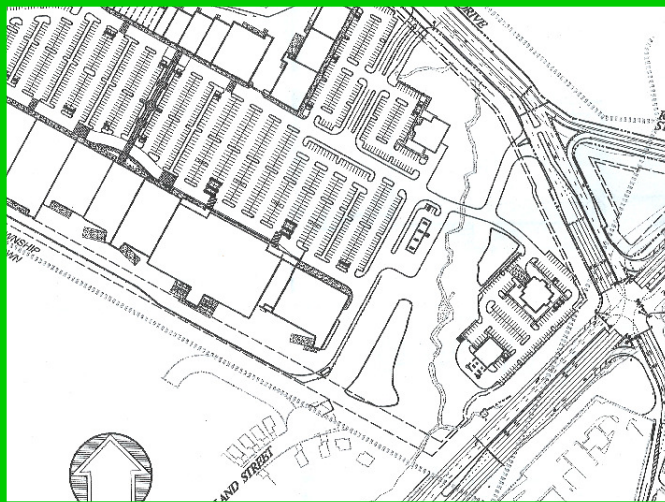


WEST POTTSGROVE TOWNSHIP

MONTGOMERY COUNTY, PENNSYLVANIA

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

2011



WEST POTTS GROVE TOWNSHIP OFFICIALS
MONTGOMERY COUNTY, PENNSYLVANIA

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ARTICLE ONE

GENERAL PROVISIONS

Section 100. Title.

This Ordinance shall be known and may be cited as the West Pottsgrove Township Subdivision and Land Development Ordinance of 2009.

Section 101. Enactment.

This Ordinance has been enacted in conformance with the provisions of the Pennsylvania Municipalities Planning Code, Act No. 247 of 1968, as amended.

Section 102. Contents.

This Ordinance contains regulations which include, but are not limited to the following:

1. Provisions for the submittal and processing of plats for subdivisions and land developments, and specifications for such plats, including provisions for Sketch, Preliminary, and Final Plan processing and approvals, and for processing of final approval by stages or sections of development.
2. Provisions governing the standards by which streets shall be graded and improved, and walkways, curbs, gutters, street lights, fire hydrants, water, sewage, and storm drainage facilities, and other improvements shall be installed as conditions precedent to formal approval of plats.

Section 103. Purposes.

The following are the purposes of this Ordinance:

1. To insure that development within the Township will be orderly, efficient, integrated, and harmonious.
2. To insure that the layout and arrangement of subdivisions or land developments shall conform to the Comprehensive Plan and to any regulations, maps, studies, and reports adopted in furtherance thereof.
3. To insure that streets in and bordering a subdivision or land development shall be coordinated, and be of such design, and in such locations as deemed necessary to accommodate prospective traffic and parking, and to facilitate fire protection and other emergency services.
4. To require adequate, appropriately located easements or rights-of-way for utilities and storm drainage facilities.
5. To insure that any lands offered for dedication or otherwise reserved for use as public or common grounds shall be of suitable size, configuration, and topographical character for their designated uses.
6. To insure conformance of subdivision and land development proposals with the availability of municipal services and public facilities, and the coordination of intermunicipal programs.
7. To preserve lands subject to inundation or flooding from subdivision or land development which would endanger life or property or further aggravate or increase the existing flooding or inundation conditions.
8. To encourage and promote flexibility, economy, and ingenuity in the layout and design of subdivisions and land developments, including provisions authorizing the Township to modify the requirements of this Ordinance in accordance with concepts and practices consistent with the modern and evolving, generally accepted principles of site planning and land development.
9. To provide equitable handling of all subdivision and land development proposals by providing uniform procedures and standards.
10. To encourage subdivision and land development in accordance with principles and practices which conserve energy, both during and after construction, and which encourage the use of alternative energy sources by the layout of the proposal and the siting of buildings.
11. To ensure conformance of subdivision and land development plans with the public improvements of the Township, and coordination of Inter-Municipal, County, and Commonwealth improvement plans and programs.
12. To provide adequate open space for traffic, recreation, light and air, and for proper distribution of population.
13. To preserve and protect natural resources such as, but not limited to, wetland areas and groundwater reserves so as to maintain the quality of life within the Township and adjacent lands.
14. To provide for the buffering of certain types of land uses to minimize their impact upon their surroundings.

Section 104-105

Section 104. Interpretation.

The provisions of this Ordinance shall be the minimum requirements to meet the above-stated purposes. Where the provisions of this Ordinance impose greater restrictions than those of any other statute, ordinance, or regulations, then the provisions of this Ordinance shall prevail. Where the provisions of any other statute, ordinance, or regulations impose greater restrictions than those of this Ordinance, the provisions of such statute, ordinance, or regulations shall take precedence.

Section 105. Jurisdiction.

Township Board of Commissioners shall, with the recommendation of the Planning Commission, review all subdivision and land development plans as defined below and in Section 201 of this ordinance which are located in whole or in part of the Township .

1. Subdivision and Land Development. No subdivision or land development of any lot, tract, or parcel of land as defined in Article 2, shall be made, and no street, alley, sanitary sewer, storm drain, water main, gas, oil or electric line, or other improvements in connection therewith, shall be laid out, constructed, or dedicated for public use, or travel, or for the common use of occupants of a building abutting thereon, except in strict accordance with this Ordinance.
2. Sale of Lots, Issuance of Building Permits or Erection of Buildings. No lot in a subdivision or land development may be sold, and no permit to erect, alter, or repair any building upon land in a subdivision or land development will be issued unless and until a subdivision and/or land development plan has been approved, and where required, recorded, and until the required improvements in connection therewith have either been constructed or guaranteed for construction in the form of a bond, escrow, or other means approved by Township Board of Commissioners under the advice of the Township Engineer and Solicitor, in accordance with the laws of the Commonwealth of Pennsylvania.
3. Condominiums. No provision of this Ordinance shall be construed to prohibit condominium ownership as permitted by the applicable enabling legislation of the Commonwealth of Pennsylvania.

ARTICLE TWO

DEFINITIONS

Section 200. Language Interpretations.

For purposes of this Ordinance, certain words shall be interpreted as follows:

1. Words used in the present tense include the future.
2. The singular number includes the plural and the plural includes the singular.
3. The phrase "used for" includes "arranged for," "designed for," "intended for," "maintained for," and "occupied for."
4. The word "person" includes an individual, corporation, partnership, incorporated association, and/or any other similar entity.
5. The words "include" or "including" shall not limit the term to the specified examples, but are intended to extend the meaning to all other instances of like kind and character.
6. The word "building" shall always be construed as if followed by the words "or part thereof."
7. The word "may" is permissive, and the words "shall" and "will" are always mandatory.
8. The words: "he" or "she" or "they" are to be used interchangeably with the word person.
9. The word "street" includes road, highway, avenue, boulevard, or expressway.
10. The word "stream" includes watercourse, creek or river, and, where referenced, a seasonal stream.

Section 201. Definition of Terms.

Words and terms used in this Ordinance shall have the meanings given in this Article. Unless expressly stated otherwise, any pertinent word or term not a part of this listing, but vital to the interpretation of this Ordinance, shall be construed to have its legal definition, or in absence of a legal definition, its meaning as commonly accepted by practitioners including civil engineers, surveyors, architects, landscape architects, and planners.

Abut. Areas of contiguous lots that share a common lot line, except not including lots entirely separated by a street or a perennial waterway. See definition of "adjacent"

Accepted Engineering Practice. That which conforms to accepted principles, tests or standards of nationally recognized technical, scientific, and/or engineering authorities.

Act 247. The Municipalities Planning Code (MPC) of July 31, 1968, 53 P.S. S10101, et seq., as amended from time to time. The MPC establishes the basic authority for the exercise of municipal land use controls in Pennsylvania.

Accelerated Erosion. The removal of the surface of the land through the combination of man's activities and natural processes at a rate greater than would occur from natural processes alone.

Acceleration Lane. The portion of a roadway adjoining the traffic lane constructed for the purpose of enabling a vehicle entering a roadway to increase its speed to a rate at which it can safely merge with traffic.

Access Strip. A piece of land which provides physical access to, and legal road frontage for a lot, but which does not comply with the minimum lot width regulations of this Ordinance. Access strips provide access to "flag," "rear" or "interior" lots. The area of an access strip shall not be included in the minimum lot area calculations.

Accessory Building. A building (such as a private garage, private tool shed, children's playhouse or noncommercial greenhouse) which is subordinate and accessory to a principal building on the same lot and which is used for purposes that are clearly customarily incidental to the use of the principal building. A portion of a principal building used for an accessory use shall not be considered an accessory building.

Accessory Structure. A structure, such as a private garage or private swimming pool, serving a purpose customarily incidental to the use of the principal building and located on the same or adjacent lot as the principal building.

Accessory Use. A use customarily incidental and subordinate to the principal use of building and located on the same lot with such principal use or building.

Section 201. Definitions

Adjacent. Includes contiguous lots that share a common lot line or that are separated only by a street or waterway. See definition of “abut.”

Alley. A minor vehicular right-of-way, public or private, on which no principal structures front, which serves as a secondary means of access to two or more properties which otherwise front on a public street.

Aisle. The traveled way by which cars enter and depart parking spaces.

Alteration. Any change or rearrangement in the structural parts or in the existing facilities of a building or structure, or any enlargement thereof, whether by extension on any side or by an increase in height, or the moving of such structure from one location to another.

Amenities. A feature that increases attractiveness or value, especially of a piece of a parcel of land.

Applicant. A person, persons, or legal profit or nonprofit organization or trust who has filed an application for approval or permit of subdivision, land development plan, variance, special exception or conditional use, including his/her heirs, successors, agents and assigns. The term also includes landowner, developer, builder and/or other persons responsible for the plans and construction or building or other improvements on any parcel of land.

Application for Subdivision or Land Development. Every application, whether preliminary or final, required to be filed and approved prior to start of construction or development, including but not limited to an application for a building permit, for the approval of a subdivision plan, or for the approval of development plan.

Approved. Passed upon as satisfactory by the authority designated by law to give approval in the matter in question.

Assemblage:

1. The merging of adjacent properties into a single unit of ownership or use.
2. The property so merged, considered as a unit.

Authority. A public organization created pursuant to the Municipal Authorities Act of 1945 (P.L. 382, No.164).

Average Vehicle Occupancy. A numerical value calculated by dividing the number of employees scheduled to start work between the hours of 6:00 A.M. and 10:00 A.M. by the number of vehicles arriving between those hours.

Basement. An enclosed floor area partly or wholly underground, other than a building which is completely underground. A basement shall be considered a “story” if a) the majority of the basement has a clearance from floor to ceiling of seven feet or greater and b) if the top of the foundation of the building is an average of four or more feet above the finished grade of the front side of the building that faces onto a street. For flood plain purposes, basement is any area of the building having its floor sub-grade (below ground level) on all sides.

Basic Structural Alteration. Any enlargement of a building, whether by extending on any side or by increasing in height, any change in the use or classification of a main building, or the moving of a building from one location to another.

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

Board. Township Board of Commissioners of West Pottsgrove Township. The elected governing body of the West Pottsgrove Township .

Bond. Any form of surety bond in an amount and form satisfactory to Township Board of Commissioners. All bonds shall be approved by Township Board of Commissioners whenever a bond is required by regulations.

Buffer Yard. A strip of land that a) separates one use from another use or feature, and b) is not occupied by any building, parking, outdoor storage or any use other than open space or approved pedestrian pathways. A buffer yard may be part of the minimum setback distance, but land within an existing or future street right-of-way shall not be used to meet a buffer yard requirement.

Builder. See Applicant.

Building. Any structure having a permanent roof and foundation, intended for the shelter, work area, housing or enclosure of persons, animals, vehicles, equipment or materials and that has a total area under roof of greater than 50 cubic feet. “Building” is interpreted as including “or part thereof.” See the separate definition of “structure.” Any structure involving

a permanent roof (such as a covered porch or a carport) that is attached to a principal building shall be considered to be part of that principal building.

Building Area. The aggregate of the maximum horizontal cross-section areas of all buildings on a lot, excluding cornices, eaves and gutters, but including porches, breezeways and carports.

Building Coverage. The percentage obtained by dividing: a) the maximum horizontal area (square feet) of all principal and accessory buildings and attached structures covered by a permanent roof on a lot by b) the total lot area of the lot upon which the buildings are located.

Building Envelope. The area of a lot within which a principal building may be erected. This area is defined by the limits of the minimum front, side, and rear yard areas, and encompasses the area of the lot not found in the yard areas and rights-of-way.

Building Façade. That portion of any exterior elevation on the building extending from grade to top of the parapet, wall, or eaves and the entire width of the building elevation that fronts on a public street, park, or plaza.

Building Line or Building Setback Line. See “Setback Line.”

Building, Principal. A building used for the conduct of the principal use of a lot, and which is not an accessory building.

Building Width. The horizontal measurement between two structural walls of one building that are generally parallel, measured in one general direction that is most closely parallel to the required lot width. For a townhouse, this width shall be the width of each dwelling unit.

Caliper. Tree diameter measured at a depth of breast height (dbh).

Capacity Analysis. Intersection approach capacity is the maximum rate of vehicular flow that can pass through an intersection under prevailing roadway, traffic and signalization conditions. The analysis compares the actual or projected traffic volume to the intersection capacity and results in a volume/capacity (V/C) ratio.

Capital Improvement Plan. A plan setting forth, by category of public facility, those public improvements and that portion of their costs that are attributable to servicing new development within a designated service area for such public facilities over a period of specified years.

Cartway. The paved portion of a street or highway designed for vehicular traffic.

Centralized Sewer or Water. A sewage disposal network and facilities, or water supply network serving a group or series of property owners in common; may be publicly or privately owned.

Circulation. Provision made for traffic within or through buildings, outside areas, and communities.

Commercial Recreation. See “Recreation, Commercial”.

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 and designed and intended for the use or enjoyment of residents of the development, not including streets, off-street parking areas, and area set aside for public facilities. Common open space shall be substantially free of structures but may contain such improvements as are in the development plan as finally approved and as are appropriate for the recreation of residents.

Comprehensive Plan. The document entitled Pottstown Metropolitan Area Regional Comprehensive Plan, or any part thereof, adopted by the Township Board, as amended.

Concurrency. The requirement that development applications demonstrate that adequate public services be available at prescribed levels of service concurrent with the impact or occupancy of the developed property.

Conditional Use. A use which is allowed or denied by the Township Board within the provisions of **Article I** and **Article XXI: Conditional Uses & Special Exceptions** of the Zoning Ordinance, after review by the Planning Commission.

Condominium. A set of individual dwelling units or other areas of buildings each owned by an individual person(s) in fee simple, with the owners assigned a proportionate interest in the remainder of the real estate which is designated for common ownership, and which was created under either the Pennsylvania Unit Property Act of 1963 or was created under the Pennsylvania Uniform Condominium Act of 1980, as amended.

Section 201. Definitions

Contiguous. Sharing a boundary for purposes of this ordinance, properties on opposite sides of a public right-of-way shall not be considered contiguous.

Construction. The materials and methods of fabricating the various elements of a structure or building.

1. New Construction. For Flood Plain Conservation District zoning purposes, new construction is defined as structures for which the start of construction commenced on or after October 3, 1979 and includes any subsequent improvements to such structures.

Conversion. The remodeling or alterations of a structure so as to accommodate the provision of more apartment units (or dwelling units) than were originally intended. Conversions would then including the alteration of a nonresidential structure into a dwelling unit for at least one family; the modification of a single-family structure so as to accommodate two or more dwellings; and the alteration of a multifamily structure so as to accommodate more units than originally intended.

Corner Lot. A lot having contiguous frontage on two or more intersecting road

County. The County of Montgomery, Commonwealth of Pennsylvania.

County Planning Commission. The Montgomery County Planning Commission.

Crosswalk. A right-of-way for pedestrian travel across a street connecting two blocks

Cul-de-Sac. A minor street with entrance and exit at the same end; it terminates in a bulb or roundabout.

Culvert. A drain, ditch, or conduit not incorporated in a closed system, that carries drainage water under a driveway, roadway, or paved area.

Curb Line. A line formed by the face of the existing curb or in its absence, the outer edge of the shoulder, along which a curb would be other wise located.

Curb Elevation or Curb Level. The elevation of the top of a curb at a given point with a reference to a designated datum.

Curb Return. The connecting link between a street curb and the curb of a driveway.

Cut. An excavation; the difference between a point on the original ground and a designated point of lower elevation on the final grade. Also, the material removed in an excavation.

D.E.P. (or "DEP"). Shall mean the Pennsylvania Department of Environmental Protection, or its successor, and its relevant subparts.

Deed. A written instrument whereby an estate in real property is conveyed by a grantor to a grantee.

1. Deed Restriction. A restriction upon the use of a property placed in a deed.
2. Warranty Deed. A deed in which, either expressly or by implication, the grantor guarantees that the title which he undertakes to transfer has not been previously conveyed by him and is free from defects and that the property is unencumbered except as stated, and for himself and heirs, agrees to defend and protect the grantee against any loss which may be suffered by reason of the existence of any other title or interest in the property existing at the time the deed was executed and not excepted therein.

De Minimis Improvements. Non-residential property improvements which would, by their use, require less than five parking spaces with a maximum footprint of the addition being less than 1,000 square feet.

Density. The total number of dwelling units proposed on a lot divided by the "lot area", unless otherwise stated.

Designated Flood Plain Conservation Districts. Those flood plain conservation districts specifically defined and established in **§1301: Floodplain Conservation District** of the Zoning Ordinance.

Designed Floodway District or Area. The channel of a river or other watercourse and the adjacent land areas required to carry and discharge a flood of the 100-year magnitude as specifically defined in this ordinance.

Design Storm. The magnitude of precipitation from a storm event measured in probability of occurrence (ie. a 50 yr. storm) and duration (24 hr. storm) and used in computing storm water control devices.

Detached Building. A building that is surrounded on all sides by open yards and that is not attached to any other building.

Developable Acreage. For the purpose of calculating density per developable acre, the developable acreage should equal the gross land area of the proposal, minus the following acreage:

1. All land within existing and/or proposed rights-of-way for all public and/or private roads.
2. All overhead and underground utility easements and/or rights-of-way.
3. Soils with slopes of 15 percent or greater as defined by the Soil Survey for Montgomery County, prepared by the Soil Conservation Service of the United States Department of Agriculture.
4. All alluvial soil floodplain or the extent of the 100-year floodplain delineated in the Flood Insurance Study for West Pottsgrove Township, Montgomery County, Pennsylvania, dated November 15, 1983, as prepared by the Federal Emergency Management Agency, Federal Insurance Administration.

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 manmade change to improved or unimproved real estate, including but not limited to, buildings or other structures, the placement of mobile homes, streets, and other paving, utilities, mining, dredging, filling, grading, excavation, or drilling operations, the subdivision of land and the storage of materials or equipment.

Development Plan. The provisions of development of a planned residential development, including a plat of subdivision, all covenants relating to use, location and bulk of buildings and other structures, intensity of use or density of development, streets, ways and parking facilities, common open space and public facilities. The phrase "provisions for the development plan" shall mean the written and graphic materials mentioned above.

Disposal. The definition of disposal as set forth in Pennsylvania Solid Waste Management Act (35 PS Sections 6018-101 - 6018.1003) and/or the Pennsylvania Code (25 PA Code Chapters 271-285) are incorporated herein by reference.

District (for Zoning District). A land area within the Township within which certain uniform regulations and requirements apply under the provisions of the Zoning Ordinance.

Drainage. The natural or manmade features of land that are specifically designed to store or carry surface water runoff.

Driveway. A private cartway providing vehicular access between a public street and a lot, property or development, and/or providing vehicular circulation within a lot, property or development.

Dwelling. A building used as a non-transient living quarters, but not including a boarding house, hotel, motel, hospital, nursing home or dormitory. A dwelling may include a use that meets the definition of a "sectional home." This ordinance categorizes dwellings into the following types:

1. **Conversion Apartment.** A new dwelling unit created within an existing building. Conversion apartments are prohibited throughout West Pottsgrove Township.
2. **Apartments.** Dwelling units within a building that are separated by only horizontal floors or by a combination of horizontal floors and vertical walls (see definition of townhouses). The individual dwelling units may be leased or sold for condominium ownership.
3. **Sectional or "Modular" Home.** A type of dwelling that meets a definition of single family detached dwelling, single family semi-detached dwelling, townhouse or garden apartment that is substantially but not wholly produced in two or more major sections off the site and then is assembled and completed on the site, and that does not meet the definition of a "mobile/manufactured home" and that is supported structurally by its exterior walls and that rests on a permanent foundation.
4. **Single-Family Detached Dwelling.** One dwelling unit in one building accommodating only one family and having open areas on all sides.
5. **Mobile/Manufactured Home.** A type of single family detached dwelling, on a permanent foundation, that meets all of the following requirements: a) is transportable, b) is designed for permanent occupancy, c) is contained in a single piece, or two substantial pieces designed to be joined into one integral unit capable of again being separated for repeated towing, d) which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, e) is constructed so that it may be used with or without a permanent foundation, f) is not a "Recreation Vehicle," and g) includes a minimum of 800 square feet of interior floor space. The terms "mobile home" and "manufactured home" have the same meaning.

Section 201. Definitions

6. **Single Family Semi-Detached Dwelling (Half of a Twin Dwelling).** One dwelling unit accommodating one family that is attached to and completely separated by a vertical unpierced fire resistant wall to only one additional dwelling unit. One side yard shall be adjacent to each dwelling unit. This use is commonly known as one-half of a twin. Each unit may or may not be on a separate lot.
7. **Townhouse.** One dwelling unit that is attached to one or more dwelling units, and with each dwelling unit being completely separated from and attached to each other by unpierced vertical fire resistant walls. Each dwelling unit shall have its own outside access. Side yards shall be adjacent to each end unit. Townhouses are also commonly referred to as “row houses” or “single family attached dwellings.”
8. **Two--Family Detached Dwelling.** Two dwelling units accommodating one family each with both dwelling units within a single building on a single lot, and without the dwelling units being completely separated by a vertical wall. The building shall have two side yards.
9. **Modular Home.** A dwelling unit for permanent occupancy, made by assembling one or more factory-produced, three-dimensional sections into one integral building, not capable of easily being separated for conventionally-built units, as required by the Township’s Building Code, and must be placed on a permanent foundation. A copy of the Structural Engineering Bulletin(s) must be provided to the Board of Commissioners, indicating approval of the dwelling or its components by the U.S. Department of Housing and Urban Development.

Dwelling Unit. A single habitable living unit occupied by only one “family.” See definition of “family.” Each dwelling unit shall have: a) its own toilet (non-portable), bath or shower, sink, sleeping and cooking facilities, and b) separate access to the outside or to a common hallway or balcony that connects to outside access at ground level. No dwelling unit shall include a separate living area that is completely separated by interior walls so as to prevent interior access from the remainder of the living area.

Easement. A vested or acquired right to use land other than as a tenant, for a specific purpose, such right being held by someone other than the owner who holds title to the land.

Eaves. The projecting lower edges of a roof overhanging the wall of a building.

Engineer. A professional engineer licensed as such in the Commonwealth of Pennsylvania, and competent in the profession encompassed by these regulations.

Equivalent Development Unit. A standardized measurement of the consumption, use or generation equivalent to that of a new single family residential development unit.

Escrow. A deposit of cash with the Township or escrow agent to secure the promise to perform some future act.

Excavation. Any act by which natural materials are dug into, cut, quarried, uncovered, removed, displaced, relocated or bulldozed, as well as the conditions resulting therefrom.

Fence. A man-made barrier placed or arranged as a line of demarcation, an enclosure or a visual barrier that is constructed of wood, chain-link metal, vinyl or aluminum and/or plastic inserts. Also see “Wall.”

Fill. Any act by which natural materials are 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, as well as the conditions resulting therefrom.

Flood. See “Floodplain Related Terms”.

Floodplain Related Terms.

1. **Base Flood.** The flood which has been selected to serve as the basis upon which the floodplain management provisions of this and other ordinances have been prepared. For the purposes of this ordinance, it shall be the 100-year flood as referenced in the current Flood Insurance Study and delineated on the Flood Insurance Rate Map of the Federal Insurance Administration.
2. **Base Flood Elevation.** The 100-year flood elevation as referenced in the Flood Insurance Study. Within the approximated floodplain, alluvial soils floodplain, or other similarly documented areas, the 100-year flood elevation shall be established as a point on the boundary of the floodplain nearest to the construction site in question.
3. **Completely Dry Space.** Space which will remain totally dry during flooding; the structure is designed and constructed to permit the passage of water and water vapor.

4. Essentially Dry Space. A space which will remain dry during flooding; except for the passage of some water vapor or minor seepage; the structure is substantially impermeable to the passage of water.
5. FEMA and FIA. The Federal Emergency Management Agency and the Federal Insurance Administration who have jurisdiction over the National Flood Insurance Program and its related studies and regulations. "FEMA" is the parent agency of the "FIA."
6. Flood. A temporary condition of partial or complete inundation of normally dry land areas.
7. Flood Insurance Rate Map. The official FIA map which shows special hazard zones and risk areas for insurance rating purposes. For the purposes of this ordinance, it also delineates floodplain areas.
8. Flood Insurance Study. The examination and determination of flood hazards by the FIA. The flood elevations contained in this study are used for floodplain management purposes as related to this and other ordinances.
9. Floodplain. A relatively flat or low land area adjoining a stream, river, or watercourse, which is subject to partial or complete inundation during a 100-year flood, or any area subject to the unusual and rapid accumulation of surface water from any source; also referred to as flood-prone area.
10. Floodplain Districts. Those floodplain districts specifically designated in the Zoning Ordinance as being inundated primarily by the 100-year flood. Included would be areas identified as the Floodway District (FW), Flood-Fringe District (FF) and General Floodplain District (FA).
11. Floodplain Management. The application of a program or activities which may consist of both corrective and preventive measures for reducing flood damages.
12. Flood proofing. Any combination of structural and non-structural 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. Such measures are set forth in Flood Proofing Regulations published by the Office of the Chief Engineers, U.S. Army, publication number EP 1165 2 314 (June, 1972 and as subsequently amended). Flood proofing measures for all new construction and substantial improvements of structures shall satisfy the requirements of the Completely Dry Spaces (W1) and Essentially Dry Spaces (W2) classes referenced in these regulations. In said publication where reference is made to "below" (or above) the "BFD" (Base Flood Datum) it shall be interpreted as meaning below (or above) the Base Flood Elevation.
13. Floodway. The channel of a river or other watercourse and the adjacent land area required to carry and discharge a flood of the 100-year magnitude as specifically defined in this Ordinance.
14. Obstruction. Any wall, dam, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel, rectification, culvert, building, fence, stockpile, refuse, fill, structure or matter in, along, across or projecting into any channel, watercourse or designated floodplain district which may impede, retard or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water, or is placed where the flow of the water might carry the same downstream to the damage of life and property.
15. Flood, One Hundred Year. A flood that, on average, is likely to occur once every 100 years (i.e. that has a one percent change of occurring each year, although the flood may occur in any year). For the purpose of this ordinance, the 100-year flood is that which is defined by the Federal Insurance Administration, Federal Emergency Management Agency, in the Flood Insurance Study, West Pottsgrove Township.
16. Lowest Floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure constructed in accordance with **§1305.B.2 (Floodplain Conservation District: Conditional Use Criteria)** shall not be considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of the Zoning Ordinance and the National Flood Insurance Program regulations.
17. Regulatory Flood Elevation (RFE). The 100-year flood elevation plus a freeboard safety factor of one and one-half feet.

Floor Area, Total. The total floor space within a building(s) measured from the exterior faces of exterior walls or from the centerlines of walls separating buildings. Floor area shall specifically include, but not be limited to: a) fully enclosed porches and b) basement or cellar or attic space that is potentially habitable and has a minimum head clearance of at least seven feet. For the purposes of regulating floor area of dwelling units, floor area specifically shall not include the following: a) elevator shafts, b) common stairwells, c) unheated areas or d) unenclosed porches, decks or breezeways. Compare with "Gross Leasable Area".

Section 201. Definitions

Frontage. The extent of a building or of land along a public road or a public waterway.

Garages, Private or Household. An enclosed building for the storage of one or more motor vehicles. No business, occupation or service shall be conducted in a private garage that is accessory to a dwelling, except as may be allowed as a home occupation.

Glare. A sensation of brightness within the visual field which causes annoyance, discomfort or loss in visual performance, visibility and/or ability to focus.

Grade. The slope of a street, parcel of land, utility lines, drainageways, etc., specified in percent (%) and shown on plans as required herein.

Gross Acreage. The total acreage of a property, tract, lot or parcel proposed for subdivision or land development, including lands within existing street rights-of-way, floodplains and steep slopes.

Gross Leasable Area. – the total floor area designed for owner or tenant occupancy and exclusive use, including basements, mezzanines and upper floors, expressed in square feet and measured from the centerline of partitions and from outside wall faces; not including public or common areas, such as public toilets, corridors, stairwells, elevator lobbies or enclosed mall spaces. Also known as gross floor area.

Ground Cover. Low growing plant materials planted in a manner to provide continuous plant cover of the ground surface; lawn, ivy, and other low plant materials are included. Non-plant ground cover may also include bark or wood chips, gravel, and stone provided they are maintained as a continuous pervious cover.

Guarantee, Maintenance. Any security which may be required from the developer by the Township after final acceptance by the Township of improvements installed by the developer. Such security may include irrevocable letter of credit, escrow account or surety bond with a bonding company or commonwealth or federally chartered financial institution.

Guarantee, Performance. Any security which may be required from the developer by the Township in lieu of the requirement that certain improvements be made before the Township approves a developer's subdivision or land development plan. Such security may include irrevocable letter of credit, escrow account or surety bond with a bonding company or commonwealth or federally chartered financial institution.

Hazardous Waste. The definition of hazardous waste as set forth in Pennsylvania Solid Waste Management Act (35 PS §6018.101 - 6018.1003) and/or the Pennsylvania Code (25 PA Code Chapters 271-285) are incorporated herein by reference.

Height, Building. The vertical distance measured from the average elevation of the average proposed ground level along the front of the building to the highest point of a structure. For a building with a roof, such height shall be measured to the highest point of the structural roof. For height of signs, see **Article XVI: Signs**.

Highway Access Point. The point at which vehicular traffic enters or exits a public right-of-way from an abutting land use.

Historic Structures. Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register.
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district.
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior.
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either (1) by an approved state program as determined by the Secretary of the Interior; or (2) Directly by the Secretary of the Interior in states without approved programs.

Home Occupation. A routine, accessory and customary non-residential use conducted within or administered from a portion of a dwelling or its permitted accessory building. The conducting of a clinic, hospital, barber shop, beauty salon, tea room, animal hospital, or similar uses shall not be deemed a home occupation.

Impact Fee. A fee imposed on new development to help finance the cost of new improvements or services. Impact fees do not include the dedication of rights-of-way or easements for such new facilities or construction of such improvements.

Impervious Coverage. The total area of all "Impervious surfaces" on a lot (including building coverage) divided by the total lot area. Impervious surface includes areas covered by roofs, concrete, asphalt or other man-made cover which has a coefficient of runoff of 0.7 or higher. The Township Engineer shall decide any dispute over whether an area is "impervious."

1. Areas being voluntarily dedicated as common open space may be included in the acreage for determining impervious coverage of an adjoining lot.
2. The non-impervious coverage may be partially or wholly met by land that abuts the use, even if such land is in a different zoning district, an adjoining municipality and an abutting lot, if such land will be deed restricted as permanent open space and be so clearly stated on official recorded plans. In such case, the land shall be properly maintained by the abutting use.

Impervious Surface. Area covered by roofs, concrete, asphalt or other man-made cover which has a coefficient of runoff of 0.7 or higher. The Township Engineer shall decide any dispute over whether an area is "impervious."

Impoundment. A body of water, such as a pond, confined by dam, dike, floodgate or other barrier.

Improvement. A structure or public utility or any other installation or physical change made on the property with a view to increasing its value, utility or beauty.

Improvements. The physical additions, installations and changes required to render land suitable for the use proposed, including streets, curbs, sidewalks, utilities, and drainage facilities.

Improvements, Public. Improvements, including but not limited to those contained in the definition of "improvements," that are intended for dedication to the Township, or other municipal body or authority, either in fee or in easement.

Improvements, On-site. Improvements, including but not limited to those contained in the definition of "improvements," that are constructed on the applicant's property or along the road frontage of the tract being developed up to the centerline of the road.

Incineration. The process of burning combustible solid waste.

Incinerator. The definition of incinerator as set forth in Pennsylvania Solid Waste Management Act (35 PS Section 6018.101 - 6018.1003) and/or the Pennsylvania Code (25 PA Code Chapters 271-285) are incorporated herein by reference.

Individual Sewage Disposal Systems. A septic tank and drainage field or other type of sewage disposal system located on a single lot and serving one equivalent development unit.

Industrial Use. Activities including manufacturing or assembly, resource extraction, warehousing, storage, distribution, shipping, and other related uses.

Institutional Use. A nonprofit or quasi-public use, such as a religious institution, library, public or private school, hospital, government-owned or -operated structure, or land used for public purpose.

Land Development. Any of the following activities:

1. 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.
2. A subdivision of land.
3. Development in accordance with Section 503 (1.1) of the Pennsylvania Municipalities Planning Code.

Landowner. The owner of a legal or equitable interest in land, including the holder of a written, signed and active option or contract to purchase, or a person leasing the property (if authorized under the lease to exercise the right of the landowner and if such lease is for a remaining period of at least 20 years), or authorized officers of a partnership or corporation that is a

Section 201. Definitions

“landowner” or other person having a proprietary interest in land. A person who has clearly received formal notarized powers of attorney relating to a landowner may act in the capacity of the landowner, if legally authorized.

Landscape. A part of the earth’s surface or the view of a portion of land or land and water as seen from any given point.

Landscape Construction. The alteration of existing ground conditions together with construction and development of ground features, including minor structures.

Level of Service. Level of service (LOS), as described in the Highway Capacity Manual (2000 - Transportation Research Board, as amended), is a qualitative measure of the operational conditions within a traffic stream and their perceptions by motorists. Levels of service are defined in terms of delay for signalized intersections and reserve capacity for unsignalized intersections. Six levels of service (A through F) are defined for each type of facility, with LOS "A" representing least congested operating conditions and LOS "F" representing a breakdown in operating conditions.

Loading, Unloading Space. A space, accessible from a street or way, in a building or on a lot, for the temporary use of the vehicles, while loading and unloading merchandise or materials.

Lot. A separate parcel of land that is recorded or that will be recorded after Township final subdivision approval in the office of the County Recorder of Deeds. The parcel is occupied or is to be occupied by one principal building or other structure or use, and any such open space as is arranged or designed to be used in connection with such principal building or other structure or use, such open spaces and the area and dimensions of such lot being not less than the minimum required by the zoning ordinance. A parcel under common ownership that is completely separated into two parts by a public street shall be considered to be one tract but two lots.

Lot Area, Buildable. Net lot area contained by the building line, minus the area of any land in a flood plain conservation district, in a steep slope conservation district, or in a wetlands areas.

Lot Area. The horizontal land area contained within the lot lines of a lot (measured in acres or square feet), but excluding the following:

1. Areas within the existing legal rights-of-way of: 1) any proposed or existing public streets or alleys or 2) any proposed or existing commonly maintained private streets that serve three or more lots;
2. Areas that exist as or will be required to be dedicated as common open space on a separate lot; and
3. Fifty percent of areas within rights-of-way or easements intended for overhead electrical lines of 35 kilovolts or higher capacity, which shall only be excluded for residential lots.

Lot Area, Gross. Calculated land area contained within the deeded boundaries of a lot.

Lot Area, Net. Gross lot area minus areas of public and private rights-of-way, easements, ultimate rights-of-way and access strips for flag lots.

Lot, Corner. A lot abutting on two or more intersecting streets. The yard setback for each road frontage shall be the front yard setback for the district in which the lot is located.

Lot Depth. The average horizontal distance between the front and the rear lot lines, measured through the approximate center of the lot.

Lot, Flag. Also known as “interior lot” or “rear lot”. An irregularly shaped lot which, although it might conform in all other respects with the dimensional requirements of the zoning district, does not meet minimum frontage requirements. Flag lots use an elongated extension to connect the street with the principal part of the lot. Flag lots are not permitted in the Township. This definition does not include the commonly-used, wedge-shaped lots located on a cul-de-sac turnaround.

Lot Lines. The property lines bounding the lot. Wherever a property line borders a public street, the lot line shall be considered to be the existing street right-of-way.

1. **Front Lot Line (Street Line).** A lot line separating the lot from the future street right-of-way.
2. **Rear Lot Line.** A lot line, most distant, and most nearly parallel or concentric to the front lot line. (A three-sided lot has no rear lot line.)
3. **Side Lot Line.** The lines most nearly perpendicular to the front lot line. If the side lot lines intersect a curved street, they shall be arranged most nearly perpendicular to the line which would result from connecting the endpoints of the lot frontage with a straight line. On a corner lot, the side lot line shall be the line or lines most nearly perpendicular to the

street abutting the front yard [for how to determine the front yard location on a corner lot, see definition of “Yard, Front”]. A “side street lot line” is a side lot line separating a lot from a street.

Lot, Merged. A lot which has resulted from the merger of two or more contiguous, nonconforming parcels of land that were held under single ownership.

Lot Width. The horizontal distance between side lot lines, measured at the building line, parallel or concentric to the ultimate right-of-way line. For a corner lot, lot width shall be measured parallel or concentric to the ultimate right-of-way line of the higher classification of street, where applicable.

Major Intersection. The intersection of any arterial or collector street with any other arterial or collector street as defined by the Montgomery County Comprehensive Plan, 2005. The transportation engineer shall seek guidance from the Planning Commission prior to the initiation of the traffic impact study to insure agreement on the location of major intersections.

Manufactured Home. For “Mobile/Manufactured Home”, see “Dwellings: Mobile Home”.

Mature Tree. Any tree of six inches or more in caliper, whether standing alone or in a tree mass or woodlands. A mature tree shall be a desirable species as determined by the Shade Tree Commission or landscape architect.

Mineral Extraction. The removal from the surface or beneath the surface of the land of bulk mineral resources using significant machinery. “Mineral extraction” includes but is not limited to the extraction of sand, gravel, topsoil, limestone, sandstone, coal, clay, shale and iron ore, but shall not include: a) removal of material from the ground solely to provide routine fill, or b) routine movement of and replacement of topsoil during construction.

Mobile/Manufactured Home. See “Dwellings: Mobile Home”.

Mobile/Manufactured Home Park. A parcel of land under single ownership which has been planned and improved for the placement of three or more mobile/manufactured homes for a non-transient residential use. The individual manufactured homes may be individually owned. A development of mobile/manufactured homes with each dwelling on its own subdivided and approved individual lot of record shall be regulated in the same manner as a subdivision of site-built homes, and shall not be considered to be a “mobile home park.”

Modular Home. See “Dwelling”.

Monument. A tapered, permanent survey reference point of stone or concrete having a top 4 inches on each side and a length of 24 inches.

Municipalities Planning Code or State Planning Code. The Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended.

Nonconforming Lot. A lot which does not conform with the minimum lot width or area dimensions specified for the district where such lot is situated, but was lawfully in existence prior to the effective date of this Zoning Ordinance or is legally established through the granting of a variance by the Zoning Hearing Board, and which is not abutted by other undeveloped land owned by the same owner.

Nonconforming Structure. A structure which does not comply with the applicable dimensional regulations, including those relating to density, impervious surfaces, building coverage, building height and setbacks in this Ordinance or amendments hereafter enacted where such structure was lawfully in existence prior to enactment of this Ordinance. Such structures including, but are not limited to, buildings, fences and swimming pools.

Nursing Home. A facility licensed by the State for housing and intermediate or fully-skilled nursing care of three or more persons.

Off-site. Located out side the boundary lines of the lot or tract which is being subdivided or developed but within the right-of-way of a contiguous street.

Off-Site Transportation Improvements. Other transportation-related improvements which are generally not contiguous with the property being developed and not required as an on-site improvements but found to be necessary, partly or wholly as a result of the proposed development.

Office. A use that involves administrative, clerical, financial, governmental or professional operations and operations of a similar character. This use shall include neither retail nor industrial uses, but may include business offices, medical or dental offices, clinics or laboratories, photographic studios and television or radio broadcasting studios.

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Official Map. The map adopted by the Township Board of Commissioners pursuant to Article IV of the Municipalities Planning Code.

Official Street Classification Map. The map as adopted by the Township Board classifying the streets of the Township. See definition of “Street Classification.” This map may be amended by resolution of the Township Board.

Official Zoning Map. The map as adopted by the Township Board which designates the location and boundaries of zoning districts.

On-Site Transportation Improvements. All improvements on or adjacent to the development site in the public right-of-way required to be constructed by the developer pursuant to any ordinance, resolution or requirement of the Township.

One-Hundred Year Flood. See “Flood, One-Hundred Year”

Open Space, Common. A parcel or parcels of land within a tract which meets all of the following standards:

1. Is designed, intended and suitable for active or passive recreation by residents of a development or the general public;
2. If not intended to be publicly owned, is covered by a system for perpetual maintenance;
3. Will be deeded to the Township or deed-restricted to permanently prevent uses of land other than “common open space” and non-commercial recreation; and
4. Does not use any of the following areas to meet minimum open space requirements: 1) existing or future street rights-of-way, 2) access ways, 3) buildings (other than accessory buildings and pools clearly intended for noncommercial recreation), 4) off-street parking (other than that clearly intended for noncommercial recreation), 5) any area needed to meet a requirement for an individual lot, 6) any area deeded over to an individual property owner for their own use, or 7) land with rights-of-way intended eventually for overhead electrical transmission of 35 kilovolts or greater capacity.

Ordinance. The Township Subdivision and Land Development Ordinance (SALDO), as amended.

Parapet. See “Wall: Parapet Wall”.

Parking Space. A reasonably level space, available for the parking of one motor vehicle, not less than 10 feet wide and having an area of not less than 200 square feet exclusive of passageways, driveways or other means of circulation or access.

Parking Space, All-Weather. A parking space surfaced with asphalt or other equivalent material approved by the Township.

Patio. A level, surfaced area directly adjacent to a principal building, at or within three feet of the finished grade, without a permanent roof intended for outdoor lounging, dining or the like.

Pathway. A designated land corridor containing a route designed for non-motorized travel that connects local facilities, neighborhoods, commercial districts, etc. to a larger trail or sidewalk network. Sidewalks are not considered pathways.

Paved Area. All areas covered by man-made impervious surfaces (e.g., macadam, concrete, etc.). Does not include areas covered by buildings.

Peak Discharge. The maximum rate of flow of stormwater runoff at given point and time resulting from a particular magnitude storm.

PennDOT (PADOT). The Pennsylvania Department of Transportation, or its successor, and its subparts.

Percolation Test. One of the tests required to identify a suitable area for the location of an on-site septic system. The test measures the ability of the soil to absorb water.

Permit. A document issued by the proper Township authority authorizing the applicant to undertake certain activities.

1. **Zoning Permit.** A permit issued indicating that a proposed use, building or structure is, to the best knowledge of the Township Staff, in accordance with the Zoning Ordinance and which authorizes an applicant to proceed with said use, building or structure, within all other applicable laws and regulations. For the purposes of the Zoning Ordinance, a zoning permit or “a permit under the Zoning Ordinance” shall mean the applicable portions of a construction permit, unless a specific system of zoning permits has been established.
2. **Construction Permit.** A permit indicating that a proposed construction, alteration, or reconstruction of a structure is, to best knowledge of the Township Staff, in accordance with the provisions of the Building Code which may be adopted by the Township.

Plan. A graphic representation of a proposal for subdivision and/or land development, including necessary written notes.

Playfield. A common area within a subdivision or land development for neighborhood residents to use for informal, active recreation purposes such as “sand-lot” ball games and other activities requiring a large lawn area, away from homes or other buildings, for their proper conduct. Playfields are not included for formalized programs such as little league baseball or midget football, which should be conducted on more appropriate facilities. For playfield regulations, see **§407: Open Space Design Requirements**.

Planning Commission. The Planning Commission of West Pottsgrove Township.

Plat. The map or plan of a subdivision or land development, whether preliminary or final.

Principal Building. The building in which the principal use of a lot is conducted. Any building that is physically attached to a principal building shall be considered part of that principal building.

Principal Use. The single dominant use or single main use on a lot.

Public Hearing. A formal meeting held pursuant to public notice by the governing body, planning commission or other municipal agency, intended to inform and obtain public comment, prior to taking action in accordance with the Pennsylvania Municipalities Planning Code, as amended.

Public Meeting. A forum held pursuant to notice under the act of July 3, 1986 (P.L.388, No. 84), known as the "Sunshine Act." ("...any prearranged gathering of an agency which is attended or participated in by a quorum of the members of an agency, held for the purpose of deliberating agency business or taking official action.")

Public Notice. Notice of a public hearing published in a newspaper of general circulation in the municipality. Such notice shall state the time and place of the hearing and particular nature of the matter to be considered at the hearing. The publication of a public notice shall be in accordance with the Pennsylvania Municipalities Planning Code, as last amended.

Public Transit. Transportation services for the general public provided by a common carrier of passengers generally but not necessarily on a regular route basis, by a public authority or a private operator offering service to the public.

Public Utilities Facility. A building or structure and its equipment, used for the transmission and exchange of telephone, radio telephone, gas, power, sewer and water facilities, provided; however, that in a residential district these shall not include public business facilities, storage of materials, trucks or repair facilities, or housing of repair crews.

Rear Yard. See “Yard”.

Recreation, Commercial. Leisure-time uses that are primarily operated for commercial purposes.

Recreation, Publicly-Owned. Land or structures that are owned by a government agency or the Township and are available for use by the general public for leisure and recreation.

Recreation Vehicle or Recreational Equipment. For the purpose of this article, the terms “recreational vehicle” or “recreational equipment” shall include boats and boat trailers, travel trailers, pickup campers or coaches, motorized dwellings, tent trailers and other trailers including, but not limited to trailers for hauling snowmobiles, motorcycles, or similar singular vehicles, and cases or boxes for transporting recreational equipment. Recreational vehicles also shall include tent trailers, travel trailers, motor homes, mini-motor homes and any similar self-propelled or trailered vehicles used mainly to provide easily transportable living accommodations. Also included are snowmobiles, all-terrain vehicles, and four-wheel drive vehicles meant for rugged, off-the-road use.

Recycling. The definition of recycling as set for in the Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. 4000.101 as amended).

Release Rate. The level of control of the post-development peak rate of runoff to be achieved for a particular site, expressed as a percentage of the pre-development peak rate of runoff.

Reserve Strip. A parcel of land whose primary function is to separate a street from adjacent properties, while not being used or capable of being used as a building lot, open space or recreation area, or legitimate environmental protection purposes.

Residential Accessory Building, Structure or Use. A use or structure that is clearly accessory, customary and incidental to a principal residential use on a lot, including the following uses and uses that are very similar in nature: Garage (household),

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Carport, Tennis Court, Garage Sale, Basketball Backboard, Household Swimming Pool, Volleyball Court, Gazebo, Storage Shed, Greenhouse, Children's Playhouse, and Children's Play Equipment.

Residential Districts. The R-1, R2, and R3 Zoning Districts.

Residential Lot Lines. The lot line of a lot that: a) contains an existing dwelling or b) is undeveloped and zoned as a Residential District.

Residual Waste. The definition of residual waste as set forth in Pennsylvania Solid Waste Management Act (35 PS Section 6018.101 - 6018.1003) and/or the Pennsylvania Code (25 PA Code Chapters 271-285) are incorporated herein by reference.

Retail Use. A commercial enterprise that provides goods and/or services directly to the consumer, where such goods are available for immediate purchase or rental and removal from the premises by the purchaser.

Reverse Frontage Lotting. Lotting which extends between two streets of differing classifications, with vehicular access provided from the lesser street, in order to promote traffic flow and safety on the greater street.

Right-Of-Way. A strip of land, over which are provided access rights for various purposes, including vehicular travel, storm drainage and utility lines. Rights-of-way are further defined as follows:

1. Legal Right-Of-Way. The road or street right-of-way legally in the public domain. Generally, an old, legal right-of-way will be substandard by comparison with current requirements, may overlap the lot as described by deed description and shall be superseded by the ultimate right-of-way.
2. Ultimate Right-Of-Way. Land that is dedicated or is required to be defined or reserved for future dedication for use as a street and for related public improvements. The terms "ultimate-right-of-way", "right-of-way-reserved-for-future-dedication" and "future right-of-way" shall have the same meaning. If a future right-of-way is not required to be defined, then future right-of-way shall have the same meaning as existing right-of-way. Ultimate right-of-way is the road or street right-of-way projected as necessary for adequate handling of current or future traffic volumes, as defined in this ordinance. Upon approval of a plan in compliance with the zoning and the West Pottsgrove Township Subdivision and Land Development Ordinance, the ultimate right-of-way shall become the legal right-of-way.
3. Equivalent Right-Of-Way. A road or street right-of-way required to be reserved where private streets are permitted. The width shall be determined by the street's function, in accordance with this ordinance.

Riparian Corridor: The area of land adjacent to and along a perennial or intermittent river, stream, lake, pond, or wetland.

Roof Line. A horizontal line intersecting the highest point or points of a roof or parapet wall.

Sanitary Sewer Facility. A public sanitary sewer system, or comparable common or package sanitary sewer facility approved by the appropriate governmental health agency.

School, Public, or Private Primary or Secondary School. An educational institution primarily for persons between the ages of five and 19 that primarily provides State-required or largely State-funded educational programs. This term shall not include "Trade Schools."

Screening. Year-round plant material, fencing, and/or walls of substantial height and density designed to buffer an intense use or site element from another use or street.

Security. A letter of credit, surety bond, or cash escrow provided by the applicant to secure its promises regarding public improvements associated with an approved subdivision or land development.

Septage. Materials pumped from a residential on-lot septic treatment system that was installed and is maintained in compliance with DEP regulations.

Setback, Front Yard.

1. The front yard within a lot representing the required minimum distance between any structure to be erected or use to be developed and the adjacent future street right-of-way or exterior lot line (when the property is not abutted by a right-of-way). Such line shall be measured at right angles from and parallel to the front lot line.
2. Any building setbacks shall be measured from the foundation, exterior wall or other component of a structure that is closest to the right-of-way line or lot line from which the setback is being measured. Eaves and cornices shall not be counted towards the required setback distance.

3. Unless otherwise stated, setback distances are for both accessory and principal structures.
4. Private Streets – For a building setback measured from a private street, the setback shall be measured from the existing right-of-way of such a street, if a right-of-way exists. If a private street does not have a right-of-way, the setback shall be measured from the edge of the cartway.

Sewage Disposal System. A system to collect, treat and dispose of sewage.

1. Central Sewer Service. Service at the time of occupancy of a use by a sewage treatment system that serves a minimum of 20 dwelling units or five principal non-residential uses.
2. Public Sewer Service. Service at the time of occupancy of a use by a central sewage treatment plant that is owned by a municipality or a municipal or county authority.
3. On-Lot or Non-Public Sewer Service. Any form of sewage service permitted under local, State and Federal law that does not meet the definition of “central sewer service.”

Sewage Enforcement Officer. A licensed employee of the Montgomery County Health Department who issues permits, reviews permit applications, and sewage facilities planning modules, and conducts inspections and investigations necessary to implement the Pennsylvania Sewage Facilities Act and regulations promulgated under it.

Sewage Facilities Plan. A comprehensive plan for the provision of adequate sewage facilities which was adopted by Township Board of Commissioners and approved by the Department of Environmental Protection.

Sewage Facilities, Central. A sewage disposal system in compliance with all state and local regulations, approved by the Pennsylvania Department of Environmental Protection and applicable sewer authority, and providing service to multiple customers. Public sewer systems are included in this definition.

Sewage Facilities Planning Module. Completed forms submitted to the Sewage Enforcement Officer and PADEP for the purposes of revising the sewage facilities plan resulting from a proposed land development or subdivision.

Sewage Sludge, Land Application of. The spreading on land of the treated conditioned accumulated settled solids and similar stabilized residue from septic and holding tank pumping and sewage treatment systems.

Shade Tree. A tree species selected and planted for its ability to provide shade, often along a sidewalk, street, or parking area.

Shopping Center. A group of commercial establishments, planned and developed as an integrated architectural and functional unit, providing convenient on-site parking and controlled, common vehicular and pedestrian access. A shopping center may also include a mix of permitted personal service, office and commercial recreation uses.

Side Yard. See “Yard”.

Sight Distance. The distance required by a driver traveling at a given speed to stop the vehicle after an object on the roadway becomes visible to the driver (Pennsylvania Code, Title 67, Chapter 441, “Access to and Occupancy of Highways by Driveways and Local Roads,” as amended).

Sight Distance, Stopping. The distance of unobstructed view along the centerline of a street from the driver's eye-height of 3.5 feet to the furthest visible point six inches above the street surface.

Sight Triangle. A triangular-shaped portion of land established at street intersections in which nothing is erected, placed, planted or allowed to grow in such a manner as to limit or obstruct the sight distance of motorists entering or leaving the intersection.

Sign. Any physical device for visual communication that is used for the purpose of attracting attention from the public and that is visible from beyond an exterior lot line, including all symbols, words, models, displays, banners, flags, devices, or representations. This shall not include displays that only involve symbols that are clearly and entirely religious in nature, and which do not include advertising.

1. Sign Area. See **Article XVI: Signs**, of the Zoning Ordinance.
2. Sign, Off-Premise. A sign which directs attention to an object, product, service, place, activity, person, institution, organization, or business that is primarily offered or located at a location other than the lot upon which the sign is located. This includes signs commonly called “billboards.”

Section 201. Definitions

Single and Separate Ownership. The ownership of a lot by one or more persons, partnerships or corporations, the ownership of which is separate and distinct from that of any adjoining lot.

Site Plan Review. Review of a site plan by the Planning Commission and/or Township Board that is required for certain uses under Article I of the Zoning Ordinance.

Solicitor. Unless otherwise stated, shall mean the appointed Solicitor to West Pottsgrove Township.

Soil Survey. The Montgomery County Soil Survey, latest edition, prepared by the Soil Conservation Service of the United States Department of Agriculture.

Solid Waste.

1. **Solid Waste.** The definition of solid waste as set forth in Pennsylvania Solid Waste Management Act (35 PS Section 6018.101 - 6018.1003) and/or the Pennsylvania Code (25 PA Code Chapters 271-285) are incorporated herein by reference.
2. For the purposes of this ordinance, the following materials shall not be considered to be solid waste: 1) portions of trees or shrubs, leaves, mulch, and rocks, 2) substances legally disposed of into the air or water through a Federal or State pollution discharge permit, 3) customary residual wastes from a permitted mineral extraction use or 4) materials of a character such as paper, plastic, aluminum and metal that have clearly been separated from the waste stream for recycling.

Special Exception Use. A use requiring zoning approval by the Zoning Hearing Board within the standards and procedures of **Article XXI: Conditional Uses & Special Exceptions** of the Zoning Ordinance. A special exception use is that use which would not be appropriate generally or without restriction throughout the zoning district, but which, if controlled as to number, area, location or relation of neighborhood, would promote the public health, safety, welfare, morals, order, comfort, convenience, appearance, prosperity, or general welfare. The Zoning Hearing Board may approve a special exception following a public hearing and findings of fact consistent with the provisions of this ordinance, provided the use complies with specified conditions and standards outlined in this ordinance.

Specimen Tree. Any tree with a caliper that is 75% or more of the record tree of the same species in the Commonwealth of Pennsylvania

State. The Commonwealth of Pennsylvania and its agencies.

Steep Slope. A grade of 15 percent or greater as determined by the Soil Survey of Montgomery County, as prepared by the Soil Conservation Service of the USDA, or accurate contour mapping.

Storage of Waste. The containment of waste on a temporary basis in such a manner as not to constitute disposal of such waste. It shall be presumed that the containment of waste in excess of one day shall constitute disposal rather than storage, unless such waste is in the form of clean glass, metal, paper or other sorted recyclables approved by the Township, which can be contained for periods not to exceed one month. This presumption can be overcome by clear and convincing evidence to the contrary.

Storage Shed. An enclosed accessory building maintained primarily for the convenience of the occupants of the principal building on the lot and which is not used for the housing of a motor vehicle with four or more wheels. A storage shed may not be a motor vehicle, trailer of any type, POD or other storage container.

Storage Trailer. A container, typically made of steel, designed to be hauled by a truck. Storage trailers are often approximately 9 feet tall, 8 feet wide, and 28 to 48 feet long. These do not include Portable Storage Units, which are typically smaller (usually 7 to 16 feet long), more temporary in nature, and used when moving.

Story (and Half-Story). A level of a building routinely accessible to humans having an average vertical clearance seven feet or greater shall be considered a full story, except as provided for in the definition of "basement." Any level of a building having an average vertical clearance from floor to ceiling of less than seven feet shall be considered a "half-story."

Stormwater Basin. A structure which provides for the storage and slow release of stormwater runoff during and after a storm. Referred to as a sediment, retention or detention basin.

1. **Wet Basin.** An impoundment basin designed to retain stormwater runoff within a permanent pool of water or existing pond.

2. Dry Basin. A naturalized impoundment basin designed to retard stormwater runoff by temporarily storing the runoff and releasing it at a pre-determined rate.

Stormwater Management Plan. A plan prepared and adopted by Montgomery County pursuant to Act 167 of 1978.

Street. A public or private thoroughfare which provides the principal means of vehicular access to abutting lots, carries traffic from local streets to arterial streets, or carries through-traffic, provides access to abutting non-residential uses, or that is an expressway, but not including an alley or a driveway. The terms “street”, “highway” and “road” have the same meaning and are used interchangeably.

Street Center Line. The center of the existing street right-of-way or, where such cannot be determined, the center of the traveled cartway.

Street Classification. The functional classification of streets into the following types, as shown on the Official Street Classification Map for existing streets and as determined by the Township Engineer for future streets:

1. Arterial. A street serving a large volume of comparatively high speed and long distance traffic.
 - A. Principal. An arterial serving the heaviest volumes of traffic in municipality, providing the highest degree of vehicular mobility and involving controls on access.
 - B. Minor. An arterial serving high volumes, providing a high degree of mobility, and some limits on access.
2. Collector. A street designed and located to provide a means to accommodate traffic between neighboring communities and to interconnect arterial streets with local roads.
 - A. Major. A collector serving moderate levels of traffic within the municipality, providing a mix of mobility and access and linking adjacent communities.
 - B. Minor. A collector serving lower amounts of traffic, providing relatively more access than mobility, and serving as a major road through identifiable neighborhoods.
3. Local. A road intended to provide access to other roads from individual properties.
 4. Cul-de-Sac Street. A local street with only one outlet and having an appropriate terminal for the safe and convenient reversal of traffic.
 5. Private Street. A local street, serving abutting lots that is not offered or required to be offered for dedication.
 6. Alley. A public or privately owned right-of-way, on which no new dwellings, stores, or other principal buildings are intended to front, serving as the secondary means of access to two or more properties whose principle frontage is some other street.
 7. Marginal Access Street. A street parallel to and adjacent to a collector or arterial street which provides access to abutting properties and separation from traffic.

Street Line. A line identical to the ultimate right-of-way line.

Street Rights-of-Way. Rights-of-way for street purposes are defined as follows:

1. Legal Right-of-Way. The street right-of-way legally in the public domain at the time a development plan is submitted.
2. Ultimate Right-of-Way. The street right-of-way projected as necessary for adequate handling of anticipated maximum traffic volumes, according to the Ultimate Right-of-Way Map incorporated in the Comprehensive Plan. The ultimate right-of-way is the legal right-of-way where it has been offered for dedication and accepted by the Township .

Street Trees. Trees required to be planted parallel to an ultimate-right-of way or curb line by Zoning or the Subdivision and Land Development Ordinance.

Structure. Any man-made object, whether or not affixed to the land, subject to the following specific standards:

1. The following specifically shall be considered to be structures: buildings, signs, stadiums, platforms, communications towers, walkways, porches or decks that are covered by a permanent structure, swimming pools (whether above or below ground), storage sheds, carports, and garages.
2. Any structure shall be subject to the principal or accessory setbacks of this Zoning Ordinance, as applicable, unless specifically exempted or unless a specific setback is established for that particular type of structure by this Zoning Ordinance.

Section 201. Definitions

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 devisee, 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.

Subdivision Ordinance or Subdivision and Land Development Ordinance (SALDO). West Pottsgrove Township Subdivision and Land Development Ordinance, as amended.

Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damage condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

1. before the improvement or repair is started or
2. if the structure has been damaged, and is being restored, before the damage occurred.

For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:

1. any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions or
2. any alteration of a structure listed on a National Register of Historic Places or a State Inventory of Historic Places.

Surveyor. A land surveyor, licensed as such in the Commonwealth of Pennsylvania, and competent in the skills needed to conduct the surveys, lay out the subdivision plans and install all markers required by the terms of this Ordinance.

Swimming Pool, Household. A man-made area with walls of man-made materials intended to enclose water at least 24 inches deep for recreational bathing or swimming and that is intended to serve the residents of only one dwelling unit and their occasional guests.

Swimming Pool, Non-Household. A man-made area with walls of man-made materials intended to enclose water for recreational bathing or swimming and that does not meet the definition of a "household" swimming pool. This includes: 1) a "semi-public" pool that serves only residents of a development or members of a club and their occasional guests or 2) a "public" pool intended to serve the general public.

Topsoil. The original upper layer of soil material to a depth of six inches which is usually darker and richer than subsoil.

Tot Lot. A confined, developed neighborhood play area primarily for use by preschool children. Low maintenance play equipment and structures shall be used and confined by a gated fence, a minimum of 3 feet high.

Townhouse. See "Dwelling Types."

Township. West Pottsgrove Township, Montgomery County, Pennsylvania.

Township Engineer. A professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the engineer or assistant engineer for West Pottsgrove Township.

Tract. In certain zoning districts, the tract is the minimum amount of adjacent land area (which may be separated by alleys, streets, or waterways) within the Township that is required to be approved as part of an overall preliminary subdivision or land development plan in order to allow either certain types of uses or to allow the creation of lots smaller than a certain specified lot area. An area of land shall meet the following requirements in order to be considered a "tract:"

1. Shall only include lands within a submitted preliminary plan that includes a well-defined internal circulation system, maximum coordination between lots and carefully limited points of vehicular access onto streets exterior to the tract: and
2. Shall only include lands that at the time of the approval of the preliminary plan have one "landowner" (as defined by Article II), unless the applicant proves to the satisfaction of the Zoning Officer that there is a legally binding commitment between two or more "landowners" to coordinate the access and development of the tract as shown in the approved preliminary plan.

Traffic Impact Study. A technical evaluation of the traffic impacts associated with a proposed subdivision or land development. Criteria for a traffic impact study are contained in section 801.

Trail. A designated land corridor containing an improved route designed for non-motorized travel that provides recreational, aesthetic, alternate transportation, or education opportunities for all ages and abilities. Sidewalks are not considered trails.

Trailer. A vehicle without motor power which may be towed on public highways by a passenger automobile without a special hauling permit, which is designed for human occupancy under transient circumstances such as camping, travel or other recreation, and having a body width not exceeding 8 feet and a body length not exceeding 32 feet.

Treatment. The definition of treatment as set forth in Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. 4000.101 as amended).

Trip. A single or one way vehicle movement to or from a property or study area. "Trips" can be added together to calculate the total number of vehicles expected to enter or leave a specific land use or site over a designated period of time.

Trip Generation Rates. The total count of trips to and from a study site per unit of land use, as measured by parameters like dwelling units or acres. The Institute of Transportation Engineers (ITE) Trip Generation Report (Third Edition, as amended) shall be referenced to determine specific rates.

Twin. See "Dwelling Types".

Ultimate Right-of-Way Line. See "Rights-of-Way".

Use. The purpose, activity, occupation, business or operation for which land or a structure is designed, arranged, intended, occupied or maintained. Uses specifically include but are not limited to the following: activity within a building, activity outside of a building, any structure, recreational vehicle storage or parking of commercial vehicles on a lot.

Variance. The granting of specific permission by the Zoning Hearing Board to use, construct, expand or alter land or structures in such a way that compliance is not required with a specific requirement of the Zoning Ordinance. Any variance shall only be granted within the limitations of the PA Municipalities Planning Code.

Vegetative Cover. The land area devoted to vegetative coverage, including, but not limited to lawns, trees, shrubs, flowers and gardens.

Viewshed. The viewing area readily perceived by the observer from a certain location or series of locations, commonly delineated by visual accents such as, but not limited to, treelines or ridges, geologic features, historic structures, stone walls, and water courses.

Visual Screen. A barrier whose purpose is to obscure a view; generally comprised of plant materials suitable for the purpose.

Wall. Man-made barriers constructed principally of masonry, concrete, cinder block or similar materials shall be considered a "wall." Regulations affecting the term "wall" do not regulate engineering retaining walls, which are permitted uses as needed in all Districts. See also "Fence". Types of walls:

1. **Bearing wall.** A wall which supports any vertical load in addition to its own weight.
2. **Common wall.** A wall owned by one party but jointly used by two parties, one or both of whom is entitled to such use under the provisions of a lease.
3. **Dry wall.** A wall of stone or other durable material, laid without mortar.
4. **Fire wall.** A wall which subdivides a building to restrict the spread of fire. It starts at the foundation and extends continuously through all stories to and above the roof.
5. **Foundation wall.** Any bearing wall or pier below the first-floor construction.
6. **Parapet wall.** That part of an exterior, party, or fire wall extending above the roof line.
7. **Party wall.** The wall used jointly by two parties under easement agreement and erected at or upon a line separating two parcels of land that may be held under different ownership.

Section 201. Definitions

8. Retaining wall.

- A. Any wall subject to lateral pressure other than wind pressure.
- B. A wall built to support a bank of earth.

Watercourse. A place intended or used for the directed surface flow of water, including permanent and intermittent streams, brooks, creeks, channels, ditches, swales, and rivers.

Warrants for Traffic Signal Installation. - A series of tests which detail the minimum traffic or pedestrian volumes or other criteria necessary for the installation of a traffic signal. These warrants are contained in the Manual on Uniform Traffic Control Devices for Streets and Highways (U.S. Department of Transportation, Federal Highway Administration, 1978, as amended).

Water Survey. An inventory of the source, quantity, yield and use of groundwater and surface water resources within West Pottsgrove Township.

Water System. A system to transmit water from a source to users, in compliance with the requirements of the appropriate state agencies and the Township.

1. Central Water Service. Service by a central water system that is owned and operated by a) a municipality, b) a municipal or county authority, or c) a water company regulated by the State Public Utility Commission, and which transmits water from a common source to more than 30 dwellings or principal uses.
2. "Public" Water Service. Central water service by a system owned by a municipality or county authority.
3. On-Lot or Non-Public Water Service. Service by a water system that does not meet the definition of a "central water service." In most cases this would involve an individual well serving an individual lot, but may also include a common well or another duly approved system.

Wetland. Those areas that are inundated and 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; includes swamps, marshes, bogs and similar areas. Development in "wetlands" is regulated by the U.S. Army Corps of Engineers and the Pennsylvania Department of Environmental Resources. Identification of "wetlands" should be based upon the "Federal Manual for Identifying and Delineating Wetlands," an interagency publication of the Corps of Engineers, EPA, Fish and Wildlife Service, and Soil Conservation Service, dated January, 1989.

Yard. An area not covered by buildings and that is on the same lot as the subject structure or use. Regulations of specific districts prohibit principal and accessory structures within specified required minimum yards.

Yard, Front. A "yard" measured from the front lot line (which is the future street right-of-way line where it abuts a street) and that extends the full width of the lot from side lot line to side lot line.

1. The front yard shall be on a side that faces towards a public street, whenever one public street abuts the lot.
2. When a lot abuts onto two or more public streets, the applicant may choose which is the front yard, unless the Zoning Officer determines that the front yard should follow the clearly predominant front yard orientation of the development of abutting lots.
3. No accessory or principal structure shall extend into the required front yard, except as provided in the Zoning Ordinance.

Yard, Rear. A "yard" extending the full-width of the lot measured from the rear lot line and that stretches between the side lot lines parallel to the rear lot line. A principal building shall not extend into the required rear yard for a principal building, and an accessory structure shall not extend into the required rear yard for an accessory structure, except as provided for in the Zoning Ordinance.

Yard, Side. A "yard" measured from the side lot line, and extending from the front lot line to the rear lot line. A structure shall not extend into the applicable minimum side yard, except as provided for in the Zoning Ordinance.

Zoning Map. The Official Zoning Map of West Pottsgrove Township, Montgomery County, Pennsylvania.

Zoning Officers. The administrative officers charged with the duty of enforcing the provisions of the Zoning Ordinance, or their officially designated assistants.

Zoning Ordinance. West Pottsgrove Township Zoning Ordinance, as amended.

ARTICLE THREE

PLAN SUBMISSION, PROCESSING, AND REVIEW

Section 300. Applicability.

The standards, requirements, and procedures contained in this Article shall govern the submission and processing of all applications for subdivision and/or land developments in the Township.

Section 301. Types of Plans.

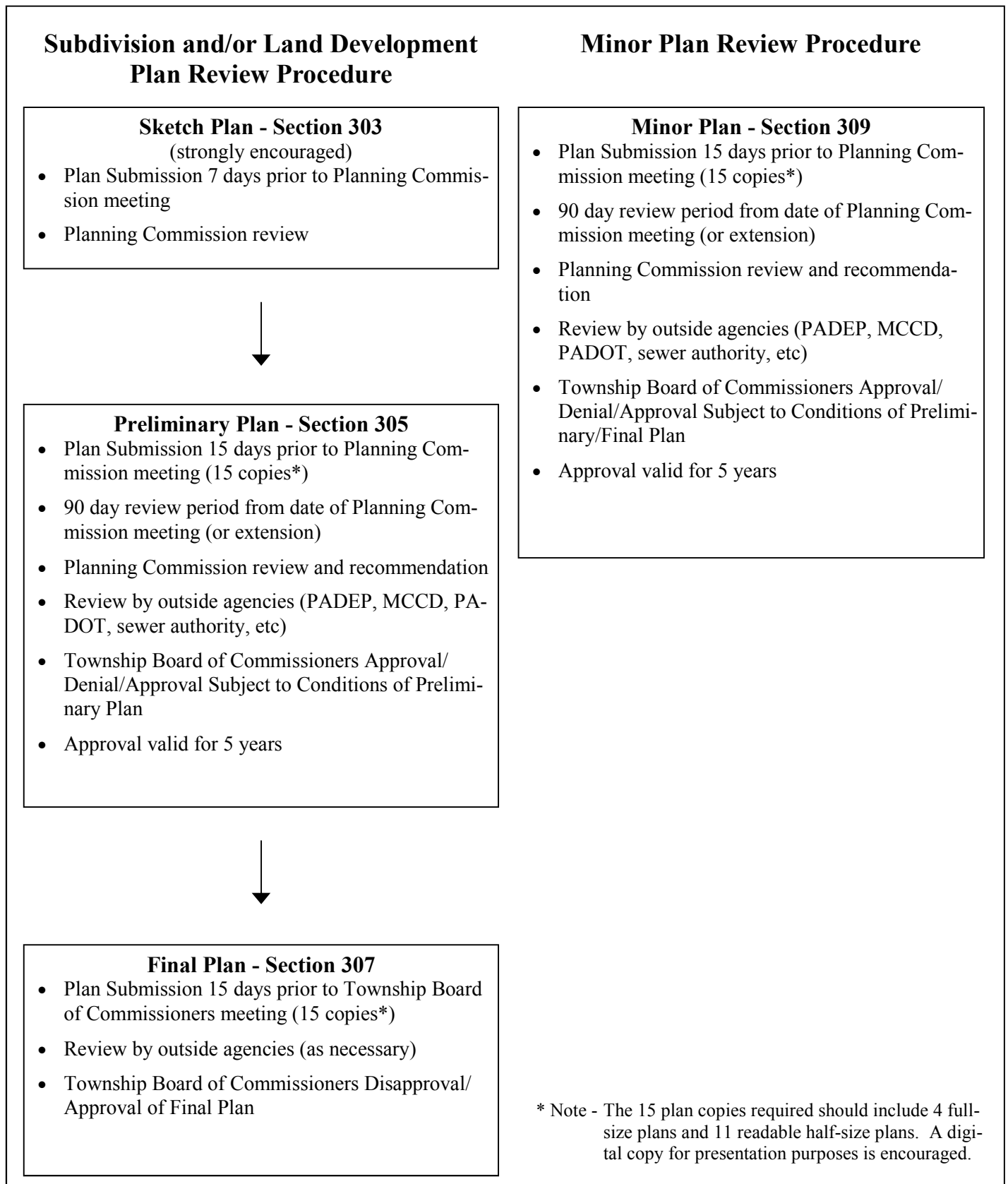
All applications for subdivision and/or land development shall be classified as Sketch Plans, Preliminary Plans, Final Plans, or Minor Plans, as further regulated herein. **Figure 3.1: Plan Processing Flow Chart** graphically presents the general plan processing procedure.

1. Sketch Plans. The Township strongly recommends applicants submit a pre-application Sketch Plan for all plans in accordance with the requirements of **§302: Sketch Plan Submission Requirements** and **§303: Sketch Plan Review Procedure**. Where only a portion of the property is currently proposed for subdivision or land development, a sketch plan shall show how the immediate proposal can fit logically into an overall plan for the entire site.
2. Preliminary Plans. A Preliminary Plan is required to be submitted for all proposals for subdivision and/or land development in accordance with the requirements of **§304: Preliminary Plan Submission Requirements** and **§305: Preliminary Plan Review Procedure**.
3. Final Plans. A Final Plan is required to be submitted for all proposals for subdivision and/or land development in accordance with the requirements of **§306: Final Plan Submission Requirements**, and **§307: Final Plan Review Procedure**.
4. Minor Plans. Applications which qualify as Minor Plans are not required to submit a Sketch Plan and may be submitted for concurrent Preliminary and Final Plan processing and approval, in accordance with the standards and requirements of **§309: Minor Plan Submission Requirements and Review Procedure**.

Section 302. Sketch Plan Submission Requirements.

1. Purposes. The purposes served by a Sketch Plan are as follows:
 - A. To inform the Township of an applicant's intent to subdivide and/or develop a property, and graphically show the concepts and extent of the proposal.
 - B. To allow the Township to provide advice and guidance to an applicant so that:
 - 1) Overall layout and circulation issues can be resolved prior to preparation of Preliminary Plans.
 - 2) The Preliminary Plan approval process may then be able to proceed more efficiently.
 - C. To show how a tract of land may be further subdivided or developed in cases where only a portion of a property is currently under an active proposal.
 - 1) This plan shall show a logical and efficient pattern of roads, lots, and/or buildings, as appropriate for the type of plan proposed, and shall not be acceptable if it proposes lotting or development which is obviously impractical or questionable for reasons of floodplain, steep slopes, relationships to other properties, or other site planning constraints.
 - 2) This plan may be shown on the Preliminary Plan for the subject site in the form of a reduced-scale inset drawing, although larger scale drawings are encouraged for review and discussion purposes.
 - 3) Pre-application sketch plans shall have no legal standing with regard to the formal plan approval process mandated by the Pennsylvania Municipalities Planning Code, but shall be considered as a tool for discussion and guidance regarding development issues.
2. Sketch Plan Information. A Sketch Plan should be drawn legibly and to scale, but it need not be a precisely surveyed or engineered plan, and it should show the following information:
 - A. The entire tract boundary, total acreage, and acreage of each lot.
 - B. Existing and proposed streets, lots, buildings, and approximate building envelopes.
 - C. Significant physical features such as floodplain, steep slopes, woodlands, and existing structures.

Figure 3.1: Plan Processing Flow Chart



- D. Contour lines at five to ten foot intervals, based on U.S.G.S. datum.
 - E. Approximate locations for stormwater control facilities, if necessary.
 - F. Location plan showing the relationship of the subject tract to the surrounding road network and major physical features.
 - G. North point and scale.
 - H. Name and address of the owner.
 - I. Name and address of the engineer, surveyor or architect, if applicable.
 - J. Any additional information which the applicant believes will help explain the proposal.
3. The applicant shall make a request to the Township Manager to be scheduled on the meeting agenda of the Township Planning Commission for presentation and discussion of the Sketch Plan, provided the plan is received three business days prior to the next Township Planning Commission meeting.

Section 303. Sketch Plan Review Procedure.

The Planning Commission shall review sketch plans in accordance with the criteria contained in this ordinance and with other applicable ordinances. It shall provide informal dialogue with the applicant and advise them as promptly as possible of the extent to which the proposed subdivision or land development conforms to the relevant standards of this ordinance, and will discuss possible plan modifications that would increase its degree of conformity. Aspects of the sketch plan that shall be specifically evaluated include but are not limited to:

- 1. The location of all areas proposed for disturbance (streets, foundations, yards, septic disposal systems, stormwater management areas etc.) with respect to notable features of natural or cultural significance as identified on the applicant's Existing Resources and Site Analysis Plan.
- 2. The potential for street connections with existing streets, other proposed streets, or potential developments on adjoining parcels.
- 3. The location of proposed access points along the existing road network.
- 4. The proposed building density and imperious coverage.
- 5. The compatibility of the proposal with respect to the objectives and policy recommendations of the Comprehensive Plan, the Open Space Plan, and other pertinent Township plans and studies.
- 6. Consistency with the Zoning Ordinance.

Section 304. Preliminary Plan Submission Requirements.

This section contains the requirements for Preliminary Plans for subdivisions and/or land developments in terms of Drafting Standards, Basic Information, Existing Features, and Proposed Features.

- 1. Fifteen copies of the Preliminary Plan shall be submitted to the Township Manager, in person by the applicant or applicant's agent, at the Township Office during normal Township business hours.
- 2. Plans must be accompanied by:
 - A. Township filing fee.
 - B. Montgomery County Planning Commission review fee.
 - C. Completed Township application and administrative forms.
- 3. Drafting Standards. Plans shall be professionally prepared in compliance with the following:
 - A. The plan shall be drawn to a standard engineering scale not exceeding 100 feet to the inch.
 - B. Sheet size shall be 15" X 18", 18" X 30", or 24" X 36", appropriately related to the scale of the drawing.
 - C. All sheets shall be the same size, and be numbered relative to the total number of sheets (i.e., 1 of 5, etc.)
 - D. Where two or more sheets are needed to show the entire tract, a reduced scale key plan shall be provided to show how the sheets fit together. Match lines shall be shown.

Section 304. Preliminary Plan Submission Requirements

- E. A reduced scale plan of the entire site at a scale greater than one 100 feet to the inch may be required in cases where it would facilitate the review and approval process. Applicants are encouraged to submit such plans in cases where they are not required.
 - F. Property lines shall be drawn and labeled in conformance with the act of May 23, 1945 (P.L. 913, No. 367), known as the "Professional Engineers Registration Law," and accepted surveying and civil engineering practices, including dimensions shown in feet and decimal fractions thereof, and bearings shown in degrees, minutes, and seconds.
 - 1) Tract boundary lines shall be the heaviest property lines.
 - 2) Proposed lot lines shall be the next heaviest.
 - 3) Possible future lots, if shown, shall be the lightest line weight, and may be shown as dashed lines.
 - 4) Property lines to be eliminated where 2 lots are proposed to be joined in common deed should be properly noted and depicted on the boundary to be removed.
4. Basic Information. All preliminary plans shall show the following basic information:
- A. Name of the subdivision or land development.
 - B. Name, address and phone number of applicant.
 - C. Name, address and phone number of the firm which prepared the plan and professional seal of the individual certifying its accuracy and compliance with applicable standards.
 - D. Date of preparation of the plan and a descriptive list of revisions to the plan, and the revision dates.
 - E. North point and graphic and written scale.
 - F. Location plan showing the relationship of the subject tract to the surrounding road network and major physical features.
 - G. The entire tract boundary with bearings and distances and total tract acreage.
 - H. A list of the basic dimensional and density requirements of the applicable zoning district, compared to the applicant's proposal.
 - I. Zoning classification(s) of all lands abutting the proposal.
 - J. Names of all current owners of immediately adjacent lands.
 - K. A statement showing:
 - 1) Number of acres under proposal (net and gross acreage should be indicated in accordance with the zoning ordinance).
 - 2) Number of lots and/or dwelling units, or gross leasable area.
 - L. Description of variances or special exceptions and the dates they were granted, if any.
 - M. Description of any deed restrictions or other covenants affecting development of the tract.
 - N. The requirements of any other local ordinance which may affect the proposal.
 - O. Legend sufficient to indicate clearly between existing and proposed conditions.
 - P. Name and address of the owner of record.
 - Q. Tax block and unit number of all parcels being subdivided or developed.
 - R. Deed book and page numbers for all parcels being subdivided or developed.
 - S. A note shall be shown on the plan which states "Preliminary Plan - Not to be Recorded"
5. Existing Features Plan. Within the tract proposed for subdivision and/or land development, and within 100 feet of the tract boundaries, the following information shall be shown on the Preliminary Plan:
- A. Streets bordering or crossing the tract, including:
 - 1) Locations.
 - 2) Names.

Section 304. Preliminary Plan Submission Requirements

- 3) Rights-of-way.
 - a. Legal.
 - b. Ultimate.
- 4) Cartway widths.
- 5) Surface conditions.
- 6) Location of Curbs and Sidewalks.
- B. Water resources, including:
 - 1) Lakes, ponds.
 - 2) Wetlands, swamps, or marshes.
 - 3) Watercourses and springs.
 - 4) Existing well locations - in use, capped, and abandoned
 - 5) Flood-prone or floodplain areas including data from FEMA Studies, supporting hydrologic and hydraulic data for 100-year flood limits, or Montgomery County Soil Survey when applicable, as determined appropriate by the Township Engineer for the watercourse(s) affecting the site.
- C. Sanitary Sewers, including:
 - 1) Pipe locations.
 - 2) Pipe sizes and materials.
 - 3) Direction of flow.
 - 4) Gradient of flow.
 - 5) Manholes.
 - 6) Invert Elevations.
 - 7) Septic systems and drain fields.
- D. Storm sewers, including:
 - 1) Pipe locations.
 - 2) Pipe sizes and materials.
 - 3) Direction of flow.
 - 4) Gradient of flow.
 - 5) Inlets, catch basins, and manholes.
 - 6) Invert elevations.
- E. Other existing stormwater and/or erosion control facilities, including:
 - 1) Basins.
 - 2) Swales.
 - 3) Diffusion devices.
 - 4) Velocity Controls.
 - 5) Related technical data for those facilities.
- F. Other natural features, including:
 - 1) Location, size, species, and condition of trees six inches in diameter or greater, when standing alone or in small groups.
 - 2) Outer limits of woodlands and a general description of their types, sizes, and conditions.

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- 3) Locations and limits of geologic features which may affect the locations of proposed streets or buildings, including:
 - a. Rock outcroppings.
 - b. Quarries.
 - c. Sink holes.
 - d. Ravines
- G. Soil types, including:
 - 1) Mapped limits.
 - 2) Names.
 - 3) Significant limitations, such as, high water table or shallow bedrock.
- H. Contour information including:
 - 1) Contours at a vertical interval of two feet, accurately drawn from photogrammetric or on-site survey data.
 - 2) Areas with slopes of 15 percent or greater should be shaded, as determined from the contours shown on the plan.
- I. Other man-made features, including:
 - 1) Location, size, character, and configuration of existing buildings, labeled "To Remain" or "To Be Removed" as applicable.
 - 2) Location and description of existing buildings and other structures less than 100 feet beyond the tract boundaries.
 - 3) Location, type, and ownership of utilities, both above and below ground, with notes to describe:
 - a. Easement or right-of-way dimensions.
 - b. Additional setback or development restrictions imposed by the utility company.
 - c. Specific type of product transported with pipelines.
6. Proposed Features and Lotting Plan. Within the tract proposed for subdivision and/or land development, the following information shall be shown on the Preliminary Plan:
 - A. Subdivision and/or Land Development Layout
 - 1) Proposed streets, alleys, driveways, and parking areas, including:
 - a. Names or other identification.
 - b. Right-of-way widths and lines.
 - c. Cartway widths.
 - d. Centerline courses, distances, and curve data.
 - e. Curb lines.
 - f. Radii at intersections.
 - g. Street location tie-ins by courses and distances.
 - h. Capacity of parking areas.
 - i. Sight distance at proposed intersections with existing streets.
 - 2) Layout and dimensions of all lots, including the net and lot area as defined within the zoning ordinance.
 - 3) All building setback lines.
 - 4) All parking setback lines where applicable.
 - 5) Proposed sidewalk or other walkway locations.

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- 6) Proposed buildings, including:
 - a. Locations.
 - b. Configurations.
 - c. Sizes (ground level floor area, total floor area, and height).
 - d. Total building coverage (square feet and percentage of site).
 - e. Locations and types of accessory structures.
 - f. Ground floor elevations.
 - 7) Common use areas, including:
 - a. Open Space Areas.
 1. Locations.
 2. Configurations.
 3. Size.
 4. Use of common area.
 - b. Recreation facilities.
 1. Locations.
 2. Types of facilities.
 - c. Parking, driveway, or road areas when privately owned for common use.
 - d. Walkways or pathways.
 - e. Notes regarding offers of dedication or retention in private ownership, as applicable.
 - 8) Areas for future uses, including:
 - a. Road extensions.
 - b. Stormwater management facilities.
 - c. Additional subdivision or land development in sketch form, in accordance with the requirements of **§302: Sketch Plan Submission Requirements**, and in accordance with the intent of **§303: Sketch Plan Review Procedure**.
 - d. Explanatory notes for such future uses.
 - 9) Proposed Landscaping Plan including:
 - a. Street trees.
 - b. Planting screens.
 - c. Buffer areas.
 - d. Other related landscape features such as mounding and water features.
 - e. Managed meadow.
- B. Grading and Drainage Plan. The following information shall be shown on the preliminary plan:
- 1) Proposed contours for the entire site at the contour interval of the plan.
 - 2) Approximate limits of site disturbance, including a clear delineation of existing vegetation including trees, hedge rows, wooded areas, scrub growth, meadow, and actively farmed land:
 - a. To be removed.
 - b. To be preserved including method of preservation.
 - 3) Stormwater management and erosion control and sedimentation facilities, including:
 - a. Basins.

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- b. Swales.
- c. Diffusion devices.
- d. Velocity Controls.
- e. Pipe Locations.
- f. Pipe sizes and materials.
- g. Direction of flow.
- h. Gradient of flow.
- i. Inlets, catch basins, and manholes.
- j. Invert elevations.
- k. Design calculations for these facilities shall be submitted in report form with a note on the plan referencing the report.

C. Infrastructure Plan

- 1) Sanitary sewer line locations, clearly identifying the following:
 - a. Pipe sizes and materials.
 - b. Direction of flow.
 - c. Gradient of flow.
 - d. Manholes.
 - e. Invert elevations.
- 2) Sanitary Sewage Pumping Stations.
- 3) Approved on-site disposal locations.
- 4) Sewage treatment plant locations.
- 5) Water supply facilities, including:
 - a. Central water supply lines.
 - b. Pipe sizes and materials.
 - c. Fire hydrant locations.
 - d. Well locations when on lot, including the 100 foot radius clear zone separating wells from sewage disposal locations.
- 6) Finished floor elevations of proposed buildings.
- 7) Municipal waste disposal facilities.

D. Cross Sections, Profiles, Structural Designs. The following shall be provided:

- 1) Cross section and centerline profile for each proposed or widened cartway, driveway, or parking area shown on the preliminary plan including:
 - a. Road centerline grades and vertical curvature including road centerline elevations shown at horizontal intervals of 25 feet along vertical curves and 50 feet for straight grades.
 - b. Profiles for sanitary sewers, water mains, storm drains, including locations of manholes, inlets, and catch basins.
- 2) Preliminary design of any bridges, culverts, or other structures and appurtenances which may be required.

Section 305. Preliminary Plan Review Procedure.

The procedure contained in this section shall regulate the review of Preliminary Plans for subdivision and land development.

1. The Township Secretary or Zoning Officer will conduct a cursory review of the application, administrative forms, and Preliminary Plans, to ensure that the submission appears to be complete, and will then stamp the plans with the Plan Submission Date.
2. The application for approval of the Preliminary Plan shall be placed on the agenda of the next regularly scheduled meeting of the West Pottsgrove Planning Commission following the Plan Submission Date provided that plans are received 15 days prior to that date.
3. The Township Secretary shall distribute copies of the plan to the following for review and recommendations:
 - A. Township Planning Commission.
 - B. Township Board of Commissioners.
 - C. Township Engineer.
 - D. Montgomery County Planning Commission, along with the required review fee and completed review request form.
 - E. Township Solicitor, Road master, Public Works Director, Fire Marshall, Police Chief, other Township boards or officials, sewer and/or water authorities, and/or other technical consultants as needed.
4. Upon completion of its review of the Preliminary Plan, which should include consideration of the timely recommendations of the Township Engineer, Montgomery County Planning Commission, and other technical advisors when requested, the Township Planning Commission shall communicate its recommendations to Township Board of Commissioners.
5. Township Board of Commissioners shall have a 90 day time period to act on the plan unless the applicant has agreed in writing to an extension of the time period.
 - A. The 90 day time period shall be measured from the date of the next regularly scheduled Township Planning Commission meeting following the Plan Submission Date.
 - B. If an extension of the 90 day time period is applied, it shall be measured from the expiration of the original 90 day period. A time extension shall postpone the deadline and effects of the 90 day time period for the additional number of days agreed to in writing prior to the last scheduled Township Board of Commissioners meeting within the 90 day plan review period.
6. Township Board of Commissioners shall consider the Preliminary Plan application at one or more of its public meetings during the 90 day time period, and/or extension thereof if applicable, and shall render a decision on the plan following receipt of the recommendations of the Township Planning Commission, Township Engineer, Montgomery County Planning Commission, and/or other technical advisors as requested.
 - A. Provided, in accordance with the "Pennsylvania Municipalities Planning Code," that Township Board of Commissioners shall not approve an application until the Montgomery County Planning Commission report of its recommendations is received, or until the expiration of 30 days from the date the application was forwarded to the County.
 - B. In accordance with the policies of the Montgomery County Planning Commission, the date the application was forwarded to the county shall be considered to be:
 - 1) The date noted on the Township's request for review, or
 - 2) Two days prior to the county's receipt of the request if no date is noted on the request, except that in no instance will the date be earlier than 5 days prior to the County's receipt of the request.
7. Procedure Following the Township Board of Commissioners Decision. When Township Board of Commissioners make a decision on a Preliminary Plan, one of following procedures will be followed, depending on the type of decision:
 - A. Denial. If Township Board of Commissioners denies approval of a Preliminary Plan, then the written notification to the applicant shall specify the defects found in the application and describe the requirements which have not been met, and shall cite the provisions of the statute or ordinance relied upon.

- B. Approval. If Township Board of Commissioners approves a Preliminary Plan, as filed by the applicant, then the Secretary will so certify thereon, and a copy of the approved plan will be forwarded to the applicant. The applicant shall then submit two paper copies of the approved plan for Township seal and signature.
- C. Approval Subject to Conditions. If Township Board of Commissioners approves a Preliminary Plan, conditioned upon the performance of any act or the obtaining of any other approval or permit by the applicant, the applicant shall be given the opportunity to accept or reject the conditions within a 10 day period. The approval of the plan shall be rescinded automatically without action of Township Board of Commissioners, at the end of 10 days from the date at which conditional approval was granted or notice received by the applicant regarding the conditional approval, upon either the applicant's failure to execute the written acceptance or upon rejection of such conditions by the applicant. Written notice will be provided to the applicant in the following manner:
 - 1) Specify the conditions of approval and request the applicant's written agreement to the conditions.
 - 2) State that the application will be denied if the applicant does not agree to the conditions, and specify the defects found in the application, describe the requirements which have not been met, and cite the provisions of the statute or ordinance relied upon for denial of the plan.
 - 3) State that the plan approval shall be rescinded automatically upon the applicant's failure to accept or reject the conditions within 10 days following the decision by Township Board of Commissioners to grant conditional approval.

Following submission of written agreement to the conditions specified by Township Board of Commissioners, the applicant shall submit two paper copies of the Preliminary Plan, which show compliance with the conditions, by plan revision or notation, for Township seal and signatures.

- D. Written notification of the Township Board of Commissioners' decision shall be communicated to the applicant personally or be mailed to the applicant's last known address not later than 15 days following the decision.
8. Effective Period of Approval. Approval will be effective for a period of 5 years from the date of plan approval, unless extended in writing by Township Board of Commissioners.
- A. No subsequent change or amendment in the zoning, subdivision, or other governing ordinance or plan shall be applied to affect adversely the right of the applicant to commence and to complete any aspect of the approved development in accordance with the terms of approval within that 5 year period.
 - B. In the case where Preliminary and Final Plan approval are concurrent, the 5 year period shall be measured from the date of that concurrent approval.
 - C. In a case of a Preliminary Plan calling for the installation of improvements beyond the 5 year period, a schedule shall be filed by the applicant with the Preliminary Plan delineating all proposed sections as well as deadlines within which applications for Final Plan approval of each section are intended to be filed.
 - 1) Such schedule shall be updated annually by the applicant on or before the anniversary of the Preliminary Plan approval, until Final Plan approval has been granted to the final section.
 - 2) Any modification in the aforesaid schedule shall be subject to approval of Township Board of Commissioners in its discretion.
 - 3) Each section in any residential subdivision or land development, except for the last section, shall contain a minimum of 25 percent of the total number of dwelling units as shown on the Preliminary Plan, unless a lesser percentage is approved by Township Board of Commissioners in its discretion.
 - 4) For any section or sections, beyond the initial section, in which the required improvements have not been substantially completed within the initial 5 year period, the terms of **§305.6:** Township Board of Commissioners shall... above shall also apply to each subsequent section for an additional term of 3 years from the date of Final Plan approval of each section.

Section 306. Final Plan Submission Requirements.

All Final Plans for subdivisions and/or land developments shall consist of two basic parts, the Improvements Construction Plan and the Record Plan, and shall comply with the requirements of this section.

- 1. Fifteen copies of the Final Plan shall be submitted to the Township Manager, in person by the applicant or applicant's agent, at the Township Office during normal Township business hours.
- 2. Improvement Construction Plan.

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- A. Drafting Standards. The same standards shall be required for an Improvements Construction Plan as for a Preliminary Plan, except that the horizontal scale of the plan and profile shall not exceed 50 feet to the inch and the vertical scale of the plan shall be 2, 4, or 5 feet to the inch, whichever is most appropriate.
- B. Information to be Shown. The plan shall contain sufficient information needed for the construction of the proposed streets, or any portion thereof, including all appurtenances, sewers and utilities, as shown on the approved Preliminary Plan. This information shall include:
 - 1) Horizontal Plan. The horizontal plan shall show details of the horizontal layout as follows:
 - a. Information shown on the approved preliminary plan.
 - b. The beginning and end of proposed immediate and future construction.
 - c. Stations corresponding to those shown on the profiles.
 - d. The curb elevation at tangent points of horizontal curves, at road or alley intersections, and at the projected intersections of the curb lines.
 - e. The location and size of sanitary sewers and lateral connections and water mains with distances between manholes, gas, electric and other utility pipes or conduits and of storm drains, inlets and manholes.
 - f. The location, type and size of curbs and all paving widths.
 - g. The location of fire hydrants and street lights.
 - 2) Profiles. The profiles shall show details as follows:
 - a. Profiles and elevations of the ground along the centerlines of proposed streets.
 - b. Profiles of sanitary sewers with a profile over the sewer of the existing and finished ground surface showing manhole locations beginning at the lowest manhole.
 - c. Profiles of storm drains showing catch basins, inlet, and manhole locations, sales, ditches, etc.
 - d. Profiles of water mains.
 - 3) Cross Sections. The cross section for each classification of street shall comply with the Township's standards and specifications as minimum requirements. It shall show a typical cross section across the road with details of grading and construction as follows:
 - a. The ultimate right-of-way width and the location and width of the cartway.
 - b. The type, depth and crown of paving.
 - c. The type and size of curb.
 - d. When sidewalks are required, grading of the sidewalk area should be carried to the full width of the ultimate right-of-way.
 - e. The location, width, type and depth of sidewalks, when required.
 - f. The typical locations, size and depths of sewers and utilities.
 - g. Proposed grading to the ultimate right-of-way line.
 - 4) Additional Information. The following additional information shall be submitted with the Final Plan.
 - a. All required Local, State, and Federal Permits shall be submitted. These permits may include: Montgomery County, PADOT, or Township road access permits; PADEP permits for drainage, stream alteration, wetlands encroachment, water quality discharge, dams, erosion, and sedimentation control, air pollution, or sanitary sewage facilities.
 - b. The following statements shall be required on the Final Plan:
 - 1. "The Approved Improvement Construction Plan, a copy of which may be inspected at the Township Office, has been made a part of the Approved Final Plan."
 - 2. "For access to a highway under the jurisdiction of PADOT, a highway occupancy permit is required, pursuant to § 420 of the act of June 1, 1945 (P.L. 1242, No. 428) known as the "State Highway Law."

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Access to the State highway shall be only as authorized by the highway occupancy permit."

- c. All engineering calculations which support the proposed improvements such as drainage calculations, sanitary facility design calculations, or structural calculations.
- d. Certification of inspection and satisfactory functioning of any on-lot sewage disposal system which will remain in use, in accord with current industry and DEP standards.
- e. Developments utilizing public water or sewer facilities should provide proof that those services will be provided.
- f. Sewage facilities plan approval from PADEP.
- g. Recommendation of approval of the erosion and sediment control plan from the Conservation District.

3. Record Plan.

- A. **Drafting Standards.** The same standards shall be required for a Record Plan as for a Preliminary Plan, and in addition, for recording purposes, the plans shall be placed on sheet sizes of 15" x 18", 18" X 30", or 24" X 36". All lettering and lines should be drawn to be legible if the plan is reduced to half size. A 2 inch border on the left side of the plan should be free of information.
- B. **Information to be Shown.** The plan, which shall include all portions of an approved Preliminary Plan, shall also show:
 - 1) **Basic Information**, as required for a Preliminary Plan, **§304.3: Drafting Standards**.
 - 2) Courses and distances sufficient for the legal description of all the lines shown on the plan. The error of closure shall not be greater than 1 part in 5,000.
 - 3) Names or identification of the following:
 - a. Abutting owners.
 - b. All dimensional and technical descriptions of roads.
 - c. Easements.
 - d. Rights-of-way.
 - e. Open space, recreation, and/or other common use areas.
 - f. Other public improvements.
 - g. For land development plans, all additional information pertinent to the location and construction of site improvements, including buildings, walks, parking, driveways, etc.
 - h. Block and unit numbers.
 - i. Montgomery County Planning Commission file number.
 - 4) All lots deeded to the ultimate right-of-way so that a single deed may be drawn to the appropriate body having jurisdiction for the dedication of streets by the applicant.
 - 5) Evidence that the plans are in conformance with the zoning ordinance and other applicable Township ordinances and regulations. In any instance where such plans do not conform, evidence shall be presented that an exception, waiver, or variance has been officially authorized.
 - 6) The location, material and size of all existing and proposed monuments with reference to them.
 - 7) Building setback lines with distances from the ultimate right-of-way line, and property lines.
 - 8) Appropriate notes and conditions governing the use or development of the proposed property.

4. Certifications. When approved, the Record Plan must show:

- A. The signature and seal of the registered Engineer and Surveyor certifying that the plan represents his/her work; that the monuments shown thereon exist as located; that the dimensional and geodetic details are correct and that the survey has been prepared in accordance with the "Pennsylvania Engineers Registration Law," PL 913, No. 367.
- B. The signature of the applicant certifying his adoption of the plan.

- C. The signature of the Township Secretary, certifying that Township Board of Commissioners approved the Final Plan on the date shown.
 - 1) Spaces shall be provided for the signatures of Township Board of Commissioners whose signatures are required.
 - 2) Space shall be provided for the signature of the Township engineer and Chairman of the Township planning commission.
- D. A blank space shall be provided for the stamp and seal of the Montgomery County Planning Commission, located along the right-hand edge of the plan, measuring 3 1/2 inches wide and 2 1/2 inches tall.

Section 307. Final Plan Review Procedure.

Final Plans shall be submitted and reviewed in accordance with the procedure contained in this section.

- 1. The application for approval of the Final Plan shall be placed on the agenda of the next regularly scheduled meeting of the Township Planning Commission following the Plan Submission Date provided that plans are received 15 days prior to that date.
- 2. The Township Secretary shall distribute copies of the plan to the following for review and recommendations:
 - A. Township Planning Commission.
 - B. Township Board of Commissioners.
 - C. Township Engineer.
 - D. Montgomery County Planning Commission, along with the required review fee and completed review request form.
 - E. Township Solicitor, Road master, Public Works Director, Fire Marshall, Police Chief, other Township boards or officials, sewer and/or water authorities, and/or other technical consultants as needed.
- 3. A Final Plan for an application that has been previously granted Preliminary Plan approval shall be approved by Township Board of Commissioners when it is assured that:
 - A. The Final Plan conforms to the approved Preliminary Plan.
 - B. All engineering and other technical details have been resolved to the satisfaction of the Township Engineer, as evidenced by a letter from the Township Engineer, and to the satisfaction of other technical advisors, when requested by Township Board of Commissioners.
 - C. A signed recommendation is received from the Planning Commission if specifically requested by Township Board of Commissioners.
 - D. All financial security and legal agreements have been found satisfactory by Township Board of Commissioners, under the review and advice of the Solicitor, all security has been posted, and all agreements have been executed.
 - 1) When requested by the developer, in order to facilitate financing, Township Board of Commissioners shall furnish the applicant with a signed copy of a resolution indicating approval of the Final Plan contingent upon the applicant obtaining a satisfactory financial security.
 - 2) The Final Plan shall not be signed nor recorded until the financial improvements agreement is executed.
 - 3) The resolution of contingent approval shall expire and be deemed to be revoked if the financial security agreement is not executed within 90 days unless a written extension is granted by Township Board of Commissioners.
 - E. The plan complies in all respects with applicable Township ordinances or that appropriate variances or waivers have been granted for features that do not comply.
 - F. All necessary permits have been obtained from the applicable regulatory agencies, authorities, or departments.
- 4. When the Final Plan is approved, the applicant shall present three paper and one linen or mylar copies of the plan to be signed by Township Board of Commissioners, and the Township Secretary, together with the date of the approval and official Township seal.

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Section 308. Recording the Final Plan.

Within 90 days following final plan approval, the applicant shall record the Final Plan in the Office of the Recorder of Deeds of Montgomery County.

1. In accordance with the Pennsylvania Municipalities Planning Code, whenever Final Plan approval is required by a municipality, the Recorder of Deeds shall not accept any plan for recording unless it contains the official approval of Township Board of Commissioners and certification of review by the County Planning Commission.
2. Prior to recording, the applicant shall present the municipally approved plan to the Montgomery County Planning Commission for its stamp and seal, with one paper copy given to the County Planning Commission for its files.

Section 309. Minor Plan Submission Requirements and Review Procedure.

Minor Plans may be submitted and processed only for Lot Line Adjustments, Simple Conveyances, Minor Subdivisions, of Minor Land Developments as characterized herein, in accordance with the standards and requirements in this section.

1. Standards for Qualification as a Minor Plan Submission.
 - A. Lot Line Adjustment.
 - 1) A proposal between two abutting, existing, legally approved and recorded lots.
 - 2) A common lot line is proposed to be adjusted in terms of its location or configuration.
 - 3) The land area of each lot may be different after adjustment, but the total lot area of the 2 lots will be unchanged.
 - 4) No alteration will occur to the perimeter boundary lines of the 2 lots.
 - 5) Neither lot shall violate the applicable dimensional requirements of the zoning ordinance as a result of the lot line adjustment.
 - 6) Possible reasons for lot line adjustments include, but are not necessarily limited to:
 - a. Correcting errors regarding locations of existing improvements (e.g. if the driveway for Lot #1 is located on Lot #2);
 - b. Relating the line to definitive physical characteristics (e.g. to adjust the line to run along an existing hedgerow);
 - c. Preferences of the landowners involved.
 - B. Simple Conveyance.
 - 1) A proposal between two abutting, existing, legally approved and recorded lots.
 - 2) A portion of one lot is being divided off to be conveyed to the owner of the abutting lot.
 - 3) The land area of each lot will be different after conveyance, but the total lot area of the two lots will be unchanged.
 - 4) The lot from which the land is being conveyed must be suitable in terms of the applicable dimensional requirements of the zoning ordinance, so that after conveyance, it will remain in compliance with those requirements.
 - 5) The land area being conveyed need not satisfy any of the dimensional requirements applicable to lotting in the district in which it is located, nor the street frontage requirements of the zoning ordinance, provided that it shall be deed restricted to the extent that it may not be transferred independently, but must be transferred together with the lot to which it is being functionally added by the process of simple conveyance.
 - C. Minor Subdivision.
 - 1) A subdivision proposal which would divide one existing lot into two lots, both of which will comply with the applicable dimensional requirements of the zoning district in which the existing lot is located.
 - 2) The existing lot has sufficient frontage on an existing, improved public street to satisfy the applicable Township requirements for lot frontage and access to a public street for both proposed lots.
 - 3) The existing lot has not been a part of an approved subdivision proposal during the 5 years previous to the current application.

- 4) The subdivision will not require new road construction, road improvements, or the extension of existing public utility lines.
- 5) The proposal will not involve significant stormwater and/or erosion control issues, as determined by the Township Engineer.
- 6) Disqualification. Township Board of Commissioners may require standard Preliminary Plan submission in place of a Minor Plan when conditions warrant it, at the advice of the Planning Commission or Engineer.

D. Minor Land Developments

- 1) A land development proposal where it is found that the intended development or modification of a site, or use and occupancy of an existing structure will create a minimal impact upon traffic, drainage, visual image, landscaping, buffering, lighting or other elements described within the purposes of the Ordinance.
- 2) Parking lot expansions.
- 3) Additions to existing non-residential buildings provided that the addition is less than 5,000 gross square feet and involves no more than a 25% in the size of the existing building.
- 4) The addition of tenants to an existing non-residential building when minimal structural improvements are required.

2. Submission Requirements and Review Procedure

- A. All Minor Plans shall be considered to be Preliminary Plans for the purposes of submission for review and approval, and shall comply with the requirements of **§304: Preliminary Plan Submission Requirements** and **§305: Preliminary Plan Review Procedure**.
- B. When a Minor Plan qualifies for approval, or for approval subject to conditions, in accordance with **§309.1: Standards for Qualification as a Minor Plan Submission**, herein, the Minor Plan may be granted concurrent Preliminary and Final Plan approvals, provided that the plan includes the Final Plan Certifications required by **§306.3: Record Plan** herein, and complies with **§307.3: A Final Plan for an Application...**, herein.
- C. A Minor Plan is not required to include an Improvements Construction Plan or a Record Plan as required by **§306.2: Improvement Construction Plan** and **§306.3: Record Plan**, herein.
- D. A Minor Plan which will require access to a State highway shall provide the "highway access" statement on the plan, as required by **§306.2: Improvement Construction Plan**.

Section 310. De Minimus Improvement Process.

No subdivision or land development approval is needed for a DeMinimus Improvement as defined in **§201: Definitions of Terms** if an applicant who wishes to proceed under these provisions shall submit to the Township staff the following for their review:

1. A building permit application setting forth the proposed improvement, the cost thereof, and any changes to be made to the land.
2. Where the project has a previously recorded land development plan, the applicants must file an amended land development plan for the record.
3. The Plan, when filed, shall undergo engineering and zoning review to address all zoning issues such as trash enclosures, landscaping, site access, and stormwater management. An escrow shall be established with the Township to cover appropriate fees for plan review as determined by staff.
4. Any given building may have no more than three De Minimus improvements as long as the cumulative additions do not exceed the definition set forth in Article Two and each application will contain a statement to effect that the cumulative De Minimus improvements granted, and including the current application, require less than five parking spaces and the total footprint of the De Minimus improvements does not exceed 1,000 square feet.
5. Upon completion of the appropriate staff review, if the applicant agrees in writing to the conditions, improvements, and/or requirements determined by the review, the application will be approved and the appropriate permits will be issued. In the event that the applicant does not agree with the review conclusions, the application is deemed denied and the applicant may elect to resubmit the application under the standard land development procedures as set forth herein.

ARTICLE FOUR DESIGN STANDARDS

General Site Design

Section 400. General Standards.

The following principles, standards and design requirements shall be used in the evaluation of all subdivision and land development proposals. Other design requirements as established in the Zoning Ordinance or other municipal ordinance shall be used in addition to the following:

1. All portions of a tract shall be designated as to their use, such as lots, roads, open space, parking areas, etc.
2. Applicants shall preserve scenic areas, historic sites, other community assets and landmarks, and natural amenities such as trees and waterways.
3. Plans shall be designed to avoid excessive disturbance of vegetation and movement of earth.
4. Floodplain land areas shall be governed by additional standards contained in this Ordinance, the Township Zoning Ordinance, and the Township's building code.
5. The applicant shall construct, install, and guarantee, at no expense to the Township or its authorities, all improvements required as part of plan approval, including, but not limited to, streets, curbs, sidewalks, water and sewage facilities, stormwater management facilities, street lights, fire hydrants, road signs, monuments, lot pins, utilities and shade trees.
6. The standards contained within this Article are the minimum standards and requirements for the protection of the health, safety and welfare of the residents of the Township and are to be used in all subdivisions and land developments. Applicants are always encouraged to exceed minimum standards. In addition, Township Board of Commissioners reserves the right to require standards in excess of the minimum requirements if warranted due to the unique characteristics of a particular property.

Section 401. Conformance with Plans.

1. Comprehensive Plans. Proposals for land development or subdivision shall be generally consistent with the Comprehensive Plan, especially as to the use of land, intensity of development, transportation, community facilities and resource protection. Residential development should also be consistent with the housing element of the plan. All proposals should be located in areas designated for development in the future land use plan element and be serviced by currently available infrastructure or infrastructure that will be developed concurrent with the development.
2. State, Regional, and County Plans. Proposals shall be generally consistent with appropriate state, regional, and county adopted comprehensive plans. Where regional facilities are proposed in the plan, such as highways, effort shall be made to preserve needed right-of-way in the proposed land development or subdivision for future infrastructure projects.
3. Public Service Improvements. Proposals shall be consistent with the location and timing of public service improvements, such as water and sewage facilities in accordance with the appropriate infrastructure plans governing those facilities. In addition, the location of public service facilities as outlined in a capital improvement program or official map should be considered in locating and planning development.

Section 402. Site Organization.

Proposed land developments and subdivisions should address the opportunities and limitations present on a site and its adjacent surroundings. Site opportunities should be maximized to enhance the overall quality of the development and sincere steps should be taken to lessen potential negative impacts upon a site and the surrounding community. The physical, social, and psychological needs of the users of the site should be evaluated and appropriately incorporated into the final subdivision layout or site design. The impacts of the proposed development on the natural environment and surrounding land uses should be given a high priority and made an integral part of the overall design for the land development and subdivision. The following site organization guidelines should be used:

1. Site Improvement Layout. Building placement should provide a functional relationship with a site's topography, existing vegetation, surrounding land uses, taking into account energy conservation, polar exposure, and pertinent natural features.

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2. Existing Natural Features. Existing natural features should be recognized and integrated into the site layout. Natural features such as streams, hillsides, wetlands, unique habitat, woods and similar natural resources should be considered strong design determinants and be incorporated into the overall site plan to strengthen the unique quality of the land.
3. Open Space and Scenic Views. The placement of open space and preservation of scenic views should be a fundamental design decision. Open space offers more than an opportunity to provide recreation. It can protect important natural systems, reduce the perceived density of development and effectively buffer different land uses.
4. Circulation. Movement within a site and access to the site should consider the safety and convenience of various types of users. Cross access between properties and joint access are encouraged to improve circulation.
5. Relationship to Surrounding Uses. The proposed design should compliment surrounding uses through building set backs, buffers, and separation of uses. Various potential negative impacts upon surrounding land uses including noise, light, and loss of privacy should be mitigated.
6. Sustainable Development. The development of a site should use methods that reduce energy and water consumption needs of the land development. Opportunities to utilize renewable energy sources and conserve and reuse water resources should be considered.

Section 403. Lots.

1. Lot Size and Width. Each lot shall meet or exceed the minimum area and width requirements of the Zoning Ordinance and be generally sufficient in size and shape to adequately accommodate the development or use proposed for it. Lots that contain natural restrictions such as wetlands, water bodies, steep slopes or other features shall be made large enough to provide suitable area for the intended use of the lot without requiring encroachment upon natural amenities. Lots with existing or planned public improvements such as fuel pipe lines, underground utility easements, stormwater detention basins, high voltage power lines or other facilities should be sized to allow suitable room for the intended use of the lot without requiring encroachment on the public facilities or easements.
2. Lot Shape. Deep, narrow lots and wide, shallow lots are to be avoided except that lots containing uniquely designed structures, such as certain types of attached dwelling units, may receive special consideration. Every lot shall contain a building envelope suitable for the type(s) of development proposed.
3. Lot Frontage. Every lot shall have frontage along the right-of-way of a public, private or common street, excluding alleys, in accordance with the Zoning Ordinance. Sufficient frontage is the minimum width required to site a driveway into the property in accordance with the design requirements in this section and other appropriate state, federal, and local regulations. Corner lots will have to meet lot frontage requirements on two streets.
4. Lot Lines. Lot lines shall be drawn parallel, concentric, at right angles, or radial to the street right-of-way line unless not feasible or undesirable due to existing, permanent, natural or man-made features. Where possible lot lines shall coincide with abutting lot lines and lot lines across streets. Generally, lot corners of several lots should coincide.
5. Reverse Frontage Lots. Reverse frontage lots may be used as an alternative to marginal access streets, or normal lotting when the lots abut a major collector street or street of a higher classification, or steep grades (over 15 percent) at the street right-of-way line. When reverse frontage lots are used and the total lot depth is less than 200 feet, 25 feet adjacent to the major collector street or street of a higher classification, shall be planted as a Screening Buffer in accordance with **Section 433: Landscaping and Plantings**.
6. Flag Lots.
 - A. Flag lots are not permitted in West Pottsgrove Township. In unique situations, flag lots may be permitted by variance by the Zoning Hearing Board in accordance with the Zoning Ordinance. In reviewing a flag lot proposal, the following factors will be considered by Township Board of Commissioners, Planning Commission, Engineer and the Zoning Hearing Board:
 - 1) The amount of road frontage and configuration of the property being subdivided.
 - 2) The sizes and number of lots proposed, including both the total number of lots and the number of flag lots.
 - 3) The type and character of road that the tract abuts.
 - 4) The type and character of the neighborhood and abutting parcels.
 - 5) The topography of the parcel being subdivided, with an emphasis on saving trees, avoiding steep slopes, and preserving floodplain, wetlands and other environmental features if present.
 - 6) The location and safety of access points and street intersections.

- 7) The economic impact on the municipality of maintaining a road as compared to using flag lots.
 - 8) The visual and physical impacts of road construction from excessive regrading, for example, as compared to the use of access strips.
- B. Parts of a Flag Lot. Flag lots shall be comprised of two parts, the access strip and the body of the lot. The body of the lot shall begin at the point at which the lot width meets the minimum lot width requirement specified in the Zoning Ordinance.
- C. Design Standards for Flag Lots.
- 1) The length of the access strip shall be kept to a minimum. As a guide, the preferred length is approximately equal to the depth of one lot which complies with the minimum lot width and area requirements of the district in which it is located.
 - 2) The location of the access strip should be logical relative to the body of the flag lot, surrounding lot configurations, and natural features of the land, and it shall intersect the public street at a safe, visible location.
 - 3) Turns greater than 45 degrees or with a radius less than 150 feet and vertical grades in excess of 10 percent are prohibited in access strips. It may be necessary to widen the access strip at such sharp turns and steep slopes to accommodate grading, drainage, tree preservation, or emergency vehicles.
 - 4) A driveway within an access strip shall be fully paved.
 - 5) No more than 1 tier of flag lots shall be permitted on a tract. In other words, a flag lot may not be located behind another flag lot.
 - 6) Flag lots are not permitted to gain access from a single access street.
 - 7) The access strip must serve as the primary access point for the lot.

Section 404. Blocks.

1. The minimum block length shall be 300 feet unless the Zoning Ordinance specifies a different minimum length.
2. The block width shall be 2 lots deep when the lots are laid out back to back according to the requirements of the Zoning Ordinance. When reverse lotting is designed, the block width shall be in accordance with the Reverse Frontage Lot standards in **Section 403: Lots**.
3. Blocks shall be designed to continue the Township's grid pattern and provide efficient, convenient, and safe pedestrian and vehicular circulation, including the reduction of intersections with arterial streets.
4. Blocks shall be designed to reflect natural features that may constrain subdivision and land development.

Section 405. Community Facilities.

1. Township Board of Commissioners shall determine the need for additional community facilities to serve the proposed subdivision or land development.
2. Where deemed essential by Township Board of Commissioners upon consideration of the particular type of development proposed, and especially in large-scale residential developments, Township Board of Commissioners may require the dedication or reservation of such areas or sites of an extent and location suitable to the needs created by the development for schools, parks and other purposes in accordance with the park and recreation plan, community facilities plan, or official map.
3. Areas provided or reserved for such community facilities shall be adequate to provide for building sites, related activity areas, landscaping, and off-street parking as appropriate to the use proposed.
4. Where a proposed park, playground, school or other public use shown in the Comprehensive Plan is located in whole or in part in a subdivision or land development, Township Board of Commissioners may require the dedication or reservation of land within the subdivision or land development.

Open Space and Natural Resources

Section 406. Ownership of Open Space.

1. Subdividers and developers shall provide recreation facilities and open space land in the amount and character prescribed in the Zoning Ordinance.

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2. Location and Criteria for Dedicated Open Space. Lands to be dedicated shall:
 - A. Comply with the Open Space criteria set out in the Township Zoning Ordinance.
 - B. At the discretion of Township Board of Commissioners, provide for either active or passive recreational or open space uses or a combination thereof in accordance with furthering the objectives of Township's adopted open space or recreation plans.
 - C. Be properly delineated before occupancy permits are granted.
3. Acceptance and Use of Dedicated Land.
 - A. Any land dedicated to the Township shall be used only for the purpose of providing park and recreational facilities and for the preservation of open space and shall be available for use by all residents of the Township.
 - B. When land is dedicated, acceptance by the Township shall be by means of a signed resolution to which a property description of the dedicated area shall be attached. A fee simple warranty deed conveying the property shall be delivered to the Township with title free and clear of all liens, encumbrances and conditions excepting public utility easements.
 - C. Open Space Designation. All land held for open space shall be so designated on the plans. The plans shall contain the following statement for lands in categories (1), (2), (3) or (4) below: "Open space land may not be separately sold, nor shall such land be further developed or subdivided." All plans shall further designate the use of open space, the type of maintenance to be provided and a planting plan or schedule. In designating use and maintenance, the following classes may be used.
 - 1) Lawn. A grass area with or without trees which may be used by the residents for a variety of informal purposes and which shall be mowed regularly to insure a neat and orderly appearance.
 - 2) Natural Area. An area of natural vegetation undisturbed during construction, or replanted. Such areas may contain pathways. Meadows shall be maintained as such and not left to become weed-infested. Maintenance may be minimal, but shall prevent the proliferation of weeds and other undesirable plants. Litter shall be removed and streams shall be kept in free flowing condition.
 - 3) Recreation Area. An area designated for a specific recreational use including, but not limited to, tennis, swimming, shuffle board, play field and tot lot. Such areas shall be maintained so as to avoid creating a hazard or nuisance, and shall perpetuate the proposed use.
 - 4) Garden Area. An area designated for family vegetable plots.
 - 5) Stormwater Management. None of the required open space may be used for stormwater detention or retention basins.
4. Open Space Ownership and Perpetuation. Any of the methods cited under this Section may be used either individually or in combination, to own and perpetually preserve open space that is provided in fulfillment of this Article. The final subdivision and or land development plan shall clearly indicate the manner in which open space will be owned and administered. Following final plan approval, the open space required shall not be transferred to another entity except for the transfer to another method of ownership as outlined below. Written notice of any proposed transfer of open space shall be given to the Township for approval no less than 30 days prior to such event.
 - A. The Township may, but is not required to, accept fee simple dedication of open space in accordance with **Section 406.3: Acceptance and Use of Dedicated Land**.
 - 1) There shall be no cost of acquisition (other than costs indicated to the transfer of ownership or the conveyance of easements, and title insurance).
 - 2) The Township shall agree to maintain the open space.
 - 3) The open space shall be in an acceptable condition to the Township at the time of dedication with regard to size, shape, location, and that any improvements are certified as satisfactory by the Township.
 - 4) The subdivider or developer shall have, at no expense to the Township, prepared the legal description, with metes and bounds, of the land being offered for dedication.
 - 5) The Township shall accept the dedication by means of a signed Municipal Resolution to which a property description, deed, and plan of dedication area or areas shall be attached.

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- 6) An agreement citing all subdivider or developer obligations serving as a condition to plan approval shall be approved by the Township and recorded with the plan at the same time as the plan is approved.
- B. A public agency acceptable to the Township may, but shall not be required to, accept the fee simple dedication of open space, provided that the Township approves a maintenance plan whereby the grantee agrees to and has access to maintain the open space.
- C. The Township or another public agency acceptable to the Township may, but shall not be required to, accept the dedication of less than fee simple interests in any portion of the open space, title of which shall remain in private ownership, provided that a maintenance agreement satisfactory to the Township is reached between the owner and the grantee.
- D. Open space may remain or be placed in the ownership of the individual property owners and shall be restricted from further subdivision and/or land development by deed restriction, provided that:
 - 1) The Township shall agree to the boundaries of the open space that shall be held in private ownership.
 - 2) Restrictions providing for the protection and continuance of the open space which meet Township specifications shall be placed in the deed for each property that has the open space area within its boundaries.
 - 3) A maintenance agreement suitable to the Township shall be established, and the deeds to the properties that are located within the deed restricted open space areas shall clearly state that the maintenance responsibility for the open space lies with the individual property owner.
- E. A private, non-profit conservation organization, among whose purposes is to conserve open space land and/or natural features, may, but shall not be required to accept the conveyance of fee simple or less-than-fee simple interests in any portion of the open space, provided that:
 - 1) Any private, non-profit conservation organization intended to be the grantee of a conveyance shall be acceptable to the Township as a bona fide conservation organization with perpetual existence.
 - 2) Any conveyance shall contain appropriate provisions for proper reverter or retransfer in the event that the grantee becomes unwilling or unable to continue carrying out its function.
 - 3) A maintenance agreement acceptable to the Township shall be established between the owner and the grantee.
- F. Open space may be controlled with condominium agreements that shall be approved by the Township and be in conformance with the Pennsylvania Uniform Condominium Act. All land and facilities shall be held as a common element.
- G. Open space may be held in common ownership by a homeowners association. In addition, the homeowners association shall be governed according to the following:
 - 1) The owner or applicant shall provide to the Township a description of the organization, including its by-laws, and all documents governing maintenance requirements and use restrictions for open space, and the Homeowners' Association Agreement shall be recorded.
 - 2) The organization shall be established (with financial subsidization by the subdivider or developer if necessary) before any lot in the subdivision or building in the development is sold.
 - 3) Membership in the organization and fees shall be mandatory for all purchasers of property therein and their successors.
 - 4) The organization shall be responsible for the maintenance of an insurance on the open space.
 - 5) The members of the organization shall share equitably the costs of maintaining, insuring, and operating the open space.
 - 6) The subdivider to developer for any tract proposed to contain open space shall arrange with the County Board of Assessment a method of assessment of the common facilities which will allocate to each tax parcel in the development a share of the total assessment for such open space. Where this alternative is not utilized, the organization shall be responsible for applicable real estate taxes on common facilities.
 - 7) The organization shall have or hire adequate staff, as necessary, to administer, maintain, and operate the open space.

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- 8) The organization shall have the power to compel contributions from property owners therein to cover their proportionate shares of the initial cost and costs associated with the maintenance and upkeep of the open space.
5. Guarantees and Agreements. Every applicant for subdivision and land development, whether preliminary or final, shall be accompanied by a form of agreement or agreements to be approved by the Township. The agreements shall be properly recorded simultaneously with the recording of the final plan, and shall specify the following:
 - A. The subdivider or developer shall agree to layout and construct all open space areas in accordance with the final plan as approved, where any or all of these improvements are required as conditions of approval, and that the improvements shall be completed within the time or times specified by the Township.
 - B. The subdivider or developer, at the Township's discretion, shall be required to place in an escrow account for a period of three years, an amount of financial security to cover the costs of providing all open space requirements established as conditions for final approval of the plan.
 - C. The Township is authorized to make random inspections of non-dedicated Township open space as deemed necessary and appropriate to ensure that the subdivider or developer and any successors duly perform, abide by, and complete any duties, obligations, or requirements as set forth in the final plan and/or formal agreements.
 - D. The Township shall be granted the right to enforce the deed restrictions regarding the use and maintenance of the open space if the organization fails in its responsibilities. The amount of financial security necessary to reimburse the Township for its expense of performing remedial measures shall be forfeited by the subdivider or developer.
 - 1) In the event that the entity charged with maintenance responsibilities, or any successor thereto, fails to maintain all or any portion of the open space in reasonable order and condition in accordance with the development plan and all applicable laws, rules, and regulations, the Township may serve written notice upon such entity, upon the residents and owners of the uses relating thereto, setting forth the manner in which the entity has failed to maintain the open space in reasonable condition.
 - 2) Such notice shall set forth the nature of corrections required and the time within which the corrections shall be made. Upon failure to comply within the time specified, the organization, or any successor organization, shall be considered in violation of their responsibilities, in which case the Township may enter the premises and take corrective action.
 - 3) The financial security funds in the applicant's escrow account, if any, may be forfeited, and any permits may be revoked or suspended. If the funds of the escrow account are insufficient to pay the costs of remedial maintenance, the costs of corrective action by the Township shall be assessed ratably, in accordance with tax assessments, against the properties that have the right of enjoyment of the common facilities and shall become a lien on said properties. The Township, at the time of entering upon such common facilities for the purpose of maintenance, shall file a notice of such lien in the Office of the Prothonotary of Montgomery County, upon the properties affected by such lien.
 - E. All plans finally approved, whether or not recorded, shall be binding upon the subdivider or developer, his heirs, executors, administrators, successors and assigns; shall limit and control the use and operation of all open space designated in such plans, to the conditions appearing in such plans and cited in any associated formal agreement for the approval thereof.

Section 407. Open Space Design Requirements.

Applicants shall provide common open space for all subdivisions land developments in conformance with the standards of this section.

1. Open Space Criteria. Open space set aside in fulfillment of the requirements of this Article shall be in accordance with the following standard and principles.
 - A. Open space shall be consistent with the plans and proposals outlined in the Township's adopted park and open space plans. Township Board of Commissioners shall review the consistency of the proposed open space with the recommendation of the Township Planning Commission and Park and Recreation Board.
 - B. Open space shall be interconnected with permanently preserved land on abutting property, if possible, including provisions for public access ways for general public use to permit residents safe and easy access to areas of the said open space.

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- C. Open space shall be a cohesive whole if possible, except that two or more parcels connected by legal public access provisions may be determined to be in public interest.
 - D. Open space shall have frontage on a public or private road or easement capable of providing suitable grade for access to the open space from the frontage for maintenance vehicles and equipment traffic.
 - E. Open space may include land within utility corridors only if the utility companies having legal rights to these corridors do not prohibit their use for such purposes.
 - F. Open space shall be sited in the land that has physical characteristics capable of serving the purposes intended for such areas and with a design for recreational use and development that is sensitive to the site physical characteristics.
 - G. Open space shall have a close visual and physical relationship to as many dwelling units as reasonably possible, yet sited with sensitivity to surrounding land use.
 - H. Open space shall protect environmentally sensitive and/or aesthetic features and be landscaped to provide sufficient man-made screening or buffer areas to minimize any negative impacts upon adjacent development.
2. Recreation Facility Requirements.
- A. Figure 4.1 lists the recreation facilities required by all residential subdivisions and land developments.
 - B. At the discretion of Township Board of Commissioners upon recommendation of the Township Planning Commission, land developments with greater than 175 dwelling units proposed may have increased recreation facility requirements.
 - C. Township Board of Commissioners, upon recommendation of the Township Planning Commission, may accept alternative recreation facility design if it can be shown to be more desirable and provide an equal level of service to residents.

Figure 4.1: Recreation Facility Requirements

Total Number of Lots or Dwelling Units	# of Tot Lots	# of Playfields	# of Basketball or Tennis Courts
15 to 49	1	1	0
50 to 99	2	1	0
100 to 149	3	2	1
More than 150	4	2	2

3. Tot Lot Requirements.
- A. Tot Lot. A confined, developed, neighborhood play area primarily for use by preschool-age children under the supervision of parents or guardians.
 - B. Use of tot lots shall be limited to daylight hours only; no lighting shall be installed.
 - C. Low maintenance play equipment and structures shall be included and confined by a gated fence, a minimum of 3 feet high. The gate shall be self-closing and self-latching.
 - D. Sitting areas, including benches, shall be provided for the convenience of persons supervising the children.
 - E. Shade trees shall be provided for sitting and play areas; gazebo or picnic-type shelters may be used in addition to shade trees.
 - F. When a tot lot is placed adjacent to the playfield, practical measures, such as fencing and orientation of facilities, shall be used to reduce hazards, especially from balls or other flying objects.
 - G. Minimum dimensional standards shall be as follows:
 - 1) Minimum area: 1,500 square feet within the fenced areas. Applicants shall provide a landscaped, but not screened, buffer area a minimum of 10 feet in depth around the fenced area.
 - 2) Minimum horizontal dimension: 25 feet.

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- 3) Minimum setbacks for the fenced-in area:
 - a. From lot lines: 20 feet.
 - b. From the ultimate right-of-way of streets:
 1. Residential streets: 20 feet.
 2. Collector streets: 40 feet.
 3. Arterial streets: 60 feet.
- H. Locations: At convenient, centralized intervals, requiring not longer than a 1,000-foot walk from any dwelling unit.
4. Playfield Requirements.
 - A. Playfield. A common area within a subdivision or land development for neighborhood residents and possibly the general public to use for informal, active recreation purposes such as ball games and other activities requiring a large lawn area, away from homes or other buildings.
 - B. Playfields shall be used only during daylight hours; no lighting shall be installed.
 - C. Playfields are intended for informal, neighborhood use. Playfields shall not be used for formalized programs such as youth or adult athletic leagues which should be conducted on larger, more appropriate fields, located, designed, and intended for use by the extended community.
 - D. Playfields shall consist of a lawn area, unobstructed by trees, shrubs, benches, playground equipment and other obstacles. Applicants are encouraged to locate trees and shrubs along the perimeter of a playfield in order to define its limits, enhance its appearance, and filter noise generated by activities.
 - E. Playfields shall be sloped for proper drainage, not less than 1percent nor more than 3 percent grade, and shall be well-drained so that they are suitable for use in most weather.
 - F. Playfields shall be fenced at the discretion of Township Board of Commissioners.
 - G. Minimum dimensional standards shall be as follows:
 - 1) Minimum area: 15,000 square feet.
 - 2) Minimum horizontal dimension: 125 feet.
 - 3) Maximum grade: 3 percent
 - 4) Minimum setbacks to the edge of a playfield:
 - a. From any dwelling unit: 60 feet.
 - b. From the ultimate right-of-way of streets:
 1. Residential streets: 30 feet.
 2. Other classifications: 60 feet.
 - H. Playfields shall have at least one backstop, facing south.
 - I. Locations: at convenient, centralized intervals.
5. Basketball and Tennis Court Requirements.
 - A. Basketball Court. A basketball facility including paved, striped court area of at least high school standard size, with posts, backboards, and baskets at both ends of the court.
 - B. Tennis Court. A tennis facility including paved, standard sized and striped court area, posts, net and fencing around its perimeter.
 - C. These courts shall be constructed in accordance with specifications approved by the Township Engineer, and shall be oriented in a north/northeast-south/southwest direction.
 - D. Minimum dimensional standards shall be as follows:
 - 1) Tennis court areas shall be of standard size, basketball court areas shall be at least high school standard size.
 - 2) Minimum setbacks to the edge of paving:

- a. From any dwelling unit: 60 feet.
 - b. From the ultimate right-of-way of streets:
 - 1. Residential and feeder streets: 30 feet.
 - 2. Other classifications: 60 feet.
 - c. From any lot line: 15 feet.
- E. Tennis courts shall be fenced around the entire perimeter with minimum 10-foot high fencing.
- F. Basketball courts shall be fenced with minimum 6-foot high fencing under the following conditions:
 - 1) When the edge of pavement is less than 30 feet from a lot line, that edge shall be fenced.
 - 2) When the edge of pavement is less than 30 feet from an area sloping 10 percent or greater downward from the court, the edge shall be fenced.
- G. Lighting may be provided for nighttime use of courts, so arranged that no glare affects abutting residences or streets, on a demand-activated basis, until not later than 10:00 PM.
- H. Locations: at convenient, centralized intervals.
- 6. Consolidation of Facilities. Applicants are required to provide the numbers and types of facilities as required in this section, spaced for convenient access by the residents. However, applicants are encouraged to consolidate several facilities in fewer locations to better serve the residents' needs in the following possible ways:
 - A. By locating all required tennis or basketball courts in one area, thereby restricting noise and light to one area, and precluding the need to search the neighborhood for a free court.
 - B. By combining two 12,000-square foot playfields into one 20,000-square foot area to permit larger fields for softball, football, soccer, or other field sports, while maintaining the neighborhood use character.
 - C. By creating one or more park-like facilities rather than several sets of scattered facilities.
 - D. Tot lots may be adjacent to other types of recreation facilities but not to other tot lots so that they may be dispersed throughout the development and only require short walking distances from all homes.

Section 408. Preservation of Existing Vegetation.

Preservation of existing woodlands, mature trees, and unique vegetation is required to maintain habitat, protect soil from erosion, reduce energy costs, and enhance local aesthetics.

- 1. Preservation of Existing Vegetation.
 - A. All subdivisions and land developments shall be laid out in such a manner as to minimize the removal or disturbance of healthy trees and shrubs. Existing woodlands should be incorporated into common open space, buffer areas, and on large lots. Special consideration shall be given to mature specimen trees and ecologically significant woodlands.
 - B. It shall be incumbent on the applicant to prove that tree removal is minimized. If challenged by the Township, the applicant shall produce evidence, such as written documents or plans certified by a registered landscape architect or other professional showing that no alternative layouts are possible and that no alternative clearing or grading plan would reduce the loss of mature trees, tree masses, or woodlands.
 - C. Mature trees, tree masses, or woodlands proposed for removal by the applicant during construction shall be labeled "TO BE REMOVED." All other trees, tree masses, or woodlands shall be designated "TO REMAIN."
 - D. Trees over six inches in caliper within a tract proposed for subdivision or land development shall not be removed unless any of the following conditions exist:
 - 1) Immediate danger to life or property.
 - 2) Affliction by a disease which threatens to injure or destroy other trees.
 - 3) There exists an approved land development plan showing landscape material to be retained or removed. Tree removal pursuant to such a plan shall be limited to those trees within 15 feet of a proposed structure, six feet of a proposed impervious surface or an area to be graded pursuant to an approved grading plan.
 - E. All specimen trees which are not to be removed shall be preserved in their natural condition.

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- F. In the event that a tree over six inches in caliper must be removed for reasons stated in **Section 408.1.D: “Trees over six inches...”** above, said trees shall be replaced with approved trees of 2½ inches caliper at a rate of two new trees to each one tree removed. Acceptable species for replacement trees are listed in **Appendix A**.
- 2. Protection of Existing Vegetation.
 - A. Existing vegetation to remain shall be identified “TO REMAIN” in the field and on the Erosion & Sediment Control plan prior to any clearing and physically protected during construction. A temporary physical barrier such as a snow fence shall be erected a minimum of one foot outside the dripline on all sides of individual trees, tree masses, and woodlands prior to clearing and construction. The barrier shall be placed to prevent disturbance to or compaction of soil inside the barrier, and shall remain until construction is complete.
 - B. It is recommended that trees to be preserved near developed portions of a site are pruned and fertilized prior to beginning of construction in order to ensure their health.

Section 409. Wetland Protection.

- 1. The presence of hydric soils may indicate the presence of wetlands. When hydric soils are indicated on the site, a wetlands study should be conducted in accordance with the federal Manual for Identifying and Delineating Wetlands. In the event no wetland study is undertaken, the location of hydric soils on site will be assumed to be wetlands for the purpose of this ordinance and so noted on the plan.
- 2. Wetlands as defined by the U.S. Army Corps of Engineers and the Commonwealth of Pennsylvania in accordance with Section 404 of the Federal Clean Water Act of 1977 and Chapter 105 of the Pennsylvania Clean Streams Act Amendments of 1978 shall be preserved in subdivisions and land developments. Required permits shall be obtained at an early stage to determine the extent and location in proposed subdivision and/or land development.

Section 410. Riparian Corridor Management.

- 1. The intent of this Section is to:
 - A. Improve surface water quality, improve infiltration, encourage sheet flow, and stabilize concentrated flows.
 - B. Improve and maintain the safety, reliability, and adequacy of the water supply for domestic, agricultural, commercial, industrial, and recreational uses along with sustaining diverse populations of aquatic flora and fauna.
 - C. Preserve and protect areas that intercept surface water runoff, wastewater, subsurface flow, and/or deep groundwater flows from upland sources and function to remove or buffer the effects of pollutants prior to entry into surface waters, as well as provide wildlife habitat, moderate water temperature in surface waters, attenuate flood flow, and provide opportunities for passive recreation.
 - D. Assist in the implementation of pertinent state laws concerning erosion and sediment control practices.
 - E. Conserve natural features important to land or water resources that provide recreational value or contain natural amenities.
 - F. Work with floodplain, steep slope, and other requirements that regulate environmentally sensitive areas to minimize hazards to life, property, and riparian features.
 - G. Recognize that natural features contribute to the welfare and quality of life of the Township’s residents.
 - H. Conserve natural, scenic, and recreation areas within and adjacent to riparian areas for the community’s benefit.
- 2. Application. The requirements of **Section 410: Riparian Corridor Management** apply to the streams, wetlands, and water bodies, and the land adjacent to them, as specified in **Figure 4.2: Riparian Corridor Width Determination**. These areas shall be known as the “Riparian Corridor”.
- 3. Permitted Uses. The following uses are permitted in the Riparian Corridor:
 - A. Zones One and Two: Up to half the required yard for any individual lot.
 - B. Zone One:
 - (1) Open space uses that are primarily passive in character shall be permitted to extend into the area defined as Zone One, including:

Figure 4.2: Riparian Corridor Width Determination

Surface Water Feature	Minimum Setback Required (for structures or activities in Section 410.3: Permitted Uses)
A. Streams , either (1) mapped on NRCS' Web Soil Survey ¹ including any adjacent wetlands and/or water bodies, or (2) unmapped, but found on a property survey by a Professional Licensed Surveyor, or (3) Intermittent: This is based on intermittent streams identified in the latest version of the Soil Survey of Montgomery County or any intermittent stream otherwise identified on the applicant's plan, provided that the intermittent stream has an upstream drainage area of 75 acres or more ² (intermittent streams are shown as dotted and dashed lines on the Soil Survey maps).	<p>Zone 1: Minimum width of 25 feet from each defined edge of the watercourse at bank full flow, measured perpendicular to the edge of the watercourse. Where steep slopes in excess of 25 percent are located within 75 feet of the stream, the area of steep slopes (and all land between said steep slopes and the stream) shall be designated as Zone One.</p> <p>Zone 2: Whichever of the following distances is greatest: (a) 50 feet from the outer edge of Zone 1, measured perpendicular to the edge of Zone 1, or (b) the extent of the 100-year floodplain³, or (c) 25 feet beyond the outer edge of a wetland along the stream.</p>
B. Isolated wetlands and water bodies: Wetlands and water bodies not located along a stream, where the wetland or water body is greater than 10,000 s.f.	<p>Zone 1: Minimum width of 25 feet from each defined edge of the watercourse at bank full flow, measured perpendicular to the edge of the watercourse. Where steep slopes in excess of 25 percent are located within 75 feet of the stream, the area of steep slopes (and all land between said steep slopes and the stream) shall be designated as Zone One.</p> <p>Zone 2: Whichever of the following distances is greatest: (a) 50 feet from the outer edge of Zone 1, measured perpendicular to the edge of Zone 1, or (b) the extent of the 100-year floodplain³, or (c) 25 feet beyond the outer edge of a wetland along the stream.</p>

Table Notes

¹ This may be accessed at: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

² Upstream drainage area shall be measured from where the stream exits the applicant's site.

³ 100-year floodplain is identified on the Flood Insurance rate Map (FIRM) prepared by FEMA, or as calculated by the applicant where FEMA data does not apply.

- a. Wildlife sanctuaries, nature preserves, forest preserves, fishing areas, passive areas of public and private parklands, and reforestation.

- b. Streambank stabilization.

(2) Forestry operations approved by the Montgomery County Conservation District.

(3) Corridor Crossings:

- a. Agricultural crossings by farm vehicles and livestock.
- b. Driveways serving one or two single-family detached dwelling units, provided the mitigation requirements of **Section 410.8.C: Mitigation Requirements** are satisfied. The corridor crossing standards of **Section 410.6: Corridor Crossing Criteria** should be considered during design of the driveway.
- c. Driveways serving more than two single-family detached dwelling units, or roadways, recreational trails, railroads, and utilities, provided the mitigation requirements of **Section 410.8.C: Mitigation Measures** and the corridor crossing design standards of **Section 410.6: Corridor Crossing Criteria** are satisfied.

C. Zone Two:

- (1) Open space uses including wildlife sanctuaries, nature preserves, forest preserves, passive areas of public and private parklands, recreational trails, and reforestation.

Section 410. Riparian Corridor Management

- (2) Agricultural uses conducted in compliance with methods described in the Department of Environmental Protection's *Erosion and Sediment Pollution Control Manual*, March 2000, as amended.
 - (3) Corridor crossings:
 - a. Agricultural crossings by farm vehicles and livestock.
 - b. Driveways serving one or two single-family detached dwelling units, provided the mitigation requirements of **Section 410.8.C: Mitigation Measures** are satisfied. The corridor crossing standards of **Section 410.6: Corridor Crossing Criteria** should be considered during design of the driveway.
 - c. Driveways serving more than two single-family detached dwelling units, or roadways, recreational trails, railroads, and utilities, provided the mitigation requirements of **Section 410.8.C: Mitigation Measures** and the corridor crossing design standards of **Section 410.6: Corridor Crossing Criteria** are satisfied.
 - (4) Residential accessory structures having an area equal to or less than 225 square feet.
 - (5) Forestry operations approved by the Montgomery County Conservation District.
 - (6) Passive use areas such as camps, campgrounds, picnic areas, and golf courses. Active recreation areas such as ballfields, playgrounds, and courts provided these uses are designed in a manner that will not permit concentrated flow of stormwater runoff.
 - (7) Centralized sewer and/or water lines and public utility transmission lines running along the corridor. When proposed as part of a subdivision or land development, the mitigation requirements of **Section 410.8.C: Mitigation Measures** shall be satisfied. In all cases, these lines shall be located as far from Zone One as practical.
4. Any use or activity not authorized within **Section 410.3: Permitted Uses**, herein, shall be prohibited within the Riparian Corridor Conservation District and the following activities and facilities are specifically prohibited:
- A. Storage of hazardous or noxious materials.
 - B. Use of fertilizers, pesticides, herbicides, and/or other chemicals in excess of prescribed industry standards or the recommendations of the Montgomery County Conservation District.
 - C. Roads or driveways (not including agricultural crossings).
 - D. Parking lots.
 - E. Any type of permanent structure, including fences.
 - F. Subsurface sewage disposal areas.
 - G. Sod farming.
 - H. Stormwater basins, including necessary berms and outfall facilities.
5. Natural State. Whenever a pond, watercourse, stream, or intermittent stream as identified in the NRCS' Web Soil Survey is located within a development site, it shall remain open in its natural state and location and shall not be piped, except for approved street or driveway crossings.
6. Corridor Crossing Criteria. All Riparian Corridor crossings shall incorporate the following design standards:
- A. The width of the right-of way shall not be greater than the minimum right-of-way width required by the Township Subdivision and Land Development Ordinance.
 - B. Crossings should be designed to cross the riparian corridor at direct right angles to the greatest extent possible in order to minimize disturbance of the corridor.
 - C. Corridor crossings should be separated by a minimum of 1,000 feet of buffer length.
 - D. Bridges shall be used in place of culverts when crossings would require a 72-inch or greater diameter pipe. When culverts are installed they should consist of slab, arch, or box culverts and not corrugated metal pipe. Culverts should also be designed to retain the natural channel bottom to ensure the passage of water during low flow or dry weather periods.
7. Boundary Interpretation and Appeals Procedure. When an applicant disputes the Zone 1 and/or Zone 2 boundaries of the Riparian Corridor or the defined edge of a watercourse, surface water body, or wetland, the applicant shall submit

evidence to the Township, for its consideration, that shows the applicant's proposed boundary, and provides justification for the proposed boundary change. The Township Engineer, and/or other advisors selected by the Board of Commissioners shall evaluate all material submitted and provide a written determination within 45 days to the Board of Commissioners, Township Planning Commission, and landowner or applicant.

8. Management Plan. Within any Riparian Corridor, no construction, development, use, activity, or encroachment shall be permitted unless a Riparian Corridor Management Plan is submitted and approved by Township Board of Commissioners and the effects of such development are mitigated by the implementation of the Riparian Corridor Management Plan.

A. The Corridor Management Plan shall include the following information:

- 1) Existing Conditions, including the corridor boundaries, steep slopes, swales, wetlands, streams, ponds, floodplains, woodlands, other vegetation, and existing structures. A written description of unusual or significant conditions should also be included.
- 2) Management goals for the entire tract and long-range goals for the riparian corridor.
- 3) Proposed Activities, including a plan drawn to scale that shows all proposed activities within and adjacent to the corridor. The plan shall differentiate areas that will be disturbed from those that will be protected and preserved.
- 4) Proposed Management, including an explanation of how the goals will be met given the proposed activities. The plan shall specify when the construction, planting, or other activities are to begin and end and shall address long and short-term maintenance, mitigation, and improvement activities necessary for preservation of the corridor, including application of herbicides, removal of invasive plants, spacing and types of newly planted trees and shrubs, mowing schedules, farming practices, and other related functions.

B. Management, Mitigation, and Restoration Measures. The proposed management plan shall demonstrate how the applicant will comply with the following management, mitigation, and restoration measures:

- 1) Existing woody and other vegetation shall be preserved to the greatest extent possible.
- 2) Fallen branches and other organic material shall be allowed to remain where they have fallen, provided that they do not create a hazard.
- 3) Stream banks shall be stabilized in accordance with *A Stream Bank Stabilization and Management Guide for Pennsylvania Landowners*, by PADEP.
- 4) Degraded landscapes shall be restored or converted to a more effective landscape for maintaining water resources (see **Section 410.8.C. Mitigation Measures**, below).

C. Mitigation Measures. When part of the riparian corridor is destroyed due to development, the loss shall be mitigated by increasing the width of the riparian corridor by a proportionate amount elsewhere on the property (the riparian corridor for the same water body may be located elsewhere than the applicant's property, with permission of the landowner and Township).

- 1) Converting to a more effective landscape. The existing landscape shall be converted to a more effective riparian landscape. The following landscapes are listed in order of effectiveness, from most effective to least effective: woodland, meadow, shrub-land, natural field, and lawn.
- 2) Mitigation plantings shall include three distinct layers of vegetation: (1) canopy trees, such as oak, hickory, maple, gum, beech, sycamore, spruce, pine, and fir, (2) shrubs that provide an understory, such as elderberry, viburnum, azalea, rhododendron, holly, laurel, and alders, and (3) herbaceous plants that serve as ground cover, including ferns, sorrel, trillium, violet, Virginia creeper, nettle, phlox, aster, and worts (all three layers shall be planted at a density sufficient to create a fully-functioning, naturalized riparian corridor).
- 3) Restoration and Conversion of Landscapes.
 - a. Landscapes shall be restored by removing invasive vines, removing invasive trees, cleaning out trash, correcting soil erosion problems, planting appropriate plants, and properly maintaining all new plantings.
 - b. Landscapes shall be converted to a more effective landscape by removing existing, incompatible vegetation, planting plants that are appropriate for the proposed landscape type and the site, and maintaining and protecting the plantings from invasive plants, deer, and other long-term problems.

Sections 410-411

8. Vegetation Selection. To function properly, vegetation in the Corridor Management Plan shall be selected from the **Recommended Plant Materials List** in **Appendix A**. Plants not included on the list may be permitted by Township Board of Commissioners when satisfactory evidence is provided from qualified sources certifying their suitability. The Township may require species suitability to be verified by qualified experts in the Montgomery County Conservation District, Natural Resources Conservation Service, Pennsylvania Fish and Boat Commission, the U.S. Fish and Wildlife Service, or state and federal forest agencies.
 - A. Existing tree cover shall be surveyed and inventoried to assess the need for any new plantings.
 - B. Existing species included on the Pennsylvania Noxious Weed Control List should be removed where conditions warrant.
 - C. Adjacent to the watercourse, dominant vegetation shall be composed of a variety of native riparian tree and shrub species and appropriate plantings necessary for stream bank stabilization.
 - D. Away from the watercourse, dominant vegetation shall be composed of riparian trees and shrubs, with an emphasis on native species and appropriate plantings necessary to stabilize the soil.
 - E. Disturbed areas shall be revegetated with riparian corridor plants, in compliance with an approved Riparian Corridor Management Plan.
 - 1) Canopy tree, shrub, and herbaceous perennial plantings shall be located along the stream bank to provide shade for the stream, soil erosion control and stormwater benefits, according to accepted stream bank restoration practices.
 - 2) New canopy trees shall be planted at a minimum rate of 15 feet on center or one tree per 225 square feet in staggered naturalized rows or an equivalent informal arrangement within the area within 25 feet of the top of each bank of the stream. One new shrub or understory tree shall be planted for every 4 new trees required for riparian corridor revegetation. The type and location of herbaceous perennials to be planted shall be specified on the plan.
 - 3) New trees shall be a variety of sizes ranging from a minimum 4 to 5 foot branched whip to an approximate 1½ inch caliper balled and burlapped planting stock.
 - F. Areas that cannot be revegetated shall be restored using management practices accepted by a landscape architect or engineer qualified in riparian corridor management.
9. Inspection. Lands within or adjacent to a Riparian Corridor will be inspected by the Township Code Enforcement Officer when a subdivision or land development plan is submitted.

Section 411. Top Soil Protection and Grading.

1. The top 6 inches of soil that existed naturally on the site prior to subdivision or land development shall be stockpiled on the site.
2. Following construction, the stockpiled soil shall be redistributed uniformly on the site to a minimum depth of 6 inches.
3. All disturbed areas excluding the stockpile soil of the site shall be stabilized and protected against erosion in compliance with the *Pennsylvania Erosion and Sediment Pollution Control Program Manual*.
4. Any topsoil in excess of the 6 inches depth that existed prior to subdivision or land development may be stockpiled separately for other uses by the applicant. Top soil may be removed from the site only upon issuance of a permit by Township Board of Commissioners to ensure that sufficient topsoil will remain on the site and in the municipality.
5. Grading. All permanent and temporary cutting, filling, grading, regrading, and/or other forms of earth-moving activities shall be known as "grading" and shall be conducted only in compliance with the standards as described below.
 - A. All grading shall be set back from property lines at least three feet, or a sufficient distance, to prevent any adverse effects on adjacent properties.
 - B. No permanent excavation shall be made with a cut face steeper in slope than three horizontal to one vertical
 - C. Wherever grading will increase the volume or velocity of stormwater flow toward a property line, the applicant shall install and maintain drainage facilities sufficient to prevent adverse effects on the adjoining property. The construction and operation of these drainage facilities shall not cause any adverse effects on abutting properties.
 - D. Along property lines, where grading creates an abrupt drop-off from the abutting property, in contrast to a previously existing gradual change, the applicant shall be required to install a fence or other suitable protective barrier.

- E. A permit shall be required for grading operations. Permits shall be issued by the Zoning Officer upon recommendation of the Township Engineer for each tract, lot, parcel, or site which comprises a separate operation, unrelated to or not contiguous with nearby grading proposed or performed by the applicant. A permit shall not be required in the following situations, however:
- 1) For an excavation that does not exceed 20 cubic yards total material removed.
 - 2) For a fill that does not exceed 20 cubic yards of material deposited.
 - 3) For an excavation below finished grade for basements and footings for a single-family detached or two-family dwelling, swimming pool, or underground-structure authorized by building permits, excavation for a driveway for a single-family detached or two-family dwelling, or the regrading of such excavated materials into the site from which they were excavated.

Section 412. Erosion and Sediment Control.

The requirements of this section shall apply when they are more stringent than those of PADEP or the Montgomery County Conservation District, or when PADEP or the Montgomery County Conservation District have no jurisdiction.

1. General.

- A. For qualifying tracts, no changes shall be made in the contour of the land; no grading, excavating, removal or destruction of the topsoil, trees or other vegetative cover of the land shall be commenced until such time that a plan for minimizing erosion and sedimentation has been approved by the Montgomery County Conservation District.
- B. No subdivision or land development plan shall be approved unless:
 - 1) There has been a plan approved by Township Board of Commissioners that provides for minimizing erosion and sedimentation consistent with this Section, and an improvement bond or other acceptable securities are deposited with the Township the form of an escrow guarantee which will insure installation and completion of the required improvements; or
 - 2) There has been a determination by Township Board of Commissioners that a plan for minimizing erosion and sedimentation is not necessary.
- C. Township Board of Commissioners, in its consideration of any preliminary plan of subdivision and land development shall condition its approval upon the execution of measures designed to prevent accelerated soil erosion and resulting sedimentation, as required by PADEP. All applicable regulations and permit requirements of said department as stipulated in its Soil Erosion and Sedimentation Pollution Control Manual shall be followed by all parties engaged in earth- moving activities. The manual is available at the office of the Montgomery County Conservation District.

2. Performance Principles.

- A. Any effective methods of minimizing erosion and sedimentation can be included in the plan. Any questionable method should be discussed with the Township Engineer prior to submission.
- B. No unfiltered stormwater coming from an area which has been disturbed shall be permitted onto an adjacent tract or discharge into any water body.

3. Responsibility.

- A. Whenever sedimentation is caused by stripping vegetation, regrading or other development activity, it shall be the responsibility of the person, corporation or other entity causing such sedimentation to remove it from all adjoining surfaces, drainage systems and watercourses and to repair any damage at his expense as quickly as possible.
- B. It is the responsibility of any person, corporation, or other entity doing any act on or across a stream, watercourse or swale or upon the floodplain or right-of-way thereof, to maintain, as nearly as possible, in its present state the stream, watercourse, swale, floodplain or right-of-way during the activity and to return it to its original or equal condition after such activity is completed.
- C. No person, corporation, or other entity shall block, impede the flow of, alter, construct any structure, or deposit any material or thing, or commit any act which will affect normal or flood flow in any stream or watercourse without having obtained prior approval from the Township or PADEP, whichever is applicable.

Sections 412-414

4. Compliance with Regulations and Procedures.
 - A. Final plans for minimizing erosion and sedimentation as approved will be incorporated into the agreement and bond requirements as required under this Ordinance.
 - B. The approval of plans and specifications for the control of erosion and sedimentation shall be concurrent with the approval of the final plans of subdivision or land development, and become a part thereof.
 - C. At the time that a building permit is applied for, a review shall be conducted by the Township Engineer to insure conformance with the plan as approved. During the construction further consultative technical assistance will be furnished, if necessary, by the Township Engineer and the Montgomery County Conservation District. During this development phase, the Township Engineer shall inspect the development site and enforce compliance with the approved plans.

Section 413. Historic Feature Preservation.

1. The design of subdivisions and land developments should be done in a manner which would preserve desirable cultural and historic features of a site wherever reasonably possible.
2. No proposal will be approved with a property line extending through any portion of an existing building, except where that property line follows a party wall separating semi-detached or attached units, in accordance with the Township Zoning Ordinance.
3. When existing buildings are retained:
 - A. Unless otherwise specified in the Zoning Ordinance, when the height and/or bulk of the existing building significantly exceeds that of abutting development, building setbacks in excess of the applicable minimums are encouraged, in respect to all new lot lines created. For tall buildings, a setback equal to the height of the building is suggested as a minimum. For proportionally wide or deep buildings, a setback equal to one-half the width or depth of the building is suggested as a minimum.
 - B. Run-down buildings shall be rehabilitated on the exterior to conform in quality with surrounding new development.
 - C. Structurally deficient buildings shall be rehabilitated in conformance with the Township's Building Code and the Uniform Construction Code.
 - D. Additions to retained buildings shall be in harmony with the character, design, building materials, and other architectural features of the building.
 - E. Historical or culturally significant buildings shall retain their respective characters, to the greatest extent practical.
 - F. New buildings abutting the retained building should reflect the respective characters of the surrounding buildings to the greatest extent practical.
4. When existing buildings will be removed as permitted by the Zoning Ordinance:
 - A. The plan must show the location and include a brief description of the building(s) to be removed.
 - B. Plan approval will be granted upon written agreement to the expeditious removal of buildings intended for removal, in conformance with applicable Township requirements and procedures regarding demolition of buildings and disposition of the reusable parts and/or disposal of the rubble.
 - C. All applicable Township requirements and procedures regarding demolition of buildings and disposition of the reusable parts and/or disposal of the rubble shall be complied with.
 - D. If the building will not be removed immediately, a financial guarantee must be posted for its removal, in compliance with **Section 502: Financial Security**, herein.

Section 414. Steep Slope Conservation.

1. Intent.
 - A. Preserve the natural character and aesthetic value of hillsides.
 - B. Guard against property damage and personal injury, and minimize the potential for erosion, soil failure, stream siltation, and contamination of surface waters caused by the misuse of steep slope areas.

- C. Encourage innovative residential development by allowing the flexibility necessary to maximize conservation of steep slopes and produce unique, environmentally sensitive projects.
 - D. Conserve existing woodlands for air and water quality benefits, to provide habitat for wildlife, and to maintain the ecological balance among the natural systems on steep slope areas.
2. Definition and Establishment of Steep Slope Conservation Areas. Steep Slopes shall be considered all those areas of the township with a slope of 15 percent or more, referred to as steep slopes or steep slope areas.
- A. Applicants shall show the boundaries of Steep Slope Areas on all subdivision and land development plans, based on an on-site survey prepared by a Registered Professional Engineer or Surveyor.
 - B. The Steep Slope Areas to be shown on all subdivision and land development plans shall be further divided into the following 2 categories when measured over 3 or more contour lines at 2 foot intervals:
 - (1) Slopes of at least 15 percent but less than 25 percent.
 - (2) Slopes of 25 percent or greater.
 - C. Waiver for manmade slopes. The Township may wish to consider a waiver of these requirements for manmade slopes, if it is determined that alteration, regrading, clearing, or construction upon such slopes can be accomplished without causing erosion of the slope, and will not result in soil failure, stream siltation, and contamination of surface waters and/or increase total runoff into any watercourse or cause an increase in the point discharge levels or velocities at any given point of collection and discharge and will not be injurious to the health, safety, and welfare of township residents. It shall be the burden of the applicant to demonstrate that the slopes were manmade and to establish the absence of impact in accordance with the criteria stated herein.

Figure 4.3: Steep Slope Disturbance Limits (as proportion of tract)

Steep Slope Category	Disturbance Limit
Slopes at least 15% but less than 25%	10%
Slopes 25% or greater	0%

3. General Regulations. In all zoning districts, for those portions of a lot or tract having steep slope areas, as defined in Subsection B, above, the following standards shall apply for all proposed uses:
- A. Tract Disturbance Limits. Based upon steep slope category, the following disturbance limits shall be the maximum proportion of the tract having such slopes that may be disturbed, regraded and/or stripped of vegetation:
 - B. Grading or earthmoving on steep slope areas including slopes less than 25% shall not result in earth cuts or fills whose highest vertical dimensions exceed 10 feet, except where no reasonable alternatives exist for construction of public roads, public drainage structures, and other public improvements, in which case such vertical dimensions shall not exceed 15 feet. Finished slopes of all cuts and fills shall not exceed three to one (3:1), unless the applicant shall demonstrate that steeper slopes can be stabilized and maintained adequately and safely. All retaining walls proposed for the stabilization of areas of cut and fill shall be designed and certified by a registered professional structural engineer, and reviewed by the Township Engineer. An applicant proposing the use of a retaining wall for stabilization of any areas of cut and fill shall be obligated to provide such design criteria and construction detail, including the required certification thereof as determined necessary by the Township Engineer. The use of retaining walls which has the effect of increasing the area of any building or improvement on the property shall not be permitted or approved. The landscape shall be preserved in its natural state, except as specifically provided herein.

Sections 414-415

- C. There shall be no disturbance of steep slope areas including slopes 25% or greater, subject to the exception set forth in **Section 414.2.C: Waiver for Manmade Slopes** of this Article, and providing that agricultural practices which involve no-till planting shall be permitted.
4. **Limit of Municipal Liability.** The granting of a use and occupancy permit or the approval of a subdivision or land development plan on or near the Steep Slope Conservation District shall not constitute a representation, guarantee or warranty of any kind by the township or any official or employee thereof regarding the practicability or safety of the proposed use and shall create no liability upon the Township, its officials, or its employees. Protections provided by this ordinance are for regulatory purposes and based on minimum engineering studies. The ordinance does not imply that areas outside the District are free from adverse effects of erosion and sedimentation.

Non-Vehicular Circulation

Section 415. Sidewalks and Border Areas.

Sidewalks shall be installed along all existing and proposed public and private streets, common driveways, and common parking areas.

1. General
 - A. Sidewalks and border areas shall be required on both sides of the street within the ultimate right of way.
 - B. Township Board of Commissioners may waive the sidewalk requirements if an alternative pedestrian circulation concept can be shown to be more desirable, especially when using open space areas, provided that appropriate connections are provided between the open space walkways and the surrounding pedestrian origins and destinations.
 - C. If for any reason an interim waiver of these requirements is made, a sufficient guaranty shall be posted for the eventual installation of sidewalks, subject to approval by Township Board of Commissioners upon recommenda-

Figure 4.4: Sidewalk and Border Area Guidelines

Functional Classification	Street Name	Border Area	Sidewalk
Principal Arterial	High Street	5'	8' - 12'
Minor Arterial	n/a	5'	5' - 8'
Major Collector	Berks Street	4'	5' - 8'
	Glasgow Street		
	Grosstown Road		
	Manatawny Street		
	Upland Square Drive		
Local Road	n/a	3'	4' - 6'
Shopping Center/Retail	Internal Walkways	n/a	5' - 8'
	Unobstructed Sidewalk Fronting Building Façade	3'	6' - 10'

tion of the Township Engineer and Solicitor, in accordance with **Section 502: Financial Security** of this Ordinance.

2. Design and Layout

- A. Sidewalks and border areas shall be provided in appropriate locations to provide safe and efficient pedestrian access between parking areas, buildings, and other pedestrian destinations.
- B. Sidewalk and border areas widths are to follow the guidelines set forth in **Figure 4.4: Sidewalk and Border Areas**. **Figure 4.5: Generalized Sidewalk Levels of Service** illustrates levels of service offered by varying widths of sidewalks.
- C. The border area shall exist between the curb line or edge of cartway and the sidewalk.
 - 1) Border areas between sidewalks and the curb may contain street lights, trees, benches, trash cans, mailboxes, or newspaper boxes. No obstacle in the border area may reduce the required sidewalk width for use by pedestrian traffic as described in the guidelines in **Figure 4.4: Sidewalk and Border Areas**.
 - 2) Border areas shall be maintained as a grass strip between the sidewalk and the curb. If grass is impractical at the site, brick pavers or similar surface may be used at the discretion of Township Board of Commissioners upon recommendation of the Township Planning Commission and Engineer. In this case, a wider sidewalk may be necessary in place of a border area to create a safer pedestrian environment.
 - 3) Where a border area is proposed as a grass strip, in no case shall its width be less than three feet.
- D. Township Board of Commissioners may require additional width in areas where higher volumes of pedestrian traffic are anticipated. In no case shall sidewalk width be less than four feet.
- E. All sidewalk widths are exclusive of any obstacle. Sidewalk areas containing street lights, trees, benches, doors, trash cans, mailboxes, newspaper boxes, or similar feature are required to have additional width.
- F. Additional sidewalks or paved trails shall be required where deemed necessary by Township Board of Commissioners to provide access to schools, religious institutions, parks, community facilities, trails, and commercial or employment centers, and to provide necessary pedestrian circulation within land development and/or subdivisions where otherwise required sidewalks would not be sufficient for public safety and convenience.
- G. Sidewalks shall be designed to facilitate access and use by persons that are physically disabled, in compliance with the American with Disabilities Act and to the satisfaction of the Township Engineer.
- H. The grade and paving of the sidewalk shall be continuous across driveways except in certain cases where heavy traffic volume dictates special treatment. The grade and alignment of all sidewalks shall be approved by the Township Engineer.
- I. If the provision of sidewalks requires the destruction or removal of valuable trees, consideration shall be given to the retention of such valuable trees.
- J. Conflicts arising from the placement of street trees, utilities, and border areas should be discussed with the Township Planning Commission and Township Engineer to determine appropriate placement and alignment.
- K. Proposed sidewalks shall maintain the width, pattern, and style of the Township's sidewalk network. Where proposed sidewalks meet existing sidewalks which have a different width, a tapered transition shall be constructed.

- 3. Sidewalk Construction and Driveway Crossing Engineering Standards. Sidewalks shall be 4 inches thick 4000 psi compression strength concrete, placed upon a minimum 4 inch layer of AASHTO #57 stone bedding. The sidewalk shall be built as to discharge drainage to the street, the grade of which shall be one-fourth inch per foot. The finished grade between the outside of the sidewalk to the curb line (edge of the cartway) shall never exceed a total vertical elevation change of one foot. Expansion joints shall be placed every 30 feet, with contraction joints every 5 feet a minimum of 1 inch in depth. Additional expansion materials shall be placed between any curb and driveway apron and in the side walk at drive way limits. A contraction joint shall be cut between the side walk and apron. All sidewalks shall receive a broom finish unless otherwise approved by the Township. An access ramp for physically disabled persons shall be placed at all sidewalk intersections with roads.

Section 415. Sidewalks and Border Area

Figure 4.5: Generalized Sidewalk Levels of Service

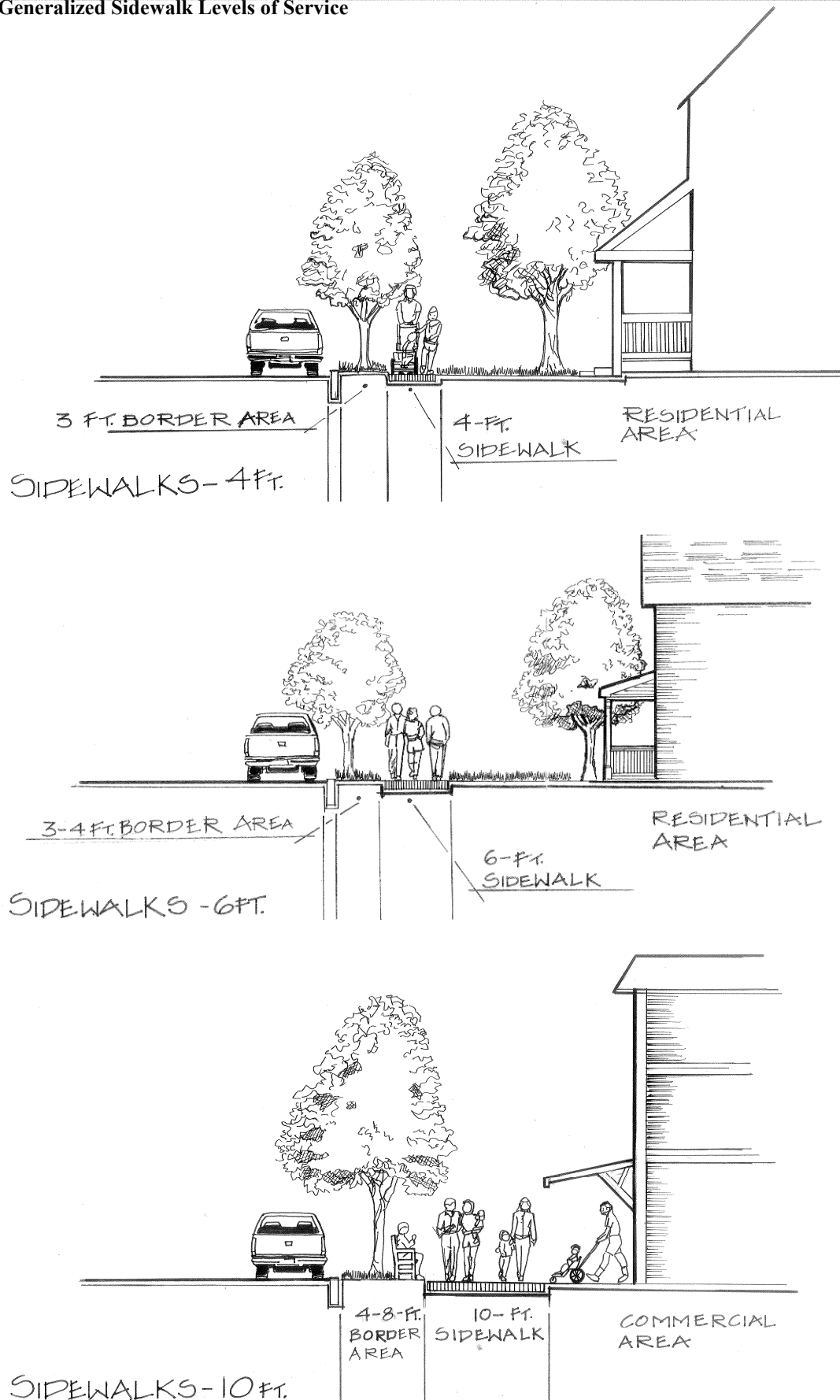
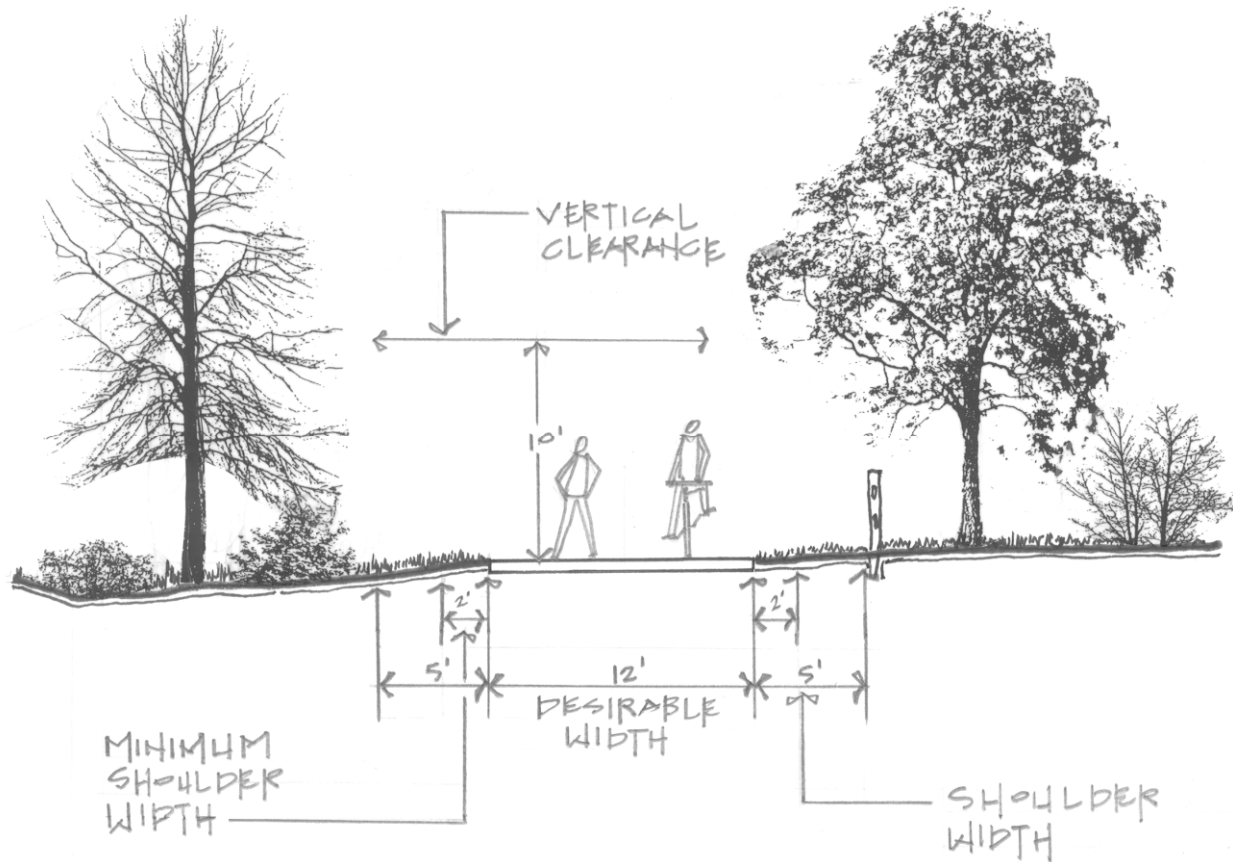


Figure 4.6: Typical Multi-Use Trail Section



Section 416. Crosswalks.

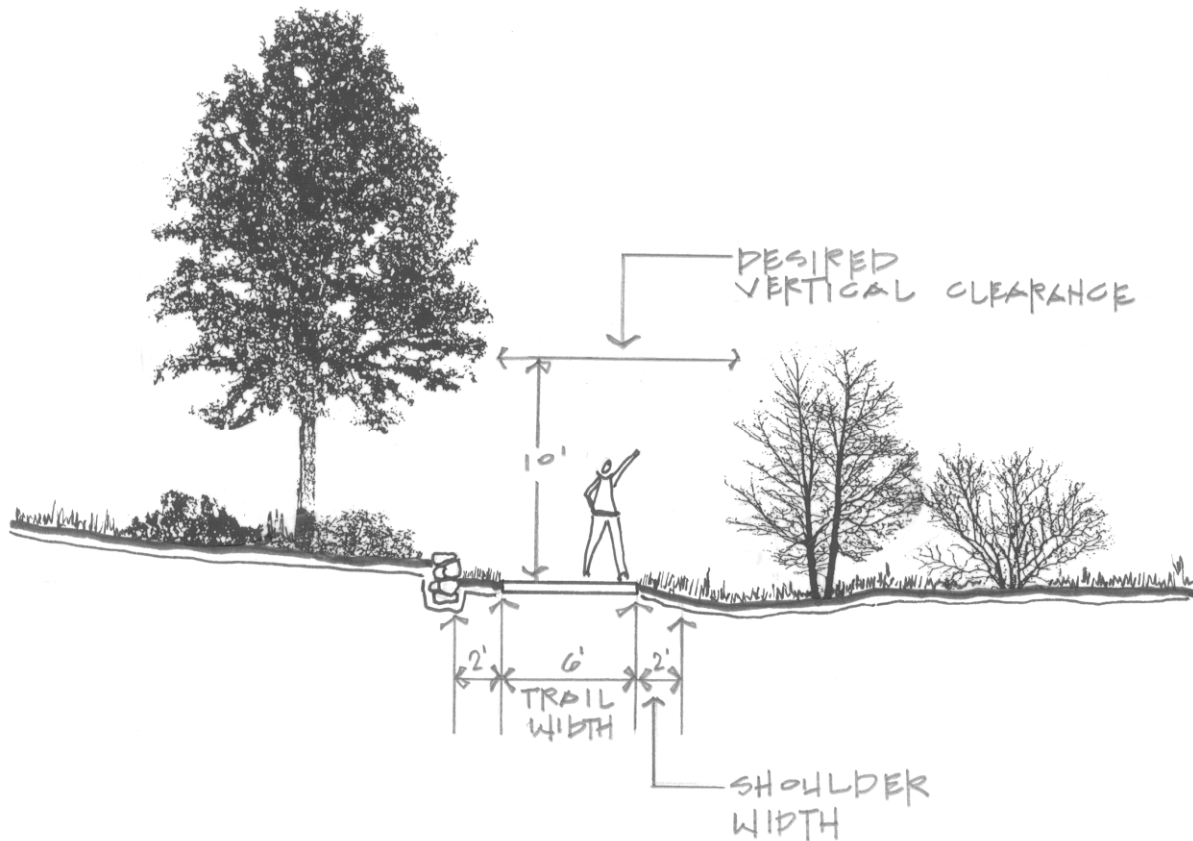
1. Crosswalks shall be required and clearly delineated at all intersections and maintain the width of the largest contributing sidewalk or trail. In no case shall crosswalk width be less than five feet.
2. Crosswalks and their transition to adjacent sidewalks or trails shall be designed to facilitate access and use by persons that are physically disabled, in compliance with the American with Disabilities Act.
3. Where a crosswalk is located at an Arterial or Collector street, Township Board of Commissioners may require one of the following measures as described in the *Pennsylvania Traffic Calming Handbook* upon recommendation of the Township Planning Commission and Engineer.
 - A. Textured Crosswalks - Crosswalk patterns, materials, and colors shall be consistent with surrounding crosswalks based on the theme established in the Township and recommended to Township Board of Commissioners by the Township Planning Commission and Engineer.
 - B. Pedestrian signalization shall be provided at intersections where traffic signals exist
 - C. Curb extensions, bulb-outs, raised medians, raised crosswalks, and other pedestrian safety methods shall be considered and, where determined to be appropriate by Township Board of Commissioners, constructed.

Section 417. Trails and Pathways.

1. When a subdivision or land development is traversed by or abuts an existing trail with public access customarily used by pedestrians, bicyclists, and/or equestrians and delineated in the Township's adopted open space or recreation plans, the applicant shall make provision for the continued recreational use of the trail subject to alterations of the course of the trail within the boundaries of the development under the following conditions:
 - A. The points at which the trail enters and exits the tract shall remain unchanged.

Section 417. Trails and Pathways

Figure 4.7: Typical Pathway Section



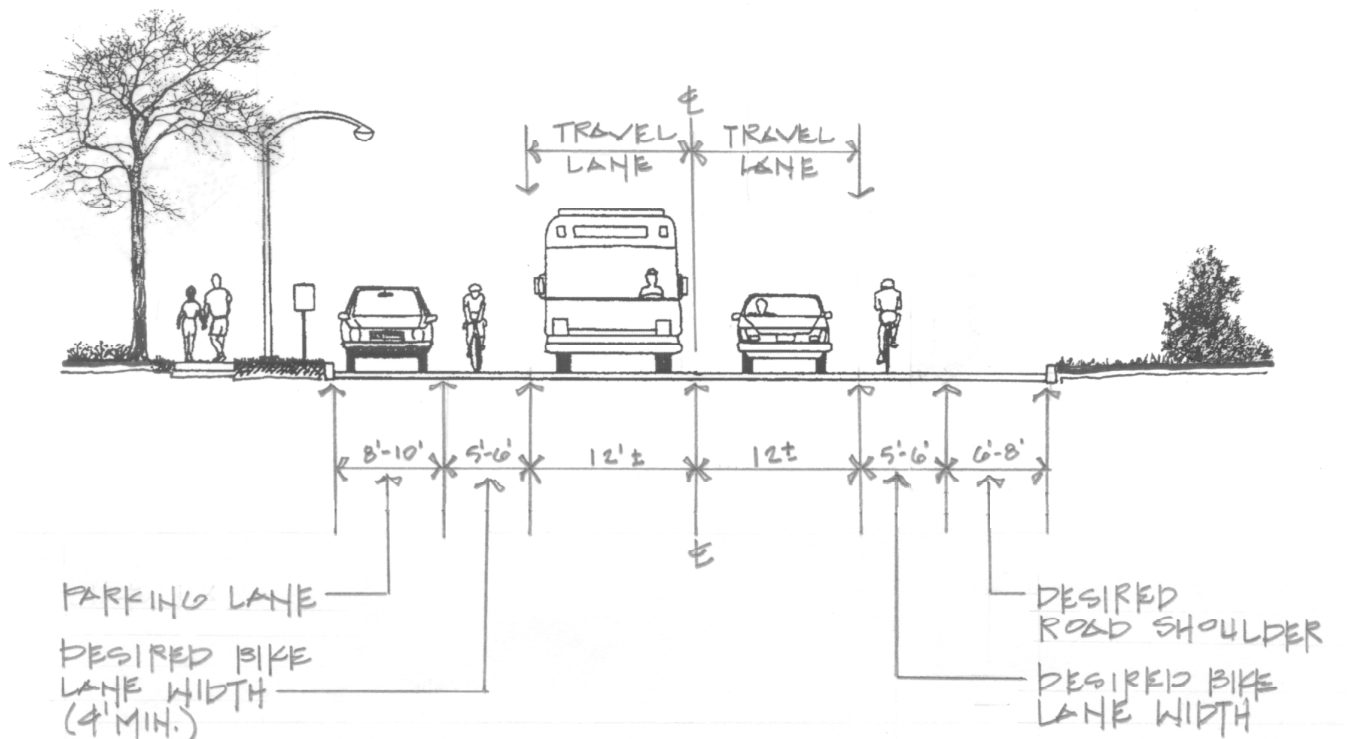
- B. The proposed alteration exhibits quality trail design according to the generally accepted principles of landscape architecture.
- C. Where an existing trail runs coincidentally with the paved road intended for use by motorized vehicles, efforts shall be made to alter the trail alignment to increase separation between the trail and the road.
- 2. Township Board of Commissioners may require, as a condition of final plan approval, the guarantee of public access and improvement of trails when the site is traversed by or abuts an existing trail or a trail proposed in an adopted open space or trail plan of the county, Township, or adjacent municipality.
- 3. When existing developed parcels adjacent to a proposed subdivision or land development allow for dedicated public access through a defined area for the purpose of connecting to a county or municipal trail, all attempts shall be made to continue this connection through a dedicated public access way to serve the proposed development.
- 4. When a subdivision or land development lies adjacent to a park, school, or other pedestrian destination, all attempts shall be made to create pedestrian connections to that destination.
- 5. All trails and pathways shall be constructed before occupancy of residences and other buildings on the site occurs.
- 6. When trails are intended for public or private use, they shall be protected by a permanent access easement on the properties on which they are located. The width of the protected area in which the trail is located shall be a minimum of 20 feet. The language of the easement shall be to the satisfaction of Township Board of Commissioners upon recommendation of the Township Solicitor.
- 7. Any of the methods cited under **Section 406: Ownership of Open Space** concerning open space ownership may be used either individually or in combination, to own and perpetually preserve trail easements that is provided in fulfillment of this Article.
- 8. Trails and pathways shall have adequate access for use by all residents of the development or, preferably, the general public.

9. Trails shall be landscaped with the specifications described in **Section 434.4: Trail and Pathway Landscaping**. Landscaping shall help delineate the route of the trail and screen surrounding properties from trail users.
10. The land area permanently designated for trails for public use may be credited toward any open space requirement as described in the Zoning Ordinance.
11. No trail shall be designed with the intent to accommodate motorized vehicles except for emergency or maintenance access.
12. Construction Standards
 - A. Pathways shall be 6 feet wide and consist of 2 inches of ID-2 wearing course over a 6 inch layer of AASHTO #57 stone. Minimum shoulder width shall be 2 feet.
 - B. Multi-use trails shall be 12 feet wide and consist of 2 inches of ID-2 wearing course over a 6 inch layer of AASHTO #57 stone. Minimum shoulder width shall be 2 feet.
 - C. Where the edge of the trail is above the surrounding grade, bituminous pavement shall be feathered.
 - D. The vertical clearance above the trail shall be maintained at a minimum ten foot height.
 - E. Trail grade shall not exceed 5 percent.
 - F. All proposed trails shall meet the guidelines as generally presented in **Figures 4.6: Typical Multiuse Trail Section and 4.7: Typical Pathway Section**.

Section 418. Bicycle Routes and Bicycle Lanes.

1. When a subdivision or land development is located on a street classified as a Principal Arterial or a Major Collector it shall provide for public access, where feasible, within the ultimate right-of-way for bicycle lanes.
2. Bicycle lanes shall be marked with appropriate striping, marking, reflectors, and signage in accordance with Federal Highway Administration guidelines.
3. Bicycle lanes shall be a minimum five feet in width.

Figure 4.8: On-Road Improvements for Bicycles



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4. Where the roadway narrows, signage and pavement markings shall be added to warn drivers and bicyclists to help them avoid bicycle-automobile conflicts.
5. Drainage improvements shall be made where necessary to eliminate puddles and sediment deposit from the section of the road used by bicyclists.
6. Proposed bicycle lanes shall meet the general guidelines as shown in **Figure 4.8: On-Road Improvements for Bicycles**.

Streets and Parking

Section 419. Street Lighting.

1. Street lighting shall adhere to the requirements described in the Zoning Ordinance.
2. Street lighting shall be required for all nonresidential land developments, for all multi-family residential areas and, at the discretion of Township Board of Commissioners, for all or portions of certain single-family residential subdivisions. As a minimum in single-family subdivisions, appropriate conduit with pull wires shall be installed underground even though standards and lighting fixtures may not be constructed immediately. Proposed intersections with any major collector street or arterial shall have streetlights.
3. Lighting shall be designed in accordance with a plan developed by a utility company or in accordance with the standards recommended in the IES Lighting Handbook. Construction of highway lighting shall be in conformance with PADOT Specifications Publication 408.
4. Where required above, the owner shall install or cause to be installed, at the owner's expense, metal pole streetlights serviced by underground conduit in accordance with a plan to be prepared by the owner's engineer and approved by the Township Engineer and by Township Board of Commissioners.
5. Lighting for all existing public streets and new streets proposed for dedication shall be a style, design, height, and source-type in fixture and pole to be consistent throughout the Township and as approved by Township Board of Commissioners.

Section 420. Utility Locations, Easements, and Rights-of-Way.

Widths and locations of easements and rights-of-way shall be determined by the Township Engineer or the appropriate Authority or utility company for all utilities, including stormwater facilities, and shall be governed by the requirements herein.

1. General Standards.
 - A. Easements and required front, side or rear yards may co-occupy the same land.
 - B. Nothing shall be permitted to be placed, set, or put within the areas of an easement unless it is a portable or removable object. The area shall be landscaped in accordance with **Section 434: Landscaping and Plantings** of this ordinance.
 - C. The owner of any lot, upon written request by the Township and at the owner's sole expense, shall remove anything placed, planted, set or put, (with or without knowledge of these regulations) within the area of any easement.
 - D. To the fullest extent possible, easements shall be adjacent to rear or side lot lines, and occupy only a portion of 1 lot (not centered on 2 lots).
2. No right-of-way or easement for any purpose whatsoever shall be recited or described in any deed unless the same has been shown on the approved plan. Any error found in a deed shall be immediately corrected and re-recorded in the Office of the Recorder of Deeds for Montgomery County at the sole expense of the subdivider or developer.
3. Utility Easements. A minimum width of 20 feet shall be provided for common utilities and drainage when provided in undedicated land for one use. Multiple utility uses within one easement require additional easement width.
4. Public Utilities. All water, sewer and gas mains and other underground facilities shall be installed prior to street paving at locations approved by the Township Engineer.
5. Underground Utilities. All water, sewer and gas mains shall be installed underground. All electric, telephone and communication services, both main and service lines, shall be provided by underground cables, installed in accordance with the prevailing standards and practices of the utility or other companies providing such services, except where it is demonstrated to the satisfaction of Township Board of Commissioners that underground installations herein required are not feasible because of physical conditions of the lands involved. All main underground cables which are within

the right-of-way of a street shall be located as specified by the utility company, subject to approval by Township Board of Commissioners, upon recommendation of the Township Engineer.

- A. In order to promote and facilitate the underground installation of utility distribution lines, a letter of endorsement shall be required from the suppliers of utility service (not limited to electrical, telephone, or cable television) of the developer's choice wherein the applicant acknowledges that underground utilities are feasible and shall be consummated as part of the improvement plan.
- B. A statement relative to the intent of the developer to provide underground utility service shall be placed on the final plan requisite to final approval of the plan.
- C. The provisions in this ordinance shall not be construed as to limit or interfere with the construction, installation, operation and maintenance of public utility structures or facilities which may hereafter be located within public easements or rights-of-way designated for such purposes.
- D. Light Standards are to be placed as required by the Zoning Ordinance. Power source for such standards shall be placed underground as required.
- E. Along arterial and collector roads, all new electrical service should be placed underground.

Section 421. New and Existing Streets.

1. All new streets and extensions and widenings of existing streets:
 - A. Shall be offered for dedication to the authority having jurisdiction over the street at the time of plan approval. The Township may accept or refuse dedication of lands which are not accepted by other jurisdictions.
 - B. Shall conform with the circulation element of the Comprehensive Plan and county or state highway plans, and be coordinated with existing streets.
 - C. Shall provide appropriate access between abutting tracts of land for immediate or future use.
 - D. Shall create a road hierarchy among interior subdivision and land development streets and exterior streets to insure proper through-traffic flow, local access, and internal traffic distribution and flow.
 - E. Shall be related closely to existing topography to assure reasonable grades, alignment and drainage, appropriate access to lots, and to minimize regrading and removal of vegetation.
 - F. Shall be designed to continue existing streets at equal or greater right-of-way and cartway width, as recommended by the Township Engineer and Planning Commission.
 - G. Curbs and storm sewers shall be installed along all existing and proposed public and private streets and common parking areas except when this requirement is waived at the discretion of Township Board of Commissioners, upon recommendation of the Township Planning Commission and Engineer.
 - H. Developer shall assign street names subject to approval of Township Board of Commissioners and use street numbers as assigned by the public works department.
 - I. Median strips or other traffic calming devices may be required by Township Board of Commissioners to provide for public safety and traffic efficiency.
2. Private Streets: Whenever a subdivider or developer proposes to establish a street which is not offered for dedication of public use, Township Board of Commissioners shall require the applicant to submit, and also to record with the plan, a copy of the agreement made with the Township on behalf of his heirs and assigns. Such streets shall be constructed in conformance with the Township Engineer standards for public streets. Maintenance reliability shall be outlined and defined by the applicant and reviewed by the Township prior to final approval. When, in the determination of Township Board of Commissioners, it becomes necessary for the Township to assume responsibility for a private street in order to maintain the health, safety, and welfare of the residents of the Township, the Township may do so and assess the property owner(s) or abutting owners who use the street for any improvements necessary to restore the street to conformance with Township specifications.

Section 422. Street Classifications and Reference to Requirements.

In its design manual, PADOT classifies streets according to standards established by AASHTO. The Township is using the same classification system in order to coordinate highway improvements with neighboring municipalities, the region, and the state. Every street, road, or highway within the Township shall be classified by its function as one of the following, and

Figure 4.9: Street Functional Classifications

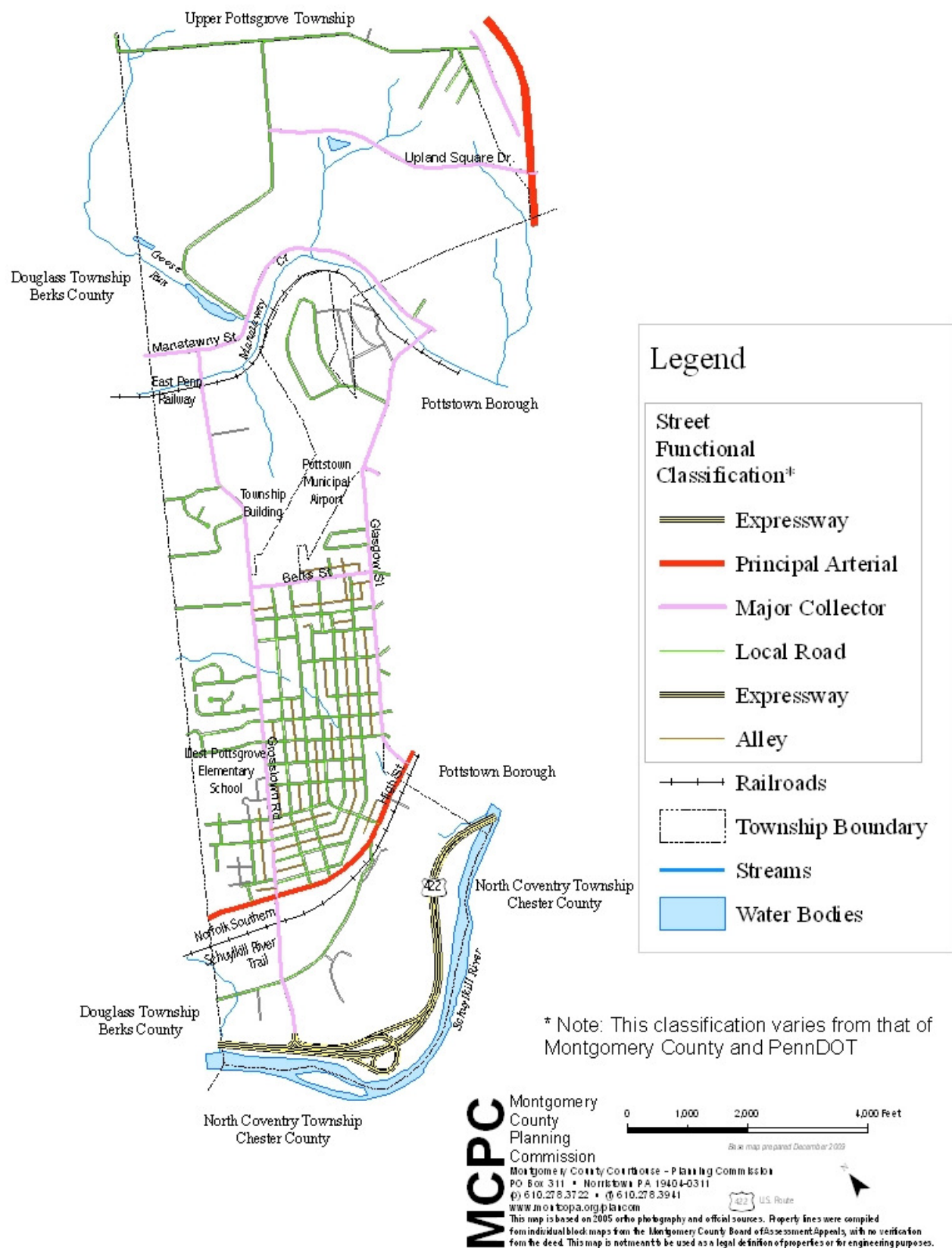


Figure 4.10: Street Classification Design Guidelines

Functional Classification	Street Name	Right-of-Way	Lanes	Travel Lane	Left Turn Width	Paved Shoulder	Parking Lane	Bicycle Lane
Principal Arterial	High Street	60' - 80'	2 - 3	12' - 14'	11' - 12'	4' - 10'	9' - 10'	5' - 6'
Major Collector	Berks Street	50' - 80'	2 - 3	11' - 14'	10' - 12'	N/A	9' - 10'	5' - 6'
	Glasgow Street							
	Grosstown Road							
	Manatawny Street							
	Upland Square Drive							
Local Road	Residential	50'	2	Total Cartway Width 22 to 30				
	Cul-de-sac							
	Nonresidential							

Figure 4.11: Typical Arterial

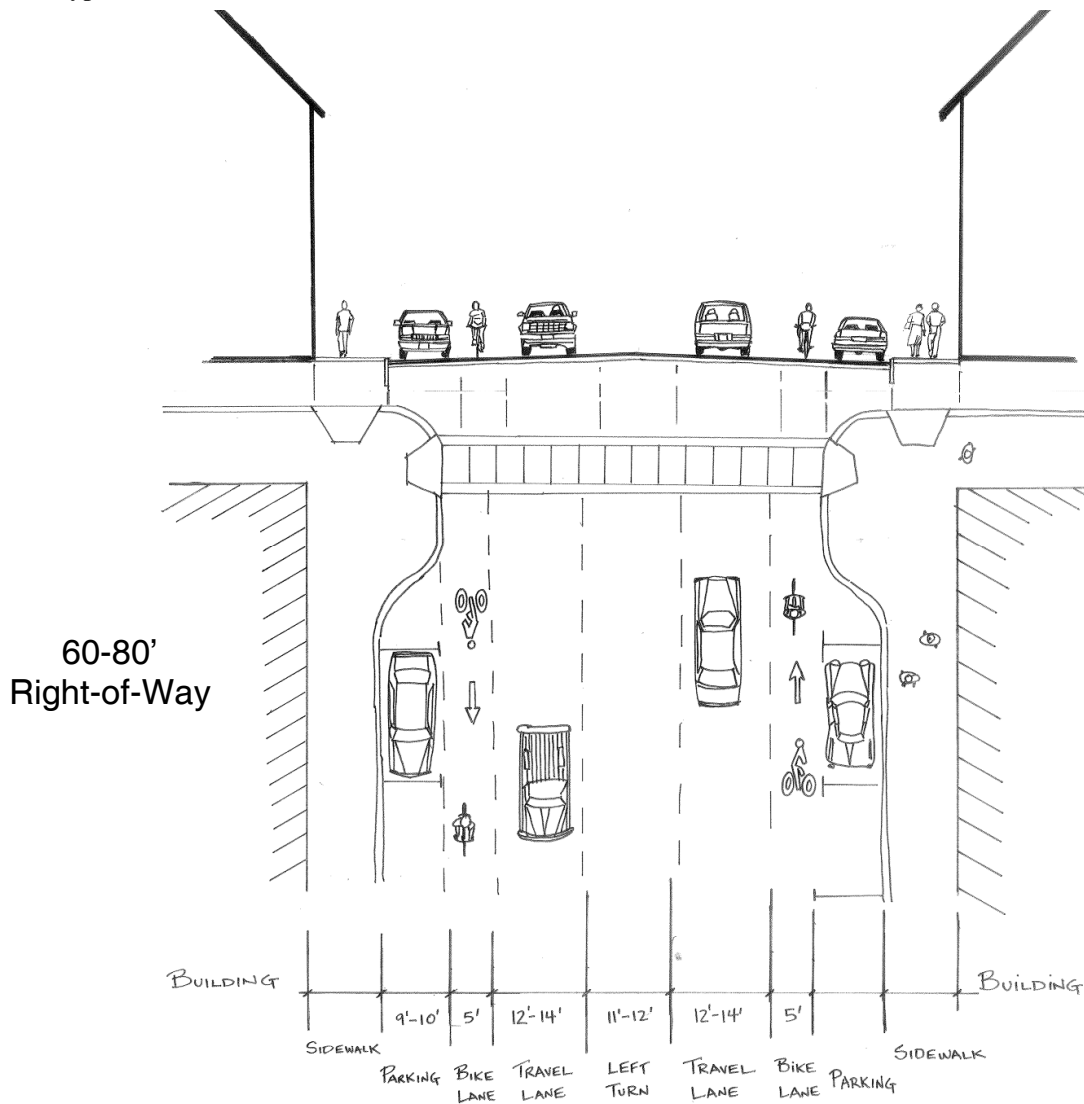
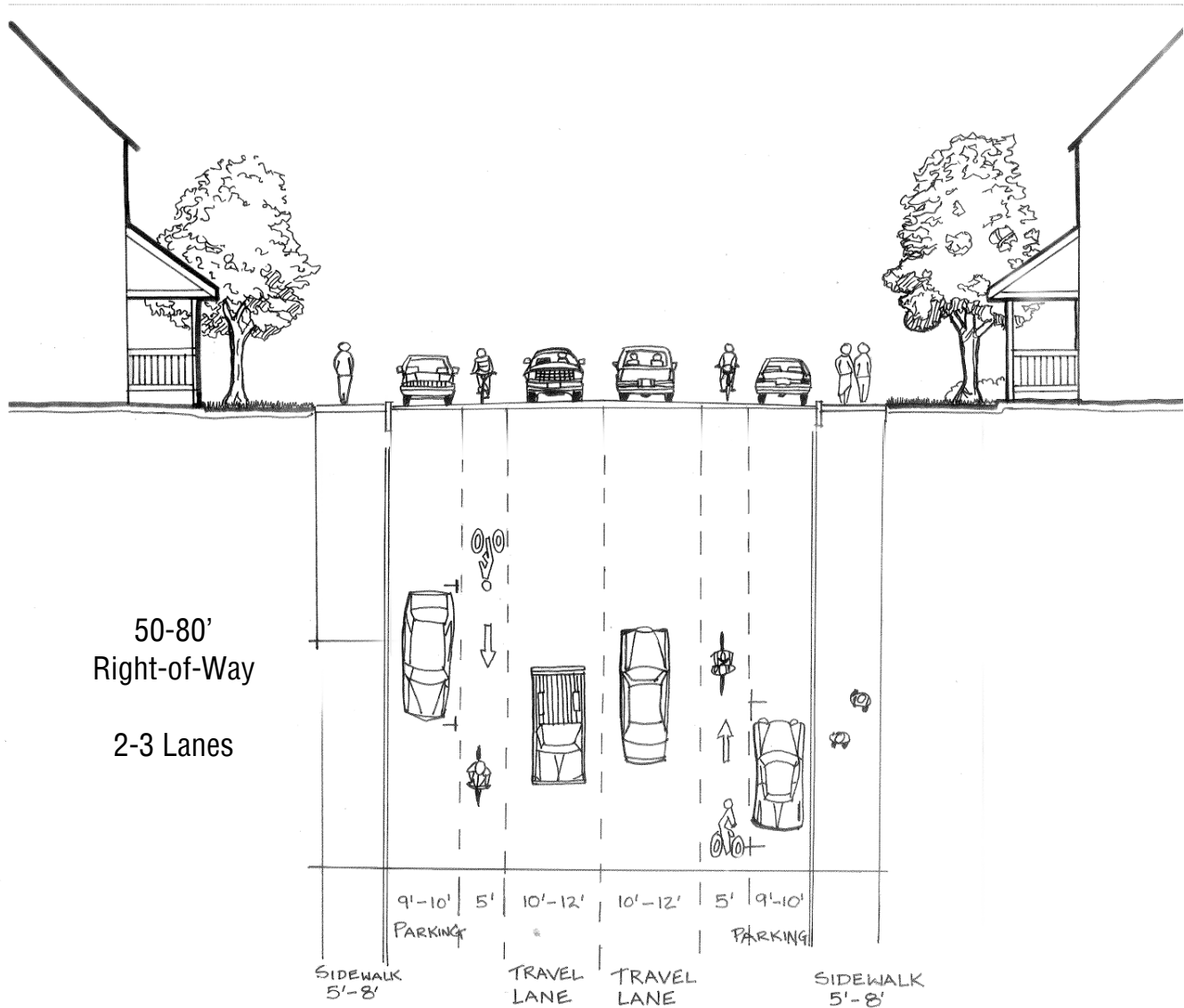


Figure 4.12: Typical Major Collector



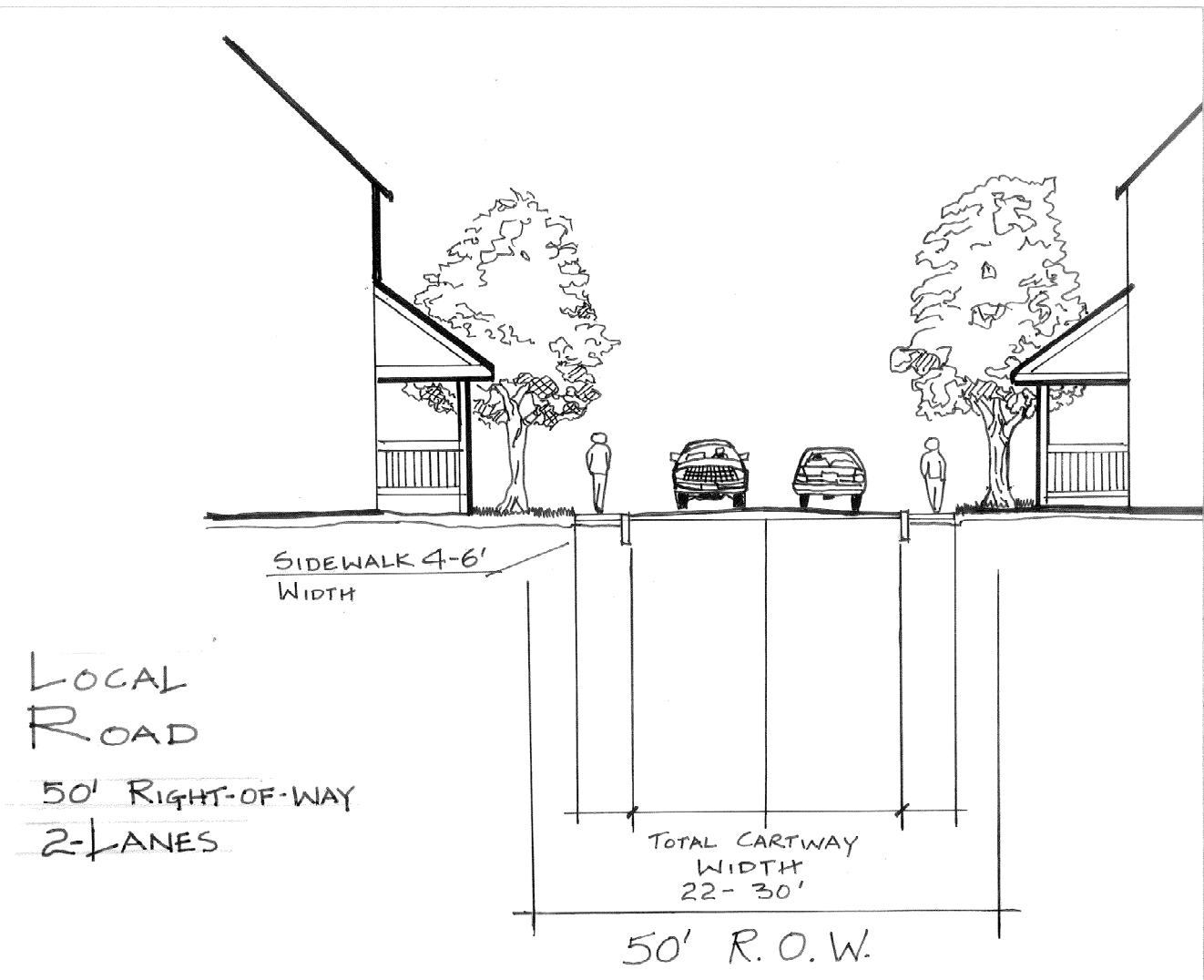
shall be subject to the guidelines for its classification as contained in this Article and presented in **Figures 4.9: Street Functional Classification** and **4.10: Street Classification Design Guidelines**:

1. Arterials (**Figure 4.11: Typical Arterial Road**)
2. Collectors (**Figure 4.12: Typical Major Collector**)
3. Local Roads (**Figure 4.13: Typical Local Road**)
4. Marginal Access Streets
5. Expressway

Section 423. Street Alignment.

Sight distance, horizontal and vertical curvature, super-elevation, and maximum and minimum street grades shall be determined by the Township Engineer in compliance with the standards contained in *A Policy on Geometric Design of Highways and Streets*, published by the American Association of State Highway Transportation Officials, most recent edition, or PADOT standards, whichever is more restrictive. In addition, the following standards and guidelines shall be complied with:

Figure 4.13: Typical Local Road



1. Horizontal curvature for all local access streets shall be not less than 150-foot radius, measured along the street centerline.
2. Long radius, gentle curves shall be used rather than shorter radius curves connected by tangents.
3. Curve-tangent relationships shall follow accepted engineering guidelines for safety and efficiency. For example, minimum radius curves shall not be used at the ends of long tangents.
4. Street grades shall be measured along the centerline in accordance with the following:
 - A. Minimum grade for all streets shall be 1 percent.
 - B. Maximum grades for arterials and collectors shall be 5 percent and for residential streets shall be 10 percent.
 - C. Curve-grade combinations shall follow accepted engineering guidelines for safety and efficiency. For example, minimum-radius horizontal curves will not be permitted in combination with maximum grades.
 - D. At all approaches to intersections, street grades shall not exceed 4 percent for a minimum distance of 50 feet from the intersection of curb lines or edges of cartways.
 - E. Street shall be designed to provide a minimum K value of 25 pci.

Section 424. Street Intersection Design.

All street intersections shall be governed by the standards of this section and the Township's Engineering Standards.

1. Number of Streets. Not more than two streets shall intersect at the same point.
2. Angle of Intersections.
 - A. All intersection approaches shall be designed at 90 degree angles for a minimum of 50 feet from the edge of the cartway of the road intersection road unless sufficient reason exists to justify a lesser angle.
 - B. Where angled intersections are used it is preferable to design them so that the heavier traffic flow will make the obliquely angled turn rather than the acutely angled turn.
3. Improvements to Existing Intersections. When existing streets intersect at odd angles or have more than four approaches, the applicant shall improve the intersection, to bring it into compliance with this Ordinance, as required by Township Board of Commissioners, who shall first seek the advice of the Township Engineer and Planning Commission and other technical advisors or agencies, as appropriate. For state and county highways, improvements shall comply with the requirements of the appropriate agency.
4. Waiver of Improvements. Township Board of Commissioners may waive the above requirements for improvements under one or more of the following conditions:
 - A. When changes made on the applicant's land will not improve the intersections deficiencies.
 - B. When other road improvements are already planned which would correct the problem without changes required of the applicant.
 - C. When not required by PADOT where the intersections are under their jurisdiction.
5. Single-access Street Intersections.
 - A. Intersections with single access shall be designed with the single access street extending as a side street from the through street.
 - B. Four-way intersections may be created using two permanent single access streets intersecting directly opposite one another along a through street, when the through street is a local access street.
6. All intersections shall provide clear sight distance in compliance with PADOT standards.
7. Intersection spacing shall be measured from centerline to centerline.
 - A. Street intersections with major collectors shall be spaced a minimum of 500 feet apart.
 - B. Street intersections with minor collectors shall be spaced a minimum of 350 feet apart.
 - C. Street intersections with local roads shall be spaced a minimum of 300 feet apart.

Section 425. Single-Access Street Regulations.

Any street which is served by only one intersection with a through-street shall be considered a single-access street, regardless of the street's configuration within the proposed subdivision or land development.

1. Single-access streets shall be classified as one of the following:
 - A. Cul-de-sac streets.
 - B. Single-access loop streets.
 - C. Stub streets.
2. Single-access streets shall be subject to the requirements for their classification of street, notwithstanding their single-access status.
 - A. Shall not serve more than twenty dwelling units
 - B. Shall be identified by a standard warning sign stating "No Outlet" when deemed appropriate by Township Board of Commissioners to help avoid mistaken turning movements.
 - C. In addition to required sidewalks, shall be served by an appropriately located pedestrian access way when required by Township Board of Commissioners to connect surrounding neighborhoods and pedestrian destinations.

Section 425. Single-Access Street Regulations

- D. Shall be served by an appropriately located and constructed emergency access way when required by Township Board of Commissioners using the following standards:
 - 1) Minimum cartway width shall be 10 feet.
 - 2) Pavement shall satisfy the standards of the Township Engineer.
 - 3) When not paved, the cartway shall be constructed of crushed stone of appropriate size, depth, and compaction to support the largest Township fire trucks under all weather conditions. Placed on top of the 6 inches of crushed stone shall be an interlinked porous pavement constructed of fiber reinforced polyethylene or concrete grass pavers. All void areas shall be filled with topsoil and seeded with an appropriate grass mix.
 - 4) Markings or appropriate form of identification shall be placed at the entrance to the emergency access way. If necessary, breakaway bollards shall be installed at each end of the emergency access way.
 - 5) Emergency access ways shall be maintained through properly recorded easements or deed restrictions which at a minimum prohibit the planting of any vegetation except grass within the access way.
 - 6) May be made available for pedestrian access.
3. The Township may request the applicant to provide a permanent easement for snow removal. The easement shall have a minimum length along the right-of-way line of 40 feet and a depth of 15 feet. When curbing is required, a curb depression shall also be placed in this easement area. No shrubbery, fence, mailbox, or any other obstruction shall be placed within the easement to hinder the placement of the snow.
4. Single-Access Loop Streets shall not under any circumstances exceed 1,200 feet in length, measured from the intersection with the through street, along the entire centerline around to its intersection with itself.
5. Cul-de-sac Streets.
 - A. Shall be permanently closed to vehicular traffic at one end.
 - B. Shall be a minimum of 250 feet but not exceed 500 feet in length. Measurement of the length shall be made from the centerline of the abutting through road or point of intersection with another cul-de-sac to the centerline of the turnaround, measured along the cul-de-sac street's centerline.
 - C. Shall be provided with a vehicular turnaround at the closed end with a right-of-way radius of at least 50 feet, and a paving radius of at least 40 feet. Alternative vehicular turnaround designs are encouraged to improve traffic flow and overall design of the subdivision. If an off-set bulb turnaround is used, the left side bulb configuration is preferable. In addition, parking is prohibited on the cul-de-sac by order of the Fire Marshall.
 - D. No more than four lots shall have frontage on the circular turnaround portion of a cul-de-sac street, and no more than four driveways shall have access to the circular turnaround portion.
 - E. Shall not extend from a single-access loop street.
 - F. Landscaped cul-de-sac islands are encouraged and shall conform to the following standards.
 - 1) Shall be located within the bulb of a cul-de-sac and be concave for use as part of the stormwater management infrastructure. Efforts should be made to retain the existing vegetation on the site within these islands.
 - 2) Shall have a maximum radius of 24 feet and be surrounded by paving on all sides.
 - 3) Shall be designed to allow for emergency vehicle access into the cul-de-sac.
 - 4) In the event that right-of-way grading will not permit the retention of existing vegetation in a cul-de-sac, the landscaping proposed for the island shall be of low-maintenance varieties as approved by Township Board of Commissioners. The landscaping plan shall specifically describe the maintenance required for any landscaping proposed on the landscape island.
6. Stub Streets.
 - A. Shall be provided in appropriate locations for vehicular access to abutting undeveloped lands when required by Township Board of Commissioners, upon advice of the Township Planning Commission and Engineer.
 - B. Shall not be longer than:
 - 1) the depth of one building lot abutting the collector street, or;
 - 2) the width of two building lots abutting the stub street.

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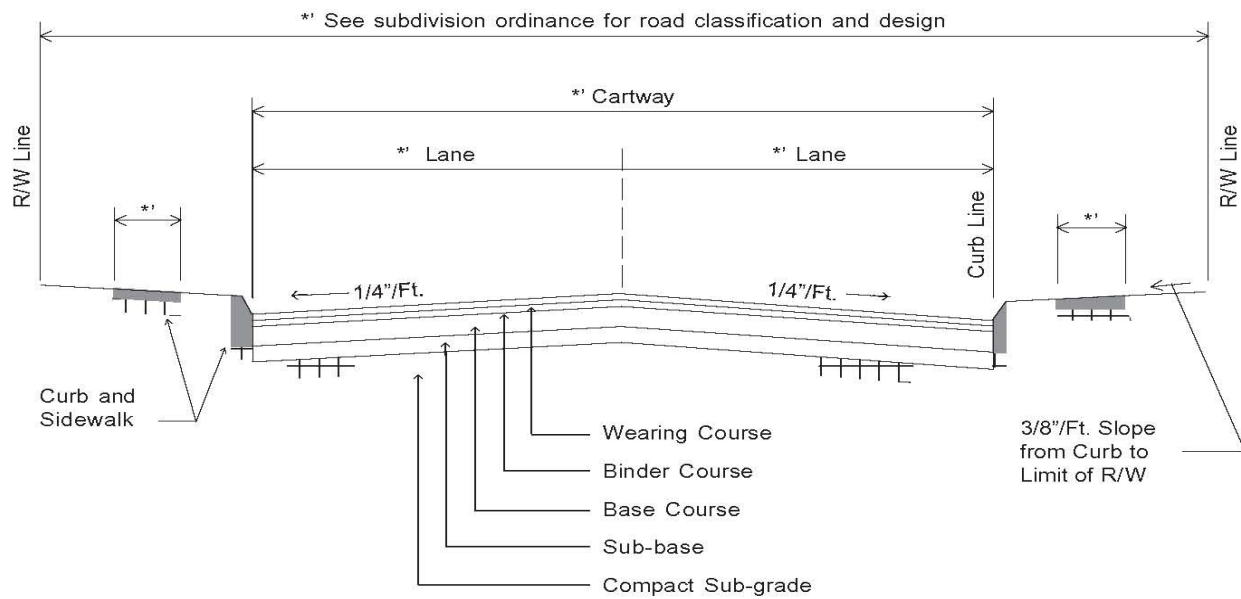
- C. Shall be provided with a vehicular turnaround.
- D. Shall be constructed to the property line in accordance with the standards of this Ordinance applicable to the classification of streets it will be upon extension.

Section 426. Roadway Improvements.

1. All adjacent structures and areas disturbed or damaged during construction shall be properly repaired, restored, or replaced to the satisfaction of the Township by the party causing the damage.
2. All trees, roots, stumps, brush, down timber, wood, rubbish and any objectionable material shall be removed from the full legal right-of-way, or as approved by the Township Engineer. Efforts shall be made during construction of roadways to preserve any vegetation specifically for preservation identified in the landscaping plan.
3. Paving. The pavement of all streets and all commercial, industrial, and multifamily parking areas and driveways into and out of parking areas shall be installed as shown on the final plan and in accordance with the following standards:
 - A. General. All paving shall be constructed both as to materials and methods, generally in conformance with applicable portions of PADOT Specifications Publication 408- 1990 or more current edition.
 - B. Pavement Design. Pavement construction shall conform to the minimum standards for different types of streets and parking areas as indicated in **Figure 4.15: Paving Cross-Section**. All pavements, except where super-elevated or curves, shall conform with typical roadway cross sections in **Figure 4.15**.
 - D. Alternative Paving. Alternative paving specifications may be approved for roads, driveways, and parking lots not intended for dedication to the Township, in commercial, industrial, rural, and multifamily areas. Porous paving systems are encouraged for use on parking lots.
 - E. Aggregates, coarse and fine, for binder coarse shall be made from stone, gravel, or other recycled aggregate or glass, and shall meet the quality requirements for Type A stone and Type A gravel. Fine aggregate shall be natural sand, manufactured sand or fine recycled glass cullet composed of free hard, durable, uncoated particles and free of lumps of clay and organic material. Fine sand shall meet the gradation requirements in Table A, Section 703, PADOT Publication 408, latest revision. The coarse aggregates shall meet the grading requirements indicated above.
4. Radii of Pavement and Right-of-Way at Intersections. Street intersections shall be rounded with tangential arcs at pavement edge (curb line) and right-of-way lines as listed below. Where two streets of different right-of-way width intersect, the radii of curvature for the widest street shall apply as shown in Figure 4.15.
5. All radii specified herein must be increased if large trucks, fire trucks, or other emergency vehicles would have difficulty with ingress or egress as determined by the Township Fire Marshall.

Figure 4.14: Minimum Street Construction Standards

	Standard	Alternate
Super-Pave Surface Course	1½”	1”
Super-Pave Binder Course	2”	2”
Super-Pave Dense Graded Binder Course	—	—
Bituminous Concrete Base Course	—	4”
PADOT No. 2A Course Aggregate Subbase	3”	4”
Minimum Structural Number	2.8±	
NOTES 1. All thickness specifications are for compacted materials. 2. Permanent cul-de-sac street, marginal access street, service street, and off-street parking construction shall conform to standards for local and residential streets. 3. All base courses and/or Super-Pave Binder Course shall be overlaid with a wearing course no later than one year after installation, unless approved otherwise. Binder course shall be installed immediately following base course installation.		

Figure 4.15: Paving Cross-Section**Figure 4.16: Radius of Curvature**

Type of Street	Minimum radius of arc at intersection of pavement edge or curb line	Minimum radius of arc at intersection of right-of-way line
Arterial	35' (or more as may be required)	20' (or more as may be required)
Collector	35'	20'
Local Access	25'	15'

6. **Pavement Cross Slopes.** The typical pavement cross slope on proposed streets shall not be less than 1/4-inch per foot and not more than 1/2-inch per foot. The typical slope of the shoulder areas shall not be less than 3/4-inch per foot and not more than 1-inch per foot.
7. **Driveway Apron.** The concrete apron in the driveway area shall be 6 inches thick concrete 4000 psi compression strength reinforced with wire 6 inches by 6 inches, 10 gauge wire (minimum). The wire shall be installed so that it is not closer than two inches from the top or bottom surfaces of the driveway. Six inches crushed stone shall be used as a bedding under the driveway apron..
8. Driveways normally used by not more than 25 vehicles per day shall comply with the standards contained in the Pennsylvania Code, Title 67, Transportation, Chapter 441, Access to and Occupancy of Highways by Driveways and Local Roads, Section 441.8, (i), (5), Grade Requirements Where Curbs and Sidewalks are Present. Driveways normally used by more than 25 vehicles per day shall comply with standards appropriate for their anticipated traffic volumes in conformance with accepted engineering standards and practices.
9. Maximum grade requirements shall not be waived unless extremely difficult circumstances exist and cannot be mitigated by alter- native locations, designs, or lotting, in which case a safe, practical alternative may be permitted by Township Board of Commissioners, upon recommendation of the Township Engineer.

Section 427. Driveways Review and Approval.

1. The term "driveway" as used here refers to every entrance or exit used by vehicular traffic to or from properties abutting a Township road. The term includes proposed streets, lanes, alleys, courts, and ways.
2. Applicants shall submit Sketch Plans to the Township Planning Commission, for their evaluation and advice, in the following circumstances:

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- A. When any residential dwelling units are proposed along an existing Arterial or Collector street.
- B. For all nonresidential proposals which require a new driveway or upgrading of an existing driveway.
- C. For all proposals whose driveways would generate 25 or more vehicular trips per day, based on I.T.E. trip generation standards.
3. The Township Planning Commission shall review the proposal in accordance with the procedures of Article 3 of this Ordinance.
4. Following evaluation by the Township Planning Commission, the applicant may submit plans to the state or Township for formal review and, as appropriate, approval and issuance of permits.
5. No driveway location, classification, or design shall be considered finally approved by the Township unless permits have been granted by the state and/or Township and preliminary plan approval has been granted by Township Board of Commissioners for the subdivision and/or land development which the driveway(s) will serve.

Section 428. Driveway Intersections with Streets.

1. The term “driveway” as used here refers to every entrance or exit used by vehicular traffic to or from properties abutting a township road. The term includes proposed streets, lanes, alleys, courts, and ways.
2. Driveway intersections with streets:
 - A. Shall provide adequate sight distance in compliance with the standards contained in the PADOT standards.
 - B. Shall not cause or contribute to:
 - 1) hazards to the free movement of normal street traffic.
 - 2) traffic congestion on the street.
 - 3) interference with the design, maintenance, and/or drainage of the street.
 - C. Shall be designed and constructed in compliance with Title 67, Chapter 441 of the Pennsylvania Code unless Township standards are more restrictive.
3. In order to facilitate safe and efficient access between streets and driveways, the number of driveways permitted to serve individual parcels of land shall be kept to the minimum needed to adequately serve the parcel in question.
 - A. Properties with frontages of 100 feet or less may be permitted not more than one driveway intersection with a street. Exceptions may be made when adjacent property owners share parking, or when the need is determined in a traffic study prepared by a qualified traffic engineer.
 - B. Not more than two driveway intersections with the same street may be permitted for any parcel of land unless anticipated traffic volumes warrant more than two, and then only when supported by a traffic study prepared by a qualified engineer warrants more than two driveway intersections.
4. Driveway intersections serving individual parcels of land may be prohibited by Township Board of Commissioners where such intersections would create congestion, interference, and/or hazards to traffic flow and safety by reason of street grades, land forms, vegetation, frequency of driveway intersections, limited sight distances, and/or high speed traffic flow. In such cases, Township Board of Commissioners may permit reasonable alternative forms of vehicular access to the parcel of land by means of:
 - A. Marginal access streets or driveways.
 - B. Reverse frontage lotting.
 - C. Other means which are legally and technically suitable in the opinions of the Township Solicitor and Engineer.
5. Where driveway intersections are prohibited by Township Board of Commissioners and alternative forms of vehicular access would cause an undue burden upon an applicant, Township Board of Commissioners may permit an alternative interim access solution in compliance with the following:
 - A. It is the safest feasible alternative, acceptable to the Township Engineer and/or PADOT.
 - B. Suitable provisions are made for a preferable permanent access solution, consistent with **Subsection 428.4**, above, including legal agreements to enable implementation of the permanent solution.
6. Distance from Street Intersections: Driveways shall be located as far from street intersections as is reasonably possible.

7. Choice of Streets: When streets of different classes are involved, the driveway shall provide access to the street of lesser classification unless this requirement is waived by Township Board of Commissioners for reasons of sight distance, incompatibility of traffic, grading, drainage, or other major reasons.
8. Stopping Areas: Regardless of the driveway classification, all driveways shall be provided with a stopping area within which the grade shall not exceed 6 percent. The stopping area shall be measured as follows:
 - A. The length of stopping area shall be a minimum of 20 feet, or the length of the longest vehicles anticipated to use the driveway, whichever is greater.
 - B. Stopping areas shall be measured from the cartway line for all streets.
9. Maximum Grades for Driveways.
 - A. Residential driveways shall not exceed 15 percent grade.
 - B. All other driveways shall not exceed 7 percent grade.
 - C. All driveways shall be provided with a stopping area within which the grade shall not exceed four percent.
10. Sight Distance Determinations. Determination of sight distances at intersections of new driveways and streets with existing Township roads shall be in accordance with the following provisions.
 - A. Access driveways shall be located at a point within the property frontage limits which provides at least the minimum safe stopping sight distance (SSSD), as determined by the standards within Chapter 441 (Access to and Occupancy of highways by driveways and Local Roads) Title 67 of the Pennsylvania Code.
 - B. The calculated minimum SSSD shall be obtainable and measured from a point 10 feet back of the pavement edge and 42 inches above the road surface to a point six feet above the road surface.
 - C. If the minimum required SSSD's cannot be achieved, the Township may exercise one or more of the following options:
 - 1) Prohibit left turns by exiting vehicles.
 - 2) Restrict turning movements to right turns in and out of a driveway.
 - 3) Require installation of a right turn acceleration lane or deceleration lane.
 - 4) Require installation of a separate left turn standby lane.
 - 5) Alter the horizontal or vertical geometry of the roadway.
 - 6) Deny access to the road.

Section 429. Bridges and Culverts.

1. Bridges and culverts shall be designed to meet current PADOT Standards to support expected loads and to pass design stormwater flows. They shall be constructed to the full width of the planned cartway. Allowance for sidewalk must also be made.
2. Where County owned roads or bridges are involved, the County Engineer must review and approve all proposals.
3. It is unlawful to construct any dam or other water obstruction, or to make any change in or addition to, any existing water obstruction, or in any manner change or diminish the course, current, or cross-section of any stream or body of water, without first having made written application to and obtained a permit or consent in writing from PADEP.
4. The following information is required: Drawings to include location plan; cross-section of present bridge if one exists; profile of stream for a reasonable distance above and below bridge site, showing slopes of bed, normal water surface and flood water surface. If the bridge is on a skew, give the angle of the center line of the bridge with the direction of the line of flow. In addition, the following information is required for new bridge construction: the total drainage area above the bridge site; description of watershed; length of stream from source to bridge site and to the mouth; character of stream bed and banks; extent and depth of overflow during floods; effect of previous floods upon bridges, their span and clearance; whether bridge will be within backwater influence of parent stream.
5. A complete set of structural computations and drawings shall be submitted with plans involving construction of bridges and culverts.

Sections 430-431

Section 430. Street Names.

1. **Street Names.** Street names shall be determined in consultation with the Township. Street names should bear a reasonable relationship to significant natural features or history of the community. Efforts should be made to reduce the occurrence of similar names or similar sounding names within the Township or postal delivery area.
2. **Street Signs.** The developer shall erect at every intersection a street sign or street signs having thereon the names of the intersecting streets. At intersections where streets cross, there shall be at least two such street signs and at the intersections where one street ends or joins another street, there shall be at least one sign. Street signs shall be erected when the first dwelling on the street is occupied. Temporary street signs may be erected with the permission of Township Board of Commissioners. Any temporary signs will be replaced prior to roadway dedication.

Section 431. Parking and Related Internal Driveways.

Parking and related internal driveways shall be governed by the following regulations.

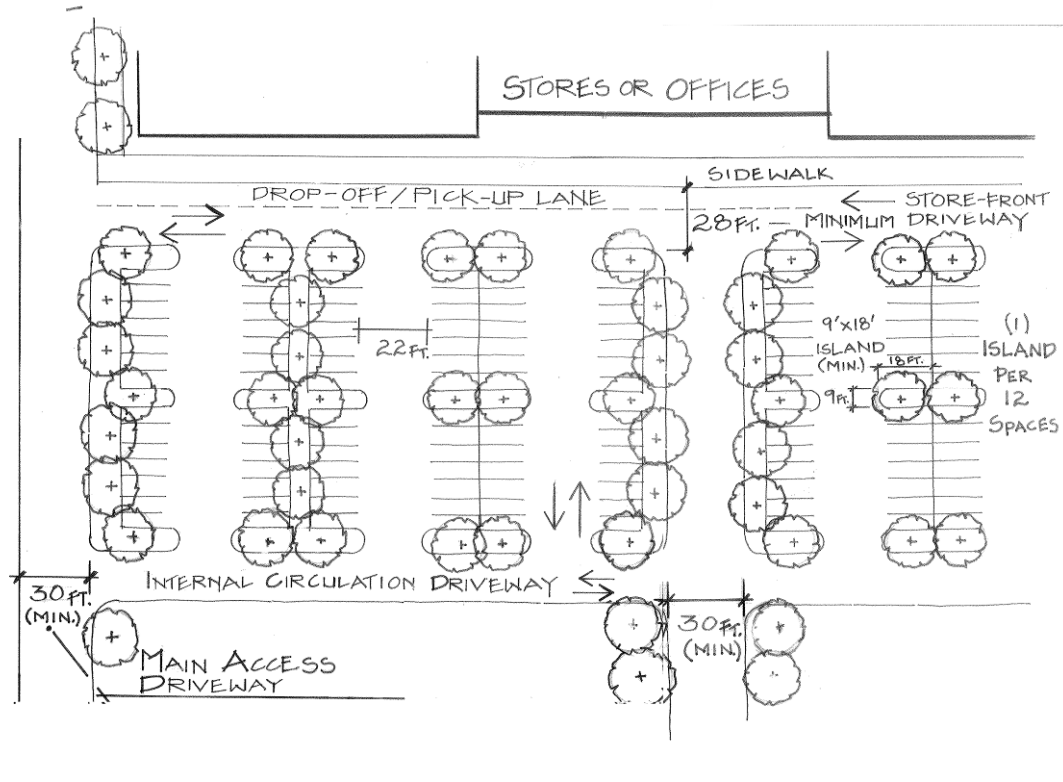
1. **General.**
 - A. The specific purposes to be served by these requirements are:
 - 1) To add visual character and improve the appearance of parking areas by reducing their massiveness into smaller units.
 - 2) To integrate parking areas into the pedestrian circulation system.
 - 3) To provide shade for parked cars and reduce heat islands, stormwater runoff, and air pollution.
 - 4) To reduce random vehicular flow across parking areas.
 - 5) To permit a high level of visibility for those uses for which visibility is an important factor.
 - 6) To facilitate snow removal and storm drainage, and to conserve energy in construction and resurfacing operations, by laying out the paving surface with minimal obstructions.
 - B. The terms "parking lot," "parking area," and "parking" are interchangeable. "Parking" includes the driveway which provides direct access to the parking spaces.
 - C. Off-street parking facilities shall be provided in compliance with the parking requirements of the Zoning Ordinance and the regulations contained herein.
 - D. Angled parking shall not be permitted along public or private streets or within parking lots, except where specifically permitted by this or other ordinances. Perpendicular parking shall not be permitted along public or private streets.
 - E. The installation of stormwater storage/infiltration facilities, such as vegetated swales, infiltration galleries, or beds beneath parking areas, are strongly encouraged. These facilities avoid the generally negative visual impacts of surface detention or retention facilities, and enhance groundwater recharge, with the attendant positive effects on stream flows and quality.
2. **All Parking Lots.**
 - A. Parking shall not be permitted along driveways which serve as the entrance(s) or exit(s) to parking areas with a capacity of 50 cars or more. A minimum driveway length of 50 feet shall be provided between the road ultimate right-of-way line and the first parking space or internal driveway intersection.
 - B. In any case not regulated by the Zoning Ordinance, parking areas shall not be located closer than 15 feet from any tract boundary line and 10 feet from any legal right-of-way line.
 - C. Where the edge of an existing parking area is located close to a street, driveway, or other parking area and the property is proposed for subdivision and/or land development, a minimum separation of 10 feet shall be provided between these features unless a shared parking or cross access arrangement is proposed.
 - D. Dead-ended parking areas shall be discouraged when the required parking capacity can be accommodated in a layout that permits more convenient vehicular movements. However, extraneous through-traffic flow should be avoided.
 - 1) Up to 30 parking spaces may also be located in a dead-ended parking area if there is no more desirable alternative feasible, and sufficient back-up areas provided for the end stalls.

Section 431. Parking and Related Internal Driveways

- 2) More than 30 parking spaces may be located in a dead-ended parking area only if a turnaround area is provided at the closed end, suitable for passenger car turning. The turnaround area may be circular, "T" or "Y" shaped, or other configuration acceptable to Township Board of Commissioners.
 - E. Parking spaces designed for the exclusive use by disabled persons shall be installed in all parking lots as close and convenient to building entrances as is reasonable. The specific number and locations of handicapped stalls shall be in conformance with the Americans with Disabilities Act (ADA).
 - F. Provisions for pedestrian safety within a parking lot shall be required by providing sidewalks and delineated crosswalks.
 - G. Planting islands shall be constructed within all parking lots with more than 12 spaces based on the following standards:
 - 1) One planting island shall be provided for every 12 parking stalls. There shall be no more than 12 continuous parking stalls in a row without a planting island.
 - 2) Alternative planting islands (without planting islands located every 12 parking stalls) must provide 1 canopy tree for every 10 parking stalls in planting island areas and perimeter parking planting areas at the discretion of Township Board of Commissioners
 - 3) The ends of all parking rows shall be divided for driving lanes by planting islands.
 - 4) Planting islands shall be a minimum of 9 feet by 18 feet in area. Unless designed to function as part of the stormwater management system, planting islands shall be underlain by soil mounded up to six inches minimum above the paved parking or drive area and shall be protected by curbs or wheel stops.
 - H. Parking lots with more than 12 stalls shall require planting strips around the entire perimeter of the parking lot except where buildings, driveways, and walkways are located.
 - I. Unless otherwise described in this ordinance, where required, all planting strips shall be a minimum of 10 feet wide and run the length of the parking row. Unless designed to function as part of the stormwater management system, planting strips shall be underlain by soil mounded up to six inches above the paved parking or drive area and shall be protected by curbs, wheel stops, or bollards.
3. Parking Area Dimensions.
 - A. Parallel parking stalls shall have minimum dimensions of 9 feet by 22 feet.
 - B. Perpendicular parking stalls shall have minimum dimensions of 9 feet by 18 feet with a 22-foot aisle.
 - C. At the discretion of Township Board of Commissioners the minimum length of parking stalls may be reduced by 1 foot if stalls are designed to allow vehicles to overhang an area of grass or other pervious surface. Bumper stops shall be provided which allow the parked vehicle to extend at least 1 foot over the edge of the pavement.
 - D. Where parking stalls abut sidewalks, parked vehicles shall not overhang the sidewalks unless the sidewalk is widened by two feet. Wheel stops are encouraged in order to allow for full pedestrian use of the sidewalks.
 - E. Parking spaces for physically disabled persons shall be constructed in accordance with standards developed under the Americans with Disabilities Act (ADA) in conjunction with the Pennsylvania Uniform Construction Code.
 4. Residential Parking Lots.
 - A. Parallel rows of parking spaces, which are not separated by a driveway, shall be separated by a planting strip.
 - B. A single row of parking spaces located parallel to and between two driveways, shall be separated from one of the driveways by a planting strip, a minimum of 8 feet wide.
 - C. Large parking lots shall be divided into smaller parking areas of no more than 40 stalls by planting strips.
 - D. No less than 20 feet of open area shall be provided between the curb line of any parking area and the outside wall of the dwelling unit.
 5. Nonresidential Parking Lots.
 - A. Parking lots with a capacity of from 41 to 100 cars shall require a planting strip around the perimeter and an additional 10 percent planting area(s) within the perimeter of the lot. Refer to **Figure 4.17: Typical Parking Lot Configuration** for an illustration of generalized locations and use of planting strips and planting islands.

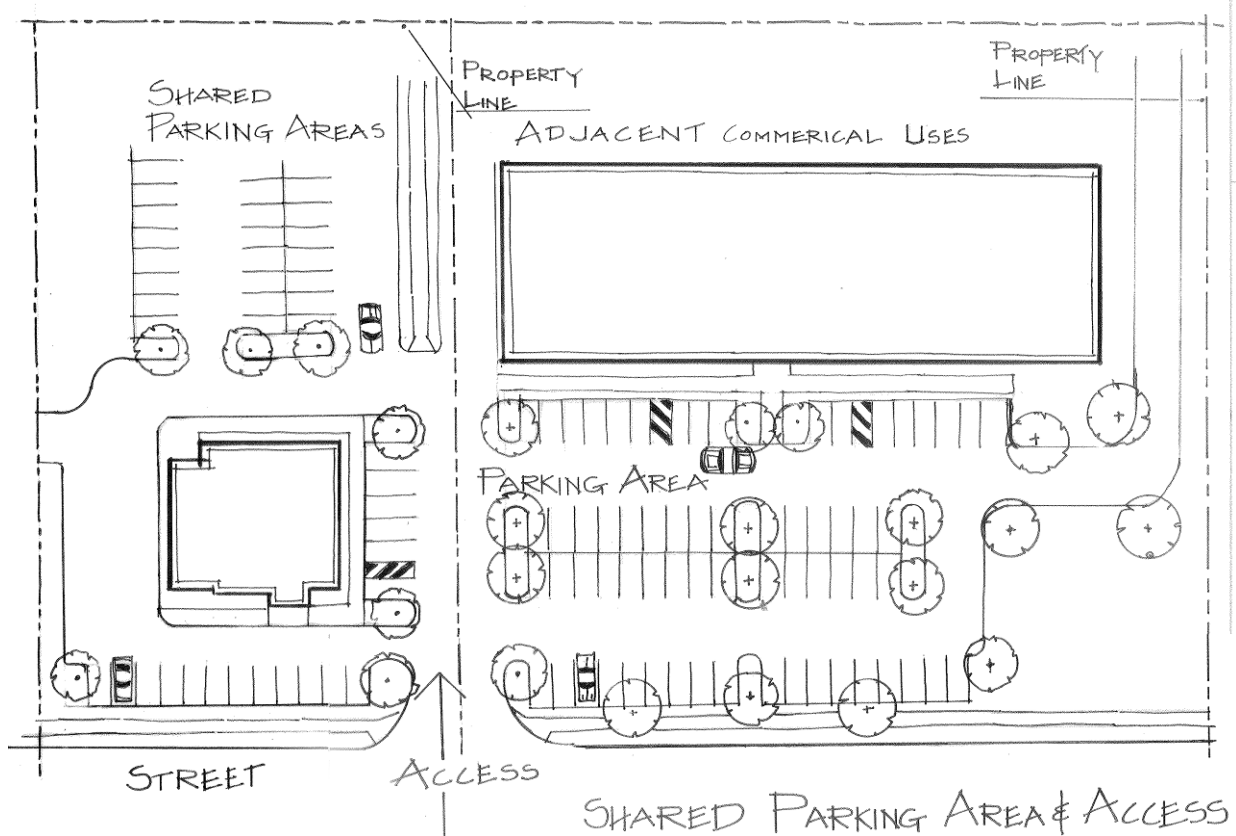
Section 431. Parking and Related Internal Driveways

Figure 4.17: Typical Parking Lot Configuration



- B. Parking lots for more than 80 cars shall be divided into sections no greater than 80 stalls each by planting strips.
- 1) These planting strips shall be located parallel to the rows of parking, to serve the following purposes:
 - a. To separate main access (entrance-exit) driveways from rows of parking spaces.
 - b. To separate other major driveways (service drives, general internal circulation) from rows of parking spaces.
 - c. To separate large parking areas into smaller units at intervals of not more than 4 rows of parking stalls.
 - 2) The ends of rows of parking shall be marked by planting islands.
 - 3) For parking areas with an ultimate capacity greater than 400 cars, the requirements may be modified by Township Board of Commissioners to provide separation into units at intervals of 6 rows of parking stalls, with each unit capacity no greater than 100 cars.
 - 4) The applicant may request the Township to permit an alternative design which achieves the purposes of these parking area requirements as well or better than the requirements herein. The final decision to permit an alternative design shall be made by Township Board of Commissioners, with the advice of the Township Planning Commission and Engineer.
- D. Shared Access. When shared parking is approved, side and/or rear yard parking requirements may be waived in order to establish unified and continuous parking areas (provided the yard for which relief is granted is a yard which lies along a property which is participating in the shared parking agreement). In such cases, access drives and sidewalks shall be so aligned as to reduce the total number of curb cuts, for traffic safety and congestion reasons. **Figure 4.17: Typical Parking Lot Configuration** illustrates one generalized example of this concept.
- 1) Nonresidential lots shall provide cross-access easements for parking areas and access driveways guaranteeing access to adjacent lots. Interconnections shall be shown on land development plans and be logically placed and easily identifiable to ensure convenient traffic flow.
 - 2) When two or more abutting lots share an access driveway, the driveway should be designed as the main access to those lots, and one or more existing access driveway should then be closed.

Fig 4.18: Shared Parking Arrangement



- 3) Where development of three or more adjoining parcels consolidates vehicular access into one shared driveway, that driveway may be upgraded into a medium volume driveway according to PADOT standards.
 - 4) Shared access may be located entirely on one lot or be split among a common lot line.
 - 5) An interconnection should not be established when all possible interconnections between the two abutting lots would cross wetlands, floodplain, or slopes 15 percent or greater.
 - 6) Access easement and maintenance agreements or other suitable legal mechanisms shall be provided, acceptable to Township Board of Commissioners in consultation with the Township Solicitor.
 - 7) Liability safeguards for all property owners and lessees served by the shared access shall be guaranteed to the satisfaction of Township Board of Commissioners in consultation with the Township Solicitor.
6. Driveways Within Sites Proposed for Nonresidential Development. The following requirements apply to all driveways within all sites proposed for land development.
- A. A smooth transition shall be provided between the driveway section required for access to a public street and the driveway(s) required for internal site circulation.
 - B. Main Access Driveways (entrance-exit), and service driveways handling large trucks shall be a minimum paved width of 30 feet, with one lane in each direction, unless otherwise required by PADOT standards governing the volume of traffic anticipated.
 - C. Access Driveways for cars and other small vehicles which are clearly secondary in importance may be reduced to 20 feet in paved width, unless otherwise required by PADOT standards governing the volume of traffic anticipated.
 - D. Interior storefront driveways in shopping centers shall be a minimum paved width of 28 feet, to allow one lane in each direction and a drop-off/pick-up lane along the sidewalks.
 - E. Driveways along other nonresidential buildings shall be a minimum paved width of 22 feet, except where a drop-off/pick-up lane is proposed.

Sections 431-433

- F. Parking Aisles shall be a minimum 22 feet wide with two-way traffic flow for convenience and efficiency.

Wherever feasible, internal circulation driveways shall extend from access drives in locations which permit and encourage entering traffic to turn and enter the parking aisles without first travelling along a building-front driveway. This feature is intended to reduce the volume of vehicular traffic along building-front driveway to make it safer for pedestrian traffic.

Section 432. Curbing.

Curbing shall be installed along all existing and proposed public and private streets, common driveways, and common parking areas.

1. General

- A. Regardless of small size of a land development or subdivision proposal, curbs shall be required along all existing and proposed public streets within the right of way, private streets, common driveways, and common parking areas.
- B. When utilizing an approved stormwater management technique, Township Board of Commissioners may waive curbing requirements in full or partially. Grass swales and infiltration trenches along streets are encouraged in appropriate locations in the Township provided that pedestrian safety and traffic circulation is addressed.
- C. If for any reason an interim waiver of these requirements is made, a sufficient guaranty shall be posted for the eventual installation of sidewalks, subject to approval by Township Board of Commissioners upon recommendation of the Township Engineer and Solicitor, in accordance with **Section 502: Financial Security** of this Ordinance.
- D. Curb Construction. All curbing shall be constructed both as to materials and methods, generally in conformance with applicable portions of PADOT Specifications Publication 408, current edition. Curbs shall be vertical profile with a minimum of 18 inch structure height. Expansion joints shall be placed every 30 feet, at structures and at the end of the day's work. Concrete curb shall have contraction joints shall be saw cut every 10 feet at a minimum of 2 inches. Concrete shall be a minimum 3000 psi in compression strength.
- E. Intersections where sidewalks are provided shall be provided with depressions for wheel chair use at each corner, and opposite each corner on "T" intersections.

Section 433. Survey Monuments.

- 1. Permanent monuments shall be indicated on the record plan. All monuments shall be constructed of precast concrete or durable stone with metal insert(s), and be 4 inches square with at least 36 inches extending below ground level, or an alternate design approved by Township Board of Commissioners. Street right-of-way reference monuments shall be located on the right-of-way lines at corners, angle points, beginning and end of curves, and as otherwise required by the Township Engineer for all new and existing streets. They shall be placed after a new street and/or lot grading has been completed. Certified copies of this reference information shall be given to both the Township Engineer and the Township Office. When final lot grading has been completed and before the issuance of occupancy permits, permanent monuments shall be set by the subdivider, developer, or builder, at all lot corners and angle points, and at all street intersections and intermediate points as may be required. Security in may be required by the Township at the time of plan approval if the monuments have not already been set.
- 2. Lot Pin Requirements. All lots upon which construction is planned shall be temporarily staked or pinned, or permanently monumented and certified to such by a registered surveyor for the owner, subdivider, builder, or developer, before issuance of a building permit. A signed certificate of compliance must be submitted with a building permit application. Temporary stakes or pins with a surveyor's ribbon attached may be acceptable on existing lots where construction of an accessory building or an addition to the primary structure is proposed, only if construction is begun within 30 days of the certificate of compliance date. Temporary stakes or pins shall remain in place until witnessed and accepted by the Township Building Inspector. Prior to final approval of a new subdivision plan, all new lot corner markers shall be marked with a minimum 5/8 inch diameter metal pin extending at least 24 inches into the ground and at least one inch revealed above the ground surface, or an equivalent metal marker, approved by the Township Engineer. Upon completion of construction and final grading, pins shall be replaced with permanent monuments as described in **Subsection 433.1**, above.
- 3. Original Monuments. In situations where they may be of legal or historical importance, the original monuments and marks must not be destroyed, defaced, hidden, or possibly confused by creating new monuments and marks

unless absolutely necessary, e.g.: the originals are decayed, destroyed, or unsafe. In some cases, to be determined by the Township Engineer, new monuments should be set as a reference or witness to the original monument to avoid disturbing the original. When in the opinion of the Township Engineer, the angle point falls in a location that is not appropriate to set a concrete monument, a written request for a waiver shall be submitted for consideration by Township Board of Commissioners.

4. Bench Marks. The Township elevations are based on the USGS Datum. Location and elevation is available to all Engineers and Surveyors upon request to the Township Engineer's Office. All contours and elevations shown on the plan must be based on this system.

Landscaping

Section 434. Landscaping and Plantings.

1. Required Landscaping Plan.
 - A. Applicants shall submit a landscaping plan as part of the Preliminary Plan submission for all subdivisions and land developments, except for residential subdivisions of three lots or less. The Landscaping Plan shall be prepared by a certified planting professional (landscape architect, nurseryman, arborist, horticulturalist, or urban forester). Township Board of Commissioners may seek the advice of a certified planting professional regarding compliance with the ordinance standards.
 - B. For residential subdivisions of no more than three lots, a formal landscaping plan is not required, but the applicant's plans shall be required to show compliance with the applicable planting requirements herein.
2. Buffers and Screens. Buffer plantings shall be installed in subdivisions and land developments to integrate new developments with surroundings, to separate incompatible land uses by providing screening, and to minimize or eliminate views to certain site elements.
 - A. Buffer plantings shall be required for the following types of development and as otherwise specified in the Zoning Ordinance:
 - 1) All nonresidential development.
 - 2) All single-family detached development over five units.
 - 3) All residential infill development.
 - 4) All multi-family and single-family attached development.
 - 5) Construction of any of the following items which exceeds 2,500 square feet in ground coverage:
 - a. Public utility facilities or structures;
 - b. Waste collection, storage and/or treatment facilities; and
 - c. Any other structure of similar character or impact.
 - B. An on-site investigation by the applicant shall determine the adjacent land uses along each property boundary. In the case of vacant land, the permitted zoning uses shall be used. The existing or zoned uses shall be noted on the plan. In the case of several permitted uses on a site, the most restrictive landscaping requirements shall apply. The Township shall have final approval of interpretation of land uses or zoning map.
 - C. Buffer Area Location and Dimensions:
 - 1) A buffer planting area of not less than 10 feet in width shall be established along all property lines and external street boundaries of the site proposed for subdivision or land development, unless otherwise specified in the Zoning Ordinance.
 - 2) Unless otherwise specified in the Zoning Ordinance the buffer area may be included within the front, side, or rear yard setback.
 - 3) The buffer area shall be a continuous pervious planting area consisting of tall canopy trees, small understory trees, and shrubs, with grass or groundcover. No paving shall be permitted within the buffer areas except for driveway crossings and/or walkways.
 - 4) Parking is not permitted in the buffer area unless a shared parking and/or access arrangement exists.

Section 434. Landscaping and Plantings

Figure 4.19: Buffering Requirements

Proposed Use	Office/Industrial & Public Recreation	Commercial/Industrial	Multifamily, SFA, MHP	Twins, Duplexes, SFD
Office/Institutional ^A	Softening	Softening	Filtering	Screening
Commercial/Industrial	Filtering	Softening	Screening	Screening
Residential ^{B C}	Softening	Filtering	Softening	Softening
Active Recreation (playing fields, golf courses, swim clubs,	Softening	Filtering	Softening	Softening

Figure 4.20: Buffer Components

	Softening	Filtering	Screening		Limited Area		
			Options		(At Discretion of Township)		
			1	2	1	2	3
Canopy tree (2½" min. caliper)	1	2	2	3			
Understory tree (1½" min. caliper)	2	2	2				
Evergreen tree (8' min. ht.)	2	5	8				
Shrub (Deciduous/coniferous mix, 3' min. ht., planted min. of 3' on center)		5	10		20		20
Upright evergreen shrub (4' min. ht., planted min. of 3' on center)				15		30	
4-6' opaque fence or wall			D	D	YES	D	
6' opaque fence							YES
Notes <i>A All uses in office/limited industrial parks shall be considered industrial uses.</i> <i>B All mixed uses that have a residential component shall be buffered as if they were nonresidential uses.</i> <i>C All multifamily or mobile home parks proposed adjacent to other residential uses shall be screened with a filtering buffer.</i> <i>D Uses from Section 434.2.D.(1) shall include this element as well.</i>							

- 5) Stormwater management facilities are permitted in the buffer area provided that the visual screening requirement of the buffer is still met.
- 6) Reverse frontage lots shall follow the requirements described in **Section 403: Lots**.
- 7) **I-Industrial District** Buffer: The Industrial Zoning District requires development which lies adjacent to a residential district to have a 100 foot buffer yard, including a 50 foot planting strip with hedge, evergreen, or other suitable plantings to constitute an effective screen. The buffer shall be provided consistent with the SALDO's **Figure 4.19: Buffering Requirements**.
- 8) **PRC—Planned Retail Center District** Buffer: Where buffer width requirements, or limited area buffer requirements of **Article VIII: PRC Zoning District** conflict with those of the SALDO, the buffer requirements of the PRC District shall supersede those of the SALDO.

Figure 4.21: Softening Buffer

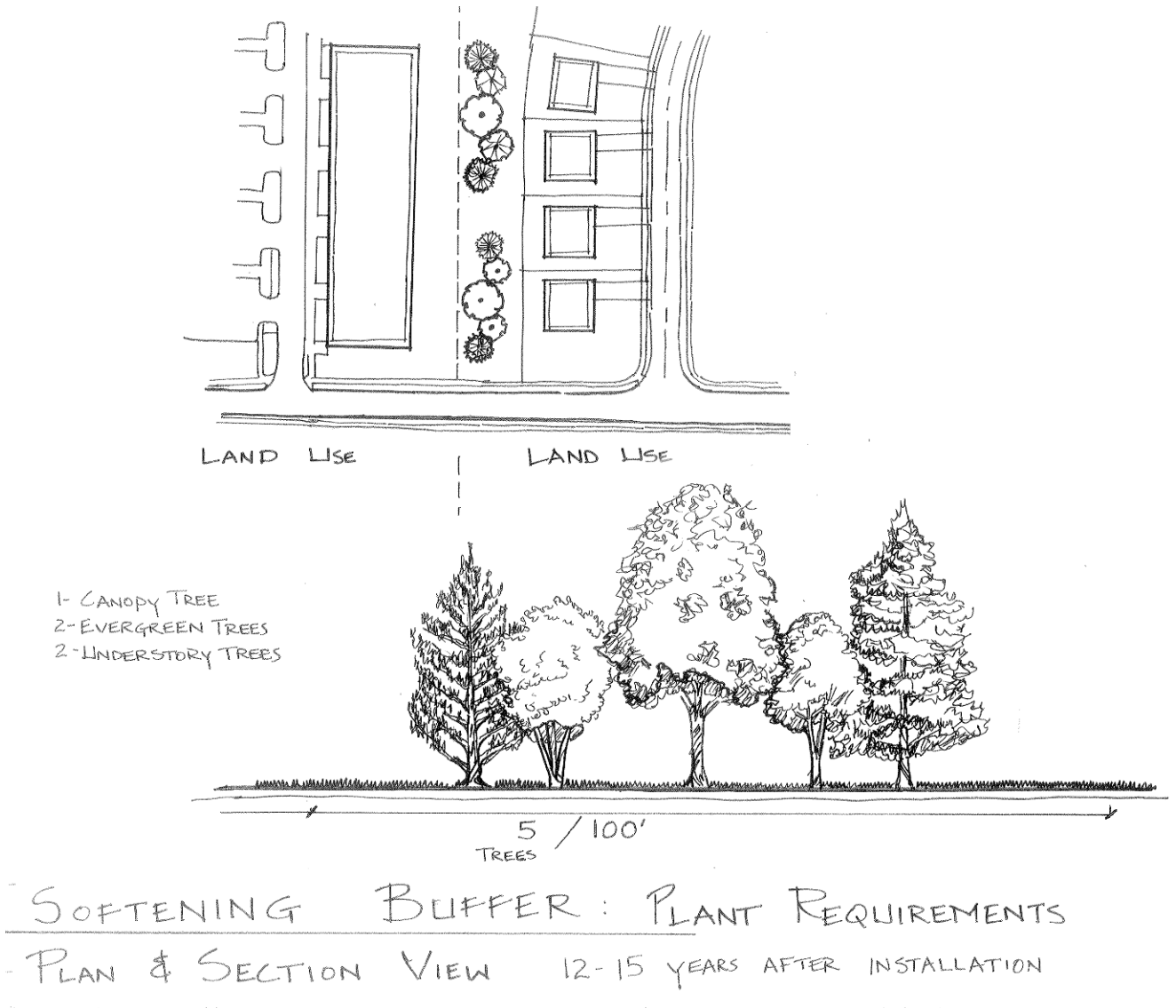


Figure 4.22: Limited Area Buffer, Option #1

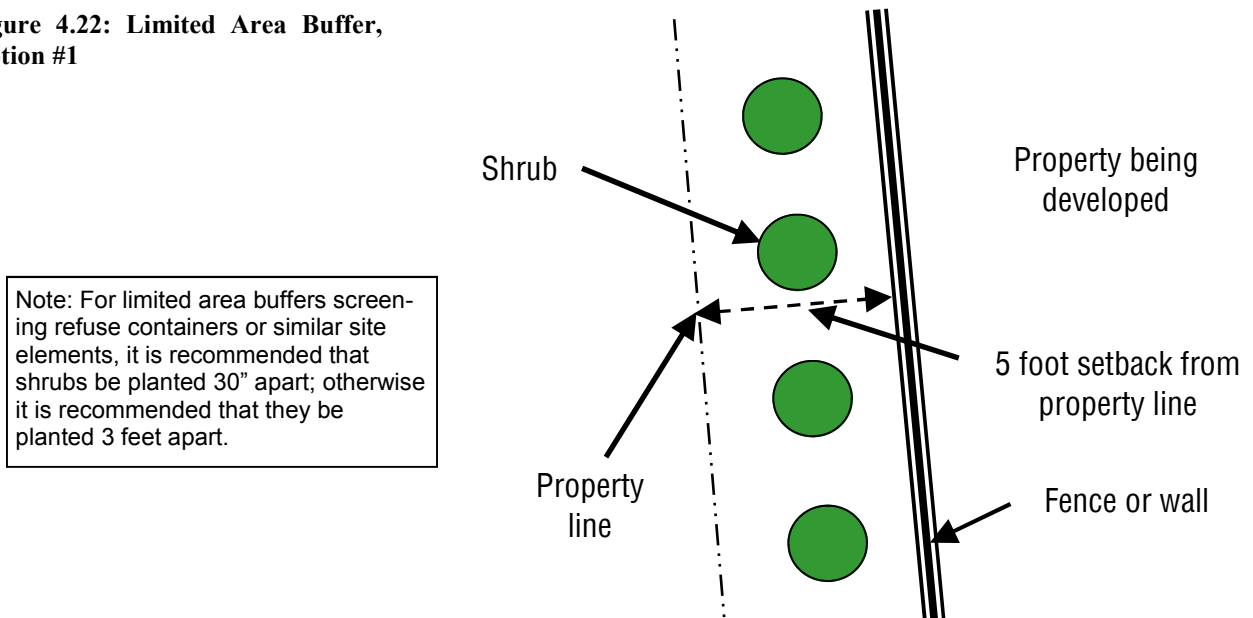
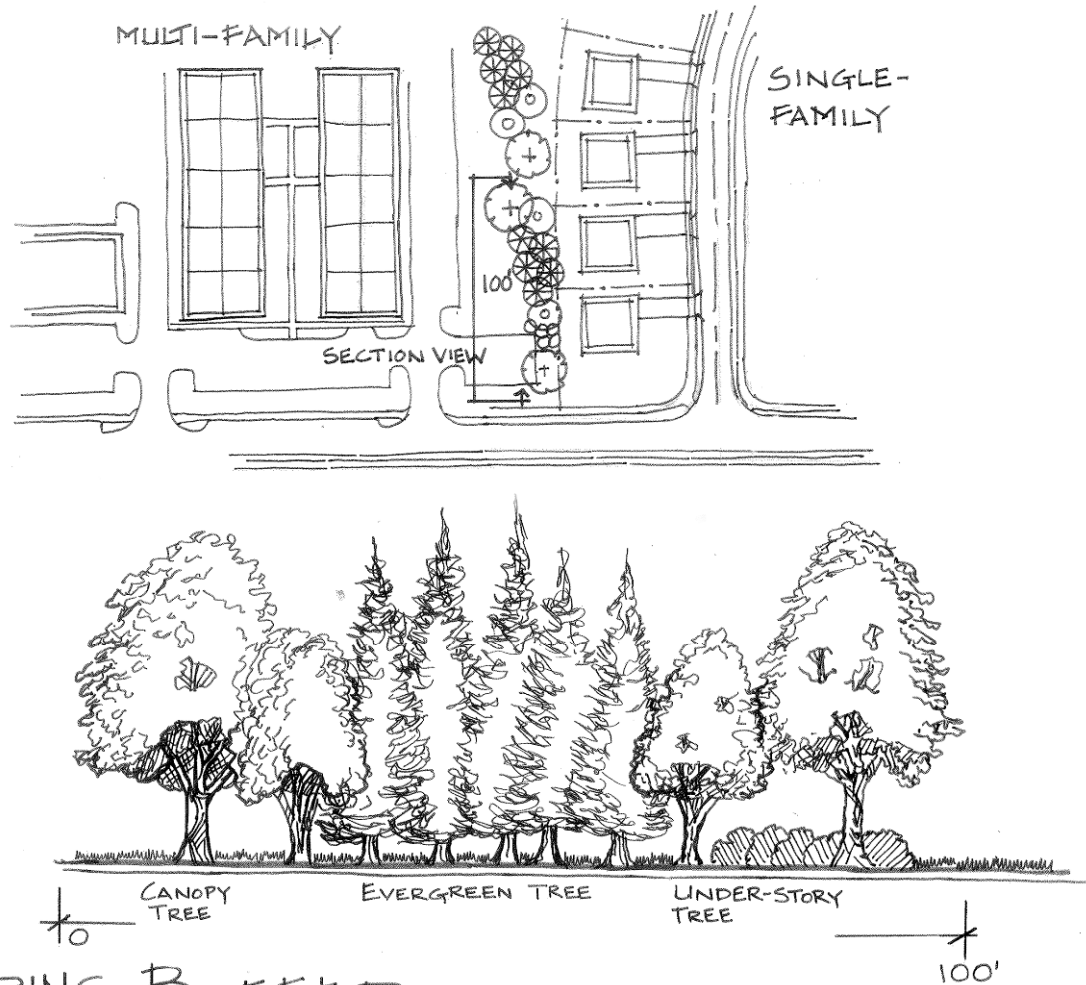


Figure 4.23: Filtering Buffer



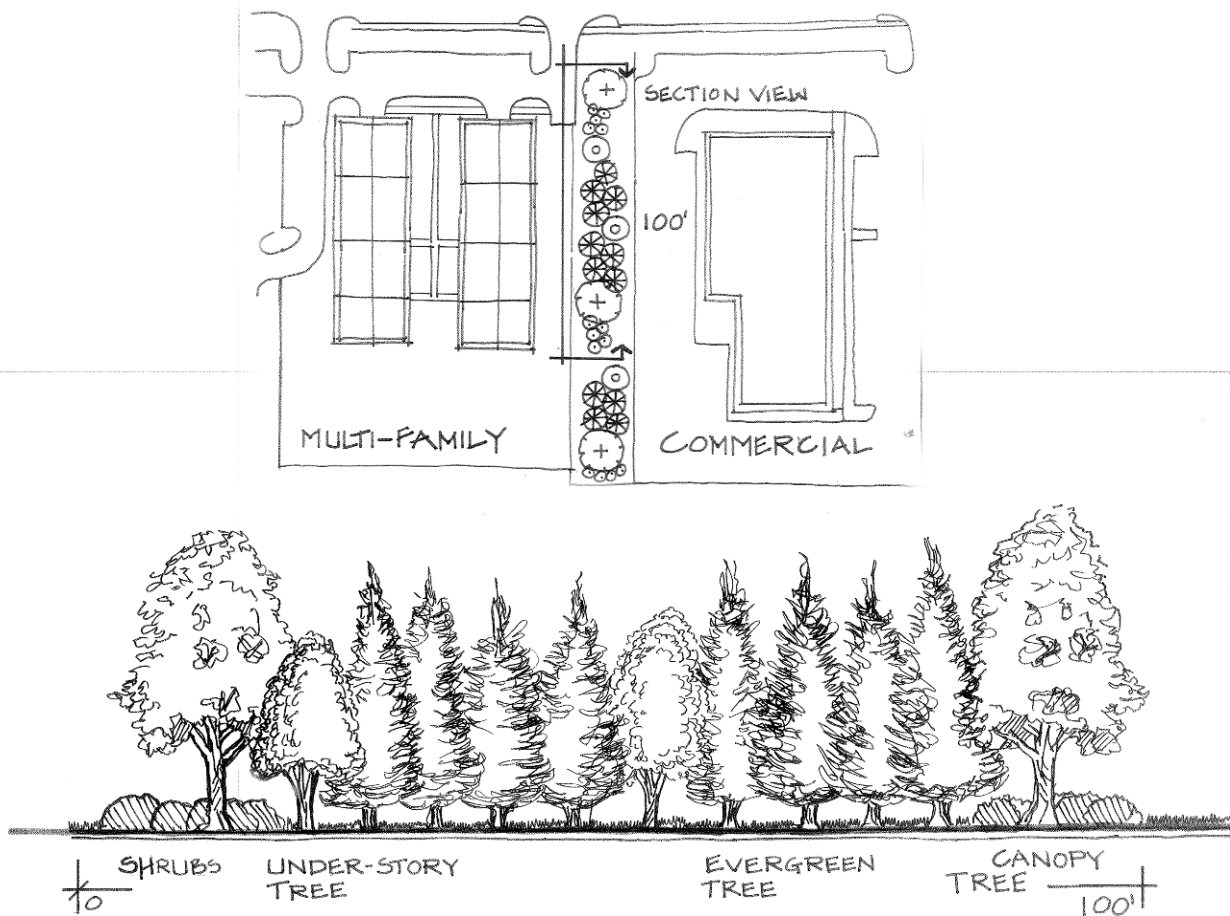
FILTERING BUFFER

PLAN & SECTION VIEW : 12-15 YEARS AFTER INSTALLATION
PLANT REQUIREMENTS - MINIMUM

2-CANOPY TREE
5-EVERGREEN TREE
2-UNDERSTORY TREE
5-SHRUBS - DECIDUOUS
OR CONIFEROUS

- 9) **RR - Resource Recovery District Buffer:** The zoning requirement for a six-to-ten-foot fence and six-foot high planted screen in the RR District shall supersede the buffer requirements of the SALDO.
 - 10) **RR-1—Resource Recovery & Recycling District Buffer:** The zoning requirement for a six-to-ten-foot fence and six-foot high planted screen in the RR-1 District shall supersede the buffer requirements of the SALDO.
- D. The minimum planting requirements shall be determined by the intensity of the proposed land use and the adjacent land use, vacant land, or zoning district, according to **Figure 4.19: Buffering Requirements**.
- 1) Screening buffers must be adequate to visually screen the proposed land use or development from off-site view. Several different planting options could be used to create an effective buffer [see **Figure 4.20: Buffer Components**]. Grading treatments and architectural features, such as walls, fences, and/or naturally undulating berms may be necessary in addition to the minimum planting quantities in order to effectively provide visual screen. The

Figure 4.24: Screening Buffer



SCREENING BUFFER

PLAN & SECTION VIEW: 12-15 YEARS AFTER INSTALLATION
 PLANT REQUIREMENTS-MINIMUM

2-CANOPY TREE	10-SHRUBS-DECIDUOUS
8-EVERGREEN TREE	OR CONIFEROUS
2-UNDERSTORY TREE	

sufficiency of the buffer shall be determined by Township Board of Commissioners upon recommendation of the Township Planning Commission.

- 2) A Limited Area Buffer can be used in areas where the width of a buffer planting would be severely restricted [see **Figure 4.20: Buffer Components**]. The planting screen would be equivalent to an evergreen hedge planting. Suggested limited area buffers which might be permitted at the discretion of the Township Board of Commissioners are listed in **Figure 4.20**.
- E. Minimum Plant Material Requirements. In accordance with **Figure 4.20: Buffer Components**, for every 100 linear feet of property line and external street boundaries of the site proposed for subdivision or land development to be buffered, the minimum quantities, types, and sizes of plant material shown in **Figure 4.20** shall be required. These are minimum standards; additional plant material, grading treatments, or architectural elements may be included in the plan, at the applicant's discretion. Generalized illustrations of buffer types are presented in **Figures 4.23 through 4.25**. Species shall be selected from **Appendix A, Recommend Plant Materials List**.

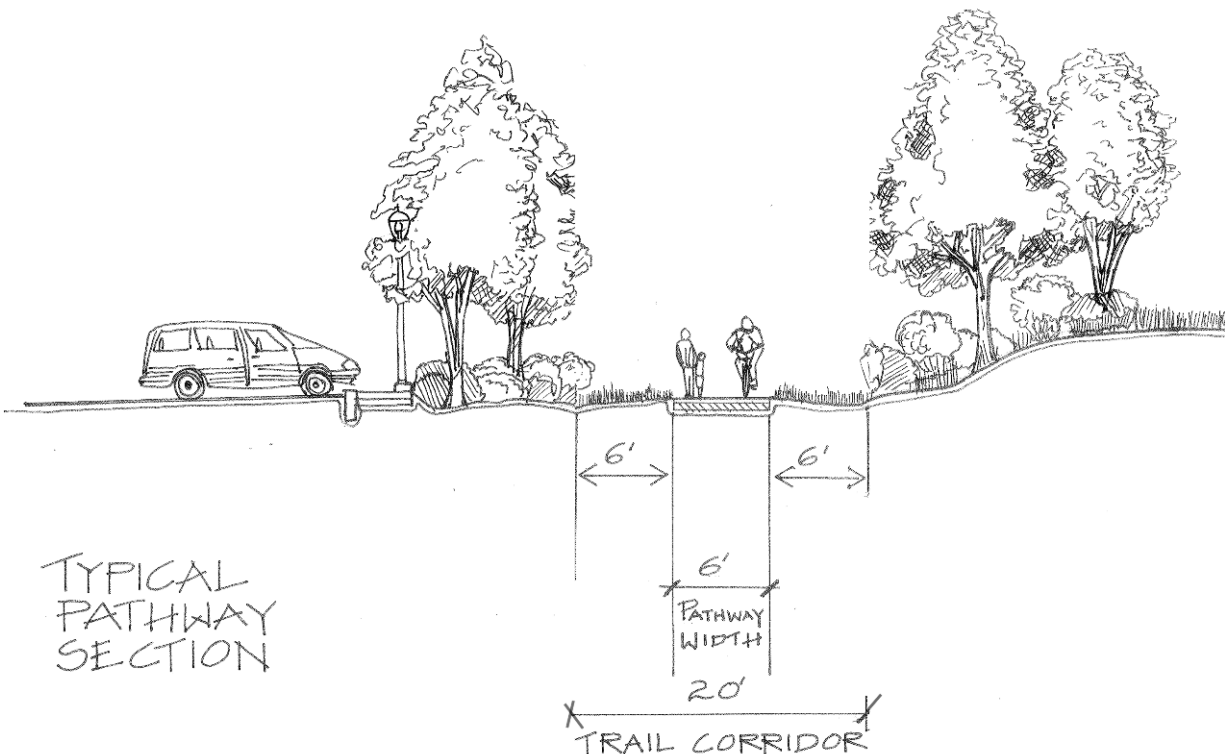
Section 434. Landscaping and Plantings

- F. Mitigation of Visual Impacts. The use of a Screening Buffer shall be required to mitigate the adverse visual impacts which proposed land uses or site elements will have on the subject tract, adjoining properties and the community in general. In addition to the requirements for buffer plantings as listed in **Figure 4.19: Buffer Requirements**, the following proposed land uses and site elements shall be screened from off-site with a Screening Buffer:
 - 1) Dumpsters, trash disposal, recycling areas, and mechanical equipment.
 - 2) Service and loading docks.
 - 3) Outdoor storage areas.
 - 4) Sewage treatment plants and pump stations.
 - G. Plant material that has been classified as invasive, destructive or is no longer recommended for use is prohibited. The plant material listed in **Appendix B: Noxious, Invasive, or Undesirable Species List** is not permitted in the Township.
3. Street Trees.
- A. Street trees shall be required:
 - 1) Along all existing streets when they abut or lie within the proposed subdivision or land development except where existing trees serve to meet the planting requirement.
 - 2) Along all proposed streets
 - 3) Along access driveways which serve two or more residential dwelling units.
 - 4) Along access driveways that serve nonresidential properties.
 - 5) Along major walkways through parking lots and between nonresidential buildings.
 - B. Street trees shall be located between the ultimate right-of-way line and the building setback line, and shall meet these standards.
 - 1) Trees shall be planted at a rate of at least one tree per 40 linear feet of frontage or fraction thereof. Trees shall be distributed along the entire frontage of the property.
 - 2) Trees shall be planted a minimum distance of five feet and a maximum distance of ten feet from the ultimate right-of-way line. However, in certain cases, as follows, Township Board of Commissioners may permit trees to be planted within the legal right-of-way:
 - a. In areas where existing planting areas may already be located within the legal right-of-way,
 - b. In cases where closely spaced rows of street trees may be desirable and future street widening is considered unlikely.
 - 3) In nonresidential developments, trees shall be located within a planting area within the front yard setback, at least ten feet in width, planted in grass or ground cover. In areas where wider sidewalks are desirable, or space is limited, tree planting pits may be used.
 - 4) Trees shall be located so as not to interfere with the installation and maintenance of sidewalks and utilities. Trees shall be planted a minimum of three feet from curbs and sidewalks, twelve feet from overhead lines, and six feet from underground utilities.
 - 5) Tree species shall be selected from the list in **Appendix A: Recommended Plant Materials List** based on appropriate growth rates and mature heights for use beneath and adjacent to overhead utility lines.
 - 6) The owners of property adjacent or abutting a right-of-way shall cause all branches from any trees or shrubbery on their property overhanging or encumbering any right-of-way, street or sidewalk, to be trimmed:
 - a. To permit the full use of the sidewalk;
 - b. So as not to obstruct the light from the streetlights; and
 - c. So there shall be a clear height of at least 10' above the sidewalk and 16' above the street wherever practical.

4. Trail and Pathway Landscaping.

- A. A Filtering Buffer as described in **Figure 4.23: Filtering Buffer** shall buffer the trail from adjacent land uses. Upon recommendation of the Township Planning Commission, Township Board of Commissioners may permit breaks in the Filtering Buffer where adjacent land uses do not require a full buffer.
- B. Trees and shrubs shall be setback six feet from the trail surface. **Figure 4.25: Trail Landscaping** illustrates a generalized concept of trail landscaping.
- C. If not required as a visual buffer, evergreen trees shall not be planted on the southern side of the trail to allow for winter sun exposure. To fulfill buffering requirements, evergreen trees shall be replaced by an equal mix of canopy trees, understory trees, and shrubs of the size described in **Figure 4.19: Buffering Requirements**.
- D. Entrances to trails and intersections of two or more trails shall be delineated with post and rail fencing or other suitable material.

Figure 4.25: Trail Landscaping



5. Parking Lot Landscaping. All parking lots shall be designed according to **Section 431: Parking and Related Internal Driveways** and landscaped according to the following regulations.
 - A. Parking lots shall be effectively landscaped with trees and shrubs to reduce the visual impact of glare, headlights, and parking lot lights, to delineate driving lanes, and to define rows of parking. Furthermore, parking lots should be adequately landscaped to provide shade in order to reduce the amount of reflected heat and to improve the aesthetics of parking lots.
 - B. Planting strips shall be planted with one canopy tree every 25 feet plus shrubs and/or groundcover to cover the entire area at maturity. Species shall be selected from **Appendix A: Recommended Plant Materials List**.
 - C. Each planting island shall contain at least one shade tree plus shrubs and/or groundcover to cover the entire area.
 - D. The placement of light standard shall be coordinated with the landscape design to avoid a conflict with the operation of light fixtures.
 - E. Additional planting is encouraged and may include a variety of ornamental trees, shrubs, and ground covers, chosen from the list of plant materials in **Appendix A: Recommended Plant Materials List**, provided that:
 - 1) At the ends of planting strips at driveway intersections, drivers' visibility shall be maintained by limited plantings within 35 feet of the intersection.

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- 2) At the ends of planting strips between rows of parking spaces, visibility shall be maintained by limited plantings within 20 feet of the intersection.
- 3) Limited planting shall mean:
 - a. not more than one shade or canopy tree within the area.
 - b. no shrubs or ground cover plants exceeding two feet in height.
 - c. no evergreen trees.
- F. Where perimeter landscaping is required, planting strips shall be planted with a Filtering Buffer as per **Figure 4.23**.
- G. Whenever a parking lot abuts a primary arterial street, it shall be screened by a 4-foot tall fence constructed of wood, vinyl designed to look like wood, brick, stone, stucco over concrete block (capped with brick, slate, or stone), or ornamental iron (or ornamental aluminum, steel, or vinyl designed to look like iron) as consistent with local character. This will be in addition to Filtering Buffer requirements. The design shall require the approval of Township Board of Commissioners upon recommendation of the Township Planning Commission.
6. Stormwater Basins and Associated Facilities - Landscaping shall be required in and around all stormwater management basins in accordance with the Pennsylvania Stormwater Best Management Practices Manual, current edition.
 - A. Once established, a singular annual mowing of the meadow/naturalized grass areas should be sufficient to maintain a wet meadow and/or basin floor. A full description of basin maintenance responsibilities should be included on the recorded subdivision plan and a notation outlining the basin maintenance responsibilities of the basin owner should be placed on the property deed.
 - B. Signage at basins to educate the public and/or designate the limits of mowing is encouraged.
 - C. Low flow channels are not permitted with stormwater management facilities.
 - D. Stormwater basins shall be screened from adjacent properties using the buffer plantings standards for a Filtering Buffer as described in **Figure 4.23: Filtering Buffer**.

Section 435. Plant Materials Specifications.

1. General Requirements.
 - A. The location, dimensions, and spacing of required plantings should be adequate for their proper growth and maintenance taking into account the sizes of such plantings at maturity and their present and future environmental requirements and tolerances including wind, moisture and sunlight.
 - B. Plantings should be selected and located where they will not contribute to conditions hazardous to public safety. Such conditions include, but are not limited to, public street rights-of-way, underground and above ground utilities, and sight triangle areas required for unobstructed views at street intersections.
2. Plant Specifications.
 - A. All plants shall meet the minimum standards for health, form and root condition as outlined in the American Association of Nurserymen AAN Standards.
 - B. All plant material shall be hardy and within the USDA hardiness Zone 6 applicable to Montgomery County, Pennsylvania.
 - C. Canopy trees, sometimes called shade trees, shall reach a minimum height and spread of 30 feet at maturity as determined by the AAN Standards and shall be deciduous. New trees shall have a minimum caliper of 2½ inches at planting.
 - D. Ornamental trees or large shrubs shall reach a typical minimum height of 15 feet at maturity, based upon AAN Standards. Trees and shrubs may be deciduous or evergreen and shall have a distinctive ornamental characteristic such as prominent flowers, fruit, habitat, foliage or bark. New ornamental trees shall have a minimum height of 6 feet or 1½ inch caliper at the time of planting. New shrubs shall have a minimum height of 3 feet at the time of planting.
 - E. Evergreen trees shall reach a typical minimum height of 20 feet at maturity based upon AAN standards for that species and shall remain evergreen throughout the year. New evergreens shall have a minimum height of 8 feet at the time of planting.
3. Maintenance.

- A. Required plant material shall be maintained for the life of the project to achieve the required visual effect of the buffer or screen. It shall be the ultimate responsibility of successive landowners to insure that the required plantings are properly maintained. Dead or diseased plant materials shall be removed or treated properly by the landowner and replaced during the next growing season.
- B. All sight distances shall remain clear, and any plant materials that could endanger safety such as unstable limbs shall be removed and the plant materials shall be replaced if necessary. It shall be the responsibility of all property owners to maintain all plantings and architectural elements to insure a safe environment.
- C. Maintenance guidelines for the plantings should be developed by the planting plan designer, to be used by grounds maintenance personnel.
- D. The current landowner or developer shall replace any tree or shrub that dies within 18 months of planting. Any tree or shrub that with 18 months of planting is deemed, in the opinion of Township, not to have survived or not to have grown in a manner characteristic of its species, shall be replaced. Substitutions for certain species of plants may be made with the approval of the municipality.

Stormwater and Utilities

Section 436. Stormwater Management and Drainage.

1. Definitions. For the purpose of this section, relating to stormwater management and drainage, certain terms and words used herein shall be interpreted as follows:
 - A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
 - B. 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.
 - C. The words “shall” and “must” are mandatory; the words “may” and “should” are permissive.

Accelerated Erosion – The removal of the surface of the land through the combined action of human activities and the natural processes, at a rate greater than would occur because of the natural process alone.

Applicant – A landowner, developer or other person who has filed an application for approval to engage in any Regulated Earth Disturbance activity at a project sit in the Municipality.

Bioretention – Densely vegetated, depressed features that store stormwater and filter it through vegetation, mulch, planting soil, etc. Ultimately stormwater is evapotranspired, infiltrated, or discharged. Optimal bioretention areas mimic natural forest ecosystems in terms of species diversity, density, distribution, use of native plants, etc.

BMP (Best Management Practice) – Activities, facilities, designs, measures or procedures used to manage stormwater impacts from Regulated Earth Disturbance activities, to meet State Water Quality Requirements, to promote groundwater recharge and to otherwise meet the purposes of this Ordinance. BMPs include, but are not limited to, infiltration, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, forested buffers, sand filters and detention basins.

Conservation District – The Montgomery County Conservation District.

DEP – The Pennsylvania Department of Environmental Protection.

Developer – A person that seeks to undertake any Regulated Earth Disturbance Activities at a project site in the Municipality.

Development – See “Earth Disturbance Activity.” The term includes redevelopment.

Development Site – The specific tract of land where any Earth Disturbance Activities in the Municipality are planned, conducted or maintained.

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Drainage Plan – The documentation of the proposed stormwater quantity and quality of management controls to be used for a given development site, including the BMP Operations and Maintenance Plan, the contents of which are established under **Section 436.3: Drainage Plan Contents**.

Earth Disturbance Activity – A construction or other human activity which disturbs the surface of the land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, road maintenance, building construction and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

Erosion – The process by which the surface of the land, including channels, is worn away by water, wind, or chemical action.

Erosion and Sediment Control Plan – A plan for a project site which identified BMPs to minimize accelerated erosion and sedimentation.

Filter Strips – See Vegetated Buffers.

Groundwater Recharge – Replenishing of existing natural underground water supplies.

Impervious Surface – A surface that prevents the infiltration of water into the ground. Impervious surface includes, but is not limited to, any roof, parking or driveway areas, and any new streets and sidewalks. Any surface areas designed to initially be gravel or crushed stone may be assumed to be impervious surfaces.

Infiltration Practice – A practice designed to direct runoff into the ground, e.g., French drain, seepage pit, seepage trench or bioretention area.

Municipality – West Pottsgrove Township, Montgomery County, Pennsylvania.

NPDES – National Pollutant Discharge Elimination System, the federal government’s system for issuance of permits under the Clean Water Act, which is delegated to DEP in Pennsylvania.

Outfall – “Point source” as described in 40 CFR Section 122.2 as the point where the Municipality’s storm sewer system discharged to surface waters of the Commonwealth.

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.

Point Source – Any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, or conduit from which stormwater is or may be discharged.

Project Site – The specific area of land where any Regulated Earth Disturbance Activities in the Municipality are planned, conducted or maintained.

Redevelopment – Earth Disturbance Activities on land which has previously been disturbed or developed.

Regulated Earth Disturbance Activity – Earth Disturbance Activity other than agricultural plowing or tilling of one (1) acre or more with a point source discharge to surface waters or to the Municipality’s storm sewer system, or Earth Disturbance Activity of five (5) acres or more regardless of the planned runoff. This includes Earth Disturbances on any portion of, part, or during any stage of, a larger common plan of development.

Road Maintenance – Earth Disturbance Activities within the existing road cross-section, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities.

Separate Storm Sewer System – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains) primarily used for collecting and conveying stormwater runoff.

State Water Quality Requirements – As defined under state regulations — protection of *designated* and *existing* uses (See Pa. Code Chapters 93 and 96) — including:

Each stream segment in Pennsylvania that has a “designated use,” such as “cold water fishery” or “potable water supply,” which are listed in Chapter 93. These uses must be protected and maintained, under state regulations.

“Existing uses” are those use actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards. (25 Pa. Code Chapter 93.1)

Water quality involves the chemical, biological and physical characteristics of surface water bodies. After Regulated Earth Disturbance Activities are complete, these characteristics can be impacted by addition of pollutants such as sediment, and changes in habitat through increased flow volumes and/or rates as a result of changes in land surface area from those activities. Therefore, permanent discharges to surface waters must be managed to protect the stream bank, stream bed and structural integrity of the waterway, to prevent these impacts.

Stormwater – The surface runoff generated by precipitation reaching the ground surface.

Stormwater Filters – Any number of structural mechanisms such as multi-chamber catch basins, sand/peat filters, sand filters, and so forth which are installed to intercept stormwater flow and remove pollutants prior to discharge. Typically, these systems require periodic maintenance and clean out.

Surface Waters of the Commonwealth – Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs, and all other bodies or channels of conveyance of surface water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

Vegetated Buffers – Gently sloping areas that convey stormwater as sheet flow over a broad, densely vegetated earthen area, possibly coupled with the use of level spreading devices. Vegetated buffers should be situated on minimally disturbed soils, have low-flow velocities and extended residence times.

Watercourse – A channel or conveyance of surface water, such as a stream or creek, having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

Watershed – Region or area drained by a river, watercourse or other body of water, whether natural or artificial.

2. Stormwater Management for Water Quality

A. General Requirements for Stormwater Management.

- 1) All Regulated Earth Disturbance Activities within the Municipality shall be designed, implemented, operated and maintained to meet the purposes of this Ordinance, through these two (2) elements:
 - a. Erosion and sediment control during the Earth Disturbance Activities (e.g., during construction), and
 - b. Water quality protection measures after completion of Earth Disturbance Activities (e.g., after construction), including operations and maintenance.
- 2) No Regulated Earth Disturbance Activities within the Municipality shall commence until approval by the Municipality of a plan which demonstrates compliance with the requirements of this Ordinance. Erosion and sediment control during Regulated Earth Disturbance Activities shall be addressed as required by **Section 436.2.C.: Erosion and Sediment Control during Regulated Earth Disturbance Activities**.
- 3) Post-construction water quality protection shall be addressed as required by **Section 436.2.D: Water Quality Requirements After Regulated Earth Disturbance Activities are Complete**. Operations and maintenance of permanent stormwater BMPs shall be addressed as required by **Section 436.6: Stormwater BMP Operations and Maintenance Plan Requirements**.
- 4) Techniques described in **Appendix C: Low Impact Development Practices: Alternative Approach for Managing Stormwater Runoff** of this Ordinance are encouraged, because they reduce the costs of complying with the requirements of this Ordinance and the State Water quality Requirements.
- 5) Recharge facilities, detention facilities, storm sewers, culverts, bridges, and related drainage installation shall

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be designed and constructed to meet the following purposes:

- a. To permit unimpeded flow to natural watercourses. Such flow may be redirected as required, subject to the approval of the Pennsylvania Department of Environmental Protection.
 - b. To insure adequate drainage of all low points as may be related to street.
 - c. To intercept stormwater runoff along streets at intervals reasonably related to the extent and grade of the area drained to prevent flow of stormwater across intersections during the design storm.
 - d. To insure adequate and unimpeded flow of stormwater under driveways in, near or across natural watercourses or drainage swales. Pipes or other conduits sized to convey the proper design storm shall be provided as necessary.
 - e. To prevent excessive flow on or across streets, sidewalks, drives, parking areas and any other paved surface of accessway.
- B. Permit Required by Other Government Entities. The following permit requirements may apply to certain Regulated Earth Disturbance Activities, and must be met prior to commencement of Regulated Earth Disturbance Activities, as applicable:
- 1) All Regulated Earth Disturbance Activities subject to permit requirements by DEP under regulations at 25 Pa. Code Chapter 102.
 - 2) Work within natural drainage ways subject to permit by DEP under 25 Pa. Code Chapter 105.
 - 3) Any stormwater management facility that would be located in or adjacent to surface waters of the Commonwealth, including wetlands, subject to permit by DEP under 25 Pa. Code Chapter 105.
 - 4) Any stormwater management facility that would be located on a state highway right-of-way, or require access from a state highway, shall be subject to approval by the Pennsylvania Department of Transportation (PennDOT).
 - 5) Culverts, bridges, storm sewers or any other facilities which must pass or convey flows from the tributary area and any facility which may constitute a dam subject to permit by DEPT under 25 Pa. Code Chapter 105.
- C. Erosion and Sediment Control during Regulated Earth Disturbance Activities.
- 1) No Regulated Earth Disturbance Activities within the Municipality shall commence until approval by the Municipality of an Erosion and Sediment Control Plan for construction activities. Written approval by DEP or a delegated County Conservation District shall satisfy this requirement.
 - 2) Subdivision and Land Development Proposals must comply with DEP regulations that require an Erosion and Sediment control Plan for any earth disturbance activity of 5, 000 square feet or more, under 25 Pa. Code Section 102.4(b).
 - 3) A DEP "NPDES Construction Activities" permit is required for Regulated Earth Disturbance Activities under 25 Pa. Code Chapter 92.
 - 4) Evidence of any necessary permit(s) for Regulated Earth Disturbance activities from the appropriate DEP regional office or County Conservation District must be provided to the Municipality.
 - 5) A copy of the Erosion and Sediment Control Plan and any required permit, as required by DEP regulations, shall be available at the project site at all times.
 - 6) The choice and design of stormwater management system used to meet the requirements of this Section shall be based on the system types and specifications set forth in the Pennsylvania Handbook of Best Management Practices for Developing Areas, published by the Commonwealth of Pennsylvania. Various combinations of methods should be tailored to suit the particular requirements for the type of development and the local site conditions and approved by the Township Engineer.
 - 7) The choice and design of stormwater management systems are to be developed through a procedure that selects best management practices and incorporates a combination of the following:
 - a. Seeking to control runoff at its source through infiltration where applicable.
 - b. Improving the quality of the stormwater conveyance.
 - c. Providing for detention.

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- 8) The rate of stormwater runoff from any subdivision or land development shall not exceed the rate of runoff prior to development. Requirements for design of stormwater management systems to control the quantity of discharge are outlined in this Chapter. The distribution of drainage discharge from the development properties shall replicate that of before development conditions to the maximum extent possible. The methodology and facilities used shall be based on the calculated flows and conditions of each particular site.
- 9) The storm drainage system serving the street shall be designed to collect water at any point where three (3) to five (5) cubic feet per second is accumulated where water floods more than $\frac{1}{2}$ of the roadway and the low point of all vertical grades, 100 feet upgrade of each low point and immediately upgrade of all street intersections. The system shall discharge any collected water which is not recharged into the nearest practical natural drainage channel or stormwater system.
- 10) All natural watercourses of concentration of surface water shall be maintained in their existing condition, unless alteration is approved by the Township. In any event, all encroachment activities shall comply with Chapter 105 of the Commonwealth of Pennsylvania's Department of Environmental Protection, Dam Safety and Waterway Management Rules and Regulations.
- 11) Manmade structures shall be kept to a minimum and bridges, culverts, or rip-rap shall be constructed to maintain natural characteristics of the stream and shall meet the approval of the Municipality. Retention/detention basins shall be designed to utilize the natural contours of the land. When such design is impracticable, the construction of the basin design shall utilize slopes as shallow as possible to blend the structures into the existing terrain. The use of multiple retention/detention facilities, which are smaller and less intrusive on the site, is encouraged.
- 12) All areas containing lakes, ponds, wetlands, and watercourses may be considered to be reserved for permanent open space. Any alteration, development, filling, piping, or diverting areas containing lakes, ponds, wetlands, and watercourses shall be in strict compliance with the all prevailing rules and regulations of Federal and State agencies. The Township recognizes the use of wetlands as potential components of stormwater management facilities and encourages such innovative use if assurances are that conservation measures are adequate and that all Federal and State requirements are satisfied.
- 13) The Township may require that a landowner or developer provide reasonable corrective onsite measures to alleviate any existing offsite drainage problem which may be affected by the proposed subdivision and/or land development. If offsite easements are required, it shall be the responsibility of the landowner or developer to obtain all drainage easements on, over, or through other properties and the Township, its agents, workmen, and employees shall be indemnified and held harmless from any liability. Any water originating from non-natural sources, such as swimming pools, air conditioning units, sump pumps, roof drains, or other similar flow, shall be properly discharged into a recharge facility or natural watercourses on the property or connected to an existing or proposed storm drainage system as approved by the Township. This discharge shall not be discharged to adjacent properties. Polluting matter from such sources may not be deposited into natural watercourses or storm drains.
- 14) All building foundations, grade slabs, and cellar floors located in soils that have a community development limitation degree of moderate to severe seasonal high water table (as defined in the NRCS' Web Soil Survey) shall be provided with an under-drain system. This system shall provide for drainage of the enclosed volume above the slab and relief of subsurface water to a depth of not less than 18 inches below the slab of foundation field of the herringbone or gridiron configuration in course, gravel-filled trenches that are in direct contact with the slab or foundation sub-base. The excavation shall provide a minimum of five one-hundredths (0.05) foot/foot slope to the gravel-filled trenches.
- 15) To mitigate the potential polluting of surface and ground waters by pollutants such as salt, petroleum products and antifreeze flowing from paved parking lots, pretreatment of the runoff may be required. The extent of the treatment shall be set by the Township Engineer and will be determined by such factors as the area of the parking lot and the course of the runoff as it is recharged or flows into natural waterways.
- 16) During site construction, all infiltration system components shall be protected from compaction due to heavy equipment operation or storage of fill or construction material. Infiltration areas shall also be protected from sedimentation. All areas designated for infiltration shall not receive runoff until the contributory drainage areas have achieved final stabilization or been cleared and reconstructed at that time. The following procedures and materials shall be required during the construction of all subsurface facilities.
 - a. Excavation for the infiltration facility shall be performed with equipment which will not compact the bottom of the seepage bed/trench, or like facility.

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- b. The bottom of the bed and/or trench shall be scarified prior to the placement of aggregate.
 - c. Only clean aggregate, free of fines, shall be allowed.
 - d. The top and sides of all seepage beds, trenches, or like facilities shall be covered with drainage filtration fabric. Fabric shall meet the specifications of PennDOT Publication 408, Section 735, Construction Class 1.
 - e. Perforated distribution pipes connected to centralized catch basins and/or manholes with provision for the collection of debris shall be provided in all facilities. The perforated pipes shall distribute stormwater throughout the entire seepage bed/trench, or like facility.
- 17) Standards During Land Disturbance – During the period of land disturbance, when significant sediment can be contained in runoff, this runoff shall be controlled prior to entering any proposed infiltration area.

D. Water Quality Requirements after Regulated Earth Disturbance Activities are Complete.

- 1) No Regulated Earth Disturbance Activities within the Municipality shall commence until approval by the Municipality of a plan which demonstrates compliance with this Ordinance.
- 2) The BMPs must be designed, implemented and maintained to meet State Water Quality Requirements, and any other more stringent requirements as determined by the Municipality.
- 3) To control post-construction stormwater impacts from Regulated Earth Disturbance Activities, State Water Quality Requirements can be met by BMPs, including site design, which provide for replication of pre-construction stormwater infiltration and runoff conditions, so that post-construction stormwater discharges do not degrade the physical, chemical, or biological characteristics of the receiving waters. As described in the DEP Comprehensive Stormwater Management Policy (#392-0300-002, September 28, 2002), this may be achieved by the following:
 - a. Infiltration: replication of pre-construction stormwater infiltration conditions;
 - b. Treatment: use of water quality treatment BMPs to ensure filtering out of the chemical and physical pollutants from the stormwater runoff; and
 - c. Streambank and Streambed Protection: management of volume and rate of post-construction stormwater discharges to prevent physical degradation of receiving waters (e.g., from scouring).
- 4) Subdivision and land development proposals must comply with DEP regulations to ensure design, implementation and maintenance of Best Management Practices (“BMPS”) that control runoff from new development and redevelopment after Regulated Earth Disturbance Activities are complete. These requirements include the need to implement post-construction stormwater BMPs with assurance of long-term operation and maintenance of those BMPs.
- 5) Evidence of any necessary permit(s) for Regulated Earth Disturbance Activities from the appropriate DEP regional office must be provided to the Municipality. The issuance of an NPDES Construction Permit or permit coverage under the statewide General Permit (PAG-2) satisfies the requirements of **Section 436.2.D(1): No regulated earth disturbance activities...**
- 6) Drainage Plan contents, including BMP operation and maintenance requirements, are described in **Section 436.3: Drainage Plan Contents** of this Ordinance.
- 7) After installation of impervious cover, there shall be no increase in volume of stormwater runoff being discharged for up to the two (2) year frequency rainfall, predevelopment to post-development. If the Township Engineer determines that such a standard is not achievable on the site (all or in part) based on the existing soil, bedrock, water table, or other conditions on the parcel, the provisions listed in **Section 436.2.D.(9): If the volume set forth...** below apply. For preliminary design purposes, this volume can be initially estimated as a depth of two and one-half (2.5) inches per unit area of new impervious surface.
- 8) After installation of impervious cover and assuming full compliance with **Section 436.2.D.(7): After installation of impervious cover...** above, the peak rate of stormwater discharges from the site for all design storms up to and including 100 year frequency rainfall shall not exceed the peak discharges from the site of the same storm before disturbance. Design storms include:
 - (Inches of Precipitation)
 - a. 2-year 24 hour storm 3.3
 - b. 10-year 24 hour storm 5.0

- c. 25-year 24 hour storm 5.8
 - d. 50-year 24 hour storm 6.4
 - e. 100-year 24 hour storm 7.2
- 9) If the volume set forth in **Section 436.2.D(8): After installation of impervious cover...** above cannot be achieved, then the peak rate standards are modified so the post-development peak rate discharges from the site for all storms up to the 10 year storm must be equal to or less than seventy-five (75%) percent of the respective peak rates for these storms, predevelopment.
- 10) Under certain conditions, the Township, upon recommendation of the Township Engineer, may impose the following additional restrictions on stormwater discharges:
- a. Peak discharge may be further restricted to alleviate offsite drainage problems.
 - b. Measures shall be imposed to protect against ground or surface water pollution where the type of business activity may result in significant nonpoint source pollution (“hot spots”) or the nature of the soils or bed-rock underlying a stormwater management structure constitutes substantial risk of contamination, such as might be the case in limestone formations. Special provisions to be followed in these cases will be provided by the Township Engineer.
 - c. Where groundwater yields are very low or where a groundwater supply already is heavily used, the Township may require that the entire volume of the two (2) year frequency rainfall (3.3 inches in 24 hours) be retained and infiltrated.

3. Drainage Plan Contents

A. Drainage Plan: General Requirements

- 1) For any Regulated Earth Disturbance Activities as set forth in this Ordinance, prior to the final approval of subdivision and/or land development plans, or the issuance of any permit, or the commencement of any Land Disturbance Activity, the owner, subdivider, developer or his agent shall submit a Drainage Plan, including a BMP Operations and Maintenance Plan, and receive a municipal approval of the plan.
- 2) The following items shall be included in the Drainage Plan:
 - a. Map(s) of the project area, in a form that meets the requirements for recording at the office of the Recorder of Deeds of Montgomery County, and shall be submitted on 24” x 36” or 30” x 42” sheets. The contents of the map(s) shall include, but not be limited to:
 - i] Clear identification of the location and nature of permanent stormwater BMPs;
 - ii] The location of the project site relative to highways, municipal boundaries or other identifiable landmarks;
 - iii] Existing and final contours at intervals of two (2) feet, or others as appropriate;
 - iv] Existing streams, lakes, ponds, or other bodies of water within the project site area;
 - v] Other physical features including flood hazard boundaries, sinkholes, existing drainage courses, and areas of natural vegetation to be preserved;
 - vi] The location of proposed underground utilities, sanitary sewers, and water lines; and the locations of all existing utilities, sanitary sewers and water lines within 50 feet of property lines of the project site;
 - vii] Proposed final changes to the land surface and vegetative cover, including the type and amount of impervious are that would be added;
 - viii] Proposed final structures, roads, paved areas, and buildings;
 - ix] An adequate access easement around all stormwater BMPs that would provide municipal ingress to and egress from a public right-of-way; and
 - x] The location of all public water supply wells within 400 feet of the project and all private water supply wells within 100 feet of the project.
 - b. A description of how each permanent stormwater BMP will be operated and maintained, and the identity of the person(s) responsible for operations and maintenance.

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- c. The name of the project site, the name and address of the owner of the property, and the name of the individual or firm preparing the Plan.
 - d. A statement, signed by the landowner, acknowledging that the stormwater BMPs are fixtures that can be altered or removed only after approval by the Municipality.
- 3) Additional Stormwater Detention/Retention Facilities Design Requirements.
- a. The following setbacks are required for stormwater management facilities:
 - i] Stormwater retention or detention basins shall be located at least 50 feet from any structure, whether existing or proposed.
 - ii] Whenever possible stormwater retention or detention basins shall be located at least 50 feet from any property boundary or right-of-way.
 - iii] Recharge systems greater than three (3) feet deep shall be located at least 15 feet from any basement wall and 25 feet from wastewater treatment areas.
 - iv] Any recharge system designed to handle runoff from any commercial or industrial impervious parking or outside storage area shall be a minimum of 50 feet from any water supply well or any wastewater treatment area.
 - b. Risers. A riser or other acceptable outfall shall be provided at the outlet of all detention basins. The riser shall be constructed of precast or poured in place concrete with controlled orifices. The riser shall extend to an elevation one (1) foot below the crest elevation of the emergency spillway. The riser shall be designed so that the rate of outflow is controlled by the pipe barrel through the basis berm when the depth of the water within the basin exceeds the height of the riser. A trash rack or similar appurtenance shall be provided to prevent debris from entering the riser. All risers shall have a concrete base attached with a watertight connection. The base shall be of sufficient weight to prevent flotation of the riser.
 - c. Landscaping. All stormwater control systems, whether existing or proposed, shall be planted to effectively naturalize areas so as to become an integral and harmonious element in the local landscape. No trees shall be planted in dams more than 15 feet high.
 - d. Emergency Spillway. Whenever possible, the emergency spillway for detention basins shall be constructed on undisturbed ground. Emergency spillways shall be designed according to the Soil Conservation Service Engineering Field Manual. All emergency spillways shall be constructed so that the detention basis berm is protected against erosion. The minimum capacity of all emergency spillways shall be such that should the principal spillway become clogged or ineffective, the emergency spillway can safely convey the 100 year storm event with one (1) foot of available freeboard. The emergency spillway shall not discharge over earthen fill and/or easily erodible material.
 - e. Anti-Seep Collars. Anit-seep collars shall be installed around the principal pipe barrel within the normal saturation zone of the detention basis berms. The anti-seep collars and their connections to the pipe barrel shall be watertight. The anti-seep collars shall extend a minimum of two (2) feet beyond the outside of the principal pipe barrel. The maximum spacing between collars shall be 14 times the minimum projection of the collar measured perpendicular to the pipe.
 - f. Freeboard. Freeboard is the difference between the design flow elevations in the emergency spillway and the top of the settled detention basin embankment. The minimum freeboard shall be two (2) feet.
 - g. Slope of Detention Basin Embankment. The maximum slope of earthen detention basin embankments shall meet the requirements contained in this subsection. Whenever possible, the side slopes and basin shape shall be amendable to the natural topography. Straight side slopes and rectangular basins should be avoided whenever possible.
 - h. Width of Berm. The minimum top width of detention basin berms shall be 10 feet.
 - i. Slope of Basin Bottom. In order to insure proper drainage of the detention basin, a minimum grade of two (2%) percent shall be maintained for all sheet flow. A minimum grade of one (1%) percent shall be maintained for all channel flow.
 - j. Energy Dissipaters. Energy dissipating devices (rip-rap, end sills, etc.) Shall be placed at all basin outlets. Any pipe or other component which discharges directly into the basin shall be equipped with energy dissipating devices and shall outlet into the bottom of the basin.

- k. Landscaping and Grading of Detention Basin. All landscaping and grading standards shall be as follows:
- i] Cuts. No excavation shall be made with a cut face steeper than two (2) horizontal to one (1) vertical, except under the condition that the material in which the excavation is made is sufficiently stable to sustain a slope of steeper than two (2) horizontal to one (1) vertical. A written statement to that effect is required from an engineer and must be submitted and approved by the Township Engineer. The statement shall affirm that the site has been inspected and that the deviation from the slope should not result in injury to persons or damage to property. Retaining walls shall be required if a stable slope cannot be maintained. Any retaining wall design must be approved by the Township Engineer. The toe of the slope or headwall of any cut must be located a minimum of five (5) feet from property lines.
 - ii] Fills. No fill shall be made which creates any exposed surfaces steeper in slope than two (2) horizontal to one (1) vertical, except where the fill is located so that settlement, sliding, or erosion will not result in property damage or be a hazard to adjoining property, streets, or buildings. A written statement is required from an engineer certifying that she or he has inspected the site and that any proposed deviation from the slope specified above should not endanger any property or result in property damage, and must be submitted to and approved by the Township Engineer.
 - [a] A concrete or stone masonry wall designed and constructed in accordance with these specifications and standards may be required to support the face of the fill where the above specified slopes are exceeded.
 - [b] The top of any fill or toe of the slope of any fill shall be located 25 feet from any property line with the exception of a downstream property line where the toe of the embankment shall be placed a sufficient distance to allow for energy dissipating devices, but in no case less than 40 feet unless approved by the Township.
 - iii) Planting Requirements. All areas proposed for recreational use, whether active or passive, shall be planted to effectively naturalize the areas to become an integral and harmonious element in the natural landscape.
 - iv) Drainage Channels and Retention Areas. All storm drainage channels and retention areas, whether existing or proposed, shall be graded and planted to effectively naturalize areas so as to become an integral and harmonious part of the landscape by contour and type of plant material employed.
 - v) Screening. A suitable vegetation screen shall be provided around all detention basins as required by the Township Engineer. All vegetative screening shall be at least three and one-half (3½) feet in height and shall be composed of the following shrubs: Barberry (Barberis species); Eleagnus (Eleagnus species); Pyracantha species; Rose (Rose species) or alternates as approved by the Township Engineer.
 - vi) Fencing. When required by the Township Engineer.
- a. Easements for all basins and storm pipes not located with the public street right-of-way shall be provided.

4) Stormwater Drainage System Design Requirements

- a. Design Flow Rate. The storm drain system shall be designed to carry a 25 year peak flow rate. The system must adequately convey 100 year storm to detention facilities. The design 25 year peak flow rate into each inlet shall be indicated on the stormwater management plan. The 25 year flow rate shall be determined by the rational formula, $Q=CIA$. Where:

Q = Peak runoff rate, cubic feet per second (CFS).

C = Runoff coefficient equal to the ratio of the runoff rate to the average rate of rainfall over a time period equal to the time of concentration.

I = Average rainfall intensity to inches per hour for a time equivalent to the time of concentration.

A = Drainage areas in acres.

Approximate values for the runoff coefficient and runoff intensity are found in the following source:

Commonwealth of Pennsylvania
Department of Transportation
Design Manual, Part 2
Chapter 12

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- b. **Overflow System.** An overflow system shall be provided to carry flow to the detention basin when the capacity of the storm drain pipe system is exceeded. The overflow system shall be of sufficient capacity to carry the difference between the 100 year and 25 year peak flow rates.
- c. **Inlet Capacity.** All inlets must be designed to accommodate the 25 year peak flow rate. The capacity of each inlet shall be indicated on the stormwater plan. The capacity of all C, M, or S type inlets shall be determined from the following source:

Commonwealth of Pennsylvania
Department of Transportation
Design Manual, Part 2: Highway Design
- d. **Straight Pipe Selection.** Wherever possible, all storm drain pipes shall be designed to follow straight courses. No angular deflections of storm sewer pipe sections in excess of five (5°) degrees shall be permitted. No vertical curves shall be permitted in the storm drain pipe system.
- e. **Minimum Grade and Size.** All storm drain pipes shall be designed to maintain a minimum grade of one-half (0.5%) percent. All storm pipes shall have a minimum inside diameter of 18 inches, except that pipes under a 25 or greater fill shall be designed in accordance with PennDOT DMII.
- f. **Pipe Material and Thickness.** All storm sewers shall be a material which meets the 100 year life expectancy criteria contained in PennDOT DMII most recent edition.
- g. **Pipe Capacity.** The capacity of all pipe culverts shall, as a minimum, provide the required carrying capacity as determined by the following source:

United States Department of Commerce

Bureau of Public Roads

Hydraulic Engineering Circular No. 5

Hydraulic charts for the Selection of Highway Culverts
- h. **Pipe Arches.** Where headroom is restricted, equivalent pipe arches may be used in lieu of circular pipes.
- i. **Allowable Headwater Depth.** At all inlets or manholes, the maximum allowable headwater depth shall be one (1) foot below the top of the inlet grate of the manhole cover.
- j. **Horizontal Pipe Deflections.** A manhole or inlet shall be provided at all horizontal deflections in the storm pipe system.
- k. **Minimum and Maximum Cover.** A minimum of 18 inches of cover shall be maintained over all storm drain pipes. When located in a street, the top of storm drain pipes shall be at least one-half (½) foot below subgrade elevation.
- l. **Diversion or Runoff.** When possible, all storm drain pipes shall be designed to carry the runoff into a detention basin or similar facility utilized to control the rate of runoff. No discharge at the top or side of basin embankments shall be permitted.
- m. **Culverts and Drainage Channels**
 - i] **Design Flow Standards.** All culverts and drainage channels shall be designed to carry a flow rate equal to a 50 year storm event.
 - ii] **Erosion Prevention.** All drainage channels shall be designed to prevent the erosion of the bed and bank areas. The flow velocity in all vegetated drainage channels shall not exceed three (3) feet per second to prevent erosion unless special provisions are made to protect banks and channel bottoms against erosion. Suitable bank stabilization shall be provided where required to prevent erosion of the drainage channels. Where storm sewers discharge into existing drainage channels at an angle greater than 30° from parallel with the downstream channel flow, the far side bank shall be properly stabilized. The stabilization shall be designed to prevent erosion and frost heave under and behind the stabilizing media.
 - iii] **Maximum Side Slope.** Any vegetated drainage channel requiring mowing of the vegetation shall have a maximum grade of three (3) horizontal to one (1) vertical in those areas to be mowed.

- iv] Design Standard. Because of the critical nature of the vegetated drainage channels, the design of all vegetated channels shall, as a minimum, conform to the design procedures outlined in the PADEP manuals. Several acceptable sources outline procedures for non-vegetated drainage channels, including the following:

- Bureau of Public Roads
 - Hydraulic Engineering Circular No. 5
 - Hydraulic charts for the Selection of Highway Culverts
 - Federal Highway Administration
 - Hydraulic Engineering Circular No. 13
 - Hydraulic Design of Improved Inlets for Culverts

- v] Reference to publications and source documents in this Section shall be deemed to include any amendments and revisions thereof.

- vi] Fencing. When required by the Township Engineer.

5) Specific Infiltration System Design Criteria (when practical and applicable)

- a. Infiltration devices shall be selected based on suitability of soils and site conditions. Measures may include porous pavement with underground infiltration bed, vegetated infiltration beds, swales, and trenches or other seepage structures similar to those proposed in the Pennsylvania Handbook of Best Management Practices for Developing Areas (1998) and related references or other guidance documents.
- b. Soil infiltration tests shall be performed for all proposed infiltration areas; these tests shall include evaluation of selected soil horizons by deep pits and percolation measurements. Testing shall be reviewed and approved by the Township Engineer. The soil infiltration rate of discharge from the infiltration area being used in the proposed design shall be based on these measurements.
- c. Where possible, the lowest elevation of the infiltration area shall be at least two (2) feet above the seasonal high water table (SHWT) and bedrock.
- d. All infiltration systems shall have appropriate positive overflow controls to prevent storage within one (1) foot of the finished surface or grade.
- e. All infiltration systems shall have a minimum setback of 15 feet from all residential structures. Care should be taken to prevent any seepage into sub-grade structures.
- f. All surface inflows shall be designed to prevent the direct discharge of sediment into the infiltration system.

B. Municipality Review of Drainage Plan Including the BMP Operations and Maintenance Plan.

- 1) The Municipality shall review the Drainage Plan, including the BMP Operations and Maintenance Plan, for consistency with the purposes and requirements of this Ordinance and any permits issued by DEP. The Municipality shall also review the Drainage Plan against any additional storm drainage provisions contained in the Municipal Subdivision and Land Development or Zoning Ordinance, as applicable.
- 2) The Municipality shall notify the applicant in writing whether the BMP Operations and Maintenance Plan is approved.
- 3) The Municipality may require an "As-Built Survey" of all stormwater BMPs, and an explanation of any discrepancies with the Drainage Plan.

C. Modification of Plans. A modification to a submitted Drainage Plan for a proposed development site which involves a change in control methods or techniques, or which involves the relocation or redesign of control measures, which is necessary because of soil or other conditions are not as stated on the Drainage Plan (as determined by the Municipality), shall require a resubmission of the modified Drainage Plan subject to review per **Section 436.3.B: Municipality Review of Drainage Plan...** of this Ordinance.

D. Waiver Procedures. The Municipality may hear requests for waivers where it is alleged that the provisions of this Ordinance inflict unnecessary hardship upon the applicant. The waiver request shall be in writing and accompanied by the requisite fee based upon a fee schedule adopted by the Municipality. A copy of the waiver request shall be provided to each of the following: Municipality, Municipal Engineer, Municipal Solicitor and the Montgomery County Planning Commission. The request shall fully document the nature of the alleged hardship. The Municipality may grant a waiver provided that all of the following findings are made in a given case:

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- 1) That there are unique physical circumstances or conditions, including irregularity of lot size or shape, or exceptional topographical or other physical conditions peculiar to the particular property, and that the unnecessary hardship is due to such conditions, and not the circumstances or conditions generally created by the provisions of this Ordinance in which the property is located;
- 2) That because of such physical circumstances or conditions, there is no possibility of this Ordinance, and that the authorization of a waiver is therefore necessary to enable the reasonable use of the property.
- 3) That such unnecessary hardship has not been created by the applicant;
- 4) That the waiver, if authorized, will represent the minimum waiver that will afford relief and will represent the least modification possible of the regulation in issue; and
- 5) That financial hardship is not the criteria for granting of a hardship waiver.

In granting any waiver, the Municipality may attach such conditions and safeguards as it may deem necessary to implement the purposes of this Ordinance. If a Hardship Waiver is granted, the applicant must still manage the quantity, velocity, direction and quality of resulting storm runoff as is necessary to prevent injury to health, safety or other property.

4. Inspections.

- A. DEP or its designees (e.g., County Conservation Districts) normally ensure compliance with any permits issued, including those for stormwater management. In addition to DEP compliance programs, the Municipality or its designee may inspect all phases of the construction, operations, maintenance and any other implementation of stormwater BMPs.
- B. During any stage of the Regulated Earth Disturbance Activities, if the Municipality or its designee determines that any BMPs are not being implemented in accordance with this Ordinance, the Municipality may suspend or revoke any existing permits or other approvals until the deficiencies are corrected.

5. Fees and Expenses

- A. General. The Municipality may charge a reasonable fee for review of the Drainage Plan, including the BMP Operations and Maintenance Plan, to defray review costs incurred by the Municipality. The applicant shall pay all such fees.
- B. Expenses Covered by Fees. The fees required by this Ordinance shall, at a minimum, cover:
 - 1) The review of the Drainage Plan and BMP Operations and Maintenance Plan by the Municipality.
 - 2) The site inspections, including pre-construction meeting.
 - 3) The inspection of required controls and improvements during construction.
 - 4) The final inspection upon completion of the controls and improvement required in the plan.
 - 5) Any additional work, including attorneys' fees, required to monitor and enforce any permit provisions regulated by this Ordinance, correct violations, and ensure the proper completion of stipulated remedial actions.
 - 6) Administrative and clerical costs.

6. Stormwater BMP Operations and Maintenance Plan Requirements

- A. General Requirements. No Regulated Earth Disturbance Activities within the Municipality shall commence without the approval of Municipality of the BMP Operations and Maintenance Plan which describes how the permanent (e.g., post-construction) stormwater BMPs will be properly operated and maintained.
- B. Responsibilities for Operations and Maintenance of BMPs.
 - 1) The BMP Operations and Maintenance Plan for the project site shall establish responsibilities for the continuing operation and maintenance of all permanent stormwater BMPs, as follows:
 - a. If a Plan includes structures or lots which are to be separately owned and in which streets, sewers and other public improvements are to be dedicated to the Municipality, stormwater BMPs may also be dedicated to and maintained by the Municipality.
 - b. If a Plan includes operations and maintenance by a single ownership, or if sewers and other public improvements are to be privately owned and maintained, then the operation and maintenance of stormwater BMPs shall be the responsibility of the owner or private management entity.

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- 2) The Municipality shall make the final determination on the continuing operations and maintenance responsibilities. The Municipality reserves the right to accept or reject the operations and maintenance responsibility for any or all of the stormwater BMPs.
- C. Adherence to Approved BMP Operations and Maintenance Plan. It shall be unlawful to alter or remove any permanent stormwater BMP required by an approved BMP Operations and Maintenance Plan, or to allow the property to remain in a condition which does not conform to an approved BMP Operations and Maintenance Plan, unless an exception is granted in writing by the Municipality.
- D. Operations and Maintenance Agreement for Privately Owned Stormwater BMPs.
 - 1) The property owner shall sign an Operations and Maintenance Agreement with the Municipality covering all stormwater BMPs that are to be privately owned. The agreement shall be substantially the same as the agreement in **Appendix D: Stormwater Best Management Practices: Operations and Maintenance Agreement** of this Ordinance.
 - 2) Other items may be included in the agreement where determined necessary to guarantee the satisfactory operation and maintenance of all permanent stormwater BMPs. The agreement shall be subject to the review and approval of the Municipality.
- E. Stormwater Management Easements.
 - 1) Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Municipal Engineer.
 - 2) Stormwater management easements shall be provided by the property owner if necessary for (1) access for inspections and maintenance, or (2) preservation for stormwater runoff conveyance, infiltration, and detention areas and other BMPs, by persons other than the property owner. The purpose of the easement shall be specified in any agreement under **Section 436.6.D: Operations and Maintenance Agreement for Privately Owned Stormwater BMPs**.
- F. Recording of approved BMP Operations and Maintenance Plan and Related Agreements.
 - 1) The owner of any land upon which permanent BMPs will be placed, constructed or implemented, as described in the BMP Operations and Maintenance Plan, shall record the following documents in the Office of the Recorder of Deeds for Montgomery County, within 90 days of approval of the BMP Operations Plan by the Municipality:
 - a. The Operations and Maintenance Plan, or a summary thereof;
 - b. Operations and Maintenance Agreements under **Section 436.6.D: Operations and Maintenance Agreement for Privately Owned Stormwater BMPs**; and
 - c. Easements under **Section 436.6.E: Stormwater Management Easements**.
 - 2) The Municipality may suspend or revoke any approvals granted for the project site upon discovery of the failure of the owner to comply with this Section.
- G. Municipal Stormwater BMP Operation and Maintenance Fund.
 - 1) If stormwater BMPs are accepted by the Municipality for dedication, the Municipality may require persons installing stormwater BMPs to pay a specified amount to the Municipal Stormwater BMP Operation and Maintenance Fund, to help defray costs of operations and maintenance activities. The amount may be determined as follows:
 - a. If the BMP is to be owned and maintained by the Municipality, the amount shall cover the estimated costs for operations and maintenance for perpetuity, as determined by the Municipality.
 - b. The amount shall then be converted to present worth of the annual series values.
 - 2) If a BMP is proposed that also serves as a recreation facility (e.g., ballfield, lake), the Municipality may adjust the amount due accordingly.

7. Prohibitions

A. Prohibited Discharges.

- 1) No person in the Municipality shall allow, or cause to allow, stormwater discharges into the Municipality's

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separate storm sewer system which are not composed entirely of stormwater, except (1) as provided in subsection 2 below, and (2) discharges allowed under a state or federal permit.

- 2) Discharges which may be allowed, based on a finding by the Municipality that the discharge(s) do not significantly contribute to pollution to surface waters of the Commonwealth, are listed below:
 - a. Discharges from fire fighting activities;
 - b. Uncontaminated water from foundations or from footing drains;
 - c. Flows from riparian habitats and wetlands;
 - d. Potable water sources, including dechlorinated water line and fire hydrant flushings;
 - e. Lawn watering;
 - f. Irrigation drainage;
 - g. Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used;
 - h. Routine external building washdown which does not use detergents or other compounds;
 - i. Air conditioning condensate;
 - j. Water from individual residential car washing;
 - k. Dechlorinated swimming pool discharges;
 - l. Springs;
 - m. Uncontaminated groundwater; and
 - n. Water from crawl space pumps
 - 3) In the event that the Municipality determines that any of the discharges identified in **Section 436.7.A(2)**: Discharges which may be allowed... significantly contribute to pollution of waters of the Commonwealth, or is so notified by DEP, the Municipality will notify the responsible person to cease the discharge.
 - 4) Upon notice provided by the Municipality under **Section 436.7.A(3)**, above, the discharger will have a reasonable time, as determined by the Municipality, to cease the discharge consistent with the degree of pollution caused by the discharge.
 - 5) Nothing in this Section shall affect a discharger's responsibilities under state law.
- B. Prohibited Connections. The following connections are prohibited, except as provided in **Section 436.7.A(2)** above:
- 1) Any drain or conveyance, whether on the surface or subsurface, which allows any non-stormwater discharge including sewage, process wastewater, and wash water, to enter the separate storm sewer system, and any connections to the storm drain system from indoor drains and sinks; and
 - 2) Any drain or conveyance connected from a commercial or industrial land use to the separate storm sewer system which has not been documented in plans, maps, or equivalent records, and approved by the Municipality.
- C. Roof Drains.
- 1) Roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches, except as provided in **Section 436.7.C(2)**, below.
 - 2) When it is more advantageous to connect directly to streets or storm sewers, connection of roof drains to streets or roadside ditches may be permitted by the Municipality.
 - 3) Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.
- D. Alteration of BMPs.
- 1) No person shall modify, remove, fill, landscape or later any existing stormwater BMP without the written approval of the Municipality unless it is part of an approved maintenance program.
 - 2) No person shall place any structure, fill, landscaping or vegetation into a stormwater BMP or within a drainage easement, which would limit or later the functioning of the BMP, without the written approval of the Municipality.

8. Right of Entry, Enforcement and Penalties

A. Right of Entry.

- 1) Upon presentation of proper credentials, duly authorized representatives of the Municipality may enter at reasonable times upon any property within the Municipality to inspect the implementation, condition, or operation and maintenance of the stormwater BMPs in regard to any aspect governed by this Ordinance.
- 2) BMP owners and operators shall allow persons working on behalf of the Municipality ready access to all parts of the premises for the purposes of determining compliance with this Ordinance.
- 3) Persons working on behalf of the Municipality shall have the right to temporarily locate on any BMP in the Municipality such devices as are necessary to conduct monitoring and/or sampling of the discharges from such BMP.
- 4) Unreasonable delays in allowing the Municipality access to a BMP is a violation of this Article.

B. Notice.

- 1) Whenever the Municipality finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the Municipality may order compliance by written notice to the responsible person. Such notice may require without limitation:
 - a. The performance of monitoring, analyses, and reporting;
 - b. The elimination of prohibited connections or discharges;
 - c. Cessation of any violating discharges, practices, or operations;
 - d. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
 - e. Payment of a judgment/fine to cover administrative and remediation costs and attorneys' fees incurred by the Municipality;
 - f. The implementation of stormwater BMPs; and
 - g. Operation and maintenance of stormwater BMPs.
- 2) Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of this/these violation(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the Municipality or designee and the expense thereof shall be charged to the violator, and collected with a penalty of ten (10%) percent, together with the maximum interest allowed by law for the collection of municipal claims either by filing a lien or by an action at law or any other authorized action.
- 3) Failure to comply with the time specified shall also subject such person to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Municipality from pursuing any and all other remedies available in law or equity.

C. Suspension and Revocation of Permits and Approvals.

- 1) Any building, land development or other permit or approval issued by the Municipality may be suspended or revoked by the Municipality for:
 - a. Noncompliance with or failure to implement any provision of the permit;
 - b. A violation of any provision of this Ordinance; or
 - c. The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution or which endangers the life or property of others.
- 2) A suspended permit or approval shall be reinstated by the Municipality when:
 - a. The Municipal Engineer or designee has inspected and approved the corrections to the stormwater BMPs, or the elimination of the hazard or nuisance, and/or;
 - b. The Municipality is satisfied that the violation of the Ordinance, law, or rule and regulation has been corrected; and

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- c. Payment of all municipal fees, costs and expenses, including attorneys' fees, related to or arising from the violation has been made.
- 3) A permit or approval which has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new permit under the procedures outlined in this Ordinance.

D. Exemptions

- 1) Prior Drainage Plan Approval – Any regulated activity for which a drainage plan was previously prepared as part of a subdivisions or land development proposal that received preliminary plan approval from the Municipality prior to the effective date of this Ordinance is exempt from the water quality provisions of this Ordinance, provided that the approved drainage plan included a design of stormwater facilities to control runoff from the site currently proposed for development consistent with the Ordinance provisions in effect at the time of approval and the approval has not lapsed under the Municipalities Planning Code. If significant revisions are made to the drainage plan after both preliminary plan approval and the effective date of this ordinance, preparation of a new drainage plan, subject to the provisions of this Ordinance, shall be required. Significant revisions would include a change in control methods or techniques, relocation or redesign of control measures or changes necessary because soil or other conditions are not as stated on the original drainage plan.
- 2) This exemption shall not relieve the applicant from implementing such measures as are necessary to protect health, safety and property. These measures include adequate and safe conveyance of stormwater on the site and as it leaves the site. This exemption does not relieve the applicant from the responsibility to secure permits or approvals from activities regulated by any other applicable code, act, or ordinance.
- 3) No exemption shall be provided for regulated activities involving the diversion or piping of any natural or manmade stream channel.

E. Compatibility with Other Ordinance Requirements

- 1) Approvals issued and actions taken under this Ordinance do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation or ordinance. To the extent that this Ordinance imposes more rigorous or stringent requirements for stormwater management, the specific requirements contained in this Ordinance shall be followed.
- 2) Nothing in this Ordinance shall be construed to affect any of the Municipality's requirements regarding stormwater matters which do not conflict with the provisions of this Ordinance, such as local stormwater management design criteria (e.g., inlet spacing, inlet type, collection system design and details, outlet structure design, etc). Conflicting provisions in other municipal ordinances or regulations shall be construed to retain the requirements of this Ordinance addressing State Water Quality Requirements.

Section 437. Water Supply.

1. Applicants shall provide a safe, reliable, and adequate water supply from public water service to support the intended uses approved as part of a development plan. When water is to be provided by means other than private wells owned and maintained by the individual owners of lots within a subdivision or land development, applicants shall present evidence to Township Board of Commissioners that the subdivision or land development is to be supplied the West Pottsgrove Municipal Authority. A copy of a Certificate of Public Convenience from the Pennsylvania Public Utility Commission or an application for such certificate, a cooperative agreement, or a commitment or agreement to serve to area in question, whichever is appropriate, shall be acceptable evidence.
2. Fire hydrants shall be located at accessible points throughout the subdivision and shall be located according to the Township Engineer. As a general rule, hydrants should be located at each street intersection and at intermediate points as recommended by the State Insurance Services Office. Generally hydrant spacing may range from 350 to 600 feet depending upon the area being serviced. The type and methods of construction to be employed in the installation of fire hydrants shall be in accordance with current State and local regulations.
3. Public Water Supply Facilities Design. The design for public water supply facilities shall be in accordance with PADEP Water Supply Manual.

Section 438. Waste Water Disposal.

1. Waste water from a subdivision or land development must be disposed of in an environmentally safe manner. All sanitary sewers shall be installed and connected to the Municipal or authority sanitary sewer system following review of plans and approval by PADEP and the Municipal Authority. In areas not presently served by central sanitary sewers, appropriate sewage disposal must be provided in accordance with the regulations of PADEP and in addition, the installation and capping of sanitary sewer mains and house connections may be required if studies by Township Board of Commissioners indicate that extension of sanitary sewers to serve the property subdivided appears probable or necessary to protect public health. PADEP and the Montgomery County Department of Health as may be appropriate shall approve the waste water disposal systems.
2. Wastewater facilities design standards.
 - A. Sewage Facilities. The type of sewage facilities developed for a particular site shall be based upon the recommendations of the Township Sewage Facilities Plan developed in accordance with Act 537.
 - B. Sewage Facilities Design. The design and installation of domestic sewage facilities shall be done in accordance with the Pennsylvania Domestic Wastewater Facilities Manual prepared by PADEP.
 - C. On-site Sewage Facilities Design. The design and installation of on-lot subsurface disposal systems shall be done in accordance with PA Title 25 Chapter 73 regulations and the Technical Manual for Sewage Enforcement Officers and under direction and approval of the Montgomery County Health Department.
 - D. Community Sewage Facilities. Sewage disposal for more than one lot on a shared basis, by means of community sewage facilities may be permitted in compliance with PADEP regulations and Township Sewage Facilities Plan.

Section 439. Solid Waste Storage.

Central trash storage and recyclable storage areas shall be developed as follows:

1. Design.
 - A. All trash collection equipment should be placed within enclosures. Enclosures should be at least large enough to adequately contain all trash and recyclable material containers. Generally the sizing and type of storage containers will depend upon the amount of trash and recyclables expected to be generated in the buildings they service.
 - B. Enclosures should be 6 feet high or at least 1 foot higher than the proposed collection container.
 - C. Enclosures should be made of durable material including masonry blocks or steel reinforced wood fencing. In most cases, garden type fencing or landscaping is not durable enough.
 - D. The entrance to the enclosure should be at least ten feet wide to accommodate front loading trucks. Gates placed on the entrance should be durable and equipped with piston type bolts to secure gates in both a closed and open position.
 - E. The trash storage area should be placed on a concrete pad. The dimensions of the pad are dependent on the number and size of proposed containers. Ideally, the pad should extend 6 to 10 feet in front of where the proposed container is to be placed to support the front wheels of the trash truck servicing the site. The area above the container should be free of obstructions. Generally, a 15 foot clearance above the storage area is sufficient.
2. Locations. In locating a trash storage area several objectives should be balanced including spatial demands, distance from source of trash generation, setback from adjoining property, and access for disposal trucks. Trash storage may be placed near building service entrances or loading docks. In apartment or condominium complexes with centralized waste storage, containers are may be located in an area which is convenient to each grouping of 10 to 15 units. Spatial consideration (i.e., loss of parking area or loading space) is important.

During the servicing of these containers (up to 5 minutes) it is important that internal circulation at the site is not impeded. Trash containers ideally should be within a building setback in a given zoning district. At a minimum, they should be setback in accordance with accessory structures.
3. Operations. Trash storage containers should be serviced at least once a week. Recycling containers can be serviced at a less frequent interval. If a dumpster contains food it should be serviced every three days. A storage container should have tight fitting lids, secured at all times, and be leak free. It should also be cleaned out at least two times a year.

Section 440. Traffic Impact Study

Traffic Impact Study

Section 440. Traffic Impact Study.

1. Purpose. The Traffic Impact Study will enable West Pottsgrove Township to assess the impact of the proposed development on the transportation system, both highways and public transportation, in the Township. Purpose of the impact study is to insure that proposed developments do not adversely affect the transportation network and to identify any traffic problems associated with access between the site and the existing transportation network. The study's purpose is also to delineate solutions to potential problems and to present improvements to be incorporated into the proposed development. The study shall assist in the protection of air quality, conservation of energy and encouragement of public transportation use.
2. A Traffic Impact Study shall be prepared by a qualified traffic engineer and/or transportation planner with previous traffic study experience. Procedures and standards for a Traffic Impact Study are as set forth herein. Applicant may provide funds to the Township to enable the Township to hire a traffic engineer of its choice to conduct the study, if this procedure is deemed appropriate and approved by the Township.
3. Applicability. A Traffic Impact Study shall be submitted with all requests for change of zoning, special exception, conditional use and as part of a preliminary plan application for all subdivisions and/or land developments and/or planned residential developments when the proposed use and/or land development involves 20 or more dwelling units or is a nonresidential use, unless determined unnecessary by the Board of Commissioners.

The Township Board of Commissioners, at its discretion, may require any other subdivision or land development application to be accompanied by a Traffic Impact Study; provided, however, that Township Board of Commissioners notify the applicant within 60 days following Township Board of Commissioners' first meeting to consider the proposal. Such a notification shall specify the reason for the requirement, citing the proposal's particular location or existing problems or type of use. The West Pottsgrove Township Board of Commissioners, at its discretion, may waive the requirement for a Traffic Impact Study. If required by Township Board of Commissioners, the developer of a land development shall provide emergency signal preemption for any traffic signals located within or immediately adjacent to the development. An application which requires a Traffic Impact Study shall not be considered complete until the Traffic Impact Study is submitted to the Township in accordance with the provisions of this section.

4. Definitions.
 - A. Public Transportation. Transportation service for the general public provided by a common carrier of passengers generally on a regular route basis, or a private operator offering service to the public.
 - B. Study Area. This area will extend approximately one-half mile along the adjacent roadways in all directions from all access points or the first major intersection along these roadways. Where doubt exists, the traffic engineer shall seek guidance from the Township Engineer prior to the submission of the Traffic Impact Study.
 - C. Major Intersection. Any intersection where traffic generated by the proposal will have significant impact on the operation of the intersection and/or any other intersection involving an arterial road. Where doubt exists, the traffic engineer shall seek guidance from Township Engineer prior to the submission of the Traffic Impact Study.
 - D. Volume/Capacity Analysis. This procedure compares the volume of a roadway or intersection approach to its capacity (maximum number of vehicles that can pass a given point during a given time period.) The procedures described in the latest version of the Highway Capacity Manual, published by the Transportation Research Board, shall be followed.
 - E. Level of Service. Level of service, as described in the 2000 Highway Capacity Manual, indicates how well traffic moves on a particular highway facility or through a specific intersection. There are six levels of servicing ranging from "A" through "F". Level of Service "A" indicates generally free movement. Level of Service "F" represents maximum capacity of the facility. Level "F" indicates congestion. Level of Service "C" is considered the design level of service, representing a stable traffic flow and a relatively satisfactory travel speed.
 - F. Trip Generation Rates. The total count of trips to and from a study site per unit of land use as measured by parameters such as dwelling units, acres, etc.
 - G. Queue Analysis. This procedure includes the average queue and maximum queue of vehicles which will be observed in each traffic stream and intersection approach, measured in both feet and vehicles. Various statistical and/or computer models may be applied.
 - H. Warrants for Traffic Signal Installation. This is a series of warrants which detail the minimum traffic or pedestrian volumes or other criteria necessary for the installation of a traffic signal. These warrants are contained in the Man-

ual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, Federal Highway Administration, 2003, as amended, or the most recent version, whichever is later.

- I. Engineering and traffic studies shall be prepared in accordance with Title 67, Chapter 201, "Engineering and Traffic Studies".
5. General Requirements and Standards. A Traffic Impact Study shall contain the following information:
 - A. General Site Description. The site description shall include the size, location, proposed land uses, construction staging and completion date of the proposed subdivision or land development. If the development is residential, types of dwelling units shall also be included. A brief description of other major existing and proposed developments within the study area shall be provided. The general site description shall also include probable socioeconomic characteristics of potential site users to the extent that they may affect the transportation needs of the site (i.e., number of senior citizens).
 - B. Transportation Facilities Description. The description shall contain a full documentation of the proposed internal and existing external transportation system. This description shall include proposed internal vehicular, bicycle and pedestrian circulation, all proposed ingress and egress locations, all internal roadway widths and rights-of-way, parking conditions, traffic channelization and any traffic signals or other intersection control devices at all intersections within the site.

The report shall describe the entire external roadway system within the study area and include discussion of existing design deficiencies and potential safety hazards. Major intersections in the study area shall be identified and sketched. All existing and proposed public transportation services and facilities within a one-mile radius of the site shall also be documented. Report shall include review and discussion of all available accident reports within the study area during the prior 3 years. All future highway improvements, including proposed construction and traffic signalization, shall be noted. The 4-Year Regional Transportation Improvement Program maintained by the Delaware Valley Regional Planning Commission and the PADOT Twelve-Year Plan shall be used as a source of information when determining if any future roadway improvements are scheduled for the adjacent road network. Any proposed roadway improvements due to proposed surrounding developments shall be recorded.

- C. Existing Traffic Conditions. Existing traffic conditions shall be measured and documented for all roadways and intersections in the study area. Existing traffic volumes for average daily traffic, peak highway hour(s) traffic, and peak development generated hour(s), and documentation shall be included in the report. Traffic counts are to be performed from 6 A.M. to 10 A.M. and from 3 P.M. to 7 P.M. Traffic count data shall not be more than 1 year old. Traffic counts shall be taken on a Tuesday, Wednesday, or Thursday of a nonholiday week. Traffic counts shall be taken during the school year. Traffic counts shall be collected during average volume conditions, during fair weather, and in consideration of any construction activities or special events which may be taking place in the area. Additional counts (conducted on a Saturday for a commercial development or residential development in close proximity to the commercial district or tourist attractions) may also be required in some cases. The Township Engineer shall make such determinations. Traffic counts shall be submitted in electronic format to the Township. Roadway characteristics shall be described and illustrated. Features to be addressed shall include lane configurations, geometry, signal timing, traffic control devices, posted speed limits, and sight distance limitations. Existing levels of service shall be calculated for all intersections and turning movements within the study area. This analysis will determine the adequacy of the existing roadway system to adequately serve the existing traffic demand. Roadways, intersections, or individual movements experiencing levels of service below C, and/or volume/capacity ratios greater than or equal to 1.0 shall be noted as deficient. A volume/capacity analysis based upon existing volumes shall be performed during the peak highway hour(s) and the peak development generated hour(s) for all roadways and major intersections in the study area. Levels of service shall be determined for each location using the current edition of The Highway Capacity Manual methodology. All analysis must utilize Highway Capacity Software, version 4.1e, or latest.
- D. Transportation Impact of the Development. Estimation of vehicular trips to result from the proposal shall be completed for the average daily peak highway hour(s) and peak development-generated hour(s). Vehicular trip generation rates to be used for this calculation shall be obtained from the manual *Trip Generation*, Seventh Edition, Institute of Transportation Engineers, 2003 (as amended). These development-generated traffic volumes shall be provided for the in-bound and out-bound traffic movements as estimated, and the reference source(s) methodology followed shall be documented. All turning movements shall be calculated. These generated volumes shall be distributed to the study area and assigned to the existing roadways and intersections throughout the study area. Documentation of all assumptions used in the distribution and assignment phase shall be provided. Traffic volumes shall be assigned to individual access points. If school crossings are to be used, pedestrian volumes shall be as-

Section 440. Traffic Impact Study

signed to each crossing. Any characteristics of the site that will cause particular trip generation problems shall be noted.

- E. Analysis of Transportation Impact. The total future traffic demand shall be calculated. This demand shall consist of the combination of the existing traffic expanded to the completion year (using a background growth rate for the area from PADOT, Pennsylvania Traffic Data, latest edition), the development-generated traffic, and the traffic generated by other proposed developments in the study area. A separate trip distribution figure shall be provided. A second/volume capacity analysis shall be conducted using the future conditions volumes without development. This analysis shall be performed during the peak highway hour(s) and peak generated hour(s) for all roadways and major intersections in the study area. Level of Service calculations shall be completed for all major intersections. A third/volume capacity analysis shall be conducted using the total future demand and the future roadway capacity. If staging of the proposed development is anticipated, calculations for each stage of completion shall be made. This analysis shall be performed during the peak highway hour(s) and peak development-generated hour(s) for all roadways and major intersections in the study area. Level of Service calculations shall be completed for all major intersections. It is usually at these locations that capacity is most restricted. All access points and pedestrian crossings shall be examined as to the feasibility of installing traffic signals. This evaluation shall compare the projected traffic and pedestrian volumes to the warrants for traffic signal installation.
- F. Sight Distance Analysis. Sight distance measurements shall be performed at any proposed driveway and/or existing driveway to determine sufficient sight distance to the left and right of the driveway. Sight distances shall be compared to the desirable sight distance standards as specified in *Title 67 of the PA Code*, Chapter 441, "Access to and Occupancy of Highways by Driveways and Local Roads," January, 1992. Sight distance shall also be compared to PADOT's safe stopping sight distance (SSSD) requirements as specified in *A Policy on Geometric Design of Highways and Streets*, of the American Association of State Highway and Transportation Officials (AASHTO), Chapter III, "Elements of Design," 1994.
- G. Auxiliary Lane Analysis. An auxiliary lane analysis shall be completed utilizing Highway Research Record (HRR) 211. HRR 211 provides graphs based upon the speed of the roadway and the percentage of left turns. Utilizing the future build with development traffic volumes, points shall be plotted on the graphs. Based on the plotted points it should be determined that the study area intersections associated with the proposed developments do or do not satisfy the left turn lane warrant. Right turn lane analysis should be based upon the "Access Management, Location and Design Participant Notebook," Publication Number FHWA-HI-92-033, US Department of Transportation, Federal Highway Administration NHI Course Number 15255, October 1991. Deceleration lanes should be provided for all high volume driveways. For low and medium volume driveways, the designer should refer to the Colorado and Virginia DOT deceleration lane warrants.
- H. Conclusions and Recommended Improvements. Levels of service for all roadways and intersections shall be listed. All individual turning movement of roadways and/or intersections showing a level of service below "C" shall be considered deficient, and specific recommendations for the elimination of these problems shall be listed. This listing of recommended improvements shall include, but not be limited to the following elements: internal circulation design, site access location and design, external roadway and intersection design/safety improvements, traffic signal installation and operation including signal timing, and transit design improvements. All physical roadway improvements shall be shown in sketches.

Existing and/or future public transportation service shall also be addressed. A listing of all actions to be undertaken to increase present public transportation usage and improve service, if applicable shall be included.

The listing of recommended improvements for both roadways and transit shall include, for each improvement, the party responsible for the improvement, the cost and funding of the improvement and the completion date for the improvement.

The study shall outline mitigation measures and demonstrate any changes to the level of service achieved by these measures. Any alternatives or suggested phasing of improvements shall be described. The mitigation measures may include recommendations such as roadway widening, turning lanes, deceleration lanes/tapers, changes to signalization, use of access management techniques, or a reduction in the proposed intensity of the use. The responsibility and timing of all recommended roadway improvements shall be described within the traffic impact study.

- 6. Time of Submission. The Traffic Impact Study shall be submitted to the Planning Commission with the preliminary plan submission. Revisions to preliminary plans may constitute the need for re-submission of the traffic impact study for the revised conditions. Improvement plans shall not be submitted to PADOT until after review by the Montgomery County Planning Commission and Township Board of Commissioners.
- 7. Implementation. Township Board of Commissioners shall review the Traffic Impact Study to analyze its adequacy in solving any traffic problems that will occur due to the land development or subdivision. Township Board of Commissioners may determine that certain improvements on and/or adjacent to the site and within the study area are necessary requirements for land development or subdivision plan approval and may attach these as conditions to the approval. If Township Board of Commis-

Section 440. Traffic Impact Study

sioners determines that such additional improvements are necessary, the developer shall have the opportunity to submit alternative improvement designs to obtain plan approval.

8. Emergency Response Organizations. The Township shall submit all land development plans proposing the construction of nonresidential buildings or multi-family residential dwellings to the fire department, police department and any other emergency response organization having jurisdiction within the area of the proposed development for review and comment.”

ARTICLE FIVE

IMPROVEMENT CONSTRUCTION REQUIREMENTS

Section 500. Applicability.

Before the final plan is signed and made ready for recording or prior to the issuance of any permits needed for construction or occupancy of any subdivision or land development, all applicants are required to complete to the satisfaction of Township Board of Commissioners all required public improvements in manner set forth in this Article.

Section 501. Completion or Guarantee of Required Improvements.

No Final Plan shall be approved until the applicant has either:

1. Completed all of the improvements required by Township Board of Commissioners for Final Plan Approval, in compliance with the requirements of this Ordinance; or
2. Provided a proper financial security for those improvements, as required by this Article, in compliance with the Pennsylvania Municipalities Planning Code, to cover the estimated costs for completion of those improvements.
 - A. The work completed or guaranteed shall be in strict accordance with the approved plans and the requirements of this Ordinance.
 - B. No lot in a subdivision may be sold, and no permit to erect, alter, or repair any building upon land in a subdivision or land development will be issued unless and until a subdivision and/or land development plan has been approved, and where required, recorded, and until the required improvements in connection therewith have either been completed or guaranteed for completion as required herein.
 - C. The applicant shall also guarantee that no lot will be sold or building constructed in any floodplain area except in compliance with the floodplain management requirements of this Ordinance, the Zoning Ordinance, and the Building Code.
 - D. Deferral or Waiver of Required Improvements Township Board of Commissioners may defer or waive at the time of final plan approval, subject to appropriate conditions, the provision of any or all required improvements, as in its judgment, are not requisite in the interests of public health, safety and welfare, or which are inappropriate due to the inadequacy or non-existence of connecting facilities. A separate public improvement agreement may be executed by Township Board of Commissioners guaranteeing completion of any deferred improvement.

Section 502. Financial Security.

1. In lieu of the completion of improvements required for Final Plan approval, financial security, in an amount required, shall be guaranteed to the Township in compliance with the applicable requirements of the Pennsylvania Municipalities Planning Code. Such financial security shall assure the complete installation of all the required improvements to be completed on or before the date fixed in the plan approval, subdivision agreement, and/or development agreement for completion of such improvements.
2. The amount of such security to be posted for the completion of required improvements shall be equal to 110% of the cost of completion estimated as of 90 days following the date scheduled for completion by the developer. Annually, the Township may adjust the amount of the required financial security by comparing the actual cost of improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the 90th day after the original scheduled date for completion or a rescheduled completion date.
3. In determining the cost of the completion of improvements for setting the amount of financial security required in 502, such cost shall be based upon an estimate of the cost of completion of required improvements submitted by the applicant or developer, and prepared by a professional engineer and certified to be fair and reasonable. The Township under recommendation of the Township engineer may refuse to accept the estimate for good reasons provided to the applicant. If the applicant or developer and the Township are unable to agree upon an estimate, then the estimate shall be recalculated and recertified by another professional engineer which is mutually chosen by the Township and the applicant. The estimate certified by the third engineer shall be presumed to be fair and reasonable and shall be the final estimate.
4. When requested by the applicant in order to facilitate financing, Township Board of Commissioners shall furnish the applicant with a signed copy of a resolution indicating approval of the Final Plan contingent upon the applicant obtaining a satisfactory financial security. Final Plans will not be signed or recorded until the financial improvements agreement is executed. The resolution of contingent approval shall expire and be deemed to be revoked if the financial security agreement is not executed within 90 days, unless a written extension is granted by Township Board of Commissioners.

5. The Township at its option, may accept financial security in cash in the form of an irrevocable letter of credit, escrow account or surety bond with a bonding company or commonwealth or federal chartered lending institution chosen by the party posting financial security provided said institution or company is authorized to conduct such business in the Commonwealth of Pennsylvania.

Section 503. Release From Liability.

Township Board of Commissioners may release all or parts of the posted financial security as completion of improvements proceeds, in compliance with the applicable requirements of the Pennsylvania Municipalities Planning Code.

1. **Partial Release of Security.** As the work of the installation of the required public improvements proceeds, the party posting the financial security may request the Township to release or authorize the release, from time to time, such portions of the financial security necessary for the payment of the contractor or contractors performing the work. Any such request shall be done in writing addressed to the municipality. Upon receipt of the request for release of a portion of the improvement security, the municipality shall within 45 days allow the Township Engineer to certify, in writing, that such portion of the public improvements has been completed in accordance with the approved plan at which time the Township shall authorize the release to the applicant or his designee by the bond company or lending institution of an amount of funds that the Township engineer feels fairly represents the value of the work completed. If the municipality fails to act upon a request for release of security within 45 days, the Township shall be deemed to have approved the full release of security as requested.
2. **Incomplete Improvements.** If the required improvements are not completely installed within the period fixed or extended by Township Board of Commissioners, Township Board of Commissioners may:
 - A. Declare the financial security in default and require that all improvements be installed regardless of the of the extent of the building development at the time the agreement is declared in default;
 - B. Suspend final plan approval until the development improvements are completed and record a document to that effect for the purpose of public notice;
 - C. Obtain funds under the security and complete improvements;
 - D. Assign the right to receive funds under the security to any third party, including a subsequent owner of the property wherein improvements were not completed in exchange for that subsequent owner's promise to complete improvements;
 - E. Exercise any other available rights under the Pennsylvania Municipalities Planning Code.
3. **Post-Completion Security.** The applicant shall be responsible for maintenance of all improvements until they are offered for dedication and accepted by the Township. Fifteen percent of the financial security may be held back to ensure that the public improvements are maintained until they are dedicated.

Section 504. Inspection of Work and Materials.

1. **Notice.** The Township Engineer shall be notified 48 hours in advance of the commencement of any construction or installation operation, in order that provision may be made for inspection by the Township. Construction and installation operations shall also be subject to inspection by the Township during the progress of the work. The subdivider, developer or builder shall pay the reasonable and necessary expenses for inspections, in accordance with the fee schedule established by resolution of Township Board of Commissioners.
2. **Improvement Specifications.** All required road improvements should be constructed in accordance with the applicable provisions of the PADOT, Form 408, current edition, including the latest revisions and other applicable regulations. All other required improvements shall be constructed in accordance with approved specifications found in the Township's Engineering Standards.
 - A. **Specifications.** The specifications will be furnished to the applicant by the Township. If any of the specifications are unavailable at the Township office, the Township Engineer shall provide the applicable specifications.
 - B. **Sample of Materials.** During or after construction of any required improvement, if the Township requires a sample of materials, said sample shall be furnished by the appropriate contractor, in a form specified by the Township Engineer.

3. Delivery Slips. Copies of all delivery slips for materials used in the construction of any storm sewers, sanitary sewers, roads, curbs, sidewalks, or any other facility within a Township right-of-way or easement shall be supplied to the Township.

Section 505. Off-Site Improvements.

Certain improvements beyond the geographical boundaries of a site to be subdivided and/or developed, including but not limited to road improvements, may be required to be constructed where it can clearly be demonstrated that such improvements have been made necessary solely through the additional burden imposed by the subdivision and/or development of the site. All such improvements or contributions for future off-site improvements shall be considered voluntary and will not be refunded to the developer. The developer may also be requested to cover certain costs which must be incurred by the Township or other governmental jurisdiction in order to make these improvements feasible. The legal and financial arrangements to cover costs of the off-site improvements shall be the same as those prescribed in **§502: Financial Security**.

Section 506. Conditions of Acceptance.

1. Conditions. The Township shall have no obligation to accept dedication of any street or other improvement unless:
 - A. The required improvements, utility mains and laterals, and monuments, shown on the approved plan or plans have been constructed to meet all requirements, and are free of defects or deterioration.
 - B. It is established to the satisfaction of Township Board of Commissioners that there is a need for the dedication of improvements.
2. Acceptance. The Township shall have no responsibility with respect to any street or other improvement, notwithstanding the use of the same by the public, unless the street or other improvement is accepted by an ordinance (or resolution) adopted by Township Board of Commissioners.
3. Offer of Dedication
 - A. The applicant shall submit a written offer of dedication to the Township for the streets or other improvements, including the following:
 - 1) A Deed of Dedication covering the improvements.
 - 2) A copy of a title insurance policy establishing the applicant's clear title to the property.
 - B. The items required in A, above, shall be submitted to the Township Engineer and Solicitor for their review and recommendations.
 - C. Township Board of Commissioners may accept dedication of the streets or other improvements by passing a resolution to that effect.

Section 507. Guarantee of Completed Improvements.

When Township Board of Commissioners accepts dedication of required improvements following their completion, Township Board of Commissioners may require posting of financial security by the applicant to secure the structural integrity and functioning of these improvements in accordance with the design and specifications as depicted on the approved final plan.

1. Said financial security shall be of the same type as otherwise required by **§502: Financial Security**, herein.
2. The amount of financial security shall be 15 percent of the actual cost of installation of the improvements.
3. The term of the guarantee shall be 18 months from the date of acceptance of dedication.

Section 508. Private Maintenance of Improvements.

Where the maintenance of improvements is to be the responsibility of individual lot owners, a homeowners' association or similar entity, or an organization capable of carrying out maintenance responsibilities, Township Board of Commissioners shall require that maintenance responsibilities be set forth in perpetual covenants or deed restrictions binding on the landowners' successors in interest, and may further require that an initial maintenance fund be established in a reasonable manner.

Section 509. Required Contracts.

Before Township Board of Commissioners shall cause its approval to be endorsed upon the final plans of any subdivision or land development (except in the case of minor subdivisions wherein Township Board of Commissioners impose no condi-

Section 509. Required Contracts

tion or conditions for the approval of the plan), and as a requirement for the approval thereof, the owners shall enter into a written agreement with the Township in the manner and form set forth by the Township Solicitor which shall include but not be limited to the following:

1. To construct or cause to be constructed, at the owners' expense, all streets, curbs, sidewalks, fire hydrants, street lights, drainage facilities, water and sewer facilities, street signs, monuments, capped sewers, parks, and other improvements shown on said final plan when required to do so by Township Board of Commissioners in accordance with the standards and specifications of the Township
2. To maintain at the owners' cost the said streets, curbs, sidewalks, drainage facilities, water and sewer facilities, street signs, parks, monuments, fire hydrants, street lights, capped sewers, and other improvements, until the same are accepted or condemned by the Township for public use, and for a period of 18 months thereafter to repair and reconstruct the same of any part of one of them when such repair or reconstruction shall be specified by Township Board of Commissioners as necessary by reason of faulty construction, workmanship, or materials, and, at or before acceptance of such improvements by the Township.
3. To install, or cause to be installed, at the owners' expense and without any cost to the Township for any part of such installation, street lighting facilities on all streets abutting the subdivision.
4. To pay all costs, charges or rates, of the utility furnishing electric service for the lighting of the streets on or abutting said subdivision, from the lights installed by the owner, until such time as the streets shown on the subdivision plans shall be accepted as public streets of the Township by deed of dedication, ordinance or resolution, or condemnation proceedings, and to indemnify and hold harmless the Township from and against all suit, actions, claims, and demands for electric service to the streets shown on said plans, or any part thereof, to the time that said streets shall be accepted as public streets of the Township in the manner hereinabove set forth.
5. Pay the inspection fees required by the Township.
6. To obtain the easements and releases required when any street, drainage facility or other improvement wherein a subdivision abuts or traverses land of persons other than the person holding legal title to the lands of the subdivision at his own cost, and obtain from the owner of the lands so abutted or traversed full releases from all damages which may change in grade, construction, or other-wise, of the street, drainage facility or other improvements and such releases shall insure to the benefit not only of the owner of the subdivision but to the Township as well.
7. To promptly remove or cause to be removed snow from the streets as may be required for safe traverse of the streets prior to dedication.
8. To promptly reimburse to the Township reasonable Attorney's and Engineers' fees.
9. Such other provision(s) as deemed necessary or desired by Township Board of Commissioners.

ARTICLE SIX

ADMINISTRATION, FEES, AND ENFORCEMENT

Section 600. General Administration.

All provisions of this ordinance shall be administered by Township Board of Commissioners or their officially designated representatives. All matters relating to this ordinance shall be submitted to the Township Manager who will handle the matter in accordance with current Township policies, procedures, and guidelines established by Township Board of Commissioners.

Section 601. Records.

The Township shall keep a public record of its correspondence, findings, recommendations, and actions relating to plans filed for review, in accordance with the policies, procedures, and guidelines established by Township Board of Commissioners and Planning Commission.

Section 602. Fees and Costs.

1. No application for preliminary or final plan approval shall be received and processed until the fees and/or escrow deposit, as set forth below, shall have been paid.
2. Township Board of Commissioners shall adopt and amend by resolution a schedule of fees, payable by the applicant to the Township for the filing of preliminary and final plans.
3. Township Board of Commissioners shall adopt and amend by resolution a schedule of escrow deposits to be paid by the applicant to the Township at the time of filing of an application, sufficient to pay all Township expenditures anticipated in the course of its review and disposition of plans.
 - A. Costs incurred by the Township in excess of the escrowed amount shall be paid by the applicant prior to the granting of approvals or permits.
 - B. If costs incurred by the Township are less than the escrowed amount, the difference shall be refunded to the applicant following disposition of the plans.
4. Township expenditures subject to escrow as in **§602.3: Fees and Costs**, above, include but are not limited to the following:
 - A. Engineering and other technical services such as plan review and construction inspections.
 - B. Materials and facilities tests.
 - C. Services of the Township Solicitor in reviewing and/or preparing documents related to the plan reviews.
 - D. Actual costs of recording.
 - E. An administrative charge of 15% of the total costs described in the previous five subsections
5. Disputes. In the event that the applicant disputes the amount of any such review fees, the applicant shall within 10 days of the billing date of the notice of withdrawal by the Township of an amount for deposit, notify the Township that the fees are disputed, in such case the Township shall not delay or disapprove a subdivision or land development due to the applicant's request over disputed fees. The following steps shall be taken to resolve disputes over contested review fees:
 - A. In the event that the Township and the applicant cannot agree on the amount of any review fees which are reasonable and necessary, then the Township and applicant shall jointly by mutual agreement, appoint another professional engineer to examine the disputed review fees and make a determination as to the amount thereof which are fair and reasonable within 50 days.
 - B. Following the independent engineers decision, the applicant shall pay the entire amount determined immediately.
 - C. If the Township and applicant cannot agree on an independent engineer within 20 days of the billing date, then upon application of either party, the President Judge of the Court of Common Pleas of the judicial district in which the municipality is located shall appoint an engineer who shall be neither the Township engineer or any professional engineer who has been retained by, or performed services for the Township or applicant within the preceding 5 years.

Sections 602-604

- D. The fee of the appointed professional engineer for determining the reasonable and necessary review fees shall be paid by the applicant if the amount of payment required in the decision is equal to or greater than the original bill. If the amount of payment is less than the original bill by one \$1,000 or more, the Township shall pay the professional engineers fees. Otherwise, the applicant and township should each pay one half of the fees of the professional engineer.

Section 603. Waiver of Requirements.

Upon review and recommendation by the Township Planning Commission, Township Board of Commissioners may grant a modification of the requirements of one or more provisions of this ordinance, if the literal enforcement of them would exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modification(s) will not be contrary to the public interest and that the purpose and intent of this ordinance is observed. All requests for modification (s) shall:

1. Be in writing and part of an application for subdivision and/or land development;
2. State the grounds and facts of unreasonableness or hardship on which the request is based;
3. List the provision(s) of the Ordinance involved; and
4. State the minimum modification necessary.

Section 604. Enforcement.

1. Preventative Remedies.
 - A. In addition to other remedies, the Township 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.
 - B. The Township may refuse to issue any permit or grant any approval necessary to further improve any real property which has been developed or has resulted from a subdivision in violation to this Ordinance. As an additional condition for the issuance of any permit or approval, the Township may require compliance with the conditions that would have been applicable to the property at which time the applicant acquired it.
2. Any person, partnership, or corporation who or which has violated the provisions of this Subdivision and Land Development Ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Township, pay a judgment of not more than \$500 plus all court costs, including the reasonable attorney fees incurred by the Township as a result thereof.
3. No judgment shall commence or be imposed, levied, or be payable until the date of the determination of a violation by the district justice.
4. If the defendant neither pays nor timely appeals the judgment, the Township may enforce the judgment pursuant to the applicable rules of civil procedure.
5. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership, or corporation violating the Ordinance to have believed that there was no such violation, in which event there shall 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.
6. All fines collected for such violations shall be paid to the Township.

ARTICLE SEVEN AMENDMENTS, VALIDITY, AND REPEALER

Section 700. Amendment Procedure.

Township Board of Commissioners may, from time to time, amend, supplement, change, modify, or repeal this ordinance by proceeding in accordance with the regulations of this Article. Township Board of Commissioners shall, by resolution adopt at a regular or special meeting, fix the time and place of a public hearing on the proposed amendment and cause public notice thereof to be given according to the definitions of public hearing and public notice set forth in Article Two of this Ordinance.

Section 701. Referral to Planning Commission.

All proposed amendments before adoption shall be referred to the Township and Montgomery County Planning Commission at least 30 days prior to the public hearing, for recommendation and report, which shall be advisory.

Section 702. Validity.

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

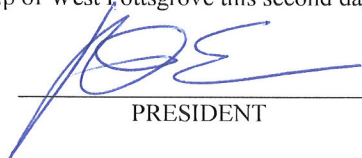
Section 703. Repealer.

All Ordinances and parts of Ordinances inconsistent herewith are repealed upon the legally effective date of this Ordinance.

Enacted and Ordained by the Board of Commissioners of the Township of West Pottsgrove this second day of March, 2011.

Attest:


SECRETARY


PRESIDENT

APPENDICES

APPENDIX A

RECOMMENDED PLANT MATERIAL LIST

CANOPY TREES

Street trees, parking lots, buffers, and screens. (*minimum mature height - 30 feet*)

Scientific Name	Common Name
Acer rubrum	Red Maple (native)
Celtis occidentalis	Hackberry (native)
Cladastris lutea	Yellowwood (native)
Fraxinus americana >Rosehill=	Rosehill White Ash
Fraxinus pennsylvanica cv. Marshall's Seedless	Marshall's Seedless Green Ash
Ginkgo biloba >Princeton Sentry=	Ginkgo (male only)
Gleditsia triacanthos inermis	Thornless Honeylocust
Koelreuteria paniculata	Golden Rain Tree
Liquidambar styraciflua	Sweet Gum (native)
Platanus occidentalis	Sycamore (native)
Platanus x acerifolia >Bloodgood=	London Planetree
Quercus bicolor	Swamp White Oak (native)
Quercus borealis	North Red Oak (native)
Quercus coccinea	Scarlet Oak (native)
Quercus imbricaria	Shingle Oak (native)
Quercus phellos	Willow Oak (native)
Quercus rubra	Red Oak (native)
Quercus shumardii	Shumard Oak
Sophora japonica	Japanese Pagodatree
Tilia americana	American Linden (native)
Tilia cordata	Little Leaf Linden
Tilia tomentosa	Silver Linden
Ulmus parvifolia	Chinese Lacebark Elm
Zelkova serrata	Japanese Zelkova

Property line buffers and non-vehicular use areas. (*minimum mature height - 30 feet*)

Scientific Name	Common Name
Acer saccharinum	Silver Maple (native)
Acer saccharum	Sugar Maple (native)
Betula nigra	River Birch (native)
Fagus grandifolia	American Beech (native)
Fagus sylvatica	European Beech
Fraxinus americana	White Ash (native)
Liriodendron tulipifera	Tuliptree (native)
Metasequoia glyptostroboides	Dawn Redwood
Ostrya virginiana	Hop Hornbeam (native)
Phellodendron amurense	Amur Cork Tree
Plantanus acerifolia	London Plane
Quercus alba	White Oak (native)
Quercus coccinea	Scarlet Oak (native)
Quercus palustris	Pin Oak (native)
Quercus vellutina	Black Oak (native)
Sassafras albidum	Sassafras (native)

Appendix A

Stormwater detention basins

Scientific Name	Common Name
+ Acer rubrum	Red Maple
* Acer saccharinum	Silver Maple
* Betula nigra	River Birch
Celtis occidentalis	Common Hackberry
* Fraxinus americana	White Ash
Fraxinus pennsylvanica	Green Ash
+ Liquidambar styraciflua	Sweet Gum
Liriodendron tulipifera	Tulip Poplar
* Nyssa sylvatica	Black Gum
Platanus occidentalis	Sycamore
Prunus serotina	Black Cherry
Quercus alba	White Oak
* Quercus phellos	Willow Oak
+ Quercus bicolor	Swamp White Oak
* Quercus palustris	Pin Oak
Quercus shumardi	Shumard Oak
Sassafras albidum	Sassafras
+ Taxodium distichum	Bald Cypress

EVERGREEN TREES

Property line buffers or site element screens. (*minimum mature height - 20 feet*)

Scientific Name	Common Name
Abies concolor	White Fir
Chamaecyparis obtusa	Hinoki Falsecypress
Chamaecyparis pisifera	Japanese Falsecypress
Ilex opaca	American Holly (native)
Picea abies	Norway Spruce
Picea glauca	White Spruce
Picea omorika	Siberian Spruce
Picea pungens	Colorado Spruce
Pinus strobus	White Pine (native)
Pinus thunbergii	Japanese Black Pine
Pseudotsuga menziesii	Douglas Fir

UNDERSTORY TREES

Street trees beneath overhead utility lines. (*mature height - 15-35 feet*)

Scientific Name	Common Name
Amelanchier canadensis	Shadblow Serviceberry (native)
Amelanchier laevis	Allegheny Serviceberry (native)
Carpinus carolinia	Ironwood (native)
Cercis canadensis	Redbud (native)
Chionanthus virginicus	Fringetree (native)
Cornus florida	Flowering Dogwood (native)
Cornus kousa chinensis	Chinese Kousa Dogwood
Cornus mas	Corneliancherry Dogwood
Crataegus cv. Toba	Toba Hawthorn
Crataegus phaenopyrum	Washington Hawthorn
Crataegus viridis >Winter King=	Winter King Hawthorn
Halesia carolinia	Silverbells (native)
Hammamelis virginiana	Witch Hazel (native)

Koelreuteria paniculata
 Magnolia soulangeana
 Magnolia virginiana
 Malus (cultivars)
 Oxydendrum arboreum
 Prunus sargentii
 Prunus serrulata cv. Kwanzan
 Prunus yedoensis
 Syringa amurensis var. japonica

Golden Raintree
 Saucer Magnolia
 Sweetbay Magnolia (native)
 Crabapple (disease resistant varieties)
 Sourwood (native)
 Sargent Cherry
 Kwanzan Cherry
 Yoshino Cherry
 Japanese Tree Lilac

LARGE DECIDUOUS SHRUBS

Property line buffers or site element screens (not clipped hedges). *(minimum mature height - 15 feet)*

Scientific Name

Aronia arbutifolia
 Calycanthus floridus
 Cephalanthus occidentalis
 Clethra alnifolia
 Cornus sericea
 Enkianthus campanulatus
 Fothergilla major
 Ilex verticillata
 Lindera benzoin
 Myrica pennsylvanica
 Philadelphus coronaris
 Physocarpus opulifolius
 Rhus glabra
 Rhus typhina
 Sambucus canadensis
 Spirea nipponica
 Vaccinium corymbosum
 Viburnum dentatum
 Viburnum lentago
 Viburnum prunifolium
 Viburnum opulus
 Viburnum trilobum

Common Name

Black Chokeberry (native)
 Sweetshrub (native)
 Buttonbush (native)
 Summersweet (native)
 Redosier Dogwood (native)
 Redvirens Enkianthus
 Large Fothergilla (native)
 Winterberry (native)
 Spicebush (native)
 Bayberry (native)
 Mockorange
 Common Ninebark
 Smooth Sumac (native)
 Staghorn Sumac (native)
 Elderberry (native)
 Snow Mound Spirea
 Blueberry (native)
 Arrow Wood (native)
 Nannyberry (native)
 Black Haw (native)
 European Cranberrybush Viburnum
 American Cranberry (native)

EVERGREEN SHRUBS

Site element screens. *(minimum mature height - 4 feet)*

Scientific Name

Azalea - evergreen varieties -
 must reach 3 foot height
 Ilex crenata
 Ilex glabra
 Ilex meserveae (varieties)
 Juniperus chinensis
 "Hetzi Glauca"
 Juniperus virginiana
 Kalmia latifolia and cultivars
 Leucothoe fontanessiana
 Pieris floribunda
 Pieris japonica
 Rhododendron sp.

Common Name

Azalea

 Japanese Holly
 Inkberry (native)
 Blue Holly(s)

 Hetz Blue Juniper
 Eastern Red Cedar (native)
 Mountain Laurel (native)
 Leucothoe
 Mountain Andromeda (native)
 Japanese Andromeda
 Various Lg. Rhododendrums

Appendix A

Taxus sp.	Yew
Thuja Sp.	Arborvitae
Viburnum rhytidophyllum	Leatherleaf Viburnum

DECIDUOUS OR EVERGREEN SHRUBS

Property line buffers or site element screens. (*minimum mature height - 4 feet*)

Scientific Name	Common Name
Aronia arbutifolia	Black Chokeberry (native)
Cornus mas	Corneliancherry Dogwood
Cotoneaster salicifolia	Willowleaf Cotoneaster
Euonymus alatus	Winged Euonymus
Euonymus alatus compactus	Dwarf Winged Euonymus
Euonymus fortunei vegetus sarcocoe	Big Leaf Wintercreeper
Ilex crenata	Japanese Holly
Ilex glabra	Inkberry (native)
Juniperus chinensis cv. glauca hetzi	Hetz Blue Juniper
Juniperus chinensis cv. pfitzeriana compacta	Compact Pfitzer Juniper
Ligustrum ibolium	Ibolium Privet
Philadelphus lemoinei	Mockorange
Ribes alpinum	Currant
Taxus baccata	English Yew
Taxus x media	Hybrid Yew
Viburnum dentatum	Arrow Wood (native)
Viburnum lentago	Nannyberry (native)
Viburnum opulus	European Cranberry Bush
Viburnum prunifolium	Black Haw (native)
Thuja occidentalis	American Arborvitae (native)

Stormwater detention basins

Scientific Name	Common Name
Alnus serrulata	Smooth Alder
+ Aronia arbutifolia	Red Chokeberry
Aronia melanocarpa	Black Chokeberry
* Calycanthus florida	Sweetshrub
+ Cephalanthus occidentalis	Buttonbush
+ Clethra alnifolia	Summersweet
+ Cornus amomum	Silky Dogwood
Cornus racemosa	Gray Dogwood
+ Cornus sericea	Redosier Dogwood
Ilex decidua	Possumhaw
+ Ilex glabra	Inkberry
+ Ilex verticillata	Winterberry
Itea virginiana	Virginia Sweetspire
Juniperus virginiana	Eastern Redcedar
* Linderia benzoin	Spicebush
* Myrica cerifera	Southern Bayberry
+ Myrica pennsylvanica	Northern Bayberry
Rhododendron atlanticum	Coast Azalea
+ Rhododendron nudiflorum	Pinxterbloom Azalea
+ Rhododendron viscosum	Swamp Azalea

* Sambucus canadensis	Elderberry
Sambucus racemosa	Red Elder
Spirea latifolia	Meadowsweet
* Viburnum cassinoides	Witherod
* Viburnum dentatum	Arrowwood
* Viburnum lentago	Nannyberry
Viburnum prunifolium	Blackhaw
* Viburnum trilobum	American Cranberrybush

HERBACEOUS PERENNIALS

Suitable for Stormwater Detention Basins

Scientific Name	Common Name
Acorus calamus	Sweetflag
Andropogon virginicus	Broomsedge
Aquilegia canadensis	Wild Columbine
Asclepias incarnata	Swamp Milkweed
Asclepias tuberosa	Butterflyweed
* Aster novae angliae	New England Aster
Aster novae-belgii	New York Aster
Caltha palustris	Marsh Marigold
Chelone glabra	White Turtlehead
Chelone lyonii	Pink Turtlehead
* Chrysanthemum leucanthemum	Ox-Eye Daisy
* Echinacea purpurea	Purple Cornflower
+* Eupatorium dubium	Joe Pye Weed
+* Eupatorium fistulosum	Hollow Joe Pye Weed
Filipendula rubra	Queen of the Prairie
* Hemerocallis sp.	Day Lily
* Hesperis matronalis	Dames Rocket
+ Hibiscus moscheutos	Rose Mallow
+* Iris pseudocaris	Yellow Iris
+ Iris versicolor	Blue Flag
Lilium superbum	Meadow Lily
Liatris spicata	Blazing Star
+* Lobelia cardinalis	Cardinal Flower
+* Lobelia siphilitica	Blue Lobelia
* Monarda didyma	Bee Balm
+* Panicum virgatum	Switchgrass
* Phalaris arundinacea	Canary Reed Grass
* Rudbeckia sp.	Black-Eyed Susan
+ Scirpus acutus	Hard Stem Bullrush
+ Spartina alternifolia	Cordgrass
Tradescantia ohioensis	Spiderwort
+ Typha angustifolia	Narrowleaf Cattail
+ Typha latifolia	Common Cattail
+* Vernonia noveboracensis	New York Iron Weed

* Suitable for usually well-drained areas that may be subject to occasional flooding.

+ Suitable for permanently wet areas.

APPENDIX B

NOXIOUS, INVASIVE, OR UNDESIRABLE SPECIES LIST

The following tree species may be considered as noxious, invasive exotic, or undesirable in sensitive plant communities. Their removal may be warranted for ecological restoration purposes. Removals of these species should not require mitigation, as set forth in **§410: Riparian Corridor Management**.

Scientific Name	Common Name
Acer platanoides	Norway Maple
Acer pseudoplatanus	Sycamore Maple
Ailanthus altissima	Tree of Heaven
Eleagnus angustifolia	Russian Olive
Eleagnus umbellata	Autumn Olive
Evodia daniellii	Korean Evodia
Morus alba	Mulberry
Paulownia tomentosa	Empress Tree
Phellodendron amurense	Amur Cork Tree (female)
Prunus avium	Sweet Cherry
Robinia pseudoacacia	Black Locust
Ulmus pumila	Siberian Elm

The following plant material shall not be permitted as part of a landscaping plan submitted to fulfill requirements of this ordinance.

Scientific Name	Common Name
Pyrus calleryana	Callery Pear
Rhamnus cathartica	Common or European Buckthorn
Coronilla varia	Crown vetch

APPENDIX C

LOW IMPACT DEVELOPMENT PRACTICES: ALTERNATIVE APPROACH FOR MANAGING STORMWATER RUNOFF

Natural hydrologic conditions may be altered radically by poorly planned development practices, such as introducing unneeded impervious surfaces, destroying existing drainage swales, constructing unnecessary storm sewers, and changing local topography. A traditional drainage approach of development has been to remove runoff from a site as quickly as possible and capture it in a detention basin. This approach leads ultimately to the degradation of water quality as well as expenditure of additional resources for detaining and managing concentrated runoff at some downstream location.

The recommended alternative approach is to promote practices that will minimize post-development runoff rates and volumes, which will minimize needs for artificial conveyance and storage facilities. To simulate pre-development hydrologic conditions, forced infiltration is often necessary to offset the loss of infiltration by creation of impervious surfaces. The ability of the ground to infiltrate depends upon the soil types and its conditions. Preserving natural hydrologic conditions requires careful alternative site design considerations. Site design practices include preserving natural drainage features, minimizing impervious surface area, reducing the hydraulic connectivity of impervious surfaces, and protecting natural depression storage. A well-designed site will contain a mix of all those features. The following describes various techniques to achieve the alternative approach:

Preserving Natural Drainage Features. Protecting natural drainage features, particularly vegetated drainage swales and channels, is desirable because of their ability to infiltrate and attenuate flows and to filter pollutants. However, this objective is often not accomplished in land development. In fact, commonly held drainage philosophy encourages just the opposite pattern – streets and adjacent storm sewers typically are located in the natural headwater valleys and swales, thereby replacing natural drainage functions with a completely impervious system. As a result, runoff and pollutants generated from impervious surfaces flow directly into storm sewers with no opportunity for attenuation, infiltration, or filtration. Developments designed to fit site topography also minimizes the amount of grading on site.

Protecting Natural Depression Storage Areas. Depressional storage areas have no surface outlet, or drain very slowly following a storm event. They can be commonly seen as ponded areas in farm fields during the wet season or after large runoff events. Traditional development practices eliminate these depressions by filling or draining, thereby obliterating their ability to reduce surface runoff volumes and trap pollutants. The volume and release-rate characteristics of depressions should be protected in the design of the development site. The depressions can be protected by simply avoiding the depression or by incorporating its storage as additional capacity in required detention facilities.

Avoiding Introduction of Impervious Areas. Careful site planning should consider reducing impervious coverage to the maximum extent possible. Building footprints, sidewalks, driveways and other features producing impervious surfaces should be evaluated to minimize impacts on runoff.

Reducing the Hydraulic Connectivity of Impervious Surfaces. Impervious surfaces are significantly less of a problem if they are not directly connected to an impervious conveyance system (such as storm sewer). Two (2) basic ways to reduce hydraulic connectivity are routing of roof runoff over lawns and reducing the use of storm sewers. Site grading should promote increasing travel time of stormwater runoff, and should help reduce concentration of runoff to a single point in the development.

Routing Roof Runoff over Lawns. Roof runoff can be easily routed over lawns in most site designs. The practice discourages direct connections of downspouts to storm sewers or parking lots. The practice also discourages sloping driveways and parking lots to the street. By routing roof drains and crowning the driveway to run off to the lawn, the lawn is essentially used a filter strip.

Reducing the Use of Storm Sewers. By reducing use of storm sewers for draining streets, parking lots, and back yards, the potential for accelerating runoff from the development can be greatly reduced. The practice requires greater use of swales and may not be practical for some development sites, especially if there are concerns for areas that do not drain in a “reasonable” time. The practice requires educating local citizens and public works officials, who expect runoff to disappear shortly after a rainfall event.

Appendix C

Using Permeable Paving Materials. These materials include permeable interlocking concrete paving blocks or porous bituminous concrete. Such materials should be considered as alternatives to conventional pavement surfaces, especially for low use surfaces such as driveways, overflow parking lots, and emergency access roads.

- **Constructing Cluster Developments.** Cluster developments can also reduce the amount of impervious area for a given number of lots. The biggest savings is in street length, which also will reduce costs of the development. “Cluster development” clusters the construction activity onto less-sensitive areas without substantially affecting the gross density of development. In summary, a careful consideration of the existing topography and implementation of a combination of the above mentioned techniques may avoid construction of costly stormwater control measures. Other benefits include reduced potential of downstream flooding, water quality degradation of receiving streams/water bodies and enhancement of aesthetics and reduction of development costs. Beneficial results include more stable baseflows in receiving streams, improved groundwater recharge, reduced flood flows, reduced pollutant loads, and reduced costs for conveyance and storage.

APPENDIX D
STORMWATER BEST MANAGEMENT PRACTICES
OPERATIONS AND MAINTENANCE AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between _____, (hereinafter the “Landowner”), and West Pottsgrove Township, Montgomery County, Pennsylvania, (hereinafter “Municipality”);

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of Montgomery County, Pennsylvania, Deed Book _____ at Page _____, (hereinafter “Property”).

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the stormwater management BMP Operations and Maintenance Plan approved by the Municipality (hereinafter referred to as the “Plan”) for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of Best Management Practices (BMP’s); and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site stormwater Best Management Practices be constructed and maintained on the Property; and

WHEREAS, for the purposes of this agreement, the following definitions shall apply:

BMP – “Best Management Practice;” activities, facilities, designs, measures or procedures used to manage stormwater impacts from land development, to protect and maintain water quality and groundwater recharge and to otherwise meet the purposes of the Municipal Stormwater Management Ordinance, including but not limited to infiltration trenches, seepage pits, filter strips, bioretention, wet ponds, permeable paving, rain gardens, grassed swales, forested buffers, sand filters and detention basins;

Infiltration Trench – A BMP surface structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer;

Seepage Pit – An underground BMP structure designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or groundwater aquifer;

Rain Garden – A BMP overlain with appropriate mulch and suitable vegetation designed, constructed, and maintained for the purpose of providing infiltration or recharge of stormwater into the soil and/or underground aquifer; and

WHEREAS, the Municipality requires, through the implementation of the Plan, that stormwater management BMP’s as required by said Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, his successors and assigns; and

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

The BMPs shall be constructed by the Landowner in accordance with the plans and specifications identified in the Plan.

The Landowner shall operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality and in accordance with the specific maintenance requirements noted on the Plan.

Appendix D

The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper identification, to inspect the BMP(s) whenever it deems necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.

In the event the Landowner fails to operate and maintain the BMP(s) as shown on the Plan in good working order acceptable to the Municipality, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). This provision shall not be construed to allow the Municipality to erect any permanent structure on the land of the Landowner. It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.

In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expense (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.

The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMP(s) by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.

The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality's employees and designated representatives from all damages, accidents, casualties, occurrences or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality. In the event that a claim is asserted against the Municipality, its designated representatives or employees, the Municipality shall promptly notify the Landowner and the Landowner shall defend, at his own expense, any suit based on the claim. If any judgment or claims against the Municipality's employees or designated representatives shall be allowed, the Landowner shall pay all costs and expenses regarding said judgment or claim.

The Municipality may inspect the BMP(s) at a minimum of once every three (3) years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of Montgomery County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs and any other successors in interest, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

(SEAL)

For the Landowner:

ATTEST:

West Pottsgrove Township

County of Montgomery, Pennsylvania

I, _____, a Notary Public in and for the County and State aforesaid, whose

commission expires on the _____ day of _____, 20____, do hereby certify that
_____ whose name(s) is/are signed to the foregoing Agreement bearing date
of the _____ day of _____, 20____, has acknowledged the same before me in my said County and State.

GIVEN UNDER MY HAND THIS _____ day of _____, 20____.

NOTARY PUBLIC (SEAL)

