or a division of land which adjoins an existing public street and does not involve the opening, widening, extension or improvement of any street or the installation of any public utility outside the frontage road and does not involve more than five (5) lots or dwelling units (except that subdivision of lots from a property after five (5) or more lots have been previously subdivided is a major subdivision).

Dedication or establishment of an unimproved right-of-way or easement shall be a minor

subdivision. Re-platting, re-subdivision or revision of five (5) lots or less shall also be considered a minor subdivision. Multi-family, commercial, industrial and mobile home park development shall be a major, not minor, subdivision or land development, regardless of the number of lots or units created.

- B. Application – A final plan complying with the requirements set forth in this Ordinance shall be prepared for each minor subdivision or land development and approval of said plat shall be requested from East Hanover Township.

When filing an application for approval of a minor subdivision or land development to East Hanover Township, the subdivider shall submit an application packet containing two (2) paper copies of the Application for Subdivision or Land Development Approval, seven (7) paper copies of 24"x36" plans, two (2) paper copies of any reports, studies, and outside agency permits conforming to the requirements of the SALDO along with digital copies of the aforementioned items on a portable digital device (i.e. usb thumb drive, CD or DVD)..

- C. Review – Upon receipt of the minor subdivision or land development plan, East Hanover Township shall begin to review the final plan for compliance with this ordinance. Where applicable, the plan may be forwarded to the County Conservation District, the County Planning Department or other agencies for review and comment. Review comments, conditions, and findings of East Hanover Township may be used as substantiation for plan approval or disapproval. After completion of the review process, the final plan shall be approved or disapproved by East Hanover Township.

- D. Approval or Disapproval – After an application for approval of a plat of a minor subdivision or land development has been filed with East Hanover Township, together with all maps, necessary data, and fees, the plan shall be reviewed and processed. The subdivider or developer shall pay required review fees at the time of official submission of the plat and official submission shall not be deemed to have been made until receipt of all the required review fees. East Hanover Township shall complete the review and either approve or disapprove the plat not later than ninety (90) days after such application submission is filed. The decision shall be in writing and shall be communicated to the applicant personally or mailed to him at his last known address not later than fifteen (15) days following the decision.

When the application is approved, it shall be appropriately signed and dated and copies shall be distributed according to Section 3.03(E) of this Ordinance. When the application is disapproved, the decision shall specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite the provisions of the Ordinance relied upon. A disapproved copy of the subdivision or land development plan shall be retained by East Hanover Township and any remaining copies of the plan shall be returned to the subdivider, developer and/or his agent.

Failure of East Hanover Township to render a decision and communicate it to the applicant within the time and in the manner required herein shall be deemed approval of the application in the terms as presented, unless the applicant has agreed in writing to an extension of time or change in the prescribed manner of presentation of communication of the decision in which

case, failure to meet the extended time or change in manner of presentation of communication shall have like effect. However, removal or withdrawal of the subdivision or land development plan from the approval process by the subdivider, developer and/or his agent shall be considered withdrawal of plan application, shall not obligate East Hanover Township to approve or disapprove the plan within the herein described timetable and shall not result in a deemed approval when ninety (90) days have elapsed. Upon knowledge of plan withdrawal, East Hanover Township shall notify, in writing, the subdivider or land developer that plan withdrawal has disrupted the approval process and no approval or disapproval will be rendered unless the subdivision or land development plan is resubmitted as a new application.

- E. Recording – When filing an application for recording of a minor subdivision or land development, the subdivider shall submit to East Hanover Township nine (9) blue line paper prints of the proposal on 18" x 24" sheets. When the 18" x 24" size plans are prepared by reduction of the larger plan original, five (5) sets of the original size plans shall also be provided.

After approval of a minor subdivision or land development plat by East Hanover Township, the original plat paper copy, containing original, notarized signatures and original professional endorsements, shall be filed and recorded in the office of the County Recorder of Deeds, said recording to occur within ninety (90) days of the final or deemed approval date of the plan or the approval shall be null and void. Whenever such plat approval is required by this Ordinance, the Recorder of Deeds shall not accept any plat for recording unless such plat officially notes the approval of East Hanover Township. Likewise, whenever plan review and comment by East Hanover Township is required by this ordinance (Section 3.03(C)), the Recorder of Deeds shall not accept any plat for recording unless such plat officially notes the review of the Lebanon County Planning Department.

Copies of an approved plat shall be sent to the applicant and retained by East Hanover Township. Additional copies may be distributed to the Pennsylvania Department of Transportation, County Emergency Management Agency, County Assessment Office, County Planning Department, Metropolitan Edison Company, or other utility or related agency making a timely request for copies.

SECTION 3.04 MAJOR SUBDIVISION OR LAND DEVELOPMENT – PRELIMINARY PLAN

- A. Classification – Any subdivision or land development involving more than five (5) lots or dwelling units; or any subdivision or land development on a property after five (5) or more lots or dwelling units have previously been subdivided from that property; or any subdivision or land development proposing the opening, widening, extension or improvement of a street shall be deemed to be a major subdivision or land development. Multi-family, mobile home park, commercial and industrial development shall be considered major subdivision or land development, regardless of the number of lots or units created.
- B. Application – A preliminary plat complying with the requirements set forth in this Ordinance shall be prepared for each major subdivision or land development and an approval requested from East Hanover Township.

When filing an application for preliminary approval of a major subdivision or land development, the subdivider shall submit to the Township two (2) paper copies of the Application for Subdivision or Land Development Approval, seven (7) paper copies of 24"x36" plans, two (2) paper copies of any reports, studies, and outside agency permits conforming to the requirements of the SALDO along with digital copies of the aforementioned items on a portable digital device (i.e. usb thumb drive, CD or DVD). As part of the submission, the subdivider shall also submit two (2) paper prints of the improvement plan (if not contained on initial sheet) containing details of the physical site improvements (roadways, utilities, etc.) proposed for the subdivision or land development. All sheets shall be 18" x 24" or 24" x 36", and two (2) copies of any associated reports.

- C. Review -- Upon receipt of the preliminary plan (and improvement plan, if separate), East Hanover Township shall review the plan for compliance with this Ordinance. The preliminary plan shall be examined for suitable relationship to adjoining subdivisions or undeveloped land, feasibility of the program for improvements, and provide an opportunity for advice, suggestions, and adjustments to meet ordinance requirements before the plan becomes rigid. The submission of alternate plans is recommended.

Where applicable, the plan may be forwarded to the County Conservation District, County Planning Department, or other appropriate agencies for review and comment. Review comments, conditions, and findings of the East Hanover Township may be used as substantiation for plan approval or disapproval. After completion of the review process, the preliminary plan and improvement plan shall be approved or disapproved by East Hanover Township.

- D. Approval or Disapproval -- After an application for preliminary approval of a plat of a major subdivision or land development has been filed with East Hanover Township, together with all improvement plans, maps, necessary data and fees, East Hanover Township shall complete the review and either approve or disapprove the plan in accordance with the procedure outlines in Section 3.03(D).
- E. Recording -- After approval of a preliminary plan for a major subdivision or land development plat by East Hanover Township, recording of the preliminary plan is not authorized.

Approval of the preliminary plan shall assure the subdivider for a period of five (5) years from the date of approval that:

1. The general layout of streets, lots, and other features are approved and shall be the basis for the preparation of the final plan; and
2. The general terms and any special conditions under which the approval of the plan was granted will not be changed; and
3. The subdivider may install improvements in accordance with the approved preliminary plan and other requirements contained in this Ordinance and those ordinances of local

municipalities where the subdivision is located.

Approval of a preliminary plan does not constitute approval of the final plan, and therefore, does not authorize the recording of the subdivision or land development plan or the sale or transfer of lots. After a period of five (5) years, approval of the preliminary plan shall expire.

SECTION 3.05 MAJOR SUBDIVISION OR LAND DEVELOPMENT – FINAL PLAN

- A. Classification – Any subdivision or land development involving more than five (5) lots or dwelling units; or any subdivision or land development on a property after five (5) or more lots or dwelling units have previously been subdivided from that property; or any subdivision or land development proposing the opening, widening, extension or improvement of a street shall be deemed to be a major subdivision or land development. Multi-family, mobile home park, commercial and industrial development shall be considered major subdivision or land development, regardless of the number of lots or units created.
- B. Application – Within five (5) years after the approval of the preliminary plat, a final plat with all necessary supplemental data shall be officially submitted to East Hanover Township with a request for approval. Failure to submit a final plan within five (5) years of the date of an approval of the preliminary plat shall void the preliminary approval, unless extended in writing by East Hanover Township. Said expired or voided preliminary plan shall not be used as a basis for any development or construction. Any subsequent development shall be preceded by a new preliminary plan.

When filing an application for approval of a major subdivision or land development to East Hanover Township, the subdivider shall submit to the Township two (2) paper copies of the Application for Subdivision or Land Development Approval, seven (7) paper copies of 24"x36" plans, two (2) paper copies of any reports, studies, and outside agency permits conforming to the requirements of the SALDO along with digital copies of the aforementioned items on a portable digital device (i.e. USB thumb drive, CD or DVD). As part of the submission, the subdivider shall also submit two (2) paper prints of the improvement plan (if not contained on initial sheet) containing details of the physical site

The subdivider or developer may apply for final approval of: 1) only a portion, section, or phase of the entire subdivision or land development as preliminarily approved; or 2) the entire subdivision or land development.

- C. Review – Upon receipt of the final plan, East Hanover Township shall begin to review the plan for compliance with this Ordinance. The final plan shall be examined for conformity to the preliminary plan, for design and detail of required site improvements and for adherence to other standards of this Ordinance. The plan shall also be examined to determine if the required site improvements have been installed or, in lieu thereof, a bond or financial security has been submitted. Where applicable, the plan may be forwarded to the County Engineer, the County Conservation District, the County Planning Department, or other agencies for review and comment.

Review comments, conditions, and findings of East Hanover Township may be used as substantiation for plan approval or disapproval. After completion of the review process, the final plan shall be approved or disapproved by East Hanover Township.

- D. Approval or Disapproval – After an application for final approval of a plat of a major subdivision or land development has been filed with East Hanover Township, approval or disapproval shall be granted in accordance with Section 3.03 (D) of this Ordinance.

However, no plat shall be finally approved unless the streets on such plat have been improved as may be required by ordinance, and any walkways, curbs, gutters, street lights, firehydrants, shade trees, landscaping, water mains, sanitary sewers, storm sewers, storm water management facilities, and other site improvements as may be required by this Ordinance and any applicable municipal requirements have been installed in accordance with such requirements. In lieu of the completion of any site improvements required as a condition for the final approval of a plat, a financial security shall be deposited by the subdivider/developer with the municipality and/or county in an amount to cover the costs of any site improvements which may be required by ordinance. Such financial security shall provide for and secure to the public, the completion of any site improvements which may be required for the subdivision or land development.

Financial improvement guarantees shall further be subject to the requirements of Section 5.14 of this Ordinance and Sections 5.09 – 5.11 of Act 247.

- E. Recording – After approval of a final plat for a major subdivision or land development by East Hanover Township, the plat shall be recorded and copies distributed in the manner prescribed in Section 3.03 (E) of this Ordinance.

Recording shall entitle the subdivider to sell, transfer, or develop the land shown on the plat in accordance with the approved plat, subject to any conditions attached thereto. Where final plans are approved for only a portion, section, or phase of the entire subdivision or land development, sale, transfer or development may proceed only on that approved portion, section, or phase.

When a final plat has been approved, no subsequent change or amendment in zoning, subdivision or other governing ordinance shall be applied to affect adversely the right of the subdivider or land developer to commence and complete any aspect 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 aforesaid five-year period shall be counted from the date of the preliminary approval.

When the subdivider or land developer has failed to substantially complete development of the approved plan within five (5) years of the aforesaid approval date and when changes in a zoning, subdivision, or other governing ordinance have occurred which affect the design of the approved plat, the subdivision or land development shall be subject to the changes in the zoning, subdivision, or other governing ordinance. East Hanover Township shall notify, in writing, the subdivider or land developer that approval has expired and submission and approval of a revised preliminary and/or final plan (as necessary to detail changes), illustrating compliance with the revised ordinance, is required prior to further development or lot transfer.

F. Geodetic Control Requirements

- I. The following geodetic control requirements shall be met for all Major Final Subdivision and Land Development Plans and are recommended for Minor Subdivision Plans:
 - a. The plat boundary shall be field tied to the nearest Lebanon County monument, which is based upon the State Plane Coordinate System NAD83 and NGVD29, in accordance with one of the methods outlined below:
 - i. Self-closing (looped) traverse(s) shall be conducted between two Lebanon County monuments and the boundary with minimum precision of no less than one part in 10,000 before adjustment.
 - ii. Self-closing (looped) traverse(s) shall be conducted between one Lebanon County monument, the plat boundary, and a line whose azimuth has been determined by astronomic observation or Global Position System (GPS) with a minimum precision of no less than one part in 10,000 before adjustment. Astronomic or GPS observation shall be performed in accordance with third order, Class II requirements set forth in Standards and Specifications for Geodetic Control Networks, Federal Geodetic Control Committee, September 1984, or as subsequently amended.
 - iii. Geodetic control points that are used shall be shown on the plat by graphically identifying their location, name, and number. The final adjusted direct tie (bearing and distance) shall be shown between those geodetic control points and specific control point(s) on the plat boundary. If only one Lebanon County monument was used, as in Section A2 above, a bearing diagram shall be shown on the plat relating the bearing structure shown on the plat to grid north.
 - b. A certified copy of the associated electronic data file (disk) shall be given to East Hanover Township, at the time of plan recording, in order to expedite entering the information into the Township's records.
 - i. The electronic disk shall contain all cross reference items listed below:
 - Boundary (line)
 - Property (line)
 - Road Centerline (line)
 - Road Right of way (line)
 - Curb (line)
 - Wetlands (line or polygon)
 - Paving -parking lot and driveways (line)
 - Sanitary Sewer Mainlines (line)
 - Sanitary Sewer Manholes (point)

- Sanitary Sewer Pump Stations (point)
- ii. Disk requirements:
- Compatible with AutoCAD Drawing Files (.dwg) in Version 2000 or earlier or .dxf files.
 - Text shall appear only on a separate TEXT layer and shall not be attached to the ITEM layers.
 - Drawing layer name shall be provided for all cross reference items (see item b.i. above).
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CHAPTER 4 – PLANS AND PLATS: REQUIRED INFORMATION

SECTION 4.01 INTENT

Plans, maps, data, and plats shall be prepared and furnished by the developer as required herein to assure accurate surveying, to provide adequate information for designing and preparing plans, and to facilitate review, approval, and recording of plats. Plans and maps shall be neat, legible, uncluttered, and easily readable to provide clear documentation of all data.

SECTION 4.02 MINOR SUBDIVISIONS

The subdivider or land developer shall furnish, as part of an application for approval of a minor subdivision or land development plan, the following information on the required 18"x 24" final plansheets:

A. Title Block

1. Identification of the plan as a final plan; and
2. Name of the development, if any; and
3. Name, address and phone number of the record owner(s), subdivider(s), developer(s), and authorized agent(s); and
4. Name of the municipality in which the subdivision or land development is located; and
5. Written and graphic scale of plan; and
6. Name, address and phone number of plan preparer; and
7. Date of plan preparation and date of subsequent revisions; and
8. Deed reference or source of title.

B. Signature Blocks

Space for date, signature, and type of formal action by each of the following:

1. County Planning Department
2. East Hanover Township Board of Supervisors
3. East Hanover Township Planning Commission
4. Other officials, where required elsewhere by this Ordinance or individual municipal ordinance.

C. Maps and Data

1. Location drawing or map section, at a scale of 1" = 800', showing the location of the proposed subdivision in relation to named streets, boundaries, previous subdivisions, etc.

The proposed subdivision or land development area shall be identified by a tone or pattern differentiation and residual land of the subdivider shall be outlined.

The location drawing shall also contain a reference to north and, where possible, be depicted in northerly alignment with the property drawing.

2. Property drawing of the parcel which is to be subdivided. Residual land shall be shown to the extent necessary to assure compliance with all applicable standards. The lot, tract or parcel drawing shall include:
 - a. Bearings and dimensions for all property lines; corporation lines; center and right-of-way lines of streets; easements and other rights-of-way; natural and artificial water courses, streams and flood plain boundaries; wetlands; and other boundary lines with distances, radii arcs, chords and tangents of all deflection angles, nearest second and error or closure of not more than one (1) foot in 10,000 feet.
 - b. Proposed lot, tract, or parcel lines in prominent solid lines. Lot, tract, or parcel lines proposed for removal shall be shown in dashed or broken lines.
 - c. Location and identification of all control points (iron pins, monuments, etc.) to which all dimensions, angles and bearings are to be referred.
 - d. Lot numbers or letters in progressive order to identify each lot or tract. Numbers shall be utilized only for lots, tracts or parcels which are eligible for independent or individual use, whereas letters shall be utilized for lot additions, land exchanges and transfer of lots or parcels which are not eligible for individual use or development. Lot numbers and letters from previous plans shall be encircled by a dashed or broken line circle or triangle while currently proposed lot numbers or letters shall be encircled by a solid line circle.
 - e. Square footage and acreage of all lots or parcels involved in the subdivision or land development, exclusive of land dedicated for public right-of-way.
 - f. The location, size, and use of all existing buildings. Proposed buildings shall be shown to the extent necessary to demonstrate compliance with other ordinance criteria. Buildings of historical significance shall be identified and preservation feasibility evaluated.
 - g. The building setback lines prescribed in the applicable zoning code.
3. Streets, utilities, topography and natural features on the proposed subdivision and within 100 feet of the boundaries, in accordance with the following:

- a. Layout, right-of-way, pavement width, and name of all roads and streets.
 - b. Size and location of all existing and proposed utilities including easements.
 - c. Existing and proposed on-lot well and sewage disposal system locations, as well as soil probe and percolation test locations for sewage disposal systems.
 - d. The existing and proposed topography and drainage of all proposed development sites shall be depicted. Existing and proposed contour intervals shall be a maximum of five (5) feet, except that development areas with a grade of less than 5% shall be depicted utilizing two (2) foot contour intervals. Lot additions and currently developed sites shall be required to stipulate only lot corner elevations or general topographic information.
 - e. Streams, ponds, waterways, flood plains, quarries, sinkholes, rock outcroppings and other significant topographical, physical, or natural features.
 - f. Identify and illustrate all soil series and soil boundaries. A separate soils delineation sheet shall be provided as part of any major subdivision.
 - g. Wooded areas.
4. Storm water management facilities, including ground water recharge and water quality design, where required by the East Hanover Township Stormwater Management Ordinance.
 5. North arrow and graphic and written scale. The scale shall not exceed 50' to the inch. Deed reference and source of title to the land being subdivided shall be included, as shown by the County Recorder of Deeds.
 6. Name of all surrounding property owners with current deed references.

D. Plan Notes and Conditions

All necessary or recommended supplementary subdivision or land development plan notes or conditions shall be prominently lettered on the plan. This shall include, but not be limited to:

1. Total number of lots or dwelling units proposed by the plan.
2. Applicable zoning standards for front, rear and side yard setbacks, minimum lot area, minimum lot width and zoning district.
3. All plans to include an "intent of plan" note.
4. Statement of deed restrictions or covenants which may be a condition of sale of the property.
5. Street Addresses to be assigned for all proposed lots.

6. The existence or non-existence of Flood Zones occurring within the site should be documented. The PA One-Call design serial number and a utility contact list with complete contact information shall be placed on the plan cover sheet.

7. Other specifics or clarifications necessary to complete the plan.

E. Certifications and Dedications

1. A certification of ownership shall be signed and notarized by the property owner(s) verifying ownership and acceptance of the plan.

2. A statement shall be signed by the owner(s) offering land for dedication to public use for all appropriate streets, rights-of-way, easements, parks, recreation, etc.

3. A certification statement by the plan preparer (registered surveyor, engineer, or landscape architect) verifying the plan accuracy.

4. Seal of the registered surveyor, engineer, or landscape architect responsible for plan preparation. Any plan establishing property boundaries shall be prepared and sealed by a registered surveyor.

F. Recreation and Open Space Dedication

Dedication of recreation and open space land, or payment of a fee in lieu thereof, in accordance with the standards of Chapter 5 of this Ordinance.

SECTION 4.03 MAJOR SUBDIVISION – PRELIMINARY PLAN

The subdivider or land developer shall furnish, as part of an application for preliminary approval of a major subdivision or land development plan, the following information on the required preliminary plan sheets.

A. Title Block

All information required in Section 4.02A of this Ordinance.

B. Signature Blocks

All information required in Section 4.02B of this Ordinance.

C. Maps and Data

All information required in Section 4.02, Subsection C, Paragraphs 1, 4, 5, and 6 of this Ordinance. Information required in Paragraphs 2 and 3 shall also be supplied as specified, except that:

1. Lots shall be depicted, but individual bearings and dimensions are not required. Lot

areas may be approximated.

2. Topographic information shall be completed at two (2) foot contour intervals. It shall show approximate direction and gradient of ground slope on immediately adjacent land; indicate subsurface condition of tract if not typical; show water courses, marshes, sinkholes, wetlands, wooded areas, isolated preservable trees and other significant features.
3. Street and utility information shall be detailed. Street profiles, cross sections and grades shall be specified, detailing cart way, curb, and shoulder design where applicable. Location, size, profiles, elevations, and cross sections shall be submitted for all sanitary sewers, water lines, storm sewers, sidewalks, street lights, storm water management facilities, and other proposed site improvements.

D. Plan Notes and Conditions

All information required in Section 4.02D of this Ordinance.

E. Certifications and Dedications

All information required in Section 4.02E of this Ordinance.

F. Recreation and Open Space Dedication

All information required in Section 4.02F of this Ordinance.

SECTION 4.04 MAJOR SUBDIVISION – FINAL PLAN

The subdivider or land developer shall furnish, as part of an application for final approval of a major subdivision or land development plan, the following information on the required 18" x 24" final plan sheet(s):

A. Title Block

All information required in Section 4.02A of this Ordinance.

B. Signature Blocks

All information required in Section 4.02B of this Ordinance.

C. Maps and Data

The plan shall include only the phase or section of the subdivision or land development proposed for immediate recording and development. All information required in Section 4.02C of this Ordinance shall be supplied.

D. Plan Notes and Conditions

All information required in Section 4.02D of this Ordinance.

E. Certification and Dedications

All information required in Section 4.02E of this Ordinance.

F. Recreation and Open Space Dedication

All information required in Section 4.02F of this Ordinance.

CHAPTER 5 REQUIRED IMPROVEMENTS AND DESIGN STANDARDS

SECTION 5.01 INTENT

The design standards established in this Chapter are intended to be fundamental requirements to be applied with professional skill in the subdividing and planning of land so as to produce attractive and harmonious neighborhoods, convenient and safe streets, and economical layouts of residential and other land development. The design standards are further intended to encourage and promote flexibility and ingenuity in the layout and design of subdivisions and land developments, in accordance with modern and evolving principles of site planning and development. It is further intended that subdivision and land development designs shall promote interconnectivity and walkability within neighborhoods, protection of natural features and resources, reservation of open space areas and emphasize the preservation and planting of trees along streets, within parking areas and in developed areas.

It is also the intent of this Chapter to require subdividers and developers to follow all applicable codes, regulations, and standards adopted by East Hanover Township relative to improvements to the subdivision or development site. In all cases, the codes, regulations and standards of the Township shall be followed and the improvements shall be approved by the Board Of Supervisors before the final plan is approved. All improvements as specified in this Chapter shall be installed before the final plat is approved or, in lieu thereof, a guarantee of installation shall be provided by the subdivider or developer prior to final plat approval. The guarantee shall assure the responsible body (East Hanover Township) that the required improvements will be installed in accordance with the subdivision or land development plan.

During the design and approval of subdivision and land development plans East Hanover Township and the developer shall give primary consideration to all transportation plans, watershed plans, water plans, sewer plans, community facility plans, county and municipal comprehensive plans and official maps as may be in effect in the Township.

SECTION 5.02 GENERAL STANDARDS

In addition to the standards contained elsewhere in these regulations, the following general standards shall be observed.

- A. Existing utilities and improvements shall be utilized wherever possible. New roads and extended utility services shall be discouraged if existing services and facilities may be utilized. Scattered urban development shall be avoided.
- B. Development designs shall minimize street lengths necessary to serve developed properties.
- C. Side lot lines should be substantially at right angles or radial to street lines, unless the purpose of lot line orientation is to obtain greater solar access.
- D. Depth of residential lots should be not less than one (1) nor more than two and a half (2 1/2) times the lot width.
- E. Every lot shall abut a street. Lot frontage or access shall be physically accessible by standard vehicles in existing conditions or East Hanover Township shall require illustration of the site improvements planned and necessary to alter steep banks, flood

plains, visibility limitations, etc. to a condition that will facilitate safe and adequate access. East Hanover Township may also require that lots be arranged to reserve a right-of-way for street access to future lots.

- F. Double or reverse frontage lots may be preferred or required when lot access to an adjoining street is not permitted or separation from the street is desired because of topographic, orientation, aesthetic, congestion, safety or high noise level considerations. Landscaping and buffering should be provided along the adjoining street.
- G. Adequate easements or rights-of-way shall be required for drainage and utilities. Easements shall be a minimum of twenty (20) feet in width and, whenever possible, shall be centered on side or rear lot lines. No structure or buildings or plantings other than grass shall be erected within such easements.
- H. Additional lot areas beyond minimum size may be required:
 - 1. On slopes in excess of 15%.
 - 2. To control erosion or storm water runoff.
 - 3. To provide sufficient area for sewage disposal.
- I. Lots shall be suitably shaped to encourage and facilitate use and maintenance of all portions of the lot. Accordingly, lots shall be square or generally rectangular in shape. Lot configurations which result in L-shaped, T-shaped, triangular or otherwise inappropriately shaped lots shall be avoided.
- J. Site design and development shall include reasonable efforts to save existing trees and vegetation as well as illustrating a proposed tree planting and landscaping design.
- K. The standards of this Ordinance shall apply to all lots being subdivided or developed and residual land which is created by the subdivision or land development activity.
- L. Subdivision of property with existing dwellings or development shall be regulated by the following:
 - 1. Each dwelling or use shall be serviced by separate utility connections. Shared sewage systems are not permitted.
 - 2. Each dwelling or use subdivided shall be on sufficient land area to satisfy minimum lot area and yard setback requirements. Where adequate land area is not available to satisfy minimum standards, subdivision may be permitted when:
 - a. Each dwelling or principal building is in good structural condition.
 - b. Mobile homes are not involved.
 - c. An equitable distribution of land is proposed between the existing uses or buildings.

- M. Lot additions, land exchanges, agricultural use only lands, and any other specific or special purpose subdivision or land development shall include prominent plan notes to avoid misinterpretation of the intent of the subdivision or land development plan. Applicable deed restrictions may be required.
- N. Deeds filed subsequent to subdivision or land development approval shall accurately and correctly describe the property therein. Deeds and use of the property shall be in complete compliance with all plan notes and conditions. Recording a deed which omits or contradicts the information on an approved subdivision or land development plan shall be a violation of this Ordinance.
- O. Subdivision/development of residential lots/units shall require the dedication of recreation and open space land, or the payment of fees in lieu thereof, in accordance with the following requirements:
1. Dedication of land or payment of fees in lieu thereof, for recreation and open space use shall be in accordance with any duly adopted municipal or county Recreation and Open Space Plan. Therefore, it is the intent and scope of these provisions to apply the recreation dedication, or fee payment in lieu thereof, requirements as follows:
 - a. As East Hanover Township has adopted a municipal Recreation and Park Plan, the subdivider or land developer shall satisfy all recreation and open space requirements and obligations with the appropriate municipal officials including, but not limited to, agreement on any lands to be dedicated or fees to be paid in lieu thereof. Documentation shall be provided to East Hanover Township to verify satisfaction of municipal requirements. All subdividers and land developers who comply with East Hanover Township Recreation and Park Plan requirements shall be exempt from County Recreation and Open Space Plan requirements, but are urged to adhere to recreation and open space guidance provided within the Lebanon County Recreation and Open Space Plan.
 2. Dedication of land for recreation and open space, or the payment of fees in lieu thereof, shall be in accordance with the standards established within the East Hanover Township Recreation and Park Plan. Said dedication and fee ratios may be adjusted for inflation from time to time, as deemed necessary by the Township Supervisors. Fees in lieu shall be paid prior to approval of the final subdivision or land development plan. Where final plan phases are proposed, applicable fees shall accompany each phased plan. Deeds for transfer of dedicated land shall be executed and recorded a) after improvement of the land as required on the approved plan, b) prior to transfer or occupancy of 50% of the lots within the development, c) in accordance with the terms of any written agreement with East Hanover Township, or d) within sixty (60) days of notice by East Hanover Township.

3. Standards and criteria for land to be dedicated are as follows:

- a. Recreation and open space shall be intended for public access, with amenities suitable for access, use and maintenance.
- b. Additions to adjacent existing or future public park and recreation areas are a priority for land dedication.
- c. Prior to plan approval, documentation shall be provided to the East Hanover Township to verify Township agreement to accept dedication of the offered land. Absent an acceptance verification, fees in lieu of dedication will be required.
- d. Land suitable for recreation and open space use shall have minimal limitations or intrusions to detract from the intended use, with no more than fifteen percent (15%) of the land area to contain easements, flood plain, steep slopes, wetlands, storm water facilities and similar limiting features (unless such areas are vital to achieving trail and greenway initiatives of the Lebanon County Comprehensive Plan).
- e. With the agreement of East Hanover Township, credit toward land dedication or fee in lieu costs may be granted to subdividers or land developers who propose and complete acceptable public recreation site improvements, facilities construction or equipment installation at approved locations. Credit value shall be documented by the subdivider or land developer and be subject to Township review to verify the value.

4. All fees collected by East Hanover Township in accordance with these provisions shall be administered in conformance with the following guidelines:

- a. Funds shall be deposited and held in a separate Township fund, exclusively for recreation and open space use. Interest earned on such funds shall become part of the fund. The fund shall be referred to as the Recreation and Open Space Fund.
- b. The Recreation and Open Space Fund shall be utilized to fund acquisition and site development of public recreation and open space sites. Expenditures shall be designed to meet the goals, objectives and recommendations of the East Hanover Township Recreation and Open Space Plan. Although intended principally for acquisition and site development, a maximum of ten percent (10%) of the funds expended during any calendar year may be utilized for maintenance or administration of recreation facilities and sites, where need is demonstrated for remediation to create safe, accessible recreational opportunities.

SECTION 5.03 ENERGY CONSERVATION STANDARDS

Conservation of energy shall be an important principle in the design of subdivisions and land developments. Plans shall facilitate the energy efficient placement of homes and buildings on lots. Whenever the following criteria are found to be appropriate to a site, development design shall be in accordance with the standards contained herein.

A. Orientation

1. Lots shall be designed for energy efficient siting of buildings with respect to slopes and existing trees.
2. Southerly exposures should be utilized for development. North slopes, especially those over 10% slope, should be avoided because the long shadows created severely restrict solar access.
3. New lots and new residences shall be oriented to make maximum effective use of passive solar energy. The long axis (depth) of each lot should run North-South, with a possible East- West variation of 22-1/2 degrees. Lot design should provide for lots of adequate width, depth, and slope for solar orientation. Lot layout should facilitate solar access by at least 75% of the proposed dwellings or buildings within a development.
4. The largest yard setback should be stipulated on the south side of proposed buildings. Buildings should be situated to the North end of the lot to permit maximum on-lot control of solar sky-space.

B. Streets

1. Streets should be oriented along an East-West axis, with maximum North-South deviations of 30 degrees. This should be required to the maximum extent possible, although size, configuration or orientation of the property; nature of the surrounding development; circulation patterns; existing physical features such as topography and vegetation (trees); and improved design potential may be considered to determine the feasibility of this requirement for a given site.
2. Street systems shall be designed to reduce overall lengths and facilitate traffic flow (minimum number of intersections).
3. The street system shall be bordered by trees, in accordance with standards of this Ordinance.

C. Vegetation and Wind

1. Site design shall emphasize the preservation of all beneficial natural features of the site, such as existing slope, naturally wooded areas, and water courses. The site design should also avoid requiring removal of large isolated trees and desirable woods and

other vegetation, particularly those existing plant materials which serve as wind barriers and aid in energy conservation.

2. Developments shall be designed to maximize wind buffering and/or breeze channelization capabilities of vegetation, topography and structure layouts. Wind breaks and buffers should utilize evergreens to protect north and northwesterly exposures. Cooling breezes from the southwest should be channeled past buildings. Deciduous trees shall be located in areas which will enable them to shade buildings from the summer sun, but still allow penetration of the winter sun.

SECTION 5.04 TOPOGRAPHY

Subdivisions shall be planned to take advantage of the topography of land in order to: utilize the natural contours, economize in the construction of drainage facilities, reduce the amount of grading, and minimize destruction of trees and topsoil. The natural features and other distinctive characteristics of the site shall be integrated into the plan to create functional variations in the neighborhoods.

Additionally, environmental safeguards may be mandated on slopes in excess of 15%. On steep slopes (in excess of 15%), site and lot design shall be adjusted, where necessary, to mitigate the detrimental effects of development on steeper slopes. The following topographic considerations shall be utilized in design of subdivisions and land developments:

- A. Streets – Land which is relatively flat or of very gentle slopes should be planned so that the streets follow the natural drainage courses and as many lots as possible shall be above the street grade. On more irregular topography, streets shall be designed to avoid extensive cuts and fills and follow the ridges or be planned approximately parallel to contour lines, and adjusted, however, so that lots on one (1) side of the street will not be excessively below the street grade.
- B. Natural Drainage – Subdivisions shall be designed, particularly on land of very gentle slopes, to take every advantage of natural grades so that all the land can be drained without excessive grading. Unless water courses or drainage ways are enclosed, the plan shall be adjusted so that rear lot lines shall be approximately parallel to the natural or straightened course, and only where such plan is not possible, should side lot lines be arranged parallel to an open drainage course. Easements for drainage ways and low-lying land which are subject to flooding may be included as part of a lot but shall not be used as building sites or included in calculating the required lot area or width.
- C. Natural Features – Natural features, irregularities, changes in level, brooks, lakes, hilltops, and other focal points within the site, and distant views outside the subdivision shall be integrated in the design to obtain variations and interest in each neighborhood and more attractive building sites. Trees, topsoil, and other natural resources shall be preserved and utilized in the development of the subdivision.
- D. Driveways – Private driveways shall be designed to furnish safe and convenient access, with reasonable clear sight distance at intersection with the street. Site improvements shall be required to insure adequate site visibility at the point of access and installation

of a stable, erosion resistant driveway surface. Driveway site distances shall be consistent with current PENN DOT requirements (Specifications located in appendix) and appropriate radii shall be provided.

Steep slopes shall be traversed diagonally to minimize grades. Driveway grades shall not exceed 15% slope at any point. All driveways shall be designed and improved with a rolled stone or paved surface, sufficient to avoid erosion. When driveway grades exceed 10% slope driveways shall be paved to minimize erosion. Required driveway improvements shall be guaranteed in accordance with Section 5.14 of this Ordinance.

SECTION 5.05 GRADING

The developer shall grade each subdivision or land development to establish street grades, floor elevations of buildings, and lot grades in proper relation to each other and to existing topography.

However, grading shall be kept to a minimum to avoid loss of topsoil and erosion potential. Lots shall be graded to secure drainage away from buildings. The grading shall facilitate collection of storm water in designated areas and avoid concentration of water in the sewage system location.

The grading of the roadway shall extend the full width of the cart way, shoulder and swale area, if applicable. Where possible, grass strips or channels between the curb or shoulder and right-of-way line should be graded at 3:1 slope; however, when unusual topographic conditions exist, standard engineering practice shall prevail.

SECTION 5.06 LOT SIZES AND STANDARDS

The minimum lot size and lot width requirements established by the East Hanover Township Zoning Ordinance shall be utilized as minimum subdivision standards. All lots shall satisfy the municipal zoning standard for lot width and lot size at the time of subdivision. Additionally, the building setback lines established by the East Hanover Township Zoning Ordinance shall be applicable and shall be noted on each subdivision or land development plan. Additionally, each subdivision or land development plan shall satisfy all other applicable zoning standards, unless variance thereto has been granted.

In cases where zoning standards have not been enacted or might otherwise be determined not to be valid, the following uniform standard shall apply for new building lots.

<u>Available Utilities*</u>	Minimum Lot size	Minimum <u>Lot Width</u>	Minimum Setbacks		
			<u>Front</u>	<u>Side</u>	<u>Rear</u>
On-lot Well & Sewage	1 Acre	150'	40'	15'	40'
Public Water/On-lot Sewage	30,000 sq.ft.	135'	40'	15'	40'
On-lot Well/Public Sewer	20,000 sq.ft.	120'	35'	10'	35'
Public Water & Sewer	10,000 sq.ft.	100'	30'	10'	30'

* Public also includes approved community water and sewage systems

SECTION 5.07

Superseded by the East Hanover Township Stormwater Management Ordinance.

SECTION 5.08 SEWAGE DISPOSAL

Sewage disposal facilities shall be designed and constructed to meet the needs of the proposed subdivision or land development. Sewage disposal facilities shall also meet all requirements of the Pennsylvania Department of Environmental Protection, and the East Hanover Township Act 537 Sewage Facilities Plan. The following requirements specify the design and installation standards for subsurface sewage disposal and public and private sewerage systems.

A. Subsurface Sewage Disposal – All subdivisions and land developments proposing subsurface sewage disposal shall be designed and submitted in compliance with the prevailing requirements of the Pennsylvania Sewage Facilities Act, D.E.P. and, where applicable, the Delegated Local Agency. It is the intent of this section to co-ordinate a simultaneous review of subdivision and land development plans with sewage planning modules thereby avoiding the approval of lots that are not suitable for sewage disposal. Where required by Municipal Sewage Plans, on-site sewage testing shall be supplemented with a Hydrogeological Study which may dictate increased lot sizes or reservation of ground water easement areas. In accordance with those standards, application for subdivision or land development approval shall satisfy the following procedural requirements :

1. Minor Subdivision – The subdivider shall submit the sewage planning module and required associated information to the sewage enforcement officer at the time of final plat application. The subdivision or land development plan shall not be processed until documentation is provided to verify that the sewage enforcement officer has approved the sewage planning module. All newly created lots, whether for immediate or future use, shall be tested and approved for sewage suitability.

2. Major Subdivision – The subdivider shall submit a preliminary plan depicting general lot layout and street design, as required herein. The subdivider shall submit the required sewage planning module and associated information to the sewage enforcement officer at the time of preliminary plan application. The subdivision or land development plan shall not be processed until documentation is provided to verify that the sewage enforcement officer has approved the sewage planning module.
- B. Existing Public Sewers – When a subdivision or land development has public sewers available on-site or within one thousand (1,000) feet of the site, sewer lines shall be included on the subdivision or land development plan and installation must be approved by the municipal authority responsible for the sewer system. Written documentation is required from the Authority to verify adequate capacity, agreement to provide service, and specific design approval.
- C. Planned Sewer Area – When a proposed subdivision or land development is located in an area not presently served by public sewers, but which has received design data preparatory to sewer system installation within eighteen (18) months, then East Hanover Township shall determine the necessity of installing house connections and/or capped mains, even though on-site facilities will be required in the interim. Installation of house connections and capped mains shall be in accordance with municipal design data and approved by the Township Engineer prior to approval of a preliminary or final plan.
- D. Private Sewerage System – When a subdivision or land development is to be provided with a private sewerage system, a statement shall be submitted to the Planning Department from the Pennsylvania Department of Environmental Protection verifying that a permit has been issued approving the proposed facilities. Additionally, East Hanover Township must be satisfied that adequate provisions have been made to guarantee the construction and maintenance of the proposed private sewerage system.
- E. Plan Notice
1. Subsurface Sewage Disposal – All subdivision and land development plans shall contain a plan note specifying that approval of the plan does not guarantee permit issuance for sewage disposal.
 2. Public Sewers – All subdivision and land development plans shall contain a plan note specifying that connection to public sewer lines is required.
 3. Lot additions in non-public sewer areas/agricultural parcels – non-building language to be displayed as provided in appendix and proper documentation to be processed through Sewage Enforcement Officer and East Hanover Township.

SECTION 5.09 WATER SUPPLY

A water supply system shall be designed and constructed by the subdivider or developer as required by the municipality, water company, or water authority in relation to the specific site of the proposed subdivision or land development. The water supply system shall be capable of

meeting the domestic and fire protection needs of the site. When possible, the subdivision or land development should be served by a public water supply system approved by municipal water officials or a community water system approved by the Pennsylvania Department of Environmental Protection. If the subdivision or land development is to be supplied by a public or community water system, the subdivider or developer shall submit a written certification, commitment or evidence that the municipal water company or authority or the association of lot owners or private company, as applicable, has adequate water capacity, has agreed to provide water service and has approved the specific water system design.

When a subdivision or land development has public water on-site or within five hundred (500) feet of the site, public water lines shall be extended as necessary to service the lots and uses on the subdivision and land development plan, subject to approval by the municipal authority responsible for the water system. In those cases where a public or community water system is not available or practical, a well shall be provided for each lot. Wells shall be placed uphill from sewage disposal systems. Wells shall not be within one hundred feet (100') of any part of the absorption field of any on-site sewage disposal system and they shall not be placed within fifty feet (50') of lakes, streams, ponds, quarries, etc.

Subdivision or land development proposals which involve the daily use of 10,000 gallons or more of well or surface water shall be accompanied by a Hydrologic Study to document the adequacy of the water supply without endangering water availability for adjoining landowners. Review and, where applicable, approval may be required from D.E.P. and the Delaware or Susquehanna River Basin Commission, as applicable.

Subdivision and land development plans shall contain a plan note specifying the source of water supply. Plans proposing the use of public or community water shall contain a note specifying that connection to the public or community water lines, as applicable, is required. Plans proposing the use of individual wells shall contain a note specifying that the lot(s) has not been tested for the availability of water of adequate quality or quantity and no guarantee of water availability is provided.

SECTION 5.10 STREETS

In addition to reflecting the topography, natural features and solar orientation, streets shall be designed according to the function served, the use of abutting land, and standards of width, intersections, maximum grades and curvatures. East Hanover Township shall require that all developments have adequate access. Where major subdivision is proposed or may occur because of the patterns started by minor subdivision activity, East Hanover Township should require reservation for, or installation of, two or more streets to insure safe and convenient access. Elimination or vacation of previously approved streets shall be approved only when East Hanover Township determines that 1) alternate access has been provided in another, more suitable location, 2) further development is not possible utilizing the street, and 3) any land owners who purchased property with reliance upon the street agree in writing to its elimination.

The developer shall design and construct streets, including pavements, shoulders, gutters, curbs, etc., as required by municipal ordinance. Where specific municipal regulations do not

exist, the following requirements shall apply.

A. Classification and General Design Goals

1. Major Streets - function primarily for the movement of fast traffic between points of heavy traffic generation. They are often known as arterial streets or highways. They shall be planned for continuation of existing streets in the system at the same or greater width in accordance with adopted municipal standards. Major streets shall contain as few intersections as possible.
2. Collector Streets – function to collect traffic from local streets and distribute it into major streets, and, as such, they will normally contain a relatively large number of intersections with local streets and few with main streets. A collector street system may be required wherever a residential neighborhood near a major street is over 150 acres in area or where the local street pattern is so designed as to converge and serve over 500 one-family dwellings, or 100 multi-family units. Collector streets shall be planned for continuity and to lead more or less directly to one or more focal points or centers of traffic generation, and may become bus routes.
3. Local Streets – provide direct access to each lot and function to allow traffic to circulate toward the principal directions of travel, bus routes, schools and playgrounds; however, the design shall discourage through and high speed traffic. The street pattern shall be indirect and yet continuous to prevent through traffic, formed of straight, moderately winding, curved, looped or angular streets. Tee-intersections shall predominate and cross-intersections shall be minimized. There shall be an underlying systematic neighborhood pattern; however, gridiron and other rigid geometrical patterns should be avoided where possible. The street pattern shall include extensions to the boundaries of the development to provide circulation between adjoining neighborhoods.
4. Cul-de-sac Streets – provide direct access to properties from other streets. Ordinarily, a cul-de-sac is a short street with only one outlet and having an appropriate terminal for safe and convenient reversal traffic movement. Drainage should be towards the open end. If drainage is toward the closed end it shall be conducted away in an underground storm sewer. Other design alternatives such as through or looped streets shall be used where possible.

B. Minimum Street Standards - See Chart on page 39.

B. Minimum Street Standards

Street Classification	Right-of-Way Width	Street w/o Curbs		Street Width with Curbs	Grade (Vertical Alignment)	Radium Curvature (Horizontal Alignment)	Reverse Curve Tangent	Sight Distance	Other Requirements
		Paved Cartway Width	Improved Shoulder Width (each)						
Major Streets	80'	44'	10'	48'	6%	500'	200'	400'	Subject width subject to Penn DOT requirements
Collector Streets	60'	34'	8'	34'	8%	300'	100'	200'	
Local Streets	50'	26'	4'	30'	10%	150'	50'	125'	Pavement width shall be increased where on-street parking is planned or lots average 80' or less in width
Cul-da-Sac Streets	50' (90' at turnaround)	20' (80' at turnaround)	4'	26'	10% (5% at turnaround)	150'	50'	100'	Maximum length of 600'. Serve a maximum 12 single family detached residential lots/units, 24 duplex lots/units or 30 townhouse/ multi-family lots/units.

C. Supplementary Street Standards --In addition to the specific standards cited in Section B, the following street standards shall apply to design and construction of streets:

1. Intersections

- a. Streets shall be designed to intersect at right angles (90 degrees) and should be at right angles for at least 100 feet from the point of cartway intersection.
- b. No more than two (2) streets shall intersect at any one point.
- c. Proposed new intersections along one side of an existing street shall coincide with any existing intersections on the opposite side of the street. Where intersections cannot practically be connected, a minimum of 150 feet shall separate the center lines of offset local streets, and 400 feet minimum shall be provided for collector and major streets.
- d. Street curb intersections shall be rounded with a minimum radius of twenty (20) feet for local streets and thirty (30) feet for collector or major streets. The radius point shall be concentric with that for the property lines.
- e. Intersections shall be designed with a flat grade. In hilly or rolling topography, a leveling area shall be provided for seventy-five (75) feet on all sides preceding the intersection, measured from the edge of the cartway of the intersecting street. The leveling area shall have a maximum grade of four percent (4 %) for local and cul-de-sac streets and a maximum grade of two percent (2 %) for collector and major streets.
- f. Clear sight triangles of seventy-five (75) feet measured along the center line from the point of intersection, shall be provided and maintained at all intersection. No building, structure, planting or other obstruction higher than 30" above the roadway grade shall be permitted within the clear site triangle unless superseded by municipal zoning regulations.

2. Street Names --shall not duplicate others nearby, and shall be subject to the approval of East Hanover Township. Reflective street signs shall be erected to identify all streets.

3. Street Expansion -where a subdivision adjoins un-subdivided land or future development phase's sufficient streets shall be planned to extend to the boundary lines so that all parcels may be subdivided and a coordinated street system obtained. Traffic circulation shall be assured by installation of a temporary, stoned cul-de-sac for short term use (less than 2 years) or paved cul-de-sac for longer use until a through street is completed.

4. Streets for Multi-Family Development --shall be planned to connect with major or collector streets to avoid generating large volumes of traffic on local residential streets.

5. Reserve Strips --the creation of reserve strips shall not be permitted adjacent to a proposed street in such a manner as to deny access from adjacent property to such street.

6. Right-of-way Widths – land for the right-of-way for the opening or extension of any street within a subdivision shall be dedicated by the developer. Where a property abuts a street which does not conform to the right-of-way width required by this Ordinance or other ordinances of East Hanover Township, the additional width necessary to meet current standards shall be dedicated when such land is subdivided.
7. Vertical Curves – The minimum length of crest and sag vertical curves shall be determined by multiplying the following "K" value by the percent change in grade for the curve (expressed as a whole number):

<u>Design Speed</u> (in miles per hour)	<u>"K"</u> <u>Crest Vertical Curves</u>	<u>"K"</u> <u>Sag Vertical Curves</u>
20	10	20
25	20	30
30	30	40
35	45	50
40	70	70
45	100	90
50	150	110
55	220	130

Regardless of the vertical curve calculation, no street vertical curves shall be less than seventy-five (75) feet in length.

8. Auxiliary Street Improvements – In addition to the required pavement and shoulder widths, streets shall be designed and constructed with curbs, street lights, gutters, culverts, catch basins, sidewalks, traffic control signs, and other improvements required by municipal ordinance or determined by East Hanover Township to be necessary for a proposed subdivision or land development. Specific improvement guidelines are:
 - a. Curbs – Vertical, slant and rolled curbs are all permissible designs, where permitted by municipal regulation, functionally coordinated with the overall development design, and constructed in accordance with the following:
 - i. Curbing shall be plain cement concrete, with a minimum strength of 3500 PSI, placed on a four (4) inch deep base of AASHTO # 57 (2B) stone.
 - ii. Curbing shall be saw cut every ten (10) feet and expansion joints installed every fifty (50) feet.
 - iii. Curbing shall be free of stress cracks and other deformities.
 - b. Sidewalks – Sidewalks of a minimum four (4) feet in width shall be required in accordance with East Hanover Township regulations and for townhouse or multi-family developments, within residential subdivisions containing public sewer or lots of 1 acre

or less, to connect to adjacent or nearby sidewalk systems or when determined by East Hanover Township to be necessary for the safety and convenience of the projected pedestrians. Sidewalk specifications are:

- i. Sidewalks shall be plain cement concrete four (4) inches thick, with a minimum strength of 3500 PSI, placed on a four (4) inch deep base of AASHTO # 57 (28) stone.
 - ii. Expansion joints shall be provided at intervals of twenty (20) feet minimum.
 - iii. Sidewalks shall have a one-quarter (1/4) inch per foot sloped towards the curb and street.
 - iv. In residential developments, when a grass (beauty) strip is provided, it shall be a minimum three (3) feet in width and shall be located between the curb line and the sidewalk.
- c. Traffic Control Signs --Signage within all subdivisions and land developments shall be designed and installed by the developer in accordance with Penn DOT regulations and MUTCD (Manual on Uniform Traffic Control Devices). Adequate vertical and horizontal area shall be reserved for sign placement at intersections.
- d. Street Lights – Street lights shall be designed and installed to illuminate all major subdivisions and land developments, unless a waiver is obtained for low density developments or similar subdivisions. Street lights shall be placed at all street intersections and accesses to land developments, within parking lots and along streets at intervals of 250 feet or less.
- e. Street Trees – Street trees shall be installed on both sides of all streets within subdivisions and land developments. Installation shall be in accordance with the following requirements:
- i. Trees shall be planted to avoid conflicts with utilities, roadways, sidewalks, intersection visibility and street lights. Small, medium or large trees shall be utilized where appropriate. Recommended tree species, by size, are listed within this Ordinance.
 - ii. Plans proposing more than 25 lots or dwelling units shall be accompanied by a detailed landscape plan.
 - iii. Street tree planting between the street curb and sidewalk, within the grass (beauty) strip, shall be in compliance with the following:

<u>Mature Tree Size</u>	<u>Minimum Grass (Beauty) Strip</u>
Small (Less than 30' Height)	3'
Medium (30' to 50' Height)	5'
Large (Over 50' Height)	8'

Where adequate grass (beauty) strip width is not available for planting because of street design, street trees shall be planted on the lot (interior) side of the sidewalk, a

maximum of five (5) feet from the edge of the sidewalk. Streets without sidewalks shall require street tree planting within ten (10) feet of the edge of the street cartway.

iv. Street tree spacing requirements are:

(1) Planting Interval

Small Trees – 30 to 40 feet

Medium Trees – 40 to 50 feet

Large Trees – 50 to 70 feet

(2) Minimum 50 feet from street intersection and outside of any clear sight triangle

(3) Minimum 10 feet from a driveway or street light pole

(4) Minimum 20 feet from a fire hydrant

v. Planting specifications required for street trees are:

(1) Trees shall be balled and burlapped, standard quality or better nursery stock, with straight trunks and well developed branch and root systems.

(2) Large trees shall be a minimum of 1 1/2" caliper and 8 feet in height. Medium and small trees shall be a minimum of 1" caliper and 6 feet in height.

(3) Tree holes shall be a minimum of twice the diameter of the tree root ball.

(4) Planted trees shall be mulched and watered during the first growing season. Dead and dying trees shall be replaced.

(5) Trees shall be staked where necessary.

(6) Trees planted within five (5) feet of a sidewalk shall have a plastic or geotextile root barrier, a minimum one (1) foot deep by ten (10) feet long, placed along the sidewalk edge closest to the tree.

(7) Recommended tree species are listed in the Appendix of this Ordinance.

9. Proposed cul-de-sac streets shall contain a fully described snow plow easement or similar authorized snow plow area.

D. Unimproved Streets or Rights-of-Way – Subdivision in East Hanover Township on unimproved (unpaved) streets or access rights-of-way is prohibited. However, one lot may access via an unimproved right-of-way provided that the right-of-way is a minimum of 50' in width and so located and designed that a street could be installed in the event of future subdivision activity.

E. Private Streets – Private streets are to be discouraged. They will be approved only if they are designed and constructed to meet public street standards and maintenance is guaranteed in perpetuity via a bonafide homeowner's association (or similar organization) agreement and appropriate financial security for repair and maintenance. A minimum of 20 lots/units are required if a private street system is proposed.

Subdivision of new lots for immediate or future development is not permitted along private lanes, alleys or streets which have not been designed, constructed and approved in accordance with these standards and those of this Ordinance.

F. Street Construction Standards - Streets and rights-of-way shall be improved to meet East Hanover Township standards. The requirements contained herein are provided as design standards and shall be used as improvement specifications where no East Hanover Township standards exist or to supplement standards of the municipalities. It shall be the developer's responsibility to satisfy all applicable construction requirements and design standards, or in lieu thereof, deposit a security in compliance with Section 5.14 of this Ordinance and established East Hanover Township policies. All public and private streets shall meet the following standards for design and construction:

1. Excavation

- a. All topsoil shall be removed from the area to be paved.
- b. During construction, excavation shall be graded to drain.

2. Embankment

- a. Placement of embankment shall be in layers not exceeding eight (8) inches, prior to compaction.
- b. Embankment material shall consist of all excavation on the project, except such materials as may be determined to be unsuitable under Penn DOT Publication 408, current edition, and when required will include borrow excavation.

3. Subgrade

- a. All required underground utilities and storm drainage shall be installed within the cartway area prior to preparation of the subgrade. Trench backfilling shall be completed in layers no greater than eight (8) inches.
- b. Adequate surface and subsurface drainage shall be provided, including underdrains for springs or spongy areas. All large rocks, boulders or ledges shall be broken off six (6) inches below the improved subgrade surface.
- c. Completed subgrade shall be maintained and protected in advance of the succeeding operation.
- d. Disturbed areas shall be moistened as necessary to minimize dust.

4. Subbase

- a. No subbase shall be placed on wet, frozen, or unsuitable material. Unsuitable material such as sod, stumps, tree roots, spongy soil and excess rock shall be removed and replaced. Disturbed areas shall be reshaped and re-compacted. Where deemed necessary by the Township Engineer, a geotextile material may be required before placement of the subbase.
- b. The subbase shall be a stone aggregate material consisting of six (6) inches of compacted 2A or 3A modified stone under the paved surface of the cartway. A minimum of four (4) inches of the same aggregate shall be installed on the shoulder of the road, extending at least

four (4) feet on each side of the cartway.

- c. The stone aggregate subbase shall be compacted to the required depth with a vibrating tamper or vibrating roller.

5. Base Course

- a. The base course shall be applied as soon as possible after subbase preparation to avoid damage to the subbase.
- b. The base course shall be a bituminous treated aggregate consisting of a minimum of three (3) inches compacted Superpave Asphalt Mixture Design HMA Binder Mix Course, PG 64-22, 0.0 to 0.3 million ESAL's (or appropriate number), 25 mm mix, 3" depth in accordance with Penn DOT Manual Form 408 specifications.

6. Wearing Course

- a. A bituminous tack coat is required between the base course and wearing course.
- b. Paving notches shall conform to Penn Dot RC-28 standards.
- c. The wearing course shall be Superpave Asphalt Mixture Design, HMA Wearing Course, PG 64-22, 0.0 to 0.3 million ESAL's (or appropriate number), 9.5 mm mix, 1 1/2" depth, with the appropriate SRL for the anticipated ADT in accordance with Penn DOT Manual Form 408 specifications.

7. Shoulders

All paving seems, including at curbs, inlets and manholes, shall be sealed using PG 64-22 or equivalent.

Shoulders shall be provided where curbing is not utilized. Shoulders shall be a minimum of four (4) feet in width and conform to Penn Dot Type 6 shoulders, as per Penn DOT RC-25.

8. Inspections

Inspections shall be requested from the Township Engineer after the completion of each of the following phrases of street construction:

- a. Preparation of the subgrade.
- b. Placement and compaction of the subbase.
- c. Installation of the base course.
- d. Completion of the wearing course.

- G. State Approval of Streets and Access – to insure that street designs comply with all applicable standards, East Hanover Township may submit any preliminary and final subdivision or land development plans to the Pennsylvania Department of Transportation for review and comment. Subdivision and land development plans which will require access to a state highway under the jurisdiction of the Pennsylvania Department of Transportation (Penn DOT) shall contain a plan note specifying that a highway occupancy permit is required from Penn DOT before driveway access to the state highway is permitted. The plan note shall also specify that plan approval does not

guarantee that a Penn DOT permit will be issued.

H. Transportation Impact Studies (TISs) and Transportation Impact Assessments (TIAs)

A Transportation Impact Study (TIS) is required in conjunction with each subdivision or land development plan which meets one or more of the following criteria:

1. The site is expected to generate 3,000 or more average daily trips or 1,500 vehicles per day.
2. During any one hour time period of any day of the week, the development is expected to generate 100 or more vehicle trips entering the site or 100 or more vehicle trips exiting the site.
3. For existing sites being redeveloped, the site is expected to generate 100 or more additional trips entering or exiting the development during any one hour time period of any day of the week.
4. In the opinion of East Hanover Township, the development or redevelopment is expected to have a significant impact on highway safety and/or traffic flow, even if none of the above warrants are met.

East Hanover Township is especially concerned about residential developments with one hundred (100) or more lots or dwelling units and non-residential developments which will have more than one hundred (100) employees, one hundred (100) parking spaces and/or more than twenty-five (25) truck trips per day. These proposed developments warrant a scoping meeting as discussed below.

If a TIS is not warranted, East Hanover Township may require the preparation of a Transportation Impact Assessment (TIA). Some of the factors in determining if a TIA is necessary include but are not limited to:

1. Location of proposed access and site configuration,
2. Congestion and delay of the surrounding roadway network, and/or
3. Safety concerns.

The purpose of the TIA is to assess the impact of the development on specific intersections and/or on elements of state and local roads. As such, the scope of the TIA will be limited and targeted to the concerns of the LCPD, municipality or municipalities affected and/or the Pennsylvania Department of Transportation (Penn DOT) if state roads (SRs) are involved. In most cases, the TIA would be limited to an opening year analysis. It is critical that before any work begins on a TIS or TIA that the applicant meets with the LCPD, affected municipality or municipalities, Penn DOT and/or other key parties in a scoping meeting in order to clarify and agree upon the work to be performed and the time table for completion of the study or assessment.

In determining the need for a TIS or TIA, the applicant should assume only one (1) access point; however, major residential and commercial developments may require two (2) access points. If the development has multiple stages or phases, the warrant for the TIS shall be based on new trips generated at full build out of the development. The size of the study area for the TIS or TIA may range from a one-half mile radius from the development out to several miles as outlined in the Penn DOT requirements. The size of the study area and the roads/intersections involved in the TIS/TIA will be

established during the scoping meeting.

A TIS or TIA needs to balance the safety and mobility of the traveling public with the needs and rights of property owners. Mitigating the impacts from development or redevelopment must occur through the TIS or TIA process. The ultimate goal is to maintain a safe and efficient transportation system and to enable growth and development/redevelopment where appropriate and sustainable.

A TIS or a TIA must be conducted under the supervision of a qualified professional who possesses a current Professional Engineer's (PE) license issued by the Pennsylvania Department of State and preferably possessing a Professional Traffic Operations Engineer (PTOE) certificate.

All TISs or TIAs in East Hanover Township must comply with Penn DOT's standards for these types of studies, as are outlined in Publication 170. If a Penn DOT highway occupancy permit (HOP) is also needed, the applicant must also adhere to Penn DOT's HOP requirements as outlined in Publication 282. The most current version of the Institute of Transportation Engineers' (ITE's) trip generation manual must also be used to calculate future trips. Where a Penn DOT HOP is required along with a local/county land development process approval, both efforts should occur in the same general time frame so that the HOP is approved by Penn DOT as the building permit is issued by the municipality/county.

In general, in the urbanized portions of East Hanover Township, the land developer or subdivider shall be responsible for the off-site transportation improvements that are necessary to assure Level of Service "D" conditions. In the rural portions of the township, Level of Service "C" conditions must be met by the applicant. A copy of the Bureau of the Census' most current urbanized area designations for Lebanon County can be obtained from the LCPD or Penn DOT.

SECTION 5.11 MONUMENTS

Sufficient monuments shall be set to ensure that reliable survey points are available for all parts of the subdivision. At least one (1) monument shall be placed for every two (2) lots or every two hundred (200) feet of streets, whichever requirement is less. The monument shall consist of a concrete monument, 4" X 4" X 30", set level with finished grade. All lot corners and changes in direction shall be identified with 3/4" diameter X 15" steel bars.

The top of the monument box shall be set at the finished grade upon completion of the grading of the street.

SECTION 5.12 UTILITIES AND OTHER IMPROVEMENTS

All subdivisions shall be designed and serviced with adequate utilities, including electricity and telephone service. The developer shall be responsible to cooperate with the utility companies to insure installation of the necessary utilities. All utilities shall be underground, except where developments of five (5) lots or less are exempted by the Pennsylvania Public Utility Commission. Where required, the developer shall obtain a letter from the utility company confirming that service may be extended to the development.

When required by East Hanover Township, the developer shall provide a street lighting duct system, in accordance with the specifications of the appropriate public utility.

In areas where public water lines are available, fire hydrants shall be installed by the developer. Fire hydrants shall be located no more than 100 feet apart and within 500 feet of any dwelling or inhabited structure. The nearest fire protection unit may be contacted for input regarding the design and placement of a fire hydrant network.

SECTION 5.13 REQUIRED IMPROVEMENTS

The land improvements required to be completed by the developer of a subdivision or land development, as set forth in this Chapter, shall be designed and installed in accordance with this Ordinance and other codes of East Hanover Township. The improvements shall be of such size and capacities as are required for the development of the proposed subdivision and of extra sizes as may be necessary to serve nearby land which is an integral part of the neighborhood service or drainage areas.

The developer shall be required to extend the improvements to serve adjoining un-subdivided land. If streets or utilities are not available at the boundary of a proposed subdivision, East Hanover Township may require the developer to construct off-site extensions of the improvements. Procedures for providing any necessary extra-size and off-site improvements and general standards for pro-rating costs shall be coordinated with East Hanover Township and shall be in accordance with the following:

- A. Extra-Size Improvements – The developer shall be required to pay for a part of the materials or construction of streets, sewers or water lines which are determined by East Hanover Township according to the standards set forth in this Chapter to be in excess of the size required for the development of the subdivision and the integral neighborhood, service, or drainage area.

If a storm sewer in excess of 18 inches, or a sanitary sewer in excess of 8 inches or a water main in excess of 6 inches is required, but each less in size than the sewer trunk lines or water mains which are to be constructed and financed on a regional basis, East Hanover Township shall construct the extra size utility and require a deposit in advance from the developer for the cost of the utility he is required to install and his portion of other costs which the municipality may assess against the benefited property owners of the service or drainage area.

- B. Extensions to Boundaries – The developer shall be required to extend the improvements to the boundary of the proposed subdivision to serve adjoining un-subdivided land; however, where East Hanover Township determines that a connecting street is necessary for the future subdividing of adjoining land, but the present construction of pavement and/or utilities therein are not warranted, East Hanover Township may require the dedication of land, the pavement intersections constructed, utilities extended at least three (3) feet beyond the pavement, and connections provided and made available for future extensions by other developers.

- C. Off-Site Extensions – If streets or utilities are not available at the boundary of a proposed subdivision, East Hanover Township may require as a precedence to approval of a preliminary or final plan, assurances that such improvement extensions shall be provided as follows:

- I. If East Hanover Township finds the extensions across undeveloped areas would not be warranted as a special assessment to the intervening properties or a municipal expense until some future time, the developer may be required, if he wishes to proceed with the development, to obtain necessary easements or rights-of-way and construct and pay for

extensions. Such improvements shall be available for connections by developers of adjoining land, or

2. East Hanover Township may construct and pay for the extensions and assess the costs to the owners benefited and require a deposit from the developer as described in subsection (A) herein. East Hanover Township may establish a revolving fund to pay for such development costs and not collect the assessments on the intervening land until it is developed.

D. Prorating Costs – In making determinations for prorating costs for the construction of off-site extensions or extra-size improvements, East Hanover Township shall consider in addition to the standards set forth in this Chapter and other regulations of the municipality the following conditions:

1. The relative location and size of the proposed subdivision,
2. The traffic estimated to be generated by the development in relation to present streets.
3. The natural drainage area for sewers and the service area for water,
4. The development benefits that will accrue to the subdivision,
5. The sequence of land and utility developments in the vicinity, and
6. Any other condition it may find pertinent.

SECTION 5.14 COMPLETION OF IMPROVEMENTS OR GUARANTEE THEREOF
PREREQUISITE TO FINAL PLAN APPROVAL

- A. Performance Guarantee in Lieu of Installation – No plat shall be finally approved unless the streets shown on such plan have been improved to a mud-free or otherwise permanently passable condition, or improved as may be required by the subdivision and land development ordinance and any walkways, curbs, gutters, streets, street lights, fire hydrants, shade trees, water mains, sanitary sewers, storm sewers, storm water management facilities, required plantings, and other improvements as may be required by the subdivision and land development ordinance have been installed in accordance with this Ordinance. In lieu of the completion of any improvement required as a condition for the final approval of a plat, the subdivider or developer shall deposit with East Hanover Township a fiscal security in an amount sufficient to cover the costs of any improvements or common amenities including, but not limited to roads, storm water detention and/or retention basins and other related drainage facilities, open space improvements, or buffer or screen plantings which may be required
- B. Type of Guarantee – Without limitation as to other types of financial security which East Hanover Township or Lebanon County may approve, which approval shall not be unreasonably withheld, Federal or Commonwealth chartered lending institution irrevocable letters of credit and restrictive escrow accounts in such lending institutions shall be deemed acceptable financial security for the purposes of this Section. Such financial security shall be posted with a bonding company or Federal or Commonwealth chartered lending institution chosen by the party posting the financial security, provided said bonding company or lending institution is authorized to conduct such business within the Commonwealth. Such bond, or other security shall provide for, and secure to the public, the completion of any improvements which may be required on or before the date fixed in the formal action of approval or accompanying agreement for completion of the improvements.
- C. Amount of Guarantee – The amount of financial security to be posted for the completion of the required improvements shall be equal to one hundred and ten percent (110%) of the cost of completion estimated as of ninety (90) days following the date scheduled for completion by the developer. Annually, East Hanover Township may adjust the amount of the financial security by comparing the actual cost of the improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the ninetieth (90th) day after either the original date scheduled for completion or a rescheduled date of completion.

Subsequent to said adjustment, East Hanover Township may require the developer to post additional security in order to assure that the financial security equals said one hundred and ten percent (110%). Any additional security shall be posted by the developer in accordance with this subsection. The amount of financial security required shall be based upon an estimate of the cost of completion of the required improvements, submitted by an applicant or developer and prepared by a qualified professional licensed as such in this Commonwealth and certified by such qualified professional to be a fair and reasonable estimate of such cost. The Township Engineer shall review and approve the cost estimate or, for good cause, refuse to accept the estimate.

If the party posting the financial security requires more than one (1) year from the date of posting of the financial security to complete the required improvements, the amount of financial

security may be increased by an additional ten (10) percent of each year period beyond the first anniversary date from posting of financial security or to an amount not exceeding one hundred and ten percent (110%) of the cost of completing the required improvements as reestablished on or about the expiration of the preceding one (1) year period by using the above cost estimate preparation procedure. A developer who fails to complete the improvements within the allotted time specified in the financial guarantee shall, at least sixty (60) days in advance of the guarantee expiration date, renew or resubmit a financial guarantee. Failure to keep a financial guarantee in effect until the completion and approval of all improvements shall be a violation of this Ordinance.

- D. Progressive Installation – In the case where development is projected over a period of years, East Hanover Township may authorize submission of final plats by phases of development subject to such requirements or guarantees as to improvements in future phases of development as it finds essential for the protection of any finally approved phase of the development.
- E. Release from Guarantee – As the work of installing the required improvement proceeds, the party posting the financial security may request the release, from time to time, of such portions of the financial security necessary for payment to the contractor or contractors performing the work. Any such requests shall be made in writing to East Hanover Township where applicable, and within forty-five (45) days of receipt of such request the Township Engineer, shall certify, in writing, to his employers whether or not such portion of the work upon the improvements has been completed in accordance with the approved plat. When the improvements are certified to be in accordance with the approved plat, East Hanover Township shall authorize release by the bonding company or lending institution of an amount as estimated by the Township Engineer fairly representing the value of the improvements completed. If East Hanover Township fails to act within said forty-five (45) day period, the release of funds shall be deemed to have been approved as requested. East Hanover Township may, prior to final release at the time of completion and certification by its engineer, require retention of ten percent (10%) of the estimated cost of the aforesaid improvement.

The applicant shall assume the necessary expense incurred for the inspection of improvements. Such inspection costs shall be based upon a schedule established and amended from time to time as deemed necessary.

- F. Maintenance Guarantee – Where East Hanover Township accepts dedication of all or some of the required improvements following completion, East Hanover Township may require the posting of financial security to secure structural integrity of said improvements as well as the functioning of said improvements in accordance with the design and specifications depicted on the final plat for a term not to exceed eighteen (18) months from the date of acceptance of dedication. Said financial security shall be of the same type as otherwise required in this Section with regard to installation of such improvements. The amount of financial security shall not exceed fifteen (15) percent of the actual cost of installation of said improvements.
- G. Remedies to Effect Completion of Improvements – In the event that any required improvements have not been installed as provided in this Ordinance or in accordance with the approved final plat, East Hanover Township is hereby granted the power to enforce any corporate bond, or other security by appropriate legal and equitable remedies. If proceeds of such bond, or other security are insufficient to pay the cost of installing or making repairs or corrections to all the improvements covered by said security, East Hanover Township may, at its option, install part of such

improvements in all or part of the subdivision or land development and may institute appropriate legal or equitable action to recover the monies necessary to complete the remainder of the improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the developer, or both, shall be used solely for the installation of the improvements covered by such security, and not for any other purposes. Failure to properly install the required improvements shall also constitute a violation of this Ordinance, punishable as provided by Section 8.06 of this Ordinance.

SECTION 5.15 INSURANCE

The developer agrees to indemnify and save harmless East Hanover Township against and from any and all loss, cost, damage, liability, and expense on account of damage to property of, or injury to or death of, the parties thereto or third person, caused by, growing out of, or in any way whatsoever attributable to the construction of said improvements and the use of the street(s) delineated on the subdivision plat during construction. The developer further agrees, but without limiting its liability to indemnify the municipality or county, to carry liability insurance contracts with a reliable insurance company covering the period of said construction in the sum of \$500,000 to \$1,000,000 for injury to or death of person(s), and in the sum of \$500,000 for damage to or destruction of property, which insurance contracts shall include East Hanover Township as a named insured.

SECTION 5.16 BUILDING CONSTRUCTION AND OCCUPANCY

A building or zoning permit may be issued and building construction started after the approval of the final plat. Occupancy shall not be permitted prior to the completion of streets, storm water management facilities and other improvements necessary for the reasonable use of the building, unless written authorization is granted by East Hanover Township where improvements have been guaranteed by valid bond or other security.

CHAPTER 6 - PLANNED RESIDENTIAL DEVELOPMENTS

SECTION 6.01 INTENT

It is the intent of East Hanover Township to provide for properly designed, constructed and maintained planned residential developments when they are provided for in township regulations. Flexible subdivision design concepts are encouraged to meet the growing demand for a variety of housing types.

SECTION 6.02 APPLICATION OF REGULATIONS

Planned residential developments are permitted only within municipalities with individual planned residential development ordinances or separate planned residential development chapters within their zoning ordinances, as per the following:

- A. When a municipality has an individual planned residential development ordinance or a zoning ordinance with a chapter regulating planned residential developments and they also have a municipal subdivision and land development ordinance, the Planning Department role during review shall be advisory, as identified by Act 247 and the applicable municipal ordinance. A combined subdivision and zoning procedure may be possible to allow comprehensive review and approval.
- B. When a municipality has an individual planned residential development ordinance or a zoning ordinance with a chapter regulating planned residential development but does not have a municipal subdivision and land development ordinance, the Planning Department shall review the plan based upon its compliance with this Ordinance and applicable municipal ordinances. Subdivision plan processing and approval shall be in accordance with Chapter 3 of this Ordinance and such additional procedures, hearings or requirements as the municipal ordinances may mandate.

SECTION 6.03 REVIEW AND APPROVAL

Upon receipt of planned residential development plans, East Hanover Township shall begin to review the plan for compliance with all applicable ordinance criteria and general planning concepts. Before taking official action, the Board of Supervisors shall refer the application to the East Hanover Township Planning Commission and the LCPD for study and recommendation. Plan review and approval or disapproval shall be subject to plan procedures described within Chapter 3 and supplements thereto, as described within Section 6.02 of this Ordinance. Compliance with all applicable municipal and county ordinances is required.

Furthermore, the following general planning concepts shall be applied during the review and approval process for a planned residential development and may be utilized as criteria in the evaluation of any planned residential development application:

- A. Land shall be efficiently used; and
 - B. The design and layout shall be consistent with the character of the surrounding neighborhood; and
 - C. Permitted non-residential buildings shall be a minor portion of the development and shall be so located and grouped as to minimize impact on adjacent residential uses; and
 - D. Ownership, maintenance and management of the development project shall be fully identified on the plan and within separate recorded documents to assure construction and continuation of the project; and
 - E. Open space and recreation areas shall be well located and adequately serve the diverse needs of the proposed residents; and
 - F. Although a mixture of housing types and design innovation are encouraged, plans shall not contain extensive departure from standard design patterns unless more conventional layout is determined to be impossible or inappropriate; and
 - G. The plan shall specify that all proposed buildings, community facilities, site improvements and development amenities are to be constructed in accordance with the approved plan and any development schedule approved therewith.
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CHAPTER 7 - FLOOD PLAIN MANAGEMENT

SECTION 7.01 INTENT

The purpose of the regulations set forth in this Chapter is to monitor the subdivision and/or development of flood plain areas in order to promote and protect the general health, welfare, and safety of the community; to require that each subdivision lot in flood plain areas be provided with a safe building site with adequate access; to insure that public facilities which serve such lots or development can be designed and installed to preclude flood damage; and to protect individuals from purchasing lands which are unsuitable for development because of flooding. The subsequent sections shall be considered requirements supplemental to those procedures and standards specified elsewhere in this Subdivision and Land Development Ordinance, the East Hanover Township Stormwater Management Ordinance, municipal zoning ordinances, the Uniform Construction Code (UCC), and any other applicable ordinances and codes.

SECTION 7.02 DEFINITIONS OF TERMS UTILIZED IN THIS CHAPTER

- A. Base Flood - A flood which has a one percent (1%) chance of being equaled or exceeded in any given year (also called the "100-year flood).
- B. Based Flood Elevation (BFE) - The elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, AI 30 that indicates the water surface elevation resulting from a flood that has a one percent (1%), or greater chance of being equaled or exceeded in any given year.
- C. Building - A combination of materials to form a permanent structure having walls and a roof. Included shall be all manufactured homes and trailers to be used for human occupancy.
- D. Construction - The term "construction" shall include the building, reconstruction, extension, expansion, alteration, substantial improvement, erection or relocation of a building or structure, including manufactured homes, and gas or liquid storage tanks. For flood plain purposes, "new construction" includes structures for which the "start of construction" commenced on or after the effective date of a flood plain management regulation adopted by the municipality.
- E. 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 manufactured homes; streets, and other paving; utilities; filling, grading and excavation; mining; dredging; drilling operations; storage of equipment or materials; and the subdivision of land.
- F. Existing Manufactured Home Park or Subdivision - A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the

effective date of the floodplain management regulations adopted by a community.

- G. Expansion to an Existing Manufactured Home Park or Subdivision –The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).
- H. Flood –A general and temporary inundation of normally dry land areas by water from waterway overflows or the unusual and rapid accumulation or runoff of surface waters from any source.
- I. Flood Insurance Rate Map (FIRM) -The official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
- J. Flood Insurance Study (FIS) -The official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Insurance Rate Map, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.
- K. Flood Plain Area – A relatively flat or low land area which is subject to partial or complete inundation from an adjoining or nearby stream, river, or watercourse; and/or any area subject to the unusual and rapid accumulation of surface waters from any source.
- L. Floodproofing –Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- M. Floodway – The channel of a river or other watercourse and adjacent land area that must be reserved to discharge the Base Flood without cumulatively increasing the water surface elevation of that flood more than one (1) foot at any point.
- N. Manufactured Home –A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes the term "manufactured home" also includes (1) all mobile homes and (2) camping trailers, recreational vehicles, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.
- O. Manufactured Home Park and/or Subdivision – A lot or area which is a planned development and designated to contain two or more manufactured homes for rent or for sale. Any lot or area proposed to utilize such design where individual manufactured home sites are proposed for sale shall be known as a manufactured home subdivision.
- P. New Manufactured Home Park or Subdivision – A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are

to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the floodplain management regulations adopted by a community.

- Q. One Hundred (100) Year Flood (Base Flood) – A flood selected as the Base Flood, that has a one percent (1%) or greater chance of occurring in any given year.
- R. Special Flood Hazard Area (SFHA) – means an area in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year. It is shown on the FIRM as Zones A, AO, A1-30, AE, A99, or AH.
- S. Start of Construction – Includes substantial improvement and other proposed new development and means the date the permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within ninety (90) days from the date of the permit and shall be completed within two (2) years after the date of issuance of the permit unless a time extension is granted, in writing, by the Floodplain Administrator. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling, nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main structure. For a structure without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
- T. Structure – A walled or roofed building, including a gas or liquid storage tank (principally above ground), a manufactured home, or any other man-made object usually assembled of interdependent parts or components which is designed to have a more or less fixed location, whether or not permanently attached at that location.
- U. Substantial Damage – Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.
- V. Substantial Improvement – Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however include any project for the improvement of a structure to correct existing violations of the state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.
- W. Uniform Construction Code (UCC) – The statewide building code adopted by The Pennsylvania

General Assembly in 1999 applicable to new construction in all municipalities whether by the municipality, a third party, or the Department of Labor and Industry. Applicable to residential and commercial buildings. The Code adopted the International Residential Code (IRC) and the International Building Code (IBC), by reference, as the construction standard applicable with the State floodplain construction. For coordination purposes, references to the above are made specifically to various sections of the IRC and the IBC.

- X. Violation – Means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR §60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

SECTION 7.03 APPLICATIONS PROCEDURES AND PLAT REQUIREMENTS

The following procedures shall be required in addition to those specified otherwise in these regulations.

A. Pre-Application Procedures

1. It is suggested that prospective developers consult the Pennsylvania Department of Environmental Protection and the East Hanover Township Sewage Enforcement Officer concerning soil suitability when on-site sewage disposal facilities are proposed.
2. Prospective developers shall consult the County Conservation District representative concerning erosion and sediment control and the probable effect of geologic conditions on the proposed development. Concurrently, a determination should be made as to whether or not any flood hazards either exist or will be created as a result of the proposed subdivision or development.

B. Preliminary Plan Requirements

The following information shall be required as part of the Preliminary Plan when a subdivision is in a flood plain area and shall be prepared by a registered surveyor or licensed engineer:

1. A map illustrating the location of the proposed subdivision or land development with respect to the municipality's flood plain areas including information on, but not limited to, Base Flood Elevations, boundaries of SFHA areas, proposed lots and sites, fill, and flood or erosion protective facilities.
2. All subdivision proposals and other proposed new developments shall provide base flood delineations; however, subdivision proposals and other proposed new development greater than 50 lots or 5 acres, whichever is lesser, shall include actual base flood elevation data. It shall be the responsibility of the developer to provide the required base flood elevation data, in a form comparable to HEC-2, which will be certified as accurate by a Registered

Professional Engineer.

3. Where the subdivision or land development lies partially or completely in the SFHA or where the subdivision borders on the SFHA, the preliminary plan map shall include detailed information giving the location and elevation of proposed roads, public utilities, and building lots. All such maps shall also show contours at intervals of two (2) feet and identify accurately the boundaries of the SFHA.

C. Final Plan Requirements

The following information shall be required as part of the Final Plan and shall be prepared by a registered engineer or surveyor:

1. All information required for submission of the Preliminary Plan plus any changes required by the East Hanover Township Board of Supervisors.
2. A map showing the exact location and elevation of all proposed buildings, structures, roads, and public utilities to be constructed in the SFHA. All such maps shall show contours at intervals of two (2) feet and identify accurately the boundaries of the SFHA.

SECTION 7.04 DESIGN STANDARDS AND IMPROVEMENTS

The design standards and improvements specified herein shall be considered requirements in addition to those of Chapter 5 and otherwise listed in this Ordinance and in addition to the East Hanover Township Stormwater Ordinance.

A. General

1. Where not prohibited by this or any other laws or ordinances, land located in the SFHA may be platted for development with the provision that the developer construct all buildings and structures to preclude flood damage in accordance with this and any other laws and ordinances regulating such development.
2. Building sites for residences or any other type of dwellings or accommodations and building sites for structures or buildings other than residential uses shall be permitted in the flood plain only when in compliance with the East Hanover Township Zoning Ordinance, the Uniform Construction Code, and any other applicable regulations.
3. If East Hanover Township determines that only a part of a proposed plat can be safely developed, it shall limit development to that part and shall require that development proceed consistent with this determination.
4. When a developer does not intend to develop the plat himself and East Hanover Township determines that additional controls are required to insure safe development, they may require the developer to impose appropriate deed restrictions on the land. Such deed restrictions shall be inserted in every deed and noted on every recorded plat.
5. Whenever a developer intends to alter or relocate a watercourse within the designated SFHA, a permit shall be obtained from the Department of Environmental Protection.

Bureau of Dams, Waterways, and Wetlands. Also, adjacent communities, the Department of Community and Economic Development, and the Federal Emergency Management Agency (FEMA) must be notified. Additionally, East Hanover Township must be assured that the flood carrying capacity of an altered or relocated watercourse will be maintained by the developer.

6. No new construction or development shall be located within a designated floodway. Where the floodway has not been specifically identified for a stream or waterway, no new construction, or development shall be permitted within the stream channel (from top of bank to top of bank). Furthermore, construction or development outside the stream banks but within the SFHA shall be permitted only when in compliance with this Ordinance and the Pennsylvania Department of Environmental Protection permit requirements.
7. Lots which are within the SFHA shall be subject to the following:
 - a. Any lots created or revised shall have not more than 50% of their area within the flood plain, except that lots may be exempted provided the minimum lot size established by the applicable zoning district or 1 acre, whichever is less, is provided outside the SFHA.
 - b. Lot access to a public road shall not be restricted or prevented by the SFHA.

B. Excavation, Grading and Use of Fill

Any excavation activities, grading, and use of fill shall be in compliance with all applicable terms of the East Hanover Township Zoning Ordinance and the Uniform Construction Code. Furthermore, where excavation or grading is proposed or where any existing trees, shrubs or other vegetative cover will be removed, the developer shall consult the Lebanon County Conservation District concerning plans for erosion and sediment control and to also obtain a report on the soil characteristics of the site so that determination can be made as to the type and degree of development the site may accommodate. Before undertaking any excavation or grading, the developer shall obtain a Grading and Excavation Permit if such is required by the Township.

C. Drainage Facilities

Storm drainage facilities shall be designed to convey the flow of surface water without damage to persons or property. The system shall insure drainage at all points along streets, and provide positive drainage away from buildings and on-site disposal sites.

Plans shall be subject to the approval of East Hanover Township. The Township may also require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be designed to prevent the discharge of excess runoff onto adjacent properties.

D. Streets

The finished excavation of proposed streets shall be no more than two (2) feet below the Base Flood Elevation. The Township may require, where necessary, profiles and elevations of streets to determine compliance with this requirement. Drainage and bridge openings shall be sufficient

to discharge flood flows without unduly increasing flood heights.

E. Sewer Facilities

All sanitary sewer systems located in the SFHA, whether public or private, shall be flood proofed to a point two (2) feet above the Base Flood Elevation.

1. East Hanover Township may prohibit installation of sewage disposal facilities requiring soil absorption systems where such systems will not function due to high ground water, flooding, or unsuitable soil characteristics. The Township may require that the developer note on the face of the plat and in any deed of conveyance that soil absorption fields are prohibited in designated areas.
2. East Hanover Township may prescribe adequate methods for waste disposal. If a sanitary sewer system is located on or within 1000 feet of the proposed subdivision and/or land development, East Hanover Township and/or the local municipality shall require the developer to provide sewage facilities to connect to this system where practical, and shall prescribe the procedures to be followed by the developer in connecting to the system.

F. Water Facilities

All water systems located in flood plain areas, whether public or private, shall be flood proofed to a point two (2) feet above the Base Flood Elevation. If there is an existing public water supply system on or near the subdivision, East Hanover Township shall require the developer to connect to this system where practical, and shall prescribe the procedures to be followed by the developer in connecting to the system.

G. Other Public and/or Private Utilities and Facilities

All other public and/or private utilities and facilities shall be elevated or floodproofed to a point two (2) feet above the Base Flood Elevation.

SECTION 7.05 PERFORMANCE GUARANTEE

No final plat shall be approved by the East Hanover Township Board of Supervisors until the improvements required by this Ordinance are completed in a satisfactory manner and approved by the township. In lieu of such construction, approval may be granted prior to completion providing:

- A. The developer enters into an agreement with East Hanover Township guaranteeing that improvements will be installed in accordance with the plans, specifications, and schedules approved by the Township prior to plat approval. This agreement shall also guarantee that no lot will be sold or building constructed in any SFHA prior to completion of all protective works or measures planned for such lot and necessary access to facilities: and
- B. The developer provides a fiscal surety to guarantee performance of this agreement and completion of the improvements as planned. The surety may include an escrow account, irrevocable letter of credit or other bond acceptable to the Township. The procedural

requirements of Section 5.14 of this Ordinance shall apply to any such bonding proposal.

SECTION 7.06 TOWNSHIP LIABILITY

The grant of a permit or approval of a subdivision and/or land development plan in the identified SFHA shall not constitute a representation, guarantee, or warranty of any kind by East Hanover Township or by any official or employee thereof of the practicability or safety of the proposed use, and shall create no liability upon the township, its officials or employees.

CHAPTER 8 –ADMINISTRATION, FEES AND PENALTIES

SECTION 8.01 INTENT

This subdivision and land development ordinance shall be considered to set forth the minimum requirements for the protection of the public health, safety, comfort, property or general welfare, pursuant to the authority of the Pennsylvania Municipalities Planning Code, Act Number 247, 1968 sessions, as amended, or such statutes hereinafter in effect, and shall be construed most favorably to the county as encouraging standards of planning and development exceeding these basic and minimum regulations.

SECTION 8.02 ADMINISTRATION AND ENFORCEMENT

East Hanover Township is authorized to administer the provisions of this subdivision and land development ordinance as herein provided, and to enforce the provisions of this Ordinance on behalf of the East Hanover Township Board of Supervisors.

In addition to other remedies provided herein, the East Hanover Township Board of Supervisors may institute and maintain appropriate actions by law or in equity to restrain, correct or abate violations, to prevent unlawful construction, to recover damages and to prevent illegal occupancy of a building, structure or premises. The description by metes and bounds in the instrument of transfer or other documents used in the process of selling or transferring shall not exempt the seller or transferor from such penalties or from the remedies herein provided.

East Hanover 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. This authority to deny such a permit or approval shall apply to any of the following applicants:

- A. The owner of record at the time of such violation; and
- B. The vendee or lessee of the owner of record at the time of such violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation; and
- C. The current owner of record who acquired the property subsequent to the time of violation without regard as to whether such current owner had actual or constructive knowledge of the violation; and
- D. 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. As an additional condition for issuance of a permit or the granting of an approval to any such owner, current owner, vendee or lessee for the development of any such real property, the East Hanover Township Board of Supervisors may require compliance with the conditions that would have been applicable to the property at the time the applicant acquired an interest in such real property.

SECTION 8.03 MODIFICATIONS

The provisions of this Ordinance are intended as minimum standards for the protection of the public health, safety and welfare of the residents and inhabitants of East Hanover Township. East Hanover Township Board of Supervisors may grant a modification of the requirements of one or more provisions of this Ordinance if it concludes that the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modifications will not be contrary to the public interest and that the purpose and intent of this Ordinance is observed.

All requests for a modification shall be made in writing to the East Hanover Township Board of Supervisors and shall accompany and be part of the application for development. The request shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, the provision or provisions of the Ordinance involved and the minimum modification necessary.

All such modification requests shall be approved or disapproved by the East Hanover Township Board of Supervisors. A written record of the action shall be kept for all modification requests.

SECTION 8.04 APPEALS

A subdivider or developer aggrieved by any action of the East Hanover Township Board Of Supervisors regarding refusal to approve a subdivision or land development plan may, within thirty (30) days of such refusal, appeal to the Common Pleas Court of Lebanon County. Any other appeals by aggrieved parties or other landowners shall be subject to the appeal procedures outlined in Article X of Act 247.

SECTION 8.05 SCHEDULE OF FEES

- A. Fee Procedures – Each subdivision or land development plan application shall be accompanied by the required review fee, as established herein. Fees shall be payable at the time of plan submission (unless otherwise noted herein) and plan processing, approval and recording shall not be completed until all required fees are paid.

The fee schedule set forth in this section may be amended from time to time by adoption of a resolution by the East Hanover Township Board of Supervisors setting forth the new fees. Fees will be placed in an escrow account.

- B. Township Fees – Fees for review, processing and approval of subdivision and land development plans shall be payable to East Hanover Township at the time of application, in accordance with the current schedule adopted by Resolution by the Board of Supervisors.

SECTION 8.06 PENALTIES

Any person, partnership or corporation who or which has violated the provisions of this subdivision and land development ordinance shall, upon being found liable therefor in a civil enforcement proceeding commenced by the East Hanover Township Board of Supervisors, pay a judgement of not more than \$500 plus all court costs, including reasonable attorney fees incurred by

East Hanover Township as a result thereof.

District Justices shall have initial jurisdiction in proceedings brought by East Hanover Township in accordance with this Section. No judgement shall commence or be imposed, levied or be payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgement, East Hanover Township may enforce the judgement pursuant to the applicable rules of civil procedure. 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 violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

SECTION 8.07 AMENDMENTS

Amendments to this Ordinance may be initiated by the East Hanover Township Board of Supervisors. If the amendments are initiated by the Board of Supervisors, the proposed amendment or amendments shall be subject for review and comment at least thirty (30) days prior to a public hearing. Before enactment of a proposed amendment or amendments the Board of Supervisors shall hold a public hearing thereon pursuant to public notice, in accordance with the PA Municipalities Planning Code.

SECTION 8.08 VALIDITY

Should any section, subsection, or provision of this Ordinance be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this Ordinance as a whole or any other part thereof.

SECTION 8.09 REPEALER

Any other ordinance provision(s) or regulations of East Hanover Township inconsistent with any of the provisions of this ordinance is hereby repealed to the extent of the inconsistency only.

East Hanover Township Subdivision and Land Development
Ordinance

(Ordinance Number ____)

ENACTED and ORDAINED at a
regular meeting of the on this ____ day
of _____, ____.

This Ordinance shall take effect immediately.

APPENDIX

Appendix

Soil Hydrologic Group Classification

<u>Soil Name</u>	<u>Hydrologic</u>
Group Abbottstown	C
Bedington	B
Berks	C
Bowmansville	C
Brecknock	B
Brinkerton	D
Buchanan	C
Bucks	B
Calvin	C
Chester	B
Clarksburg	C
Comly	C
Duffield	B
Hagerstown	C
Hazelton	B
Holly	D
Klinesville	C/D
Laidig	C
Leck Kill	B
Lehigh	C
Lindsay	C
Markes	D
Melvin Variant	D
Mount Lucas	C
Murrill	B
Neshaminy	B
Nolin Variant	B
Penn	C
Philo	B
Pope	B
Readington	C
Rowland	C
Thorndale	D
Ungers	B
Watchung	D
Weikert	C/D

SAMPLE STANDARD STORM WATER NOTES

Use all applicable notes and supplement or revise where necessary for clarification:

1. All storm water management facilities shown on this plan shall be constructed by the developer in accordance with the design, conditions and specifications identified on this plan. Ownership and maintenance shall be the responsibility of the landowner, his successors and assigns, unless specifically identified otherwise herein.
2. Storm water management facilities shall be maintained in good working condition so that they are performing their design function, in a manner acceptable to the county, as required by the East Hanover Township Stormwater Management Ordinance. Maintenance shall include performing routine maintenance and repair or replacement of damaged facilities, vegetation or storm water areas to conditions as shown on the approved plan and in accordance with the East Hanover Township Stormwater Management Ordinance.
3. Any drainage and utility easements shown on the plan shall be constructed, owned and maintained in accordance with the approved plan and shall be referenced within the property deed.

4. Runoff from the lot improvements shall be directed to the storm water management facilities. Storm water runoff from existing natural swales and/or other existing drainage conveyors shall not be directed towards or intercepted by the storm water management facilities.
5. East Hanover Township officials and their agents or employees have the right of access for inspection and, in cases of construction default, construction of the storm water management facilities.
6. After storm water management facilities installation is completed, contact the East Hanover Township Engineer for inspection by the Township Engineer. No occupancy permitted until storm water management facilities have been installed and approved through inspection by the Township Engineer.

Where facilities such as new streets with storm sewers and related structures are intended for ownership and maintenance by East Hanover Township, a Homeowner's Association, or similar organization, detailed additional notes are required to document ownership and maintenance responsibilities.

STORM WATER EXEMPTIONS

Use the following note instead of the 6 standard storm water notes:

Lot(s) # _____ has (have) been exempted from the mandatory design and installation of storm water management facilities, based upon satisfaction of the exemption criteria with Section 402 of the East Hanover Township Stormwater Ordinance. No occupancy permitted until lot(s) # _____ has (have) been inspected and approved by the Township Engineer (phone #) to verify that construction and development has been completed in accordance with this plan and Section 402 criteria.

BUILDING CODE NOTE

"All construction shall be subject to the requirements of the Pennsylvania Uniform Construction Code, as adopted by East Hanover Township."

EAST HANOVER TOWNSHIP MODEL ACCESS MANAGEMENT ORDINANCE SUMMARY

East Hanover Township has developed the attached Access Management Ordinance in order to balance mobility and accessibility. Mobility refers to the movement of traffic; while accessibility refers to the ability of traffic to enter and exit a roadway from adjacent properties. The major benefits of access management ordinances are improved public safety and reduced traffic congestion. Well thought out and easy to understand access management ordinances also benefit the business community, governmental agencies, communities/neighborhoods, and pedestrians, bicyclists, transit riders and motorists.

The East Hanover Township Model Access Management Ordinance includes twenty four different sections (A through X) dealing with purpose, application of regulations, definitions, non-conforming driveways, relationship to PennDOT Highway Occupancy Permits, number of driveways, access to roadways, driveway radius, driveway throat width, driveway throat length, driveway profile, driveway channelizing islands, driveway location, safe sight distance, driveway spacing, corner clearance, joint and cross access, driveway clearance from interchange ramps, internal access to parcels, pedestrian connections, signalized intersection spacing, right turn/deceleration lane, left turn lane, and extension of service roads. Tables and figures are provided for ease of use.

The Model Access Management Ordinance will be used by East Hanover Township when it reviews applications for subdivision and land development approval or for building permits for lots with frontage on arterial or major collector roadways within East Hanover Township that are under the jurisdiction of the Township for the above mentioned activities.

A. Purpose

This access management ordinance is intended to promote safe and efficient traffic flow on higher order roadways within East Hanover Township, while protecting the rights of abutting landowners to reasonable street access. By reducing the potential for crashes at access points along the corridor and avoiding future degradation of roadway capacity, this access management ordinance serves to promote the public health, safety and welfare of the people of East Hanover Township.

B. Application of Regulations

This ordinance shall pertain to all applications for subdivision and land development approval, or building permit, for lots with frontage along roadways classified as arterial or major collector roadways within East Hanover Township that are under the jurisdiction of the Township for subdivision, land development, or building permit activities.

East Hanover Township may grant a modification of the requirements of this ordinance if it concludes that the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modifications will not be contrary to the public interest and that the purpose and intent of this Ordinance is observed.

Except for those criteria found within this ordinance, Pennsylvania Department of Transportation (PennDOT) criteria as found in Pennsylvania Code 441 shall govern the design of intersections of arterial and major collector roadways with private driveways and with other public roadways.

C. Definitions

Access point – the location of the intersection of a highway, street or driveway with another highway.

ADT Volume – Average Daily Traffic volume, or the number of vehicles passing a single point on a roadway in a 24-hour period, adjusted by day of the week and monthly factors.

Band width – the time elapsed between the passing of the first and last possible vehicles moving at the design speed through a coordinated traffic signal system. Band width is expressed as a percentage of the signal cycle in which vehicles on the major street receive a green indication.

Cross access driveway – a service driveway providing vehicular access between two or more contiguous sites so that the driver need not re-enter the public street system.

Curblin opening – the overall opening dimension at the curblin measured between the points of tangency of the driveway radii if curbing exists or the maximum width of opening at the curblin/edge of the roadway if curbing does not exist.

Driveway – every entrance or exit used by vehicular traffic to or from properties abutting a public street or road. This term does not include proposed streets.

Driveway radius – the radius of the curb or pavement at the intersection of the public roadway and the driveway.

Driveway throat – the section of a driveway between the highway right of way and the first internal intersecting driveway within the site.

High volume driveway – a driveway used or expected to be used by more than 1,500 vehicles per day.

Joint access driveway – a driveway connecting two or more contiguous sites to the public street system.

Low volume driveway – a driveway used or expected to be used by more than 25 but less than 750 vehicles per day.

Medium volume driveway – a driveway used or expected to be used by more than 750 but less than 1,500 vehicles per day.

Minimum use driveway – a residential or other driveway which is used or expected to be used by not more than 25 vehicles per day.

Peak hour volume – the numbers of vehicles passing a single point during one hour during a defined peak period of a day, usually the morning or evening commuter peak or the Saturday shopping peak.

PennDOT Highway Occupancy Permit (HOP) – the permit issued by PennDOT to approve any construction, including driveways, within all PennDOT rights of way.

Service road – a road that runs parallel to a higher-speed road, and which provides access to all abutting land uses. The service road feeds the higher speed road at appropriate points of access.

D. Non-Conforming Driveways

Driveways that do not conform to the regulations in this ordinance, and were constructed before the adoption of this ordinance, shall be considered legal nonconforming driveways. However, nonconforming driveway(s) shall be reconstructed to comply with this ordinance if there is a change in use or intensity of the land use, such that the use of the access increases peak hour or ADT volume by 10 percent or more and by 100 daily trips, based on the latest edition of *Trip Generation* published by the Institute of Transportation Engineers or upon other data approved by the Township Engineer and by Township Staff.

E. Relationship to PennDOT Highway Occupancy Permit

Issuance of a PennDOT Highway Occupancy Permit (HOP) does not guarantee site plan approval by the Township nor does it deem the plan in conformance with this ordinance. The HOP submittal to PennDOT should not occur before approval to do so by the County. However, upon request of the applicant or request of the Township, PennDOT may be brought into the County review process to reconcile site design and access issues.

F. Number of Driveways

1. One driveway shall be permitted per property. Additional driveways shall be permitted if the applicant demonstrates that:
 - a) The design is in the best interest of efficient traffic operations on the site, including but not limited to reducing delays at a single access point that would otherwise operate at worse than a Level of Service 'C' in rural areas and Level of Service 'D' in urban areas, and can improve safety; and,
 - b) The frontage of the property is sufficient to permit multiple driveways in accordance with the spacing requirements of Section O.
 - c) All driveways on one property shall be interconnected with an internal roadway network.

G. Access to Roadways

For properties that abut two or more roadways, the Township may restrict access to only one roadway, if all movements can be efficiently and safely accommodated on that roadway and if doing so serves the goal of managing the number of access points and thus better maintains mobility on the restricted roadway. For properties fronting a state roadway and local roadway, access can be restricted to the local roadway notwithstanding the ability to receive a Highway Occupancy Permit (HOP) from PennDOT for access to the stateroadway.

The limited amount of public transportation available to the residents of East Hanover Township makes it important to ensure efficient traffic circulation throughout the Township by controlling access to various roads in order to maintain and/or increase mobility without creating significantly higher volumes of traffic on these roads. Therefore, the traffic carrying capacities of the major roads in East Hanover Township must be maintained and protected. Failure to properly control access to and

development along these arterials and collector roads can seriously impair their efficiency and may create hazardous driving conditions.

As such, projected or actual changes in land use can cause significant impacts on and may be greatly affected and/or limited by the surrounding road systems. The classifications of East Hanover Township's roads and the amounts of traffic on them will be used in determining the types of land uses allowed in various parts of the Township. This will largely be based on the Model Access Management Ordinance. Conversely, these roads must provide adequate access and increased mobility for the proposed new land uses.

The 2013 East Hanover Township Comprehensive Plan identifies the roads listed in the chart below as the highest use roads within the Township. They are listed in order based on existing traffic volumes.

ROAD NO.	LOCAL NAME	1998 AADT	LANES	PAVED WIDTH
I-81	Interstate 81	49,000	4	48'
US 22	Allentown Boulevard	8,500 – 9,700	4	48'
PA 934	Bellegrove Road	7,200 – 9,500	2	20' – 22'
SR 4020	Fisher Avenue	6,400	2	22' – 24'
SR 4027	Lincoln School Road	3,000	2	22'
SR 4011	Gravel Hill Road	750 – 3,000	2	18' – 22'
SR 4007	Ono Road	2,200 – 2,900	2	18'
SR 443		1,000 – 2,000	2	22' – 33'
SR 4022	Clement Avenue	1,900	2	30'
SR 4019	Asher-Miner Road	1,300	2	33''
SR 4017	Harrison School Road	100 – 900	2	14' – 20'

Based on the above information, those roads are classified as follows:

INTERSTATES/EXPRESSWAYS

Interstate 81

RURAL MINOR ARTERIALS

US 22 (Allentown Boulevard)

RURAL MAJOR COLLECTORS

PA 934 (Bellegrove Road)

Fisher Avenue (SR 4020)

RURAL MINOR COLLECTORS

SR 443

SR 4007 (Ono Road)

SR 4011 (Gravel Hill Road)

SR 4017 (Harrison School Road from SR 443 to US 22)

SR 4019 (Asher-Miner Road)

SR 4022 (Clement Road)

SR 4027 (Lincoln School Road)

In addition to the heavy traffic volumes on these roads, many also have other related safety concerns due to congestion, poor intersection configurations, inadequate sight distances at some intersections, weight restrictions, and needed (but unplanned and unscheduled) bridge repairs and improvements. Increased traffic due to development causes wear and damage to existing roads including the major roads listed above. Many of these and other Township roads have not been designed to handle an increase in demand. As development continues on local roads there may also be conflicts between various existing and new agricultural and residential uses.

Development along or using all of the roads listed in the foregoing chart will be evaluated based on the Model Access Management Ordinance. Interstate 81 (I-81) will not be evaluated in this process. This is because I-81 is already a high-volume limited access road. It is also very unlikely that new or increased access to I-81 within East Hanover Township will occur anytime soon.

For proposed developments or land use changes along other local township roads, East Hanover Township will evaluate such proposals on a case-by-case basis. Dependent on the intensity of the development, East Hanover Township may opt to complete this review based on the Model Access Management Ordinance, as determined to be applicable.

H. Driveway radius

1. Following are the minimum and maximum driveway radii (in feet), as related to the posted speeds on the accessed street. Table H.1 pertains to land uses with infrequent service by buses and combination trucks (5% or less of volume). Table H.2 pertains to land uses which are regularly serviced by buses and combination trucks (more than 5% of volume).

Table H.1 Land uses with infrequent service by busses and combination trucks

	Posted speed limit of street being accessed			
	Less than 45 mph		45 mph and greater	
	Min.	Max.	Min.	Max.
Minimum Use	5	15	10	25
Low Volume	10	15	15	25
Medium Volume	15	30	15	50
High Volume	30	50	40	50

Table H.2. Land uses with regular service by busses and combination trucks

	Posted speed limit of street being accessed			
	Less than 45 mph		45 mph and greater	
	Min.	Max.	Min.	Max.
Minimum Use	35	50	40	55
Low Volume	35	50	45	55
Medium Volume	45	55	50	55
High Volume	45	55	50	55

2. In areas with existing or projected regular pedestrian activity, landowners should use the minimum driveway radius provided.
3. Notwithstanding any of the above, the applicant shall prepare a truck circulation plan to document that the largest truck that will regularly service the site can be accommodated by the site circulation design and the access design.

I. Driveway throat width

1. Minimum and maximum dimensions for the width of driveways in the throat are provided below. Driveways shall be designed such that the opening at the curbline is no larger than necessary. The maximum desirable curbline opening shall be 50 feet.
2. The dimensions in the table assume one lane in each direction; engineering judgment should be used to determine appropriate dimensions for multi-lane driveways.

	One-way	Two-way
Min.	10 feet	20 feet
Max.	24 feet	28 feet

J. Driveway throat length

Following is the minimum length of driveways from the public street to an internal driveway or intersection:

Driveway	Length
Minimum use	25 feet
Low volume	50 feet
Medium volume	120 feet
High volume	150 feet

An illustration of driveway radius, width and length is provided in the Appendix, Figure 1.

K. Driveway Profile

Driveway grade requirements where curb is not present on the intersecting street:

1. The change in grade between the cross-slope of the connecting roadway or shoulder and the driveway shall not exceed 8%.
2. The driveway grade shall not exceed 8% within 10 ft. of the travel lane for minimum use driveways and within 40 ft. for low, medium and high volume driveways.
3. A 40-foot minimum vertical curve shall be used for a high volume driveway.

Driveway grade requirements where curbs and sidewalks are present:

1. The difference between the cross slope of the roadway and the grade of the driveway apron may not exceed 8%.
2. The driveway grade shall not exceed 8% within 10 feet of the travel lane for minimum use driveways and within 40 feet for low, medium and high volume driveways.
3. If the driveway grade would exceed 8% in the area between the curb and sidewalk, the street side of the sidewalk may be depressed to enable the driveway grade to stay within 8%.
4. The sidewalk cross slope shall be no greater than 1/4 inch per foot. If the sidewalk cross slope exceeds 1/4 inch per foot, the entire sidewalk may be depressed. The longitudinal grade of the sidewalk may not exceed 2 inches per foot.

*An illustration of driveway profile is provided in the Appendix, Figure 2.

L. Driveway Channelizing Islands

1. Where it is found necessary to restrict particular turning movements at a driveway due to the potential disruption to the orderly flow of traffic or as a result of sight distance constraints, East Hanover Township may require a raised channelization island.
2. Raised channelization islands shall be designed with criteria consistent with the latest edition of the AASHTO (American Association of State Highway Transportation Officials) publication, *A Policy on Geometric Design of Highways and Streets*.

M. Driveway Location

Driveways shall be located directly across from a public roadway or private driveway on the opposite side of an undivided roadway where feasible. If it is not possible to align driveways on opposite sides, the centerlines of access points should be offset by at least 150 feet. In no case shall left turns into the driveway be made across a left turn lane serving another driveway or street on the opposite side of the roadway.

N. Safe Sight Distance

1. Safe sight distance shall be available for all permitted turning movements at all driveways, and shall be documented on the site plans.
2. Pennsylvania Code Chapter 441, "Access to and Occupancy of Highways by Driveways and Local Roads," and Penn DOT Pub. 70, "Guidelines for the Design of Local Roads and Streets," shall be referenced to determine minimum driveway and roadway intersection safe sight distance requirements.
3. All driveways and intersecting roadways shall be designed and located so that the sight distance is optimized to the degree possible without jeopardizing other requirements such as intersection spacing.

*An illustration of sight distance is provided in the Appendix, Figure 3.

O. 0. Driveway Spacing

1. Driveway spacing is measured from the center of one driveway to the center of the next driveway, along the same side of the roadway.
2. The following driveway spacing standards are to be followed for arterial roadways and major collector roads:

Posted Speed (mph)	Minimum Spacing (feet)
30	200
35	250
40	300
45	360
50	425
55	490

3. If these driveway spacing standards cannot be met, a system of joint or cross access driveways, frontage roads or service roads may be required.
4. All driveways shall be located outside the limits of deceleration and acceleration lanes serving the adjacent driveway or intersection. The Township Engineer, Township Planning Commission, or PennDOT may require acceleration and deceleration lanes of adjacent driveways to be connected to form an auxiliary lane.
5. Pre-existing lots in residential zoning districts, which do not have sufficient lot frontage to meet the above driveway spacing standards, are permitted to install one driveway to serve single-family homes approved for construction.

P. Corner Clearance

1. Driveways on arterial and collector roadways shall meet the following spacing standards from intersecting roadways:

Posted Speed (mph)	Minimum Spacing (feet)
30	200
35	250
40	300
45	360
50	425
55	490

2. If minimum corner clearance standards cannot be achieved due to constraints, the following shall apply in all cases:
 - a. The driveway shall be sited as far from the corner as possible.
 - b. The Township may require turn restrictions at the driveway if the Township Engineer or Township Staff determines that the location of the driveway and particular ingress or egress movements will create safety or operational problems.
 - c. The Township may require installation of joint or cross access driveways, or frontage or service roads.

Q. Joint and Cross Access

1. The Township may require a joint or cross access driveway in order to achieve the driveway spacing standards of Section O and the corner clearance standards of Section P, or on any property when possible in order to maintain efficient traffic flow on the abutting public roadway.
 - a. The Township shall waive this requirement if installing a joint or cross access driveway is not possible. In such cases, the property owner shall sign an agreement to close the permitted driveway and to seek to establish a joint or cross access driveway, if possible, when an adjoining property is developed or redeveloped.
2. Documentation that a joint or cross access driveway is not possible may include, but is not limited to:
 - a. Documentation that a good faith offer to develop a joint or cross access driveway was presented to adjacent property owners, but was declined;
 - b. Topographical conditions or other natural features, or insufficient front yard, that make it impracticable to develop joint or cross access.
3. If a joint or cross access is developed, the property owners shall:
 - a. Record an easement with the deed allowing cross access to and from other properties served by the driveway.
 - b. Record a joint agreement with the deed defining maintenance responsibilities of the property owners along the driveway.
 - c. Record an agreement with the Township so that future access rights along the driveway are granted at the discretion of East Hanover Township.

R. Driveway Clearance from Interchange Ramps

1. A driveway shall not be permitted on or within an interchange ramp, including the acceleration or deceleration lane.
2. A driveway shall not be permitted within 100 feet in areas classified as urban by PennDOT or 300 feet in areas classified as rural by PennDOT from either the end or beginning of a ramp radius.

S. Internal Access to Outparcels

For commercial and office developments comprised of more than one building site and under the same ownership and consolidated for the purposes of development, the Township shall require that the development, including all outparcels, be served by an internal road that is separated from the main roadway. Outparcel access shall demonstrate safe, efficient ingress and egress and avoid queuing across other driveways and parking aisles.

T. Pedestrian Connections

Land uses generating more than 750 trips per day shall provide pedestrian connections from their side or rear yards to adjoining land uses when possible. The intent of this section is to shorten pedestrian trips between abutting major pedestrian generators, such as shopping centers and multi-family residential developments. This requirement may be waived for connections between major pedestrian generators and properties with single-family and two-family residences. These direct pedestrian connections shall be provided in addition to the installation of sidewalks along the front of the property.

U. Signalized Intersection Spacing

1. The following table indicates minimum spacing (in feet) for traffic signals for efficient vehicular progression:

Cycle length (sec)	Speed (mph)						
	25	30	35	40	45	50	55
60	1,100	1,320	1,540	1,760	1,980	2,200	2,430
70	1,280	1,540	1,800	2,050	2,310	2,500	2,640
80	1,470	1,760	2,050	2,350	2,640	2,640	2,640
90	1,630	1,980	2,310	2,640	2,640	2,640	2,640
120	2,200	2,640	2,640	2,640	2,640	2,640	2,640
150	2,640	2,640	2,640	2,640	2,640	2,640	2,640

- a. Warrants for the signalization of an intersection shall be justified by PennDOT Pub. 201M, Engineering and Traffic Studies, with County and municipal concurrence, through a formal municipal resolution to maintain and operate the traffic signal in accordance with the Permit issued by PennDOT.
2. The location of a traffic signal shall result in a minimum band width percentage as indicated in the following table:

Roadway Function	Minimum Acceptable Band Width
Principal Arterial	50 percent
Minor Arterial	40 percent
Collector and Local	30 percent

3. The study area for the band width analysis shall include the traffic signal to either side of the proposed signal, and all traffic signals within the coordinated traffic signal system, if a coordinated system exists or is proposed.
4. A waiver from these signal spacing standards may be given to arterial or collector roadways that serve as the main street of a mixed use business district with a traditional grid street network. In these areas, signal spacing of one block length with a minimum of 300 feet may be acceptable, with no minimum bandwidth.

V. Right Turn/ Deceleration Lane

1. Development projects shall require a right turn deceleration lane on the major road at an un-signalized intersection under all of the following conditions:
 - a. When the posted speed on the road is greater than 40 mph;
 - b. The road has average daily traffic volumes of 5,000 or more; and
 - c. There are 40 or more right turns in the peak hour.

2. Following are the minimum deceleration lengths on roadways with a grade of 2% or less. These lengths include both the taper and the full-width deceleration lane:

Speed (mph)	Deceleration Length (feet)
35	220
40	275
45	360
50	425
55	510

- a. For roads with grades greater than 2%, the deceleration lengths shall be multiplied by the following factors:

Slope	Upgrade	Downgrade
3% to 4%	.9	1.2
5% to 6%	.8	1.35

3. Deceleration lanes are not required on roadways with a posted speed of 40 mph or less; however, where deceleration lanes are installed on such roadways, they should be at least the length indicated in the table.
4. Where the width of the roadway right-of-way is insufficient to permit construction of the right turn/ deceleration lane, the property owner shall provide any necessary right-of-way. Where the lot frontage is insufficient to permit installation of a deceleration lane of the recommended length, the property owner may be requested to set back the front curb for the length of the property if development on the adjacent property is eventually anticipated.

An illustration of a deceleration lane is provided in the Appendix, Figure 4.

W. Left Turn Lane

Signalized intersections shall require the installation of a left-turn lane when a capacity analysis indicates that the operation of an intersection, approach, or movement will operate at Levels of Service 'E' or 'F' and the operation of the intersection, approach or movement can be improved with the installation of one or more left turn lanes.

X. Extension of Service Roads

East Hanover Township may require developers to extend a service roadway through the subject property when doing so will result in fewer trips directly accessing the higher order roadway.

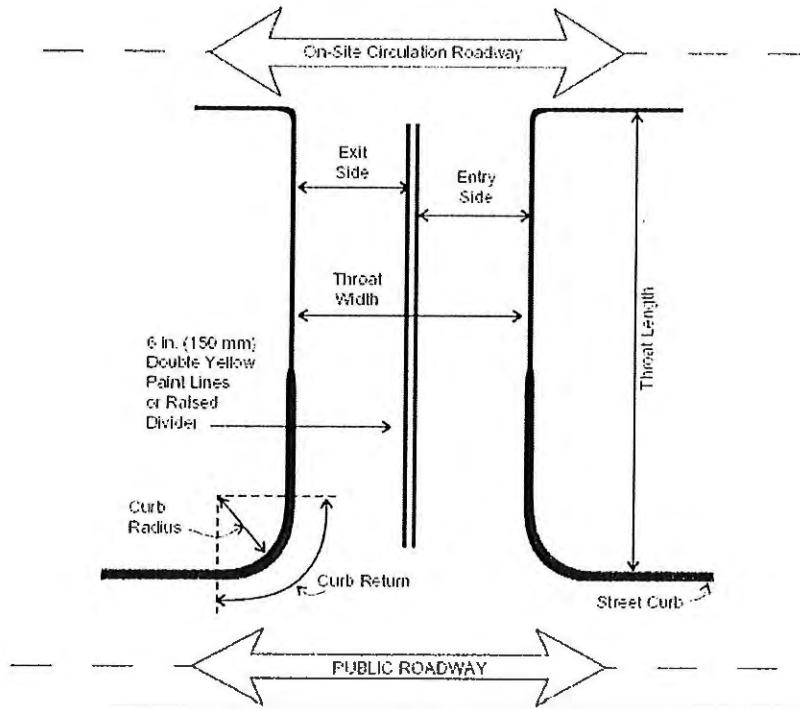


Figure 1

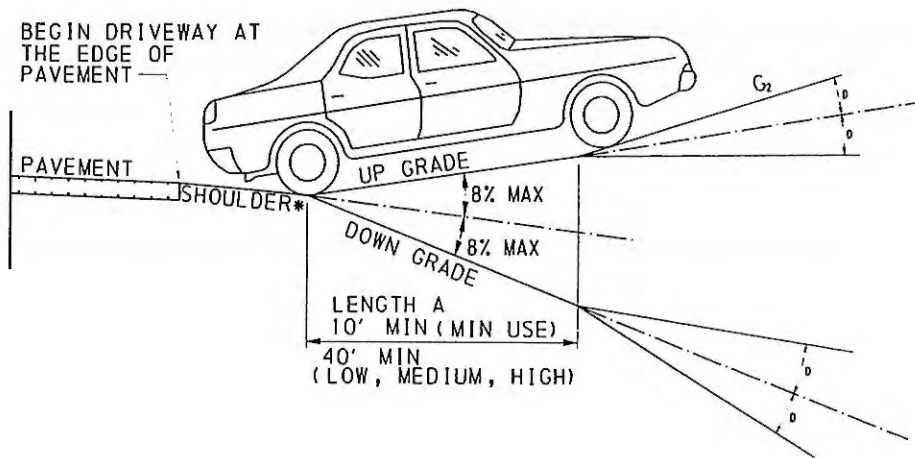
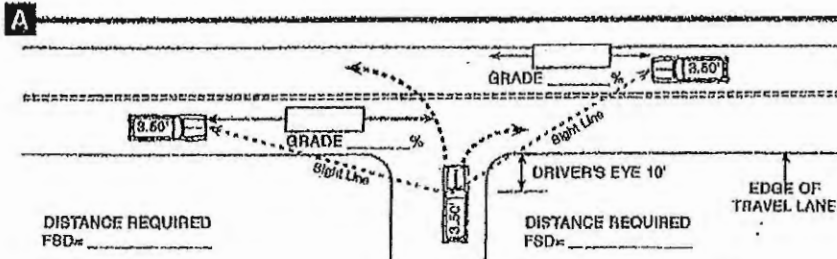


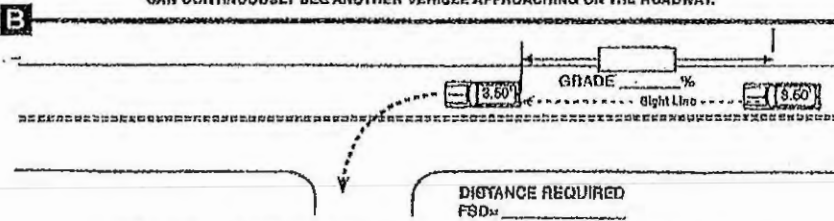
Figure 2

DRIVEWAY SIGHT DISTANCE MEASUREMENTS (FOR LOCAL ROADS, USE PENNDOT PUB 70)

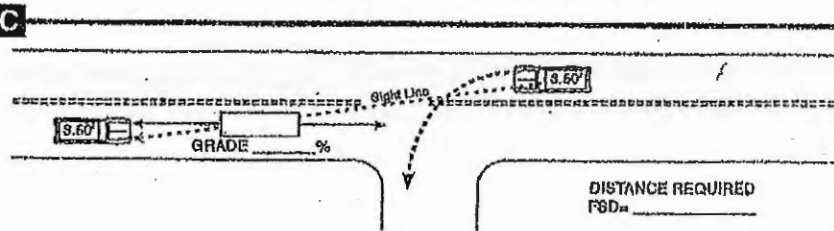
APPLICANT _____ APPLICATION NO. _____
 S.R. _____ SEG. _____ OFFSET _____ LEGAL SPEED LIMIT _____
 MEASURED BY _____ DATE _____
 FOR DEPARTMENT USE ONLY: Safe-Running Speed _____ 85th Percentile Speed _____



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.



Intersection sight distance to make left turn from a roadway into an access connection

Figure 3.

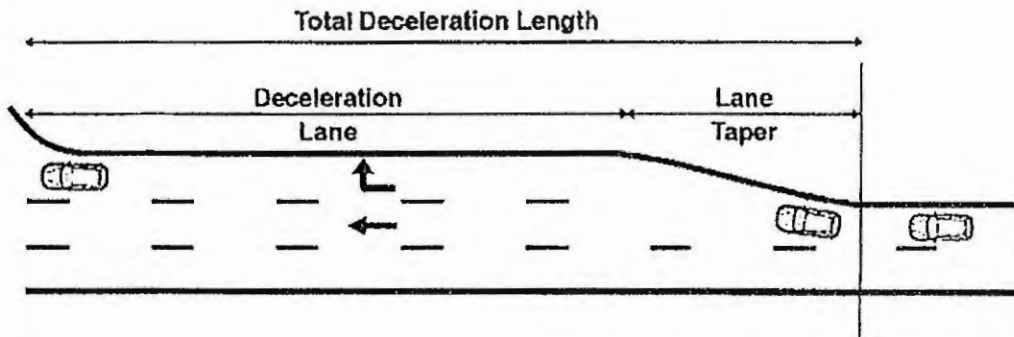


Figure 4

RECOMMENDED STREET TREES

SMALL TREES (Less than 30'in Height)

<u>Scientific Name</u>	<u>Common Name</u>
Acer buergerianum	Trident Maple
Acer tataricum	Tatarian Maple
Amelanchier sp.	Serviceberry
Cercis canadensis	Eastern Redbud
Cornus kousa	Kousa Dogwood
Crataegus sp.	Hawthorn
Magnolia sp.	Magnolia
Malus sp.	Flowering Crabapple
Prunus sp.	Cherry

MEDIUM TREES (30' to 50' in Height)

<u>Scientific Name</u>	<u>Common Name</u>
Acer campestre	Hedge Maple
Acer truncatum	Pacific Sunset Maple
Betula nigra	Heritage River Birch
Carpinus sp.	European Hornbeam
Koelreuteria paniculata	Goldenrain tree

LARGE TREES (Greater than 50' in Height)

<u>Scientific Name</u>	<u>Common Name</u>
*Acer rubrum	Red Maple (e.g. October Glory)
Ginkgo biloba	Ginkgo
Gleditsia triacanthos	Honeylocust
Quercus sp.	Oak (Appropriate varieties)
Tilia americana	American Linden
Zelkova serrata	Zelkova

*Not suitable for grass (beauty) strip planting because of shallow rooting habit. Utilize along streets w/o curbs or within lot interiors.

FURTHER INFORMATION

Many varieties and cultivars of the above listed trees may be suitable for street tree use. Other tree species may be used where suitability is documented. Consult "Street Tree Factsheets" by Henry D. Gerold, Penna. State Univ. and other references for further tree selection information.

DRIVEWAY SIGHT DISTANCE MEASUREMENTS (FOR LOCAL ROADS, USE PENNDOT PUB 70)

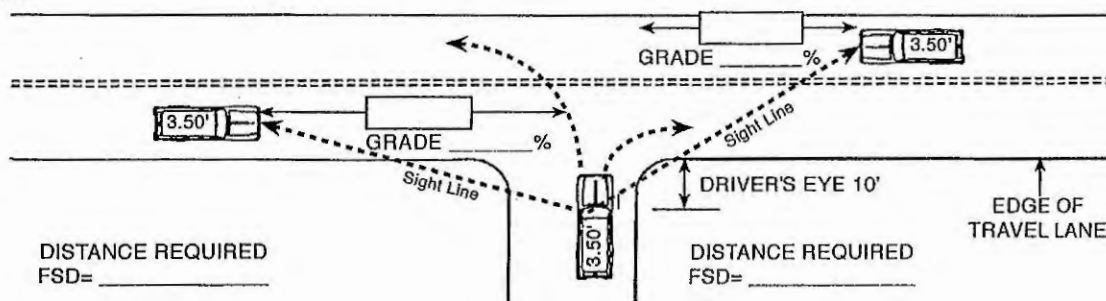
APPLICANT _____ APPLICATION NO. _____

S.R. _____ SEG. _____ OFFSET _____ LEGAL SPEED LIMIT _____

MEASURED BY _____ DATE _____

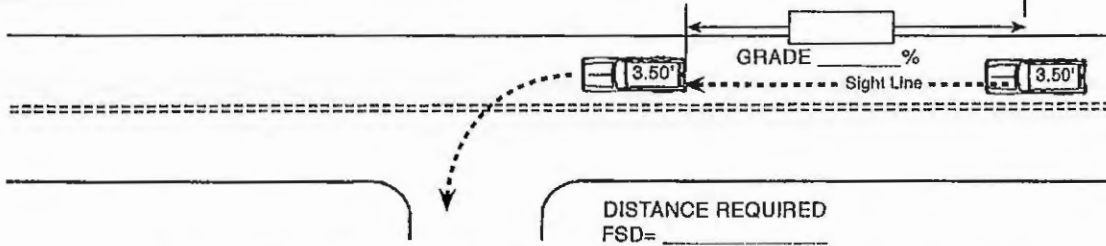
FOR DEPARTMENT USE ONLY: Safe-Running Speed _____ 85th Percentile Speed _____

A



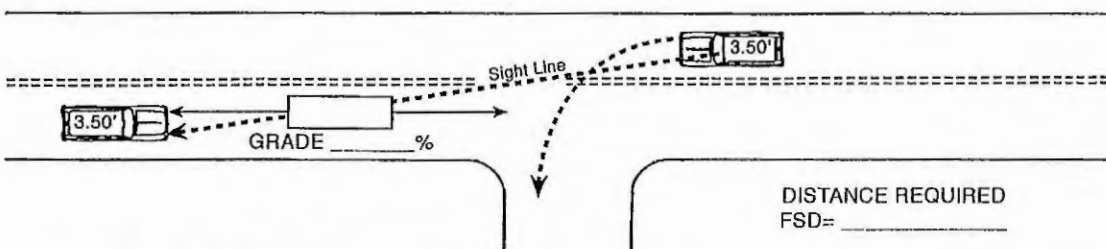
THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER AT A DRIVEWAY LOCATION
CAN CONTINUOUSLY SEE ANOTHER VEHICLE APPROACHING ON THE ROADWAY.

B



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER ON THE ROADWAY CAN
CONTINUOUSLY SEE THE REAR OF A VEHICLE WHICH IS LOCATED IN THE DRIVER'S TRAVEL LANE
AND WHICH IS POSITIONED TO MAKE A LEFT TURN INTO A DRIVEWAY.

C



THE MAXIMUM LENGTH OF ROADWAY ALONG WHICH A DRIVER OF A VEHICLE INTENDING TO MAKE A LEFT TURN
INTO A DRIVEWAY CAN CONTINUOUSLY SEE A VEHICLE APPROACHING FROM THE OPPOSITE DIRECTION.

FORMULA SIGHT DISTANCE TABLE

Speed (V) (Miles Per Hour)	Average Grade (G) (Percent)										
	Use plus grades when approaching vehicle is travelling upgrade.										
	0.0	+1.0	+2.0	+3.0	+4.0	+5.0	+6.0	+7.0	+8.0	+9.0	+10.0
25	147	145	144	143	142	140	139	138	137	136	135
30	196	194	191	189	187	185	183	182	180	178	177
35	249	245	242	239	236	233	231	228	226	224	221
40	314	309	304	299	295	291	287	284	280	277	274
45	383	376	370	364	358	353	348	343	339	334	330
50	462	453	444	436	429	422	415	409	403	397	392
55	538	527	517	508	499	490	482	475	468	461	454
	Use negative grades when approaching vehicle is travelling downgrade.										
	0.0	-1.0	-2.0	-3.0	-4.0	-5.0	-6.0	-7.0	-8.0	-9.0	-10.0
25	147	148	150	151	153	155	157	159	161	164	166
30	196	199	201	204	207	210	214	217	221	226	230
35	249	252	256	260	265	269	275	280	286	292	299
40	314	319	325	331	338	345	352	360	369	379	389
45	383	390	398	406	415	425	435	447	459	472	487
50	462	471	481	492	504	517	531	546	563	581	600
55	538	550	562	576	590	606	622	641	661	682	706

Residual Tract Waiver Note

As of the date of this plot plan notice recording, the residual tract of this subdivision is dedicated for the express purpose of agricultural use. No portion of the residual tract of this subdivision has been approved by East Hanover Township or the approving agency for the installation of sewage disposal facilities. No sewage permit will be issued for the installation, construction, connection to or use of any sewage collection, conveyance, treatment or disposal system (except for repairs to existing systems) unless East Hanover Township and the approving agency have approved any required sewage facilities planning for the residual tract of the subdivision described herein in accordance with the Sewage Facilities Act (35 P.S. Section 750.1 et seq.) and regulations promulgated thereunder. Prior to signing, executing, implementing or recording any sales contract or subdivision plan, any purchaser or subdivider of any portion of this residual tract should contact the municipality which is charged with administering the Sewage Facilities Act to determine what type of sewage facilities planning is required and the procedure and requirements for obtaining appropriate permits or approvals.

Lot Addition Waiver Note

As of the date of this plot plan notice recording, lot addition "A" of this subdivision is dedicated for the express purpose of being added to Lot # 1. No portion of lot addition "A" of this subdivision has been approved by East Hanover Township for the installation of sewage disposal facilities. No sewage permit will be issued for the installation, construction, connection to or use of any sewage collection, conveyance, treatment or disposal system (except for repairs to existing systems) unless the municipality and approving agency have approved any required sewage facilities planning for the lot addition of the subdivision described herein in accordance with the Sewage Facilities Act (35 P.S. Section 750.1 et seq.) and regulations promulgated thereunder. Prior to signing, executing, implementing or recording any sales contract or subdivision plan, any purchaser or subdivider of any portion of this lot addition should contact East Hanover Township to determine what type of sewage facilities planning is required and the procedure and requirements for obtaining appropriate permits or approvals.

Said lot addition MUST BE legally merged with the tract/lot to which it is being added to. They must be combined into one tract/lot and may NOT have multiple tracts on the same deed. Any future proposal to subdivide any portion of the newly created tract must obtain all approvals from the municipality and all approving agencies.

Lot addition MAY NOT be used as a separate building lot.

EROSION AND SEDIMENTATION POLLUTION CONTROL GUIDELINES

INTRODUCTION

Pennsylvania law requires an Erosion and Sedimentation Pollution Control (E & SPC) plan be developed and implemented for all earthmoving activities. The following guidelines are to be incorporated into an E & SPC plan for projects that do not have an existing plan. **The guidelines alone do not constitute a complete plan.** The E & SPC plan must be fully developed and site specific in accordance with Pennsylvania Department of Environmental Protection Chapter 102 rules and regulations. Additional information regarding E & SPC development and Chapter 102 regulations may be obtained from the County Conservation District.

PROCEDURE

The following list of E & SPC guidelines shall be used as standard subdivision and land development plan notes on all plans. Major subdivision and land development plans also require sitespecific E & SPC design sheets and details.

GUIDELINES

1. A logical construction sequence shall be developed that includes the installation of E & SPC facilities, and Best Management Practices (BMP's), before earthmoving may commence.
2. E & SPC facilities and BMP's shall be correctly installed and maintained. Maintenance information and construction details may be obtained from the Lebanon County Conservation District.
3. Earth disturbance shall take place within a defined limit of disturbance and immediately prior to construction.
4. Development plans shall preserve salient natural features, minimize land cuts and fills and conform to the general topography. Plans shall be designed and implemented so as to create the least potential for erosion and to adequately contain the volume and reduce the velocity of surface water runoff.
5. Natural vegetation shall be retained, protected and supplemented prior to and during construction.
6. Topsoil shall be removed from construction areas and stockpiled for final grading and seedbed preparation. Downslope areas of any stockpiles, construction or borrow areas shall be protected with correctly installed and maintained silt fence, straw bales or sediment traps prior to any earth disturbance in order to minimize sediment laden runoff.
7. All cuts and fills shall be brought to final grade early in the construction sequence, and stabilized immediately with seed and mulch.

8. Only driveway excavations that can be stabilized with a crushed stone base the same day shall be completed.
9. Current regulations state: (a) *Upon completion of an earth disturbance activity or any stage or phase of an activity, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation.* (b) *Erosion and sediment control BMP's shall be implemented and maintained until the permanent stabilization is completed.* (c) *For an earth disturbance activity or any stage or phase of an activity to be considered permanently stabilized, the disturbed areas shall be covered with one of the following: (1) A minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation. (2) An acceptable BMP which permanently minimizes accelerated erosion and sedimentation.*
10. The Penn State *Erosion Control & Conservation Plantings on Noncropland guide or Agronomy guide* shall be consulted for permanent and temporary seeding and mulching types and rates. (Straw mulch shall be applied at a rate of at least 3 tons per acre or 5 bales per 1000 square feet. Slopes steeper than 3:1 shall be correctly lined with appropriate turf reinforcement matting.) Other helpful publications include *Turfgrass Establishment* (special Circular 163), *Turfgrass Seed and Seed Mixtures* (extension circular 391), and *Principles of Turfgrass Irrigation* (special circular 158). The publications referenced are available from the Penn State Extension Office.
11. All recycling and disposal of construction waste shall be in accordance with local and state rules and regulations for waste management. Construction waste includes but is not limited to: Excess soil and rock, building materials, concrete and concrete wash water, sanitary waste and any other materials that could adversely impact surface or ground water quality.

Post Construction Stormwater Management (PCSM) Standard Notes

PCSM Requirements

A licensed professional or a designee shall be present onsite and be responsible during critical stages of implementation of the approved PCSM Plan. The critical stages may include the installation of underground treatment or storage BMPs, structurally engineered BMPs or other BMPs as deemed appropriate by the Township or the conservation district. The PCSM Plan, inspection reports, and monitoring records shall be available for review and inspection by the Township or the conservation district.

PCSM Long Term Operations and Maintenance Requirements

The permittee or co-permittee shall be responsible for long-term operation and maintenance of PCSM BMPs unless a different person is identified in the notice of termination and has agreed to long-term operation and maintenance of PCSM BMPs.

A permittee or co-permittee that fails to transfer long-term operation and maintenance of the PCSM BMP or otherwise fails to comply with this requirement shall remain jointly and severally responsible with the landowner for long-term operation and maintenance of the PCSM BMPs located on the property.

Permit Termination

Upon permanent stabilization of the earth disturbance activity and installation of BMPs in accordance with an approved plan, the permittee or co-permittee shall submit a notice of termination to the Township or conservation district. The notice of termination must include:

- (1) The facility name, address and location
- (2) The operator name and address

- (3) The NPDES permit number
- (4) The reason for permit termination
- (5) Identification of the persons who have agreed to and will be responsible for long-term operation and maintenance of the PCSM
- (6) Copy of Legal Instrument: For any property containing a PCSM BMP, the permittee or co-permittee shall record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must identify the PCSM BMP, provide for necessary access related to long-term operation and maintenance for PCSM BMPs and Provide notice that the responsibility for long-term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees, and provide proof of filing with the notice of termination.
- (7) Final certification: The permittee shall include with the notice of termination "Record Drawings" with a final certification statement from a licensed professional, which reads as follows:

"I (name) do hereby certify pursuant to the penalties of 18 Pa. C.S.A. §4904 to the best of my knowledge, information and belief, that the accompanying record drawings accurately reflect the as-built conditions, are true and correct, and are in conformance with Chapter 102 of the rules and regulations of the Department of Environmental Protection and that the project site was constructed in accordance with the approved PCSM Plan, all approved plan changes and accepted construction practices."

- (1) The permittee shall retain a copy of the record drawings as a part of the approved PCSM Plan.
- (2) The permittee shall provide a copy of the record drawings as part of the approved PCSM Plan to the person identified in this section as being responsible for the long-term operation and maintenance of the PCSM BMPs.

ORDINANCE NO. 2019-02

AN ORDINANCE OF THE TOWNSHIP OF EAST HANOVER, LEBANON COUNTY, PENNSYLVANIA, ADOPTING THE EAST HANOVER SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND THE EAST HANOVER STORMWATER ORDINANCE.

WHEREAS, the Second Class Township Code authorizes the Board of Supervisors to plan for development of East Hanover Township through zoning, subdivision and land development regulations under the Pennsylvania Municipalities Planning Code, 53 P.S. §66517, *et seq.*; and

WHEREAS, East Hanover Township had deferred to the Lebanon County Subdivision and Land Development Ordinance for review and approval of any subdivision and land development plans for properties located in East Hanover Township; and

WHEREAS, East Hanover Township had deferred to the Lebanon County Stormwater Ordinance for review and approval of any required stormwater facilities for properties located in East Hanover Township; and

WHEREAS, the Board of Supervisors believe it is best interest of East Hanover Township for review and approval of any subdivision and land development as well as stormwater facilities to be reviewed by East Hanover Township professionals; and

WHEREAS, the Board of Supervisors held a Public Hearing on the proposed Zoning Ordinance on March 25, 2019, pursuant to requirements set forth in the Pennsylvania Municipalities Planning Code, 53 P.S. §10609, *et seq.*; and

WHEREAS, a final draft copy of the proposed Subdivision and Land Development Ordinance as well as the Stormwater Ordinance were submitted to the Township Planning Commission and the Lebanon County Planning Department at least forty-five (45) days prior to the Hearing held on March 25, 2019.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED, and it is hereby enacted and ordained by the Board of Supervisors of the Township of East Hanover Township, Lebanon County, Pennsylvania, as follows:

1. The East Hanover Board of Supervisors hereby adopts the "East Hanover Subdivision and Land Development Ordinance" attached hereto and incorporated by reference as Exhibit "A."

2. The East Hanover Board of Supervisors hereby adopts the "East Hanover Stormwater Ordinance" attached hereto and incorporated by reference as Exhibit "B."

3. If any sentence, clause, section or part of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts of this Ordinance. It is hereby declared as the intent of the East Hanover Township Board of Supervisors that this Ordinance

would have been adopted had such unconstitutional, illegal, or invalid sentence, clause, section, or part thereof not been included therein.

4. All Ordinances or parts of Ordinances which are inconsistent herewith are hereby repealed.

5. This Ordinance shall become effective five (5) days after enactment by the Board of Supervisors.


ORDAINED AND ENACTED this 25th day of March, 2019.

TOWNSHIP OF EAST HANOVER

By 
Matthew Hetrick, Chairman

[Township Seal]

Attest:


Dennis Grubb, Township Secretary