INTRODUCTION

The objective of this Guide is to formalize uniform standards and processing procedures for subdivision and land development throughout the Tri-County Region (Cumberland, Dauphin and Perry Counties). Municipal officials, real estate developers, financial institutions, surveyors, engineers, landscape architects, planners, and property owners will benefit in this effort to guide community development in an orderly manner.

In the preparation of this model subdivision and land development ordinance, the Tri-County Regional Planning Commission (TCRPC) strongly encourages municipal officials within the Tri-County Region to consider the model either if officials are looking to adopt an ordinance or if officials are considering amendments. Local officials will find this Model Zoning Ordinance most helpful in these efforts. Public officials are however, cautioned to seek competent legal and planning counsel in the use of this Model Subdivision and Land Development Ordinance. Moreover, municipal officials are advised to consider the regional and local recommendations from the Tri-County Regional Growth Management Plan, County Comprehensive Plans, and local Comprehensive Plans in the preparation or amendment of a municipal subdivision and land development ordinance.

The Commission believes that the best way to encourage better subdivision and land development in the Region is to encourage the local municipalities to adopt local subdivision and land development ordinances containing regulations designed to fit the particular needs of the municipality. The municipality in developing such an ordinance should attempt to secure citizens' opinions, including those of landowners, developers, and subdividers, during the preparation of such an ordinance. Municipal officials are also encouraged to seek competent legal and planning aid in the use of this Guide.

Any municipality in the Tri-County Region interested in preparing a new subdivision and land development ordinance, or amending an existing one, and needs assistance may contact the Tri-County Regional Planning Commission office. The Commission’s staff is available to provide such assistance through its Municipal Advisory Service program.

Legal Basis for Subdivision and Land Development

This Guide was prepared to provide a basis by which a local Subdivision and Land Development Ordinance may be prepared by local governments. It includes articles on procedures and specifications for the preparation, submission and review or approval of subdivision and land development plats in accordance with the Pennsylvania Municipalities Code (PAMPC), Act 247, as reenacted and amended to date; to agree with the requirements of the Pennsylvania Department of Environmental Resources' Rules and Regulations for Erosion and Sedimentation Control Plans and the processing of Sewage Modules ' for Land Development; the Professional Engineers' Registration Law, as amended; the Federal Flood Insurance Program requirements; and compliance with the Pennsylvania Flood Plain Management Act, 1978.

Under the MPC, Contents of Subdivision, and Land Development Ordinance, the subdivision and land development ordinance may include, but need not be limited to:

- Provisions for insuring the submittal and processing of plats, including the charging of review fees, and specifications for such plats, including certification as to the accuracy of plats and provisions for preliminary and final approval and for processing of final approval by stages or sections of development.
- Provisions for insuring the exclusion of certain land development from the definition of land development contained in section 107 only when such land development involves:
- Provisions for insuring that the layout or arrangement of the subdivision or land development shall conform to the comprehensive plan and to any regulations or maps adopted in furtherance thereof.
- Provisions for insuring streets in and bordering a subdivision or land development shall be coordinated, and be of such widths and grades and in such locations as deemed necessary to accommodate prospective traffic, and facilitate fire protection.
- Provisions for insuring that adequate easements or rights-of-way shall be provided for drainage and utilities.
- Provisions for insuring reservations if any by the developer of any area designed for use as public grounds shall be suitable size and location for their designated uses.
- Provisions governing the standards by which streets shall be designed, graded and improved, and walkways, curbs, gutters, street lights, fire hydrants, water and sewage facilities and other improvements shall be installed as a condition precedent to final approval of plats.
- Provisions which take into account phased land development not intended for the immediate erection of buildings where streets, curbs, gutters, street lights, fire hydrants, water and sewage facilities and other improvements may not be possible to install as a condition precedent to final approval of plats, but will be a condition precedent to the erection of buildings on lands included in the approved plat.
- Provisions which apply uniformly throughout the municipality regulating minimum setback lines and minimum lot sizes which are based upon the availability of water and sewage, in the event the municipality has not enacted a zoning ordinance.
- Provisions for encouraging and promoting flexibility, economy and ingenuity in the layout and design of subdivisions and land developments, including provisions authorizing alterations in site requirements and for encouraging other practices which are in accordance with modern and evolving principles of site planning and development.
- Provisions for encouraging the use of renewable energy systems and energy-conserving building design.
- Provisions for soliciting reviews and reports from adjacent municipalities and other governmental agencies affected by the plans.
- Provisions for administering waivers or modifications to the minimum standards of the ordinance.
- Provisions for the approval of a plat, whether preliminary or final, subject to conditions acceptable to the applicant and a procedure for the applicant’s acceptance or rejection of any conditions which may be imposed.
- Provisions and standards for insuring that new developments incorporate adequate provisions for a reliable, safe and adequate water supply to support intended uses within the capacity of available resources.
- Provisions requiring the public dedication of land suitable for the use intended; and, upon agreement with the applicant or developer, the construction of recreational facilities, the payment of fees in lieu thereof, the private reservation of the land, or a combination, for park or recreation purposes as a condition precedent to final plan approval.

Content of the TCRPC’s Model Subdivision and Land Development Ordinance

Originally developed for the Region in 1974, and then revised in 1982, the Region’s Model Subdivision and Land Development Ordinance have been widely utilized.

The organized format for the Model is as follows:

- Article I - Is structured to identify the title of the ordinance for identification and reference.
- Article II - Identifies the purpose, Authority, Application, and Interpretation.
- Article III - Provides a comprehensive list of applicable definitions to help tie the model ordinance together.
- Article IV - Covers plan processing procedures and requirements.
- Article V - This article focuses on subdivision and land development design standards.
- Article VI - This article targets improvements and maintenance guarantees
- Article VII - The mobilehome park article.
- Article VIII - Organizes a format for applying local fees for review expenses.
- Article IX – This article identifies the mechanism for the granting of waivers to the ordinance’s minimum requirements. A noticeable change to this Article was the infusion of provisions for considerations on which municipal officials can base the determination as to whether a waiver should be granted. These considerations take into account whether the applicant has indeed proven hardship as defined herein.

Introduction-2
- Article X - This article covers Enforcement, Amendments, Penalties, and Severability representing the current PAMPC requirements for these particular subject items.

- Article XI - The last article covers the Effective Date and Enactment page.

- Appendices have been included in the back of the model ordinance. Within the appendices text, the reader will find flow charts for plat processing in municipalities having or not having a local subdivision and land development ordinance, as well as, Sewage Modules for Land Development; a sample plat application form; a sample public notice for ordinance adoption; and model provisions for the incorporation of solar access standards into a subdivision and land development ordinance.

While the standards contained in this Guide are considered minimums, adjustment by individual municipalities could be made to suit local conditions particular to each municipality, It is emphasized that local governing bodies should utilize competent engineering, legal, and planning advice in developing their own municipal subdivision and land development ordinance. Any municipality in the Tri-County Region, needing assistance in preparing such an ordinance or revising an existing ordinance, should contact the Tri-County Regional Planning Commission office. The Commission's staff is available to provide such assistance.

Enactment of Subdivision and Land Development Ordinance or Amendment thereto

Prior to voting on a proposed subdivision and land development ordinance, municipal officials are required to hold a public hearing pursuant to public notice. The public notice is required to provide a brief summary of the principal ordinance provisions and identify where within the municipality, copies of the proposed ordinance may be secured or examined. Unless the proposed ordinance was prepared by the municipal planning commission, the municipal officials are required to submit the ordinance to the municipal planning commission at least 45-days prior to the hearing on such ordinance. On the same lines, the county planning commission is required to receive a copy for a 45-day review period prior to the public hearing. With an amendment, both the municipal and county planning commissions are each afforded 30-days for review.

Furthermore, within 30-days after adoption, the municipal officials adopting the ordinance are required to forward a certified copy of the ordinance to the appropriate county planning commission. As highlighted, the only underlying difference in processes for an ordinance and an amendment is the review time allotted to the planning commission.

Special Recognition

Not to be overlooked, the Pennsylvania Housing Resource Center receives special recognition for recommendations derived from the Center’s resourceful design guide: Pennsylvania Standards for Residential Site Development. For additional information on the Pennsylvania Housing Research/Resource Center's Standards, visit the following web address: [www.engr.psu.edu/phrc/Land%20Development%20Standards.htm](http://www.engr.psu.edu/phrc/Land%20Development%20Standards.htm)

A second group, the Natural Lands Trust, is also worthy of recognition for their hard working effort assembling their model, Growing Greener: Conservation by Design Standards. Finally, additional information from various ordinances within the Region and several others from around the state were used to finalize the assembly of this Region’s model.
The Tri-County Regional Planning Commission would like to recognize the following individuals for their time and assistance in the preparation of this update to the Tri-County Region’s Model Subdivision and Land Development Ordinance Guide. This document would not have been possible without the participation of each Committee Member.

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Cumberland East Plan Development Section:       Cumberland East Plan Development Section:
Cumberland Central Plan Development Section:    Cumberland Central Plan Development Section:
Cumberland West Plan Development Section:       Cumberland West Plan Development Section:
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Dauphin Southwest Plan Development Section:     Dauphin Southwest Plan Development Section:
Dauphin North Plan Development Section:         Dauphin North Plan Development Section:
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## MODEL SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

## TABLE OF CONTENTS

### ARTICLE 1. SHORT TITLE

Section 101. Short Title .......................... Page 1-1

### ARTICLE 2. PURPOSE, AUTHORITY, APPLICATION AND INTERPRETATION

Section 201. Purpose .......................... Page 2-1
Section 202. Authority .......................... Page 2-2
Section 203. Application of Regulations .......................... Page 2-2
Section 204. Interpretation .......................... Page 2-3

### ARTICLE 3. DEFINITIONS

Section 301. Language Interpretation .......................... Page 3-1

### ARTICLE 4. PLAN PROCESSING PROCEDURES AND REQUIREMENTS

Section 401. Plan Processing Procedures .......................... Page 4-1
Section 402. Sketch Plan (Optional) .......................... Page 4-2
Section 403. Preliminary Plan Procedures .......................... Page 4-4
Section 404. Final Plan Procedure .......................... Page 4-8
Section 405. Lot Add-on Plan Procedures .......................... Page 4-10
Section 406. Centerline Separation Plan Procedure .......................... Page 4-11
Section 407. Preliminary Plan Specifications .......................... Page 4-11
Section 408. Final Plan Specifications .......................... Page 4-18
Section 409. Lot Add-on Plan Specifications .......................... Page 4-21
Section 410. Centerline Separation Plan Specifications .......................... Page 4-24

### ARTICLE 5. DESIGN AND IMPROVEMENT STANDARDS

Section 501 Purpose .......................... Page 5-1
Section 502 General .......................... Page 5-1
Section 503 Site Design .......................... Page 5-1
Section 504 Blocks .......................... Page 5-3
Section 505 Lots .......................... Page 5-3
Section 506 Street System Design and Construction .......................... Page 5-11
ARTICLE 6. IMPROVEMENT AND MAINTENANCE GUARANTEES

Section 601. General Statement ........................................ Page 6-1
Section 602. Financial Security for Improvement Guarantees .......... Page 6-2
Section 603. Inspection of Improvements During Construction .......... Page 6-7
Section 604. Dedication of Improvements ................................ Page 6-8
Section 605. Maintenance Guarantee .................................... Page 6-8
Section 606. As Built Plans .............................................. Page 6-8

ARTICLE 7. MOBILEHOME PARKS

Section 701. Grant of Power ............................................. Page 7-1
Section 702. Purpose, Authority and Jurisdiction .......................... Page 7-1
Section 703. Plat Requirements and Processing Procedure.............. Page 7-1
Section 704. Design Standards ........................................... Page 7-1
Section 705. Improvement and Construction Requirements ............ Page 7-3
Section 706. Fees and Permits .......................................... Page 7-6
ARTICLE 8. FEES

Section 801. Filing Fee ........................................ Page 8-1
Section 802. Administrative Fee Schedule ......................... Page 8-1
Section 803. Municipal Engineer Review Fee ....................... Page 8-1
Section 804. Recording Fee (Optional) .......................... Page 8-2
Section 805. Other Fees ........................................ Page 8-2

ARTICLE 9. MODIFICATION OF REQUIREMENTS

Section 901. Application of Modification Provisions .......... Page 9-1
Section 902. Requests for Modification .......................... Page 9-1
Section 903. Granting of Modification ............................ Page 9-1
Section 904. Denial of Modification .............................. Page 9-1
Section 905. Displaying on Plans ................................ Page 9-1

ARTICLE 10. ENFORCEMENT, AMENDMENTS VIOLATIONS, APPEALS, PENALTIES, SEVERABILITY, AND REPEALER

Section 1001. Administration and Enforcement .................. Page 10-1
Section 1002. Amendments ........................................ Page 10-2
Section 1003. Violations .......................................... Page 10-2
Section 1004. Appeals ............................................ Page 10-2
Section 1005. Penalties ............................................ Page 10-3
Section 1006. Severability ........................................ Page 10-3
Section 1007. Repealer ............................................. Page 10-4

ARTICLE 11. EFFECTIVE DATE AND ENACTMENT

Section 1101. Codification Statement ............................ Page 11-1
Section 1102. Effective Date ....................................... Page 11-1
Section 1103. Enactment ........................................... Page 11-1

EXHIBITS

Exhibit 5-1. Highway Access Management Overlay Standards .. Page 5-80
Exhibit 5-2. Clear-Sight Triangle ................................. Page 5-95
Exhibit 5-3. Rainfall Coefficient “C’ for Rational Formula and “CN” Range ........................................... Page 5-117
Exhibit 5-4. Rainfall Intensity Computation ........................ Page 5-118
Exhibit 5-5. Time of Concentration Nomograph (Rational Method) Page 5-119
Exhibit 5-6. Runoff Coefficient for Rational Formula Versus Hydrologic Soil Group and Slope Range ........................................ Page 5-120
Exhibit 5-7. PA Region 4 IDF Values .................................................... Page 5-121
Exhibit 5-9. Stormwater Management Summary ............................... Page 5-125
Exhibit 5-10. Operation and Maintenance Plan for Stormwater BMP’s Page 5-126

APPENDICES

Appendix 1. Sample Developer’s Agreement for Completion of Improvements ........................................ Page A-2
Appendix 2. List of Site Improvements Items for Developer’s Agreement ........................................ Page A-7
Appendix 4. Sample Conservation Subdivision Regulations by the Natural Lands Trust ............................... Page A-12
Appendix 5. List of Native Plants Provided by PA Natural Heritage Program ........................................... Page A-62
Appendix 7. Sample Checklist for Subdivision & Land Development Plan Content .................................... Page A-73
Appendix 9. Sample Performance Bond ............................ Page A-78
Appendix 10. Sample of Offer of Irrevocable Dedication ..................... Page A-79
Appendix 11. Sample Lot Addition/Part and Parcel Deed Covenant Form ........................................ Page A-81
Appendix 14. Sample Municipal Comment Form .......................... Page A-86
Appendix 15. Sample Municipal Zoning Comment Form .................. Page A-88
Appendix 16. Sample Modification (Waiver) Request Form ............ Page A-90
Appendix 17. Sample Subdivision and Land Development Fee Schedule Page A-92
ORDINANCE NO. _____

AN ORDINANCE REGULATING THE SUBDIVISION OF LAND AND LAND DEVELOPMENT WITHIN THE (Municipality), (County), PENNSYLVANIA; PROVIDING FOR THE PREPARATION AND PROCESSING OF PRELIMINARY AND FINAL PLATS FOR SUCH PURPOSES; REQUIRING CERTAIN IMPROVEMENTS TO BE MADE OR GUARANTEED TO BE MADE BY THE APPLICANT; REGULATING THE LAYOUT AND SALE OF LOTS; ERECTION OF BUILDINGS, LAYING OUT, CONSTRUCTION, OPENING AND DEDICATION OF STREETS, STORM AND SANITARY SEWERS, AND OTHER PUBLIC IMPROVEMENTS IN CONNECTION WITH SUBDIVISION AND LAND DEVELOPMENT; AND PRESCRIBING PENALTIES FOR THE VIOLATION THEREOF.

THE (Governing Body) OF THE (Municipality), (County), PENNSYLVANIA, PURSUANT TO THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, ACT 247, ARTICLE V, AS AMENDED, DOES ENACT AND ORDAIN:

ARTICLE 1

SHORT TITLE

Section 101. SHORT TITLE

This Ordinance shall be known and may be cited as "The Subdivision and Land Development Ordinance of (Municipality)".
ARTICLE 2

PURPOSE, AUTHORITY, APPLICATION AND INTERPRETATION

Section 201. PURPOSE

This Ordinance has been designed and adopted to provide uniform standards and procedures for the regulation of subdivision and land development within (Municipality).

The purpose of such regulations is to provide for the harmonious development of the municipality and county by:

1. Assuring sites are suitable for building purposes and human habitation;

2. Coordinating proposed streets and other proposed public improvements;

3. Assuring that adequate easements and rights-of-way are provided for drainage facilities, public utilities, streets, and other public improvements;

4. Assuring equitable and uniform handling of subdivision and land development plat applications;

5. Assuring coordination of intra, and inter-municipal public improvement plans and programs;

6. Assuring the efficient and orderly extension of community facilities and services at minimum cost and maximum convenience;

7. Regulating the subdivision and land development of land within any flood hazard area or floodplain district in order to promote the health, safety and welfare of the citizens of the municipality;

8. Requiring that each lot in flood prone areas includes a safe building site with adequate access, and that public facilities which serve such uses be designed and installed to minimize flood damage;

9. Assuring that reservations, if any, by the developer of any area designated for use as public grounds shall be suitable in size and location for their designated uses;

10. Guiding the future growth and development of the (Municipality) in accordance with the adopted comprehensive plan;

11. Assuring that documents prepared as part of a land ownership transfer fully and accurately describe the parcel of land being subdivided and the new parcel(s) thus created;
12. Assuring the greater health, safety, convenience and welfare to the citizens of (Municipality);

13. Ensuring the protection of water resources and drainageways;

14. Ensuring the efficient movement of traffic;

15. Ensuring the equitable handling of all subdivision and land development plans by providing uniform standards and procedures.

Section 202. AUTHORITY

1. The (*) (Governing Body) shall have the authority to approve or disapprove all preliminary and final subdivision or land development plat application as required herein.

2. The (Municipality) Planning Commission is hereby designated as the agency, which shall review and make recommendations to the governing body on all subdivision and land development plat applications as required herein.

3. Preliminary and final subdivision and land development plat applications within (Municipality) shall be forwarded upon receipt, with the appropriate review fee, to the (county) County Planning Commission for review and report. The (governing body) shall not approve such applications until the county review report is received or until the expiration of thirty (30) days from the date, the application was forwarded to the County Planning Commission. As evidence of their review and report, officials of the County Planning Commission will sign preliminary and final plats, which have been formally approved by the municipality before such plats are presented for recording.

(*)The governing body may wish to delegate preliminary subdivision and land development plat application approval/disapproval authority to the municipal planning-commission, in which case this section should be revised. All other sections of this Ordinance Guide are written to show the Governing Body holding approval/disapproval authority.

Section 203. APPLICATION OF REGULATIONS

1. No subdivision or land development of any lot, tract, or parcel of land located in (Municipality) shall be effected; no street, sanitary sewer, storm sewer, water main, or other facilities in connection therewith shall be laid out, constructed, opened or dedicated for public use or travel, or for the common use of occupants of buildings thereon unless and until a Final Subdivision or Land Development Plat has been approved by (Governing Body) the and publicly recorded in the manner prescribed herein; nor otherwise in strict accordance with the provisions of this Ordinance.
2. No lot in a subdivision may be sold; no permit to erect or alter any building upon land in a subdivision or land development may be issued; and no building may be erected or altered in a subdivision or land development, unless and until a Final Subdivision or Land Development Plat has been approved by the (Governing Body) and recorded, and until the improvements required in connection therewith have been either constructed or guaranteed in a manner prescribed herein.

3. Unit or condominium subdivision of real property is included within the meaning of subdivision and land development as defined herein, and must comply with these regulations. Such compliance shall include, but not be limited to, the filing of Preliminary and Final Plats, payment of established fees and charges, location of each structure and clear definition of each unit, public easements, common areas, improvements, and all easements appurtenant to each unit.

4. All subdivision and land development plats are subject to all applicable zoning regulations.

Section 204. INTERPRETATION

When interpreting and applying the revisions of this Ordinance, applicants shall be held to the minimum requirements for the promotion of public health, safety, comfort, convenience and greater welfare. Where the provisions of this Ordinance impose greater restrictions than those of any statute, other ordinance, or regulation (i.e. State enabling statutes, local zoning, or building codes, etc.), the provisions of this Ordinance shall prevail. Where the provisions of any statute, other ordinance, or regulation adopted by this municipality impose greater restrictions than those of this ordinance, the provisions of such statute, ordinance, or regulation shall prevail.
ARTICLE 3
DEFINITIONS

Section 301. LANGUAGE INTERPRETATION

Unless otherwise expressly stated, the following words shall for the purposes of this Ordinance have the meaning herein indicated. Words expressed in the plural include their singular meanings; the present tense shall include the future; words used in the masculine gender shall include the feminine and the neuter; the words "shall", "must", and "will" are mandatory; the words "should" and "may" are permissive. For those words utilized in this Ordinance not defined herein the definitions found in the most recent edition of Webster’s Unabridged Dictionary apply.

ABANDONMENT: The relinquishment of property, or a cessation of the use of the property, by the owner with the intention neither of transferring rights to the property to another owner nor of resuming the use of the property.

ABUT OR ABBUTTING: A building(s) which physically touch; Areas of contiguous lots that share a common lot line, not including lots entirely separated by a street, public alley open to traffic or a perennial waterway.

ACCESS DRIVE: A way or means of approach to provide vehicular or pedestrian physical entrance to a property.

ACCESSORY BUILDING: A building subordinate to and detached from the main building on the same lot and used for purposes customarily incidental to the main building.

ACCESSORY USE: A use customarily incidental and subordinate to the principal use or the main building and located on the same lot with such principal use or main building.

ACCELERATED EROSION: The removal of the surface of the land through the combined action of human activity and the natural processes at a rate greater than would occur because of the natural process alone.

ACRE: A measure of land area containing 43,560 square feet.

ADDITION: Any construction which increases the size of a building, such as a porch, attached garage or carport, or a new room or wing.

ADJOINING LOT OR LAND: A lot or parcel of land which shares all or part of a common lot line with another lot or parcel of land. (See Abut)

AGENT: Any person other than the applicant who, acting on the landowner(s) authorized behalf, submits a subdivision or land development application.
AGRICULTURE: The use of land which shall include, but not be limited to, the tilling of the soil, the raising of crops, horticulture, apiculture, floriculture, viticulture and gardening. The production, keeping or maintenance, for sale, lease or personal use, of plants and animals useful to man, including but not limited to: forages and sod crops; grains and seed crops; dairy animals and dairy products, poultry and poultry products: livestock, including beef cattle, sheep, swine horses ponies, mules, or goats, or any mutations or hybrids thereof, including the breeding and grazing of any or all of such animals: bees and apiary products; fur animals; trees and forest products: fruits of all kinds, including grapes, nuts and berries; vegetables; nursery, floral, ornamental and greenhouse products; or lands devoted to a soil conservation or forestry management program. (See Horticulture)

AGRICULTURAL OPERATION: An enterprise that is actively engaged in the commercial production and preparation for market of crops, livestock and livestock products and in the production, harvesting and preparation for market or use of agricultural, agronomic, horticultural, silvicultural and aquaculture crops and commodities. The term includes an enterprise that implements changes in production practices and procedures or types of crops, livestock, livestock products, or commodities produced consistent with practices and procedures that are normally engaged by farmers or are consistent with technological development within the agricultural industry.

ALLEY (or SERVICE DRIVE): A public or private right-of-way other than a side street which affords only a secondary means of access to abutting property and not intended for general traffic circulation.

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

ALTERATIONS, STRUCTURAL: Any change or rearrangement in the supporting members of an existing building, such as bearing walls, columns, beams, girders, or interior partitions, as well as any change in doors, windows, means of ingress or egress, or any enlargement to or diminution of a building or structure, whether horizontally or vertically, or the moving of a building or structure from one location to another.

AMENDMENT: An official change to this ordinance in accordance with Section 505 of the PA MPC.

APARTMENT: A structure containing three or more dwelling units.

APPLICANT (Also see DEVELOPER and SUBDIVIDER): A landowner or developer, as hereinafter defined, who has filed an application for the subdivision or development of a tract of land, including his heirs, successors, and assigns.
APPLICATION FOR DEVELOPMENT: Every application, whether preliminary or final, required to be filed and approved prior to start of construction or development including, but not limited to, an application for a building permit, for the approval of a subdivision plat, or for approval of a land development plan.

AREA, BUFFER: See BUFFER AREA.

AREA, BUILDING: The total of area, in square feet, of all floors, excluding basement, of the principal building and all accessory buildings, exclusive of uncovered porches, terraces, and steps.

AREA, GROSS: The total lot area, including public right-of-way.

AREA, NET: The total lot area, less public right-of-way.

AUTHORITY: A body politic and corporate created pursuant to the Act of May 2, 1945 (P.L.382, No. 164), as amended, known as the, “Municipalities Authorities Act of 1945”.

AWNING: A roof-like cover that is temporary or permanent in nature and that projects from the wall of a building for the purpose of shielding a doorway or window from the elements, and can be periodically retracted onto the face of a building.

AZIMUTH: The horizontal angle of an observer’s bearing in surveying, measured clockwise from a referenced direction.

BASE FLOOD ELEVATION: The elevation above sea level, based on the vertical datum in the current flood Insurance Rate Maps for (municipality) of the 100-year flood.

BEST MANAGEMENT PRACTICES (BMPs): State-of-the-art technology as applied to a specific problem. The BMP presents physical, institutional, or strategic approaches to environmental problems, particularly with respect to nonpoint source pollution control.

BLOCK: An area bounded by streets, railroad rights-of-way, waterways and other definite barriers.

BOARD OF COMMISSIONERS: The Board of Commissioners of the Township of (township name).

BOARD OF SUPERVISORS: The Board of Supervisors of the Township of (township name).

BOROUGH: The (borough name), (county), Pennsylvania; Borough Council, its agents or authorized representatives.

BOROUGH COUNCIL: The Borough Council of the Borough of (borough name).
BUFFER AREA: A strip of land which is planted and maintained in shrubs, bushes, trees, grass or other landscaping material and within which no structure is permitted except a wall or fence.

BUFFER YARD: An open area whose dimensions normally exceed the normal building setback or yard requirements used to protect low-density uses and zoning districts from adjacent higher-density uses and districts.

BUILDING: Any structure having a roof supported by columns or walls and intended for the shelter, housing or enclosure of any individual, animal, process, equipment, goods or materials of any kind.

BUILDING, ACCESSORY: A building incidental and subordinate to and detached from the main building on the same lot and used for purposes customarily incidental to the principal building.

BUILDING, ADDITION: A structure added to the original structure at some time.

BUILDING AREA: See AREA, BUILDING.

BUILDING COVERAGE: The ratio of the horizontal area measured from the exterior surface of the exterior walls of the ground floor of all principal and accessory buildings on a lot to the total gross lot area.

BUILDING INSPECTOR: An individual designated by the appointing authority to enforce the provisions of the building code. Includes code enforcement officer or zoning officer.

BUILDING LINE: A line parallel to the front, side or rear lot line set so as to provide the required yard.

BUILDING SETBACK LINE: The line within a property defining the required minimum distance between any enclosed structure and the adjacent right-of-way, and the line defining side and rear yards, where required.

BUILDING PERMIT: Written permission issued by the proper municipal authority for the construction, repair, alteration, or addition to a structure.

BUILDING, PRINCIPAL: A building which is conducted the primary use of the lot on which it is located, and is not an accessory building.

CALIPER: The diameter of a tree trunk measured in inches six inches above ground level for trees up to four inches in diameter and 12 inches above ground level for trees over four inches in diameter.
CAMP OR CAMPGROUND: A state-permitted facility, through the Pennsylvania Department of Health, in which a portion of land is used for the purpose of providing a space for trailers or tents for camping purposes, regardless of whether a fee has been charged for the leasing, renting or occupancy of the space, in accordance with the Pennsylvania Code, Title 28, Chapter 19. The campground may be an organized camp which includes a combination of programs and facilities established for the primary purpose of providing an outdoor group living experience for children, youth and adults with social, recreational, and educational objectives and operated and used for five or more consecutive days during one or more seasons a year.

CARPORT: A roofed structure providing space for the parking of motor vehicles and enclosed on not more than three sides, and accessory to a main or accessory building.

CARTWAY: That portion of a street or alley which is improved, designed, or intended for vehicular use.

CENTERLINE: A line located exactly in the center width of a road or street cartway, right-of-way, easement, or access.

CLEAR-SIGHT TRIANGLE: A triangular-shaped portion of land established by a street or driveway intersection in which nothing is erected, placed, planted, or allowed to grow in such a manner as to limit or obstruct the site distance of motorists entering or leaving the intersection.

CLUSTER: A development technique utilized for the purpose of concentrating building construction in specific areas of a site while allowing the remaining land area to remain open space for the preservation of environmentally sensitive features, recreation, or other.

CLUSTER SUBDIVISION (DEVELOPMENT): A form of development that permits a reduction in lot area and bulk requirements, provided that unless otherwise authorized, there is no increase in the number of lots permitted under a conventional subdivision or increase in the overall density of development, and the remaining land area is devoted to open space, active or passive recreation, preservation of environmentally sensitive areas, or agriculture.

COMMISSION: The (municipality) Planning Commission.

COMMON AREA: The area in a subdivision or planned residential development, including common open space, owned or leased and maintained by an association or other combination of persons for the benefit of the residents of the residential development and, if owned under the Pennsylvania Unit Property Act, including all common elements designated for the use of all dwelling unit owners.

COMMON OPEN SPACE: A parcel or parcels of land or an area of water, or a combination of land and water, within a development plan, designed and intended for the use or enjoyment of residents of the development plan and, where designed, the
community at large. Common open space does not include rights-of-way, off-street parking areas, and areas set aside for public facilities. Common open space shall be substantially free of structures, but may contain such improvements as approved in the development plan that are appropriate to recreational and other open space areas of any schools or churches to be included within the proposed development.

**COMPREHENSIVE PLAN:** The official public document prepared in accordance with the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.O. 805, No. 247, as amended and reenacted, consisting of maps, charts and textual material, that constitutes decisions about the physical and social development of the Township of Upper Allen, as amended from time to time.

**CONDOMINIUM:** A building, or group of buildings, in which dwelling units, offices, or floor area owned individually, and the structure, common areas, and facilities are owned by all the owners on a proportional, undivided basis. It is a legal form of ownership of real estate and not a building style. The purchaser has title to his or her interior space in the building and an undivided interest in parts of the interior, the exterior, and other common elements.

**CONDOMINIUM ASSOCIATION:** The community association that owns, administers, and maintains the common property and common elements of a condominium.

**CONSERVATION DISTRICT:** A geographic area, usually a county, in which professionals provide advice to communities, agencies, and individuals within the jurisdiction and review development proposals.

**CONSISTENCY:** An agreement or correspondence between matters being compared which denotes a reasonable rational, similar, connection or relationship.

**CONSTRUCTION:** The erection, reconstruction, renovation, repair, extension, expansion, alteration or relocation of a building or structure, including the placement of mobile homes.

**CONTIGUOUS:** Next to, abutting, or touching and having a boundary, or portion thereof, that is coterminous. To physically touch or border upon, or to share a common property line, but not overlap.

**COOPERATIVE:** Ownership in common with others of a parcel of land and of a building or buildings thereon which would normally be used by all the occupants, together with individual rights of occupancy of a particular unit or apartment in such building or buildings or on such parcel of land and may include dwellings, offices and other types of space in commercial buildings or on property and where the lease, sale or exchange of a unit is subject to the agreement of the group of persons having common ownership.

**COUNTY:** Any county of the second class through the eighth class.
COURT: An unoccupied open space, other than a yard, on the same lot with a building, which is bounded on two or more sides by the walls of such building.

COURT, INNER: A court enclosed on all sides by exterior walls of a building or by exterior walls and lot lines on which walls are allowable, and that the court does not extend to a street, alley, yard or other outer court.

COURT, OUTER: A court enclosed on not more than three sides by exterior walls and lot lines on which walls are allowable, with one side or end open to a street, driveway, alley or yard.

COVERAGE: That portion or percentage of the plot or lot area covered by the building area.

CROSS-WALK: A right-of-way, publicly or privately owned, intended to furnish access for pedestrians.

CUL-DE-SAC: See STREET, MINOR / CUL-DE-SAC.

CURB: A stone, concrete, or other improved boundary usually marking the edge of the roadway or paved area.

CURB CUT: The opening along the curb line at which point vehicles may enter or leave the roadway.

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 excavation.

DECIDUOUS: Plants that drop their leaves before becoming dormant in winter.

DEDICATION: The deliberate appropriation or donation of land or property by its owner for any general or public uses, reserving no other rights. Acceptance of any such dedication is at the discretion of the (governing body).

DEED: A legal document conveying ownership of real property.

DEED COVENANT OR RESTRICTION: A restriction on the use of the land set forth in the deed or instrument of conveyance. Such restriction(s) usually runs with the title of the land and is binding upon subsequent owners of the property. The (governing body) is not responsible for enforcing such deed restrictions, unless the restriction(s) resulted from a condition or stipulation of the subdivision or land development approval process.

DENSITY: The number of families, individuals, dwelling units, or housing structures per gross acre of land.
DEP: Pennsylvania Department of Environmental Protection. (See also PADEP)

DETENTION BASIN: A structure designed to detain and release runoff in excess of volumes allowed at a controlled rate.

DETERMINATION: Final action by an officer, body, board, or agency charged with the administration of any land use ordinance or applications there under. Determinations shall be appealed only to the boards designated as having jurisdiction for such appeal.

DEVELOPER: Any landowner, agent of such landowner or tenant with permission of such landowner, who makes or causes to be made a subdivision of land or a land development or submit a development plan under the terms of this chapter.

DEVELOPMENT PLAN: The provisions for a planned 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.

DEVELOPMENT OF REGIONAL SIGNIFICANCE AND IMPACT: Any land development that, because of its character, magnitude, or location will have a substantial effect upon the health, safety, or welfare of citizens in more than one municipality.

DISTRICT, ZONE: A district includes all buildings, lots, and surface areas within certain designated boundaries as indicated on the Zoning Map.

DRAINAGE: (1) Surface water runoff; (2) the removal of surface water or ground water from lands by drains, grading or other means which include runoff controls to minimize erosion and sedimentation during and after construction of development, the means for preserving the water supply and the prevention or alleviation of flooding.

DRAINAGE EASEMENT: An easement required for the installation of storm water sewers or drainage ditches, and/or required for the preservation or maintenance of a natural stream or water course or other drainage facility.

DRAINAGE FACILITY: Any ditch, gutter, culvert, storm sewer, or other structure designed, intended, or constructed for the purpose of diverting surface waters from or carrying surface waters off streets, public rights-of-way, parks, recreation areas, or any part of any subdivision or contiguous land areas.

DRAINAGE PLAN: A plan showing all proposed and existing facilities to collect and convey surface drainage, described by grades, contours, and topography.

DRAINAGE SYSTEM: Pipes, swales, natural features and other improvements designed to hold or convey drainage.
DRIVEWAY: A private access for vehicles to park in a parking space, garage, dwelling or other structure.

DUPLEX: See DWELLING, SINGLE FAMILY, SEMI-DETACHED.

DWELLING, MANUFACTURED HOUSING: Any structure designed primarily for residential occupancy, which is wholly or in substantial part made, fabricated, formed or assembled in manufacturing facilities for installation of assembly and installation on the building site in such a manner that all concealed parts or processes of manufacture cannot be inspected at the site without disassembly, damage or destruction.

DWELLING, MULTI-FAMILY: A building designed, occupied or used by three or more families living independently of each other, wherein each dwelling unit or apartment shall contain private bath and kitchen facilities; including apartment houses.

DWELLING, SINGLE FAMILY ATTACHED: A building used by one family and having two (2) party walls in common with other buildings (such as row house or town house), except that end units have only one party wall.

DWELLING, SINGLE FAMILY, DETACHED: A building used by one (1) family, having only one (1) dwelling unit and having two (2) side yards.

DWELLING, SINGLE FAMILY, SEMI-DETACHED: A building used by one (1) family, having one (1) side yard, and one (1) party wall in common with another building.

DWELLING, TWO FAMILY DETACHED: A building used by two (2) families, with one dwelling unit arranged over the other and having two (2) side yards.

DWELLING UNIT: One or more rooms used for living and sleeping purposes and having a kitchen(s) with fixed cooking facilities, toilet and bathroom facilities and arranged for occupancy by not more than one family.

EARTHMOVING ACTIVITY: Activity resulting in movement of earth or stripping of vegetative cover from the earth.

EASEMENT: A grant of one or more of the property rights by the property owner to and/or for the use by the public, a corporation or another person or entity.

EASEMENT, DRAINAGE: See DRAINAGE EASEMENT.

EASEMENT, UTILITY: A right-of-way granted for the limited use of land for public or quasi-public purposes.

ENGINEER, MUNICIPAL: A registered professional engineer in Pennsylvania designated by the municipality to perform the duties of engineer as herein specified.
ENGINEER, PROFESSIONAL: An individual licensed and registered under the laws of the Commonwealth to engage in the practice of engineering. A professional engineer may not practice land surveying unless licensed as set forth in P.L. 534, No. 230; however, a professional engineer may perform engineering land surveys.

ENGINEERING LAND SURVEYS: Surveys for (1) the development of any tract of land including the incidental design of related improvements, such as line and grade extension of roads, sewers and grading but not requiring independent engineering judgment; provided, however, that tract perimeter surveys shall be the functions of the Professional Land Surveyor; (2) the determination of the configuration or contour of the earth's surface, or the position of fixed objects thereon or related thereto by means of measuring lines and angles and applying the principles of mathematics, photogrammetry or other measurement methods; (3) geodetic or cadastral survey, underground survey and hydrographic survey; (4) sedimentation and erosion control surveys; (5) the determination of the quantities of materials; (6) tests for water percolation in soils; and (7) the preparation of plans and specifications and estimates of proposed work as described in this subsection.

ENGINEERING, PRACTICE OF: (1) Shall mean the application of the mathematical and physical sciences for the design of public or private buildings, structures, machines, equipment, processes, works or engineering systems, and the consultation, investigation, evaluation, engineering surveys, planning and inspection in connection therewith, the performance of the foregoing acts and services being prohibited to persons who are not licensed under the laws of the Commonwealth as professional engineers unless exempt under other provisions of the laws of the Commonwealth. (2) The term "Practice of Engineering" shall also mean and include related acts and services that may be performed by other qualified persons, including but not limited to, municipal planning, incidental landscape architecture, teaching, construction, maintenance and research but licensure under the laws of the Commonwealth to engage in or perform any such related acts and services shall not be required.

ENGINEERING SPECIFICATIONS: The Engineering Specifications of the municipality regulating the installation of any required improvement or for any facility installed by any owner, subject to public use.

ENVIRONMENTAL CONSTRAINTS: Features, natural resources or land characteristics that are sensitive to improvements and may require conservation measures or the application of creative development techniques to prevent degradation of the environment, or may require limited development, or in certain instances may preclude development.

EROSION: The removal of surface materials by the action of natural elements.
EXCAVATION: Any act by which earth, sand, gravel, rock or any other similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated or bulldozed. It shall include the conditions resulting there from.

EXISTING GRADE: The vertical location of the ground surface prior to excavation or filling.

FARM: An area of land used for agricultural purposes, as defined in “agricultural operation”.

FENCE: Any freestanding and uninhabitable structure constructed of wood, glass, metal, plastic materials, wire, wire mesh, or masonry, singly or in combination, erected for the purpose of screening or dividing one property from another to assure privacy, or to protect the property so screened or divided, or to define and mark the property line. For the purpose of this ordinance a freestanding masonry wall when so located is considered to be a fence; also for the purpose of this ordinance when the term “lot line” is used in relation to fences it shall be synonomous with “rear yard lot lines”, “side yard lot lines”, “front yard lot lines.

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

FINISHED GRADE: The proposed elevation of the land surface of a site after completion of all site preparation work.

FLOOD: A temporary inundation of normally dry land areas.

FLOOD BOUNDARY, FIVE-HUNDRED-YEAR: The outer boundary of an area of land that is likely to be flooded once every 500 years (i.e., that has 1/5 of 1% chance of being flooded each year). A study by the Federal Insurance Administration, the United States Army Corps of Engineers, the United States Department of Agriculture’s Soil Conservation Service, the United States Geological Survey, the Susquehanna River Basin Commission, the Department of Environmental Protection, or a licensed professional registered by the Commonwealth of Pennsylvania to perform such a study as necessary to define this boundary.

FLOOD BOUNDARY, ONE-HUNDRED-YEAR: The outer boundary of an area of land that is likely to be flooded once every 100 years (i.e., that has a 1% chance of being flooded each year). A study by the Federal Insurance Administration, the United States Army Corps of Engineers, the United States Department of Agriculture’s Soil Conservation Service, the United States Geological Survey, the Susquehanna River Basin Commission, the Department of Environmental Protection, or a licensed professional
registered by the Commonwealth of Pennsylvania to perform such a study as necessary to define its boundary.

FLOOD INSURANCE RATE MAP (FIRM): See FLOOD HAZARD BOUNDARY MAP.

FLOOD, FIVE-HUNDRED-YEAR: A flood which is likely to be equaled or exceeded once every 500 years (i.e. that has a 1/5 of 1% chance of being equaled or exceeded in any given year. A study by the Federal Insurance Administration, the United States Army Corps of Engineers, the United States Department of Agriculture’s Soil Conservation Service, the United States Geological Survey, the Susquehanna River Basin Commission, the Department of Environmental Protection, or a licensed professional registered by the Commonwealth of Pennsylvania to perform such a study is necessary to define this flood.

FLOOD, ONE-HUNDRED-YEAR (BASE FLOOD): A flood, which is likely to be equaled or exceeded once every 100 years (i.e. that has a 1% chance of being equaled or exceeded in any given year). A study by the Federal Insurance Administration, the United States Army Corps of Engineers, the United States Department of Agriculture’s Soil Conservation Service, the United States Geological Survey, the Susquehanna River Basin Commission, the Department of Environmental Protection, or a licensed professional registered by the Commonwealth of Pennsylvania to perform such a study is necessary to define this flood.

FLOOD FRINGE: That portion of the floodplain outside the floodway.

FLOOD HAZARD BOUNDARY MAP (FHBM): An official floodplain map of a community, issued by the Federal Insurance Administration.

AREAS OF SPECIAL FLOOD HAZARD: The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

FLOODPLAIN: A floodplain may be either or a combination of: (a) a relatively flat or low land area which is subject to partial or complete inundation from an adjoining or nearby stream, river or watercourse, during a one-hundred-year-design-frequency storm; or (b) any area subject to the unusual and rapid accumulation of runoff or surface waters from any source.

FLOODPROOFING: Any combination of structural and non-structural additions, changes or adjustments to structures which reduces or eliminates flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents. With regard to nonresidential structures, the term “flood proofing” shall also mean that the structure, together with attendant utility and sanitary facilities, be designed so that any space below the regulatory flood elevation is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydromatic loads and effects of buoyancy.
FLOODWAY: The areas identified as floodway in the Flood Insurance Study prepared by the FEMA. The term shall also include floodway areas which have been identified in the other available studies or sources of information for those floodplain areas where no floodway has been identified in the Flood Insurance Study.

FLOODWAY FRINGE: Those portions of land within the FP-Floodplain District subject to inundations by the one-hundred-year flood, beyond the floodway in areas where detailed study and profiles are available.

FORESTRY (TIMBER HARVESTING): The management of forests and timberlands, when practiced in accordance with accepted silvicultural principles, through developing, cultivating, harvesting, transporting and selling trees for commercial purposes, which does not involve any land development.

FREEBOARD: The vertical difference between the crest of an embankment or drainage structure and the design water surface.

FUTURE RIGHT-OF-WAY: (1) right-of-way width required for the expansion of existing streets to accommodate anticipated future traffic loads; (2) a right-of-way established to provide future access to or through undeveloped land.

GARDEN STRUCTURES:

GOVERNING BODY: The (governing body) of (municipality, county), County, Pennsylvania.

GREENWAY: A greenway may be any one or combination of the following: (1) a linear open space established along either a natural corridor, such as a riverfront, stream valley or ridgeline, or over land along a railroad right-of-way converted to recreational use, a canal, a scenic road, or other route; (2) a natural or landscaped course for pedestrian or bicycle passage; (3) an open space connector linking parks, natural reserves, cultural features or historic sites with each other and with populated areas; and (4) strip or linear parks designated as a parkway or greenbelt.

GROSS BUILDING AREA: The total area of a building available for construction or use, as measured from the exterior walls or the building. The gross building area should be used in computing all square footage measurements for buildings as well as dimension requirements.

GUARANTEE, MAINTENANCE: Any financial security that may be required of a developer by a municipality after final acceptance by the municipality of improvements installed by the developer. Such security may include, but not limited to, irrevocable letters of credit, bonds, restrictive accounts, or escrow accounts from approved Federal, State, or Commonwealth lending institutions.
GUARANTEE, PERFORMANCE: Any financial security that may be required of a developer by the municipality in lieu of a requirement that certain improvements be made prior to final approval of the subdivision or land development plan. Such security may include, but is not limited to, those instruments cited above as acceptable as maintenance guarantees.

HALF OR PARTIAL STREET: A street, generally parallel with and adjacent to a property line, having a lesser right-of-way width than required for improvement and used as a street in accordance with the Ordinance.

HOMEOWNERS ASSOCIATION: A community association, which is, organized in a development in which individual owners share common interests in open space or facilities.

IMPERVIOUS MATERIAL (SURFACE): Any substance placed on a lot which covers the surface in such fashion as to prevent natural absorption of surface water by the earth so covered. The following items shall be deemed to consist of impervious material: Buildings, sidewalks, driveways, parking lots, swimming pools.

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

IMPROVED PUBLIC STREET: Any street for which the (municipality), or Commonwealth has maintenance responsibility and which is paved with an approved hardtop surface.

IMPROVEMENTS: Those physical additions, installations, and changes required to render land suitable for the use intended, including but not limited to grading, paving, curbing, street lights and signs, fire hydrants, water mains, electric service, gas service, sanitary sewers, storm drains, sidewalks, crosswalks, driveways, culverts, and other public utilities, and street shade trees, and improvements to existing water courses.

INTERIOR WALK: A right-of-way for pedestrian use extending from a street into a block or across a block to another street.

LAND DEVELOPMENT (See SUBDIVISION):

(1) The improvement of one 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 non residential building on a lot or lots regardless of the number of occupants or tenure, or
   (b) the division or allocation of land or space 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.
The following are exempted from the definition of Land Development:

(a) The conversion of an existing single family detached dwelling or single family semi-detached dwelling into not more than three (3) residential units, unless such units are intended to be a condominium;
(b) The addition of an accessory building, including farm building, on a lot or lots subordinate to an existing principal building; or
(c) The addition or conversion of buildings or rides within the confines of an enterprise, which would be considered an amusement park. For the purposes of this subsection, an amusement park is defined as a tract or area used principally as a location for permanent amusement structures or rides. This exclusion shall not apply to newly acquired acreage by an amusement park until initial plans for the expanded area have been approved by the proper authorities.

**LANDOWNER:** The legal or beneficial owner or owners of land including the holder of an option or contract to purchase (whether or not such option or contract is subject to any conditions), a lessee having a remaining term of not less than forty years, or other person having a proprietary interest in the land, shall be deemed to be a landowner for the purpose of this Ordinance.

**LANDSCAPE PLAN:** A component of a development plan, if required, on which is shown proposed landscape species (such as number, spacing, size at time of planting, and planting details); proposals for protection of existing vegetation during and after construction; proposed treatment of hard and soft surfaces; proposed decorative features, grade changes, buffers and screening devices; and any other information that can reasonably be required in order that an informed decision can be made by the governing body.

**LIGHTING, DIFFUSED:** That form of lighting wherein the light passes from the source through a translucent cover or shade.

**LIGHTING, DIRECT OR FLOOD:** That form of lighting wherein the source is visible and the light is distributed directly from it to the object to be illuminated.

**LIGHTING, INDIRECT:** That form of lighting wherein the light source is entirely hidden, the light being projected to a suitable reflector from which it is reflected to the object to be illuminated.

**LOADING SPACE:** An off-street space on the same lot with a building or contiguous to a group of buildings, for the temporary parking of a commercial vehicle while loading or unloading merchandise or materials and which abuts in or has access to a street.

**LOT:** A designated parcel, tract or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit.
LOT AREA: The area contained within the property lines of a lot as shown on a subdivision plan excluding space within any public street right-of-way, but including the area of any easement.

LOT, CORNER: A lot at the junction of and abutting on two or more intersecting streets or private roads.

LOT, IMPERVIOUS COVERAGE: A lot which has a surface of any material that prevents the absorption of stormwater into the ground. The total of impervious area includes the building area inclusive of rooftop, parking lot, sidewalks, and access drive, divided by lot total gross area.

LOT, DEPTH: The horizontal distance measured between the street right-of-way line and the closest rear property line. On corner and reverse frontage lots, the depth shall be measured from the street right-of-way line of the street of address to the directly opposite property line.

LOT, DOUBLE FRONTAGE: See LOT, REVERSE FRONTAGE.

LOT, FLAG (PAN HANDLE): A lot not meeting minimum frontage requirements and where access to the public road is by a narrow private right-of-way or driveway.

LOT, INTERIOR: A lot other than a corner lot.

LOT LINES: The boundary lines of a lot as defined herein.

(1) FRONT LOT LINE: The lot line separating a lot from a street right-of-way. In the case of a corner lot or a lot abutting a street right-of-way on more than one side, there shall be two front lot lines.

(2) REAR LOT LINE: The lot line opposite and most distant from the front lot line. In the case of triangular or otherwise irregularly shaped lots, a line ten feet in length entirely within the lot, parallel to and at a maximum distance from the front lot line. A corner lot shall have 2 front lines, and two side lot lines.

(3) SIDE LOT LINE: Any lot line other than a front or rear lot line. A corner lot shall have 2 front lines, and two side lot lines.

LOT, MINIMUM WIDTH: The horizontal distance between the side lines of a lot measured at the front building setback line.

LOT, MOBILEHOME: A parcel of land in a mobilehome park, improved with the necessary utility connections and other appurtenances necessary for the erection thereon of a single mobilehome.

LOT, NONCONFORMING: The area or dimension of which was lawful prior to the adoption or amendment of a zoning ordinance, but which fails to conform to the
requirements of the zoning district in which it is located by reasons of such adoption or amendment.

**LOT, REVERSE FRONTAGE (DOUBLE FRONTAGE, THROUGH):** A through lot that is not accessible from one of the parallel or nonintersecting streets upon which it fronts. In the case of a lot fronting on streets of different classification, access to the lot shall be from the lower classified roadway.

**LOT, THROUGH (DOUBLE OR REVERSE FRONTAGE):** See **LOT, REVERSE FRONTAGE**.

**MAJOR SUBDIVISION:** See **SUBDIVISION, MAJOR**

**MANUFACTURED HOME:** See “**DWELLING, MANUFACTURED HOUSING**”.

**MANUFACTURED HOME:** Factory-built single-family structures that meet the National Manufactured Home Construction and Safety Standards Act (42 U.S. c. Sec. 5401) commonly known as HUD (U.S. Department of Housing and Urban Development) code.

**MANUFACTURED HOME LOT:** A parcel of land in a manufactured home park improved with the necessary utility connections and other appurtenances necessary for the erection thereon of a single manufactured home. (See also “Mobile Home Lot”)

**MINOR SUBDIVISION:** See **SUBDIVISION, MINOR**.

**MOBILEHOME:** A transportable, single family dwelling intended for permanent occupancy, office or place of assembly contained in one unit, or in two units designed to be joined into one integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation.

**MOBILEHOME LOT:** See **LOT, MOBILEHOME**.

**MOBILEHOME PARK:** A parcel or contiguous parcels of land which has been so designated and improved that it contains two or more mobilehome lots for the placement thereon of mobilehomes.

**MODIFICATION / WAIVER:** Relief from this ordinance’s provisions granted by the (Municipal Governing Body) for relief from the strict application of a specific requirement or provision of this ordinance, which if literally enforced would exact undue hardship on the applicant. Modification/waiver decisions are required to be based on unique or peculiar conditions pertaining to the land. All modification/waiver requests are required to be submitted in writing and constitute the least possible relief necessary. (Additional considerations for modification(s)/waiver(s) are in Article IX.)
MODULAR HOME: A type of dwelling that is in a substantial part but not wholly produced in sections off the site and then is assembled and completed on the site. This shall not include any dwelling that meets the definition of mobile home, nor shall it include any dwelling that does not rest on a permanent foundation, nor any dwelling intended to be able to be moved to a different site once assembled, nor any dwelling that would not fully comply with any and all applicable building codes. A modular home also shall not include a building that includes only one substantial piece prior to delivery on the site.

MONUMENT: A tapered, permanent survey reference point of stone or cement having a round top four inches (4”) on each side with a length of twenty-four (24”) inches.

MUNICIPAL AUTHORITY: The (municipality name), County, Pennsylvania.

MUNICIPALITY: A borough, or township.

NATURAL FEATURE: A component of a landscape existing or maintained as part of the natural environment and having ecologic value in contributing beneficially to air quality, erosion control, groundwater recharge, noise abatement, visual amenities, growth of wild like, human recreation, reduction of climatic stress or energy costs. Such features include those, which, if disturbed, may cause hazards or stress to natural habitats, property or the natural environment.

NONCONFORMING LOT: See LOT, NONCONFORMING.

NONCONFORMING STRUCTURE OR BUILDING: A structure or part of a structure manifestly not designed to comply with the applicable use or extent of use provisions in this zoning ordinance or amendment theretofore or hereafter enacted, where such structure lawfully existed prior to the enactment of such ordinance or amendment or prior to the application of such ordinance or amendment to its location by reason of annexation. Such nonconforming structures include, but are not limited to, nonconforming signs.

NPDES: The National Pollutant Discharge Elimination System.

OBSTRUCTION: Any wall, dam, wharf, embankment, levee, dike, projection, excavation, channel, rectification, culvert, building, fence, stockpile, refuse, fill, structure, or matter in, along, across, or projecting into any channel, watercourse, or flood-prone area, 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 water might carry the same down stream to the damage of life and property.

OFF-STREET PARKING: A temporary storage (surface or structure) for a motor vehicle that is directly accessible to an access aisle and that is not located on a dedication right-of-way, and is located upon the same lot as a principal use or, in the case of joint parking, within close proximity.
ON-LOT SEPTIC SYSTEM: See SEPTIC SYSTEM

OPEN SPACE: Any parcel or area of land or water essentially unimproved and set aside, dedicated, designed, or reserved for public use or enjoyment or for the use and enjoyment of owners, occupants, and their guests.

OPEN SPACE, COMMON: See COMMON OPEN SPACE.

OPEN SPACE, PRIVATE: Common open space held in private ownership, the use of which is normally limited to the occupants of a single dwelling or building.

OPEN SPACE, PUBLIC: Open space owned by a public agency and maintained by it for the use and enjoyment of the general public.

OUTDOOR LIGHTING: An illumination source outside any building, including but not limited to an incandescent bulb, mercury, sodium or neon-filled bulb, and the hardware containing the illumination source and supporting it. Lighting fixtures underneath a roof of an open-sided building, including but not limited to storage sheds, canopies and gas station marquees over gas pumps, are deemed to be “outdoor lighting.”

OWNER: See LANDOWNER.

PADEP: The Pennsylvania Department of Environmental Protection.

PAMPC: See PENNSYLVANIA MUNICIPALITIES PLANNING CODE

PARCEL: Any lot, plot or tract of land designated by any legally recorded or approved means as a single unit. The term includes, but is not limited to, tax parcels, lots or deeded areas.

PARK: A tract of land, designated and used by the public for active and passive recreation.

PARKING AREA: See PARKING LOT.

PARKING GARAGE: A building where passenger vehicles may be stored for short-term, daily or overnight off-street parking.

PARKING LOT: Any lot, municipally or privately owned for off street parking facilities, providing for the transient storage of automobiles or motor-driven vehicles. Such parking services may be provided as a free service or may be provided for a fee.

PARKING SPACE: The space within a building, or on a lot or parking lot, for the parking or storage of one (1) automobile.
PEDESTRIAN WALKWAY: A specified easement, walkway, path, sidewalk or other reservation which is designed and used exclusively by pedestrians.

PENNDOT: The Pennsylvania Department of Transportation.


PERSON: A corporation, company, association, society, firm, partnership, or joint stock company, as well as an individual, a state, and all political subdivisions of a state or any agency or instrumentality thereof, or any other legal entity whatsoever, which is recognized by law as the subject of rights and duties.

PERVIOUS SURFACE: Any material that permits full or partial absorption of stormwater.

PLAN: See PLAT.

PLAN, CONSTRUCTION IMPROVEMENT: A plan prepared by a registered engineer or surveyor showing the construction details of streets drains, sewers, bridges, culverts, and other improvements as required by this Ordinance.

PLAN, COMPREHENSIVE: See COMPREHENSIVE PLAN.

PLAN OR PLAT, FINAL: A complete and exact subdivision or land development plan, prepared for official recording as required by statute, to define property rights and proposed streets and other improvements.

PLAN OR PLAT, PRELIMINARY: A tentative subdivision or land development plan, in lesser detail than a final plan, showing approximate proposed street and lot layout as a basis for consideration prior to preparation of a final plan.

PLAN OR PLAT, PRE-APPLICATION (SKETCH): An informal plan indicating salient existing features of a tract and its surroundings and the general layout of a proposed subdivision or land development. The pre-application (sketch) plat or plan does not constitute a formal submission of a preliminary or final plat and is voluntarily offered to all applicants for guidance.

PLANNING AGENCY: A planning commission, planning department, planning office, or a planning committee of the governing body.

PLANNING COMMISSION: (municipality) Planning Commission.

PLAT: The map or plan of a subdivision or land development whether preliminary or final. (For the purpose of this ordinance, the terms “plat” and “plan” have the same meaning.)
**PRE-APPLICATION CONFERENCE:** An initial meeting between developers and the zoning officer and/or codes enforcement officer and/or municipal Engineer which affords applicants and/or developers the opportunity to present their proposals informally.

**PRIME AGRICULTURAL LAND:** Land consisting of those soils designated by the USDA Natural Resource Conservation Service as prime soils.

**PRINCIPAL BUILDING:** See BUILDING, PRINCIPAL.

**PRIVATE:** Not publicly owned, operated, or controlled.

**PRIVATE STREET/ROAD:** A non-public right-of-way which provides vehicular access to two or more lots.

**PROFILE LINE:** Means the profile of the centerline of the finished surface of the street, which shall be midway between the sidelines of the street.

**PUBLIC GROUNDS:** Includes:

1. Parks, playgrounds, trails, paths and other recreational areas and other public areas;
2. Sites for schools, sewage treatment, refuse disposal and other publicly owned or operated facilities;
3. Publicly owned or operated scenic and historic sites.

**PUBLIC LAND:** Owned, operated or controlled by a government agency, whether federal, state, or local, and including any corporation created by law for the performance of certain specialized governmental functions, or any public school district.

**PUBLIC HEARING:** A formal meeting held pursuant to public notice by the governing body or planning agency, intended to inform and obtain public comment, prior to taking action in accordance with the Pennsylvania Municipalities Planning Code.

**PUBLIC MEETING:** A forum held pursuant to notice under 65 PA. C.S., CH 7 (Relating to open meetings).

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

**PUBLIC PARKS AND RECREATION AREAS:** Locations for leisure-time activities, including but not limited to sports and entertainment that are open to anyone without restriction, except for the rules and standards of conduct and use.
PUBLIC STREET/ROAD: A street ordained or maintained or dedicated and accepted by the municipality, county, state or federal governments and open to public use.

RECREATION, ACTIVE: Leisure-time activities, usually of a formal nature and often performed with others, requiring equipment and taking place at prescribed places, sites, or fields.

RECREATION, PASSIVE: Activities that involve relatively inactive or less energetic activities, such as walking, sitting, picnicking, card games, checkers, and similar table games. It can also mean open space for nature walks and observation.

RECREATIONAL VEHICLE: A vehicular type unit, portable and without permanent foundation, which can be towed, hauled or driven and primarily designed as temporary living accommodation for recreational, camping and travel use and including but not limited to travel trailers, truck campers, camping trailers and self-propelled motor homes.

RECREATIONAL VEHICLE PARK OR CAMPGROUND: A parcel of land which has been planned and improved for the placement of recreational vehicles or camping equipment for temporary living quarters, for recreational, camping or travel use, on recreational vehicle or camp ground lots rented for such use.

RECREATIONAL VEHICLE PARK OR CAMPGROUND LOT: A parcel of land abutting a street or private road occupied by one recreational vehicle or camping equipment for temporary living quarters, for recreational, camping, or travel use.

REGIONAL PLANNING AGENCY: The Tri-County Regional Planning Commission.

REGULATORY FLOOD ELEVATION: The 100-year flood elevation plus a freeboard safety factor or one and one half (1½) feet.

REPORT: Any letter, review, memorandum, compilation or similar writing made by a body, board, officer or consultant other than a solicitor to any other body, board, officer or consultant for the purpose of assisting the recipient of such report in the rendering of any decision or determination. All reports shall be deemed recommendatory and advisory only and shall not be binding upon the recipient, board, officer, body or agency, nor shall any appeal lie there from. Any report used, received or considered by the body, board, officer or agency rendering a determination or decision shall be made available for inspection to the applicant and all other parties to any proceeding upon request, and copies thereof shall be provided at cost of reproduction.

RESERVE STRIP: A narrow parcel of ground separating a street from other adjacent properties.

RETENTION BASIN: A reservoir, formed from soil or other material, which is designed to detain temporarily, a certain amount of storm water from a catchment area and which may also be designed to permanently retain additional storm water runoff from the
catchment area. Retention basins may also receive freshwater from year-round streams. Unlike detention basins, retention basins always contain water, and thus may be considered man-made lakes or ponds.

**RIGHT-OF-WAY**: A strip of land acquired by reservation, dedication, forced dedication, prescription or condemnation and intended to be occupied or occupied by a road, crosswalk, railroad, electric transmission lines, oil or gas pipeline, water line, sanitary storm sewer and other similar uses.

**RIGHT-OF-WAY, STREET**: A public thoroughfare for vehicular traffic and/or pedestrian traffic, whether designated as a street, highway, thoroughfare, parkway, road, avenue, boulevard, lane, alley, or however designated.

**RIPARIAN BUFFER AREA**: An area of land adjacent to a perennial or intermittent stream, subject to the regulations of the municipal zoning ordinance.

**RIPARIAN LAND**: Land that is traversed or bounded by natural watercourse or adjoining tidal lands.

**RIPARIAN RIGHTS**: Rights of a landowner to the water on or bordering his or her property, including the right to make use of such waters and to prevent diversion or misuse of upstream water.

**ROAD**: See STREET.

**RUN OFF**: The surface water discharge or rate of discharge of a given watershed after a fall of rain or snow that does not enter the soil but runs off the surface of the land.

**SANITARY SEWAGE**: Any liquid waste containing animal or vegetable matter in suspension or solution or the water-carried waste resulting from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or any other source of water-carried waste of human origin or containing putrescible material.

**SANITARY SEWER**: Pipes that carry domestic or commercial sanitary sewage and into which storm, surface, and ground waters are not intentionally admitted.

**SEDIMENTATION**: The process by which mineral or organic matter is accumulated or deposited by moving wind, water, or gravity. Once this matter is deposited (or remains suspended in water), it is usually referred to as "Sediment".

**SEPTIC SYSTEM**: An underground system with a septic tank used for the decomposition of domestic wastes.

**SCREENING**: The provision of a barrier to visibility, airborne particles, glare and noise between adjacent properties, uses and/or districts, composed entirely of trees, berm, shrubs, hedges, sight-tight fences and/or other similar-type materials.
SCREEN PLANTING: A vegetative material of sufficient height and density to conceal from the view of property owners on adjoining properties. The structures and uses on the premises on which the screen planting is located.

SETBACK LINE: See BUILDING SETBACK LINE

SEWAGE DISPOSAL SYSTEM (ON-LOT): Any system designed to eliminate sanitary sewage within the boundaries of the lot the system serves.

SEWAGE DISPOSAL SYSTEM (OFF-LOT): Any system designed to eliminate sanitary sewage outside the boundaries of the lot the system serves.

SEWAGE DISPOSAL AND TREATMENT SYSTEM (PUBLIC OR COMMUNITY): A sanitary sewage collection method in which sewage is carried from the site by a system of pipes to a central treatment and disposal plant.

SIDEWALK: A paved, surfaced, or leveled area, paralleling and usually separated from the street, used as a pedestrian walkway.

SIDEWALK AREA: That portion of the right-of-way that lies between the right-of-way line and curb line, regardless of whether the sidewalk exists.

SIGHT DISTANCE: The length of roadway visible to the driver of a passenger vehicle at any given point on the roadway when the view is unobstructed by traffic.

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.

SITE: A parcel of land located in a municipality, established by a plat or otherwise as permitted by law, which is the subject of an application for development. A site may include more than one lot.

SITE PLAN: An accurately scaled development plan that illustrates the existing conditions on a land parcel as well as depicting details of a proposed development.

SKETCH PLAN: See PLAN OR PLAT, PRE-APPLICATION (SKETCH)

SLOPE: The face of an embankment or cut section; any ground whose surface makes an angle with the plane of the horizon. Slopes are usually expressed in a percentage based upon vertical difference in feet per 100 feet of horizontal distance.

SOIL STABILITATION: Chemical or structural treatment designed to increase or maintain the stability of a mass of soil or otherwise to improve its engineering properties.
SQUARE FOOTAGE: The unit of measure used to express the area of a lot, tract, or parcel involved in a subdivision or land development; the length of a lot in feet multiplied by the width of the lot in feet.

STAFF: A municipality’s personnel or contracted personnel.

STREAM ENCLOSURE:

STEEP SLOPE: Land with a 15 feet or greater change in elevation 100 feet or less in horizontal distance or, in other terms, 15% or greater on the average. The following formula is the acceptable method of determining average slope:

\[ S = \frac{0.0023 \times I \times L}{A} \]

- \( S \) = Average percent slope of site
- \( I \) = Contour interval in feet
- \( L \) = Sum of the length of contours in feet
- \( A \) = Land area in areas of parcel being considered

STORMWATER: Water that surfaces, flows or collects during and subsequent to rain or snowfall.

STORMWATER DETENTION: Any storm drainage technique that retards or detains runoff, such as detention or retention basin, parking lot storage, rooftop storage, porous pavement, dry wells or any combination thereof.

STORMWATER MANAGEMENT PLAN: A plan for managing the storm water runoff from a proposed subdivision or land development, including data and calculations, prepared by the developer in accordance with the standards of this ordinance, or any applicable municipal or watershed stormwater management ordinance.

STREAM: A watercourse having a source and terminus, banks and channel through which waters flow at least periodically.

STREET: Includes street, avenue, boulevard, road, highway, freeway, parkway, lane, alley, viaduct, and any other ways used or intended to be used by vehicular traffic or pedestrians whether public or private.

STREET CENTERLINE: See CENTERLINE, STREET.

STREET GRADE: The officially established grade of the street upon which a lot fronts or in its absence the established grade of the other streets upon which the lot abuts, at the midpoint of the frontage of the lot thereon. If there is no officially established grade, the existing grade of the street at such midpoint shall be taken as the street grade.
STREET LINE: The dividing line between the street or road and the lot, also known as the right-of-way line.

STREET, MAJOR:

1. **INTERSTATE HIGHWAY**: Limited access highways designed for traffic between major regional areas or larger urban communities of 50,000 or more; these highways extend beyond state boundaries, with access limited to interchanges located by the U.S. Department of Transportation.

2. **FREEWAY**: Limited access roads designed for large volumes of traffic between communities of 50,000 or more to major regional traffic generators (such as central business districts, suburban shopping centers and industrial areas); freeways should be tied directly to arterial roads, with accessibility limited to specific interchanges to avoid the impediment of through traffic.

3. **PRINCIPAL ARTERIAL HIGHWAY**: A principal arterial provides land access while retaining a high degree of through traffic mobility and serves major centers of urban activity and traffic generation. These highways provide a high-speed, high-volume network for travel between major destinations in both rural and urban areas.

4. **MINOR ARTERIAL HIGHWAY**: A minor arterial gives greater emphasis to land access with a lower level of through traffic mobility than a principal arterial and serves larger schools, industries, hospitals and small commercial areas not incidentally served by principal arterials.

5. **COLLECTOR HIGHWAY**: A collector road serves dual functions, collecting traffic between local roads and arterial streets and providing access to abutting properties. It serves minor traffic generators, such as local elementary schools, small individual industrial plants, offices, commercial facilities and warehouses not served by principal and minor arterials.

6. **STREET, ARTERIAL**: A major street or highway with fast or heavy traffic of considerable continuity and used primarily as a traffic artery for intercommunications among large areas.

7. **STREET, COLLECTOR**: A major street or highway which carries traffic from minor streets to arterial streets including the principle entrance streets of a residential development and streets for circulation within such a development.

8. **LIMITED ACCESS HIGHWAY**: A major street or highway which carries large volumes of traffic at comparatively high speed with access at designated points and not from abutting properties.
STREET, MARGINAL ACCESS: A minor street which is parallel and adjacent to a limited access highway or arterial street, which provides access to abutting properties and protection from through traffic.

STREET, MINOR: A street used primarily for access to abutting properties. Minor streets include the following:

1. STREET, CUL-DE-SAC: A street intersecting another street at one end terminating at the other in a vehicular turn-around.

2. STREET, DEAD END: A street or portion of a street with only one vehicular outlet, but which has a temporary turnaround and which is designed to be continued when adjacent open land is subdivided.

3. STREET, LOCAL: Streets which are used primarily for access to abutting properties, including streets with subdivisions or developments, usually characterized by low operating speeds and dedicated or accepted for municipal ownership and maintenance.

4. STREET, PRIVATE: A legally established right-of-way other than a public street not offered for dedication or accepted for municipal ownership and maintenance.

5. STREET, PUBLIC: All streets open to the public and maintained by, or dedicated to and accepted by the municipality, the County, the State or the Federal Government.

STREET, PAPER: A street that has never been built shown on an approved plan, subdivision plat, tax maps, or official map.

STREET, SHOULDERS: The portion of the street, contiguous to the cartway, for the accommodation of stopped vehicles, for emergency parking, and for lateral support of base and surface courses of the pavement.

STREET, WIDTH: The distance between street lines measured at right angles to the center line of the street.

STRUCTURE: Any man-made object having an ascertainable stationary location on or in land or water, whether or not affixed to the land.

1. STRUCTURE, ACCESSORY: A structure detached from a principle structure, but located on the same lot, which is customarily incidental and subordinate to the principle building, structure or use.

2. STRUCTURE, PRINCIPLE: The main or primary structure on a given lot, tract or parcel.
3. **STRUCTURE, TEMPORARY**: A structure without any foundation or footings and which is removed when the designated time period, activity, or use for which the temporary structure was erected has ceased.

**SUBDIVIDER**: The owner or authorized agent of the owner of a lot, tract, or parcel of land to be subdivided for sale or land development under the terms of this Ordinance.

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

**SUBSTANTIALLY COMPLETED**: Where, in the judgment of the municipal engineer, at least 90% (based on the cost of the required improvements for which financial security was posted pursuant to PAMPC, Section 509) of those improvements required as a condition for the final approval have been completed in accordance with the approved plan, so that the project will be able to be used and operated for its intended use.

**SURFACE DRAINAGE PLAN**: A plan showing all present and proposed grades and facilities for stormwater drainage.

**SURVEYING, PRACTICE OF LAND**: Shall mean the practice of that branch of the profession of engineering which involves the location, relocation, establishment, reestablishment or retracement of any property line or boundary of any parcel of land or any road right-of-way, easement or alignment; the use of principles of land surveying, determination of the position of any monument or reference point which marks a property line boundary, or corner setting, resetting or replacing any such monument or individual point including the writing of deed descriptions; procuring or offering to procure land surveying work for himself or others; managing or conducting as managers, proprietors or agents any place of business from which land surveying work is solicited, performed, or practiced; the performance of the foregoing acts and services being prohibited to persons who are not granted certificates of registration under the laws of the Commonwealth as a professional land surveyor unless exempt under other provisions of the laws of the Commonwealth.

**SURVEYOR, PROFESSIONAL LAND**: An individual licensed and registered under the laws of this Commonwealth to engage in the practice of land surveying. A professional land surveyor may perform engineering land surveys but may not practice any other branch of engineering.

**SWALE**: A low-lying stretch of land characterized as a depression used to carry surface water runoff.
TOPOGRAPHIC MAP: A map showing the elevations of the ground by contours or elevations.

TOPOGRAPHY: The configuration of a surface area showing relative elevations.

TOPSOIL: Surface soils and subsurface soils, which presumably are fertile, soils and soil material, ordinarily rich in organic matter or humus debris. Topsoil is usually found in the uppermost soil layer called the A Horizon.

TOWNSHIP: The Township of, (name of municipality), (county), County, Pennsylvania, (governing body), its agents or authorized representatives.

UNDEVELOPED LAND: Any lot, tract or parcel of land, which has not been graded or in any other manner prepared for the construction of a building.

UNIT: See DWELLING UNIT.

USE: The specific purpose for which land or a building is designated, arranged, intended, or for which it is or may be occupied or maintained. The term "permitted use" or its equivalent shall not be deemed to include any nonconforming use.

1. USE, ACCESSARY: A use customarily incidental and subordinate to the principal use, building or structure located on the same lot with this principal building or structure.

2. USE, PRINCIPAL: The main or primary use of property, buildings or structures.

UTILITY, PUBLIC OR PRIVATE: (1) Any agency which under public franchise or ownership, or under certificate of convenience and necessity, provides the public with electricity, gas, heat, steam, communication, rail transportation, water, sewage collection or other similar service, (2) a closely regulated private enterprise with an exclusive franchise for providing a public service.

VIEWSHED: That portion of the landscape which can be readily viewed by the observer from one or more vantage points. The extent of area that can be viewed is commonly delineated by landform, vegetation and/or distance.

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

WAIVER: See MODIFICATION / WAIVER.

WATER FACILITY: Any water works, water supply works, water distribution system, or part thereof designed, intended, or constructed to provide or distribute potable water.
**WATERCOURSE:** A stream of water, river, brook, creek, or a channel or ditch for water whether natural or man-made.

**WATERSHED, STORM WATER MANAGEMENT PLAN:** A plan for managing storm water runoff from and from within a particular watershed area.

**WATER SYSTEM:** A water facility providing potable water to individual lots or to the public for human consumption.

**WATER SYSTEM, NONPUBLIC:** All water systems which are not public water systems.

**WATER SYSTEM, OFF-LOT:** An approved water system in which potable water is supplied to a dwelling or other building from a central water source which is not located on the same lot as the dwelling or building.

**WATER SYSTEM, ON-LOT:** A well or other approved system designed to provide potable water to a dwelling or building located on the same lot as the source.

**WATER SYSTEM, PUBLIC:** A water system, as defined by the Pennsylvania Department of Environmental Protection, which has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least 60-days out of the year.

**WATER SURVEY:** An inventory of the source, quantity, yield, and use of groundwater, creek, channel, ditch, whether natural or man-made.

**WETLANDS:** Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that are under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

For the purposes of this ordinance, the term includes but is not limited to, wetland areas listed in the State Water Plan, the US Forest Service Wetland Inventory of Pennsylvania, the US Fish and Wildlife National Wetlands Inventory, and wetlands designated by the Susquehanna River Basin Commission.

**YARD, BUFFER:** See BUFFER YARD.

**YARD, REQUIRED:** An open space located on the same lot with a building unoccupied and unobstructed from the ground up, except for permitted accessory buildings or such projections as are expressly permitted. The minimum depth or width of a required yard shall consist of the horizontal distance between the lot line and the required building setback line.

**ZERO LOT LINE:** The location of a building on a lot in such a manner that one or more of the building’s sides rest directly on a lot line.
ZONE: Same as District.

ZONING: A police power measure, enacted primarily by general purpose units of local government, in which the community is divided into districts or zones within which permitted and special uses are established as well as regulations governing lot size, building bulk, placement and other development standards. (Also see the Pennsylvania Municipalities Planning Code)

ZONING DISTRICT: A section of a municipality designated in the Zoning Ordinance text and delineated on the Zoning Map, in which requirements for the use of land and building and development standards are prescribed.

ZONING MAP: The map setting forth the boundaries of the Zoning Districts of the borough/township/city which shall be part of this Ordinance.

ZONING OFFICER: The administrative officer appointed by the Board of Commissioners to administer the Zoning Ordinance and issue zoning permits. (Also see Pennsylvania Municipalities Planning Code)

ZONING PERMIT: A document signed by a zoning officer, as required in the Zoning Ordinance, as a condition precedent to the commencement of a use, or the erection, construction, reconstruction, restoration, alteration, conversion or installation of a structure or building, that acknowledges that such use, structure or building complies with the provisions of the municipal zoning ordinance or authorized variance there from.
ARTICLE 4

PLAN PROCESSING PROCEDURES AND REQUIREMENTS

SECTION 401. PLAN PROCESSING PROCEDURES

General Procedure

1. Whenever a subdivision or land development is proposed, a plan of the layout of such subdivision or land development shall be prepared, filled and processed according to the requirements of this Ordinance. The governing body may hold a public hearing, properly advertised, prior to action on the plan. No lots will be sold or structures erected prior to the final approval of the plans.

2. Innovative design including Traditional Neighborhood Development, Planned Residential Development, Open Space Cluster Development is encouraged as provided in the municipal zoning ordinance. (See Appendix 5 for Sample Conservation Subdivision Regulations by Natural Land Trust).

3. The applicant shall complete the “Check List for Submitting Subdivision and Land Development Plan” (See Appendix No.1) for all preliminary and final plans.

4. The municipal engineer/or its representative shall have the right not to accept a plan, if the plan is administratively incomplete due to the omissions of any criteria required in Section 407 thru Section 410. Any such non-acceptance of a plan shall not be considered to have been filed.

5. Prior to the preparation of any plan, the applicant shall review the rights and restrictions associated with prior recorded plan and is advised to consult with all appropriate agencies with respect to, but not limited to as more fully described in this Ordinance;

   A. Compliance to zoning ordinance
   B. Sanitary and water services
   C. On-lot sewage disposal
   D. Public utilities
   E. Stormwater control measures
   F. Floodplain development measures
   G. Erosion and sedimentation control measures
   H. Historic Preservation
   I. Important Natural Habitats
   J. Archaeological Resources

6. A preapplication submission meeting is strongly suggested with the municipal staff and municipal engineer. Due to the informal nature of the meeting, the
applicant and the municipality shall not be bound by the determination of the preapplication meeting.

7. Plan submission, official filing date and approval of the plan.

a. The application for submission of subdivision and land development plans shall be submitted fifteen (15) working days prior to the regularly scheduled planning commission (or the governing body if there is no planning commission established) meeting date. Upon receipt of an application, the municipality shall affix to the application both the date of submittal and the official filing date.

b. The official filing date shall be the date of the next regularly scheduled meeting of the planning commission following the submittal date (or the governing body if there is no planning commission established). Should the regular meeting occur more than thirty (30) days following the submission of the application, than the official filing date shall be the 30th day following the day the application has been submitted.

8. Approval of Plans

The application for approval of the plans whether preliminary or final shall be acted upon and decision rendered by the planning commission or the governing body and communicate it to the applicant not later than ninety (90) days following the official filing date.

SECTION 402. SKETCH PLAN (OPTIONAL)

A Pre-application meeting or sketch plan review is recommended for the applicant to receive advice and comments from the municipal staff. The meeting between the applicant and the municipal staff shall be considered confidential.

1. Prior to the filing of a subdivision or land development plan, the applicant is encouraged to submit a sketch plan to the planning commission (or the governing body) for advice and assistance on the requirements necessary to achieve conformity with the standards of this and other applicable municipal ordinances. The submission of a sketch plan does not constitute an official subdivision and land development application.

2. The plan shall be labeled “SKETCH PLAN” and shall include sufficient data such as listed below.

   A. Name and address of the legal owner, the equitable owner, and/or applicant and the person responsible for preparing the sketch plan
   B. Title, scale, north arrow and date of preparation
   C. Location map, tract boundary and ground contours
D. Existing and proposed streets and layout of lots and open space easements
E. Topographic features such as water courses, rock outcropping, steep slopes, wetlands, vegetation, and floodplain areas
F. Proposed method of water supply, sewage disposal and stormwater management
G. The zoning district for the proposed plan area

3. Twelve (12) copies of the sketch plan shall be submitted fifteen (15) working days prior to the planning commission (or the governing body) regularly schedule meeting date.

4. Individuals are permitted to discuss proposals with the municipal staff, planning commission or other governing body without the benefit of the plan, however, the benefit will be limited.
SECTION 403. PRELIMINARY PLAN PROCEDURES

The preliminary plan and all related information shall be submitted to the municipality as provided below:

1. Plans shall be submitted to the Municipality fifteen (15) working days prior to the Planning Commission (or Governing Body) meeting date. The applicant may request a waiver and submit a combined preliminary/final plans for non-phased projects.

2. Twelve (12) copies of the preliminary plan, application form including description and purpose of the plan and checklist duly completed.

3. When a sewage module is required, the applicant shall submit five (5) copies of the appropriate planning module component, as required by the PA Department of Environmental Protection compliance with the requirements of the Pennsylvania Sewage Facilities Act and Chapter 71 of Title 25 of the Pennsylvania Code. A completed module package or exemption letter should accompany the plan.

4. Twelve (12) copies or less as deemed appropriate by the municipality, of the stormwater management report.

5. A non-refundable filing fee for a municipality as set by the governing body and the filing fee as set by the county planning commission for review of the plans.

6. The municipality will distribute within seven (7) days, copies of the preliminary plan to the following, as applicable.
   A. Members of the planning commission (or the governing body)
   B. Municipal engineer
   C. Municipal manager and codes/zoning officer
   D. Municipal authority and public utility
   E. School district, as required
   F. Fire department, as required
   G. County conservation district
   H. Any other appropriate public agency deemed beneficial to review the plan by the municipality.

7. The municipality shall forward one (1) copy of the preliminary plans, supporting documents with review fee and county application for plan review form to the county. The municipality may allow the applicant to submit the plans directly to the County Planning Agency.

8. The County Planning Commission shall review the preliminary plan and data and shall return a written review report to the municipality within thirty (30) days of its receipt of the same or forfeit its right to review. The Municipality shall not
approve the application until the county review report is received or until the expiration of thirty (30) days from the date the application was forwarded to the county.

9. The Municipal Planning Commission (or the Governing Body) shall review the preliminary plan to determine if it meets the requirement and standards set forth in this Ordinance. The Planning Commission shall recommend whether the preliminary plan should be approved, approved with conditions, table to make revision to the plan, or disapprove the plan. The Planning Commission shall notify the Governing Body in writing thereof including, if recommended for disapproval, with reasons for such action, including specific reference to the provision of any statute or ordinance which have not been fulfilled.

10. When a plan is tabled by the Planning Commission/Governing Body to comply with the review comments generated by the Planning Commission/Governing Body, Codes/Zoning staff, Municipal Engineer, County Planning Commission and other review entity(s), the applicant shall provide a written response to all the comments and the revised plan before the next Planning Commission/Governing Body meeting date.

11. The Planning Commission shall act on the preliminary plan in time for the Governing Body to render their decision within ninety (90) days, or extension thereof, of the official filing date. The ninety (90) day time period begins following the date of regular meeting of the governing body or planning commission (whichever first reviews the application). Failure to do so shall be deemed an approval.

12. The Governing Body at their regular meeting shall act on the preliminary plan.

13. Before acting on the plan, the Governing Body may hold a public hearing after proper public notice.

14. The Governing Body shall notify the applicant, in writing, of its decision to approve, approve with conditions or disapprove the preliminary plan. Such notice shall be given to the applicant in person or mailed to him/her at the last known address not later than fifteen (15) days following the decision. If the plan is approved with conditions or disapproved, the governing body shall specify in their notice the conditions which must be met and/or the defects found in the plan and the requirement which have not been met, including specific reference to provisions of any statute or ordinance which have not been fulfilled.

15. If the preliminary is approved subject to conditions, the Governing Body shall not sign the plan until all the conditions have been met. All conditions of approval must be fulfilled within 120 days of the date of conditional approval, or the approval shall automatically become null and void, unless requested by the
applicant in writing and extended by the governing body. The official date of approval of the preliminary plan shall be the date of conditional approval.

16. Approval of the preliminary plan shall constitute a subdivision or land development plan with respect to general design, the arrangements and approximate dimension of lots, street and other planned features. The approval binds the developer to the general scheme of the plan as approved. Approval of the preliminary plan does not authorize the recording, sale, or transfer of lots. Construction of improvements are allowed to be constructed after the approval of the preliminary plan.

17. The preliminary plan approval will be effective for a five-year period from the date of approval of the preliminary plan. The final plan for the entire project must be made within five (5) years of the preliminary plan approval unless the Governing Body grants a waiver by extending the effective time period of the approval. An extension of time may be requested by the applicant in writing and approved by the Governing Body in accordance with Section 508(4) of the Pennsylvania Municipalities Planning Code, Act 247 as amended. Request for extension shall be submitted to the municipality (Code Enforcement Officer) thirty (30) days prior to any prevailing expiration date. Extensions may be granted for no more than three (3) one-year periods.

18. In the cases of a preliminary plan calling for installation of improvements beyond the five (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 application for final plat approval of each section are intended to be filed. Such schedule shall be updated annually by the applicant on or before the anniversary of the preliminary plan approval, until final plan approval of the final section has been granted and any modification in the aforesaid schedule shall be subject to approval of the governing body in its discretion.

19. Each section in any residential subdivision or land development, except for the last section, shall contain a minimum of twenty-five percent (25%) of the total number of dwelling units as shown on the preliminary plan, unless a lesser percentage is approved by the governing body in its discretion. Provided the applicant has not defaulted with regards to or violated any of the conditions of the preliminary plan approval, including compliance with applicant’s aforesaid schedule of submission of final plans for the various sections, then the aforesaid protection afforded by substantially completing the improvements shown on the final plan within five (5) years shall apply and for any section or sections, beyond the initial section, in which the required improvements have not been substantially completed within said five (5) year period the aforesaid protection shall apply for an additional term or terms of three (3) years from the date of final plan approval for each sections.
Failure of applicant to adhere to the aforesaid schedule of submission of final plan for the various sections shall subject any such section to any and all changes in this ordinance, zoning and other governing ordinance enacted by the governing body subsequent to the date of the initial preliminary plan submission.
SECTION 404. FINAL PLAN PROCEDURES

1. After the applicant has received from Municipality the official notification of the approval of the Preliminary Plan with or without conditions, and the applicant has successfully fulfilled any conditions of approval, the applicant may submit a final plan in accordance with this ordinance and the provisions of the Municipalities Planning Code. The Municipality will not accept concurrent plan unless all previous conditions are met.

2. The applicant shall submit a final plan to the Municipality within one (1) year after the date of the approval of the Preliminary Plan for the portion intended to be developed. Filling of the plan shall include all the material and other data required under the final plan specifications and appropriate review fees. Failure to comply with time limitation herein provided shall make the approval of the Preliminary Plan null and void. The applicant may request a waiver and submit a combined preliminary/final plans for non-phased projects.

3. The applicant shall submit to the municipality the completed application form, appropriate filling fees, along with the following.
   
   A. Twelve (12) prints and one (1) reproducible Mylar copy of the final plan and (1) electronic media formatted copy.
   B. Twelve (12) copies of construction plans.
   C. Twelve (12) copies of stormwater management report.
   D. Twelve (12) of all supporting information required for the Final Plan requirements.

4. The municipality shall forward within seven (7) days, one copy of the final plan, report(s) to the County Planning Commission with review fee and county application for plan review form. The Municipality may send plans to other agencies as needed. Copies of the plan and required report(s) will also be provided to the Planning Commission.

5. The final plans shall be reviewed by the Municipal Engineer and Codes enforcement staff to provide review comments to the Planning Commission and the applicant.

6. The County Planning Commission shall review the plans and provide review comments to the Municipality within thirty (30) days.

7. The Planning Commission will review the plan and required report(s) at its regularly scheduled meeting date, for compliance with the approved Preliminary Plan and this Ordinance and make recommendation to the Governing Body. The Planning Commission shall act on the final plan in time for the Governing Body to render their decision within 90 days from the official filling date.
8. The final plan shall incorporate all the changes and modifications required by the Governing Body in the Preliminary Plan, and shall conform to the approved Preliminary Plan, and it may constitute only that portion of the approved Preliminary Plan which the applicant proposes to record and develop at the time, provided that such portion conforms with all the requirements of this ordinance and the phasing requirement agreed upon with the Governing Body and the requirements of the Municipalities Planning Code, Act 247, as amended.

9. When a plan is tabled by the Planning Commission/Governing Body to comply with review comments generated by the Planning Commission/Governing Body, Codes/Zoning officer, Municipal Engineer, County Planning Commission, and other review entity(s), the applicant shall provide a written response to all the comments and the revised plan before the next Planning Commission/Governing Body meeting date.

10. The Governing Body will not take the official action on the final plan until the applicant and the Municipality agrees on the terms for completion of all public improvements or guarantee thereof. The agreements and improvement and/or maintenance guarantee shall be prerequisite to final plan approval and shall be in accordance to improvement and maintenance guarantees.

11. The Governing Body, upon the recommendation of the Planning Commission shall act on the final plan within ninety- (90) days, or extension thereof of the official filing date.

12. In the event that any modification/waiver of requirement from this Ordinance by the applicant, or is deemed necessary for approval, the details of the modification request and the reasons for its necessity shall be submitted to the municipality in writing as provided in Article 9.

13. The applicant during the plan review process may grant an extension of time for the Municipality to act on the plan in writing.

14. The Governing Body shall notify the applicant, in writing, of its decision to approve, approve with conditions or disapprove the plan. Such notice shall be given to the applicant in persons or mailed to the applicant’s last known address not later than fifteen (15) calendar days following the decision. If the plan is approved with conditions or disapproved, the Governing Body shall specify in their notice the conditions which must be met and/or the defects found in the plan and the requirements which have not been met, including specific reference to the provision of any statute or ordinance which have not been fulfilled.

15. If the plan is approved with conditions, the applicant shall respond to the Governing Body indicating acceptance or rejection of such conditions. Such response shall be in writing, signed by the applicant, and received by the Municipality within ten (10) calendar days of receipt by the applicant of
governing body’s decision to approve the plan with conditions. Approval of the plan shall be rescinded automatically upon the applicant’s failure to accept or reject such conditions in the manner and within the time frame noted above.

16. No changes, erasures, modifications or revisions shall be made on any final plan after approval has been given by the governing body, and endorsed in writing on the plan, unless the plan is first resubmitted to the Governing Body.

17. The applicant shall place a notation on the final plan if there is no offer of dedication to the public of streets and certain designated public areas, in which event the title to such areas shall remain with the owner and the municipality shall assume no responsibility for improvement or maintenance thereof, which fact shall be noted on the final plan.

18. Within ninety (90) days after the approval of the final plan by the Governing Body and upon all condition being met, the applicant shall provide one Mylar and no less than six (6) prints of the plan to the Municipality for signatures of the Governing Body. Then the applicant shall obtain the signatures of the County Planning Commission for review of the plan and a copy of the final signed plan shall be recorded in the office of the county recorder of deeds. The applicant shall provide the Municipality with two recorded copies signed for municipal records with Instrument number/plan book number and appropriate page numbers indicated on the plan.

19. Recording of the final plan shall be an irrevocable offer to dedicate all streets and other public ways to public use and to dedicate or reserve all park reservation and other public areas to public use unless reserved by the applicant as hereinafter provided. The approval of the final plan shall not impose any duty upon the municipality or the governing body concerning maintenance or improvements of any such dedicated street, or public use, until the Governing Body shall have accepted the same by the prevailing procedure of the municipality.

SECTION 405. LOT ADD-ON PLAN PROCEDURE

A plan which proposes to alter the location of lot lines between existing lots of separate ownership for the sole purpose of increasing lot size can be submitted as a “Lot Add-on final plan” to the municipality when meeting the following criteria;

1. No lot or tract of land is created which is neither smaller than the minimum nor larger than the maximum lot size permitted by the applicable Zoning Ordinance.

2. Drainage easements or rights-of-way are not altered.

3. Access to the affected parcel is not changed.
4. Street alignments are not changed.

5. No new building lots are created

The Lot Add-on Plan shall be prepared in conformance with the provisions of Section 409 of this Ordinance and any other applicable requirement of the law.

SECTION 406. CENTERLINE SEPARATION PLAN PROCEDURE

The division of an existing tract along the centerline of an existing road to create two (2) lots/tracts whose common boundary is said centerline can be submitted to the municipality as a “Centerline Separation Final Plan” when meeting the following criteria:

1. The resultant lots meet all requirements of the applicable zoning district.

2. The resultant lots shall retain adequate access to accommodate potential development in accordance with the current zoning district regulations.

3. Notification signed by the municipal zoning officer that the proposal is generally in conformance with the applicable zoning regulations.

4. Notification from Pennsylvania Department of Environmental Protection that either approval of the Sewer Facility Plan Revision (Plan Revision Module) or supplement has been granted or that such approval is not required.

The Centerline Separation Plan shall be prepared in conformance with the provisions of Section 410 of this Ordinance and any applicable requirement of the law.

SECTION 407. PRELIMINARY PLAN SPECIFICATIONS

A Preliminary which meets the requirements of Section 403 shall be prepared for submission to the Municipality and comply with the following requirements

1. Preliminary plans shall be prepared by land surveyor, an engineer or landscape architect registered in the Commonwealth of Pennsylvania. Land surveyor shall prepare the bearings and distances for the tract and lots.

2. Twelve (12) copies of the plans will be submitted on a minimum sheet size of 18 inches by 24 inches and no larger than 24 inches by 36 inches.

3. Preliminary plan shall contain the following information:

   A. Cover sheet information

      1). Title block.
2). Name of proposed development, municipality and the county, Pennsylvania, and plan labeled “Preliminary Plan”

3). Name, address, email address and telephone number of the record owner of the tract, the equitable owner if one exists, and the subdivider/developer.

4). Name, address and telephone number of professional engineer, landscape architect and professional land surveyor.

5). Reference to Instrument Number/Deed book, volume and page number and tax parcel number.

6). A location map drawn to a scale of a minimum of one inch to two thousand feet (1”= 2000’) and north arrow.

7). Date of plan preparation and revision date(s).

8). Zoning data in a table form to include: Zoning district, minimum lot area, building setbacks, and lot width, density, building height and number of floors, floor area ratio, lot and building coverage, parking, open space, landscape buffer and screening, public or private water and sewer.

9). Site data in a table form to include: Total area of tract, proposed use, proposed number of lots/number of units, floor area for non-residential uses, lot and building coverage, density, building height, number of floors, floor area ratio, open space area, developable area, area of public right-of-way, public or private water supply and sanitary sewer, total length of proposed and/or improved street(s) in feet and parking calculations including handicap parking.

10). Existing and proposed protective covenants running with the land, if any or a note stating none exist.

11). A statement listing any approved modifications of requirements, waivers, variances, special exceptions, conditional uses and/or any non-conforming structures.

12). An inventory of all permits/approvals/required by other agencies along with date submitted and approval dates.

13). Location of well and distance to on-lot sewerage facilities, if applicable.
14). Statement for recordation of the plan with date, Instrument number/Deed book, volume and page number and tax parcel number.

15). Index of drawings and identify sheets to be recorded.

16). Pennsylvania One Call System, Inc, with serial number(s).

17). List of utilities with addresses and telephone number.

18). Parcel(s) of land to be dedicated.

19). A statement regarding public improvements shall be provided as follows:
   "All public improvements shall conform to PennDOT Publications 408 and Construction Standards Publication 72, current edition and with municipal construction requirements and ordinances."

20). If the development and improvements are proposed in phases, and then provide the number of lots and time schedule for development in a table form.

21). A statement regarding presence or absence of archaeological resources, historical features and important natural habitat.

22). Certification of ownership and statement of dedication of roads or streets and right-of-ways signed by owner and duly notarized.

23). Certification of professional land surveyor with seal and signature for the accuracy of the plan survey.

24). Certification of professional engineer or landscape architect with seal and signature that prepared the plan, that all information shown is correct.

25). Certification by a biologist or a person with training in wetland who has evaluated the site and determined by the 1987 Army Corp of Engineer’s manual on wetland delineation and determination that there are/or there are no wetlands on the site.

26). Certification on the presence or absence of floodplain

27). A certification that the stormwater management system as shown on this plan is adequate to meet the requirements of the Municipal ordinances.
28). Contribution of recreation land or fee for residential lots and land developments as approved by the governing body.

29). A statement that a Highway Occupancy Permit (HOP) is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428) known as the “State Highway Law,” as amended by Act No. 1986-43 of May, 1986, before access to State Highway is permitted.

30). A statement regarding municipal highway occupancy permit. That: “No building permit will be issued until a Municipal Occupancy Permit has been issued”.

31). Signature block for review of the plan by Municipal Planning Commission.

32). Signature block for approval of the plan by the Municipal Governing Body.

33). Signature block for review of the plan by County Planning Commission or Planning Department.

34). Signature block for the Municipal Engineer for review of the engineering aspects of the plan.

35). A statement that the municipality shall be notified at least 48 hours prior to any blasting activities taking place.

37). A statement regarding the date and/or ordinance number of the Zoning and Subdivision and Land Development ordinance in effect at the time of submission.

B. Plan information and other requirements:

1). The plan shall be drawn no smaller than 100 feet to an inch. All dimensions shall be shown in feet and hundredths of a foot.

2). A separate plan showing all the existing conditions within the tract.

3). Total tract, layout of lots, lot area, lot dimensions and lot numbers.

4). North arrow, graphic and written scale on all sheets.
5). Name and deed reference of all adjoining landowners with abutting lot lines, and whether such abutting land is contained within an Agricultural Security Area or Agricultural Conservation Easement.

6). Primary control point, which shall be referenced to the PA plane coordinate system.

7). Existing and proposed concrete monuments and iron pin markers.

8). Existing contours at a minimum of two (2) feet for land with average slope of four (4) percent or less and a maximum vertical interval of five (5) feet for slope greater than four (4) percent. Contours shall be referenced to National Geodetic Vertical Datum (NGVD).

9). Tract and lot boundary with bearing and distances. For undeveloped area in access of ten (10) acres, deed plat information may be used.

10). Name of existing and proposed public or private streets and driveways on or adjacent to the tract, right-of-way and cartway width, curb and sidewalks. Traffic regulatory signs and painted zebra crossing and directional signs on street and parking lots/areas.

11). Location of existing sanitary sewer main water supply main, fire hydrant, gas line, power line, stormwater management facilities and other significant manmade features on or adjacent to the tract or developed/disturbed area within 200 feet.

12). Location of existing building or structure(s) on the tract.

13). Location of existing and proposed easements with bearings and distances.

14). Existing natural features such as wetlands delineated in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (January 1989), 100 years flood elevation, flood fringe and floodway, tree masses, watercourses, soil types, steep slopes, rock outcrops, contours and other features.

15). Existing and proposed protective covenants associated with the land, if any or a note stating none exist.

16). Archaeological resources, historical features, and important natural features map, as applicable.
17). Prime Agricultural Land as indicated by the Soil Conservation Service Map as “Pennsylvania prime farmland soils” and Capability Class I, II, or III

18). Minimum building setback lines for each lot.

19). First floor elevation of building.


21). Clear sight triangle and sight distance at proposed street intersections and driveways.

22). Snow dump areas in the turnaround of a cul-de-sac, if applicable.

23). Typical street cross-section for proposed streets.

24). Street centerline profile for each proposed street.

25). Proposed street names approved by the Post Office.

26). Location of any proposed site improvements such as curbs, sidewalks, street trees, traffic regulatory signs, fire hydrants, snow dump areas, community mail box(s), trash dumpster(s) handicap ramps and parking facilities.

27). Preliminary design of water mains if municipal or authority owned and sanitary and storm sewer mains.

28). Preliminary Stormwater management plan and all supporting calculations.

29). Traffic impact study, as required by this Ordinance.

30). Erosion and sedimentation control plan shall be prepared as required by the “Pennsylvania Clean Streams Law”, and the Pennsylvania Department of Environmental Resources “Erosion and Sediment Pollution Control Program Manual” (April 2000): (Title 25, part I, Subpart C, Article II, Chapter 102-Erosion Control).

31). Landscaping, buffering and Screening Plan, if required, prepared by landscape architect, arborist or other qualified professional.

32). Grading and Earth Moving Plan.
33). Hydrogeologic/water Supply Study, where on-site wells are proposed as required by this Ordinance.

34). Lighting Plan for outdoor and street lighting, as applicable.

35). For on-lot water supply provide location of well.

36). For on-lot sewerage facilities provide location of perc and probe for primary and secondary sites and distance to well.

37). DEP Sewage Facilities Planning Revision Module or appropriate waiver request and approval.

38). Such other data as may be required by the planning commission, governing body, and municipal engineer in the administration and enforcement of this ordinance.

39). Provide Legend describing various notations shown on the plan.

40). Steep Slope Report as required by this Ordinance.
SECTION 408. FINAL PLAN SPECIFICATIONS

A final Plan which meets the requirements of Section 405 and contain all the specifications required by the Preliminary Plan in Section 407, shall be prepared for submission to the Municipality and comply with the following requirements.

1. Final plans shall be prepared by land surveyor, an engineer or landscape architect registered in the Commonwealth of Pennsylvania. Land surveyor shall prepare the bearings and distances of the tract and lots.

2. (12) Copies of the plan will be submitted on a minimum sheet size of 18 inches by 24 inches and no larger than 24 inches by 36 inches.

3. Final plan submissions shall include a digital file of the drawings. The digital files shall reside on a 3 1/2 inch compact disc. The digital file shall be Auto CAD or DXF compatible.

4. The Plan shall be labeled as “Final Plan” and contain the following information.

   A. Cover Sheet information
      1). Information as required in Preliminary Plan Section 405.
      2). Date of Preliminary Plan approval.
      3). List of waivers and modification of requirements, conditional uses and variances with approval dates.
      4). The approval date of State Highway Occupancy permit if applicable.
      5). Municipal Road Occupancy Permit approval for proposed subdivision and land development that abuts municipal streets for sight distance from municipal engineer.
      6). Approval date of erosion and sedimentation control plan by county conservation district.

   B. Other Requirements
      1). Stormwater Management Plan, approved by the municipal engineer.
      2). Details of stormwater management facilities along with maintenance and inspection requirements.
3). Drainage and grading plan showing existing and proposed final contours, including swales and any stormwater facilities.

4). Plans and profiles of proposed streets, sanitary and stormwater sewers with grade and pipe size indicated and a plan of proposed water distribution system showing pipe size and location of valves and fire hydrant and specification for construction and materials.

5). PA Department of Environmental Protection Sewage Facilities Planning Module approval or exemption letter from PADEP in compliance with the requirements of Pennsylvania Sewage Facilities Act.

6). Parcels of land intended to be dedicated or reserved for parks, playgrounds, parking areas, common open space or other public, semi-public or community purpose.

7). Notification of plans to the school district if required.

8). Review of plans by fire department when a new street is proposed or a parking lot with ten (10) or more parking spaces.

9). Copy of all the permits/approvals from utilities and government agencies.

10). Financial security estimate for improvements.


13).Developer’s agreement which is acceptable to the municipality.

14).Wetland Study, as required.

15).A copy of final deed restrictions or protective covenants.

16).A copy of the Condominium/Homeowner’s Association package, if such is proposed.

17).If water supply is to be provided by means other than private wells owned and maintained by individual lot owners within the subdivision or development, the applicant shall present evidence that the subdivision or development is to be supplied by a certified public utility, a bona fide cooperative association of lot owners, or
by a municipal corporation, authority or utility. A copy of a certificate of public convenience from the Pennsylvania Public Utility Commission or an application for such certificate, a cooperative agreement, or commitment or agreement to serve the area in question, whichever is appropriate is acceptable.

18). When a facility is proposed for dedication to the municipality as built drawings shall be provided to the municipality within ninety (90) days of construction completion.

19). Erosion and sedimentation plan reviewed by the County Conservation District, as applicable.

20). Description of the centerline and right-of-way for all new and existing streets, to include distances and bearings with curve segments comprised of radius, tangent, arc, and cord. The description shall not have an error of closure and greater than one (1) foot in ten thousand (10,000) feet.

21). Description of all lot lines, with accurate bearings and distances, and lot areas for all parcels. Curve segments shall be comprised of arc, cord, bearing and distance. Along existing street right-of-way, the description shall be prepared to the right-of-way lines. The description shall not have an error of closure greater than one (1) foot in ten thousand (10,000) feet.

22). A standard note regarding public improvements shall be added as follows:

“All public improvements shown shall conform to PennDOT Publications 408 and Construction Standards Publication 72, current edition and with municipal construction requirements and ordinances.”

23). Such other data which may be required by the planning commission, municipal governing body and municipal engineer in the administration and enforcement of this Ordinance.

24). Street signage and traffic regulatory sign and details.

25). Lighting Plan for outdoor and street lighting, as applicable.

26). Landscape, buffering and screening Plan, as applicable.

27). Approved Street names by U.S. Postal Service.
28). Traffic studies required by state laws to warrant traffic control devices such as stop signs, traffic signals, speed limits, turning lanes, etc.

29). Steep Slope Report, as required.

SECTION 409. LOT ADD-ON PLAN SPECIFICATIONS

A subdivision plan which meets the criteria of Section 405 for Lot Add-on Plan may be prepared as a final plan for submission to the municipality and shall comply with the following requirements.

1. The lot add-on plan shall be prepared by a land surveyor registered in Commonwealth of Pennsylvania.

2. Six (6) copies of the plan will be submitted on a minimum sheet size of 18 inches by 24 inches and no larger than 24 inches by 36 inches.

3. Dimensions shall be in feet and degrees, minutes and seconds with an error of closure no greater than one foot in ten thousand feet.

4. The plan shall contain the following information.

   A. Cover Sheet
      
      1). Title block
      
      2). Name of proposed plan, municipality, county, Pennsylvania and plan labeled “Lot Add-On Final Plan”.
      
      3). Name, address, email address and telephone number of the recorded owner and any equitable owner of the two effected lots.
      
      4). Name, address and telephone number of professional land surveyor.
      
      5). Reference to Instrument Number/Deed Book, Volume and Page Number and tax parcel number.
      
      6). A location map drawn to a scale of a minimum of one inch to two thousand feet (1” = 2000’) and north arrow.
      
      7). Date of plan preparation and revision date(s).
      
      8). Zoning data in a table form to include: Zoning district, minimum lot area, building setbacks, and lot width, density, floor area ratio, lot and building coverage, parking, open space, landscape buffer and screening.
9). Site data in a table form to include: Area of the lots, proposed use, proposed lot numbers, lot and building coverage, density, open space area, area of public right-of-way, public or private water supply and sanitary sewer.

10). Existing and proposed protective covenants associated with the lands, if any or a note stating that none exist.

11). A statement listing any approved modification of requirements, waivers, variances, special exceptions, conditional uses and/or any non-conforming structures.


13). Certification of Professional Land Surveyors with seal and signature for the accuracy of the plan survey.

14). Certification regarding presence or absence of wetland and flood plan.


16). Signature block for approval of the plans by Municipal Governing Body.

17). Signature block for review of plan by County Planning Commission.

18). Signature block for Municipal Engineer for review of engineering aspects of the plan.

19). A statement that “No lot created as a lot addition by this plan shall be later subdivided to create additional building lots. The lease, conveyance, sale or transfer of land shall be incorporated into existing lots by recorded deed. The newly created lot may not be used as a stand-alone lot.”

20). A statement indicating that a Non-Building Waiver Form B has been approved by the Pennsylvania Department of Environmental Protection.

B. Plan Information

1). The plan shall be drawn no smaller than 100 feet to an inch. All dimensions shall be in feet and hundredth of a foot.

2). Property plan showing the entire lot, tract or parcel to be effected by the lot add-on plan subdivision.
3). Lot area, bearings and distances and lot numbers. If the remaining acreage is in excess of ten (10) acres, its boundary and the boundary of the remaining tract shall be described by deed plotting drawn at a legible scale.

4). North arrow, graphic and written scale.

5). Name and deed reference of all adjoining land owners with abutting lot lines of both conveying and receiving lot.

6). Primary control points, which shall be referenced to the PA Plane Coordinate System.

7). Existing and proposed concrete monuments and iron pin markers.

8). Name of existing public or private streets, and driveways on or adjacent to the lot, right-of-way and cartway width, curb and sidewalk.

9). Location of easements with bearing and distances and utilities on and/or adjacent to both the conveying and receiving lot.
SECTION 410. CENTERLINE SEPARATION PLAN

A subdivision plan, which meets the criteria of Section 406 for Centerline Separation Plan, may be prepare as a final plan for submission to the municipality and shall comply with the following.

1. The Centerline Separation Plan shall be prepared by a land surveyor registered in the Commonwealth of Pennsylvania.

2. Six (6) copies of the plan will be submitted on a minimum sheet size of 18 inches by 24 inches and no larger than 24 inches by 36 inches.

3. Dimensions shall be in feet and degrees, minutes and seconds with an error of closure as greater than one foot in ten thousand feet.

4. The plan shall contain the following information.

   A. Cover Sheet

      1). Title block.

      2). Name of proposed plan, municipality, county, Pennsylvania and plan labeled “Centerline Separation Final Plan”.

      3). Name, address, e-mail address and telephone number of the recorded owner and any equitable owner.

      4). Name, address and telephone number of professional land surveyor.

      5). Reference to Instrument Number/Deed Book, Volume and Page Number and tax parcel number.

      6). A location map drawn to a scale of a minimum of one inch to two thousand feet (1” – 2000’) and north arrow.

      7). Date of plan preparation and revision date(s).

      8). Zoning data in a table form to include: Zoning district, minimum lot area, building setbacks, and lot width, density, floor area ratio, lot and building coverage, parking, open space, landscape buffer and screening.

      9). Site data in a table form to include: Area of the lots, proposed use, proposed lot numbers, lot and building coverage density, open space area, area of public right-of-way, public or private water supply and sanitary sewer.
10). Existing and proposed protective covenants associated with the lands, if
any or a note stating that none exist.

11). A statement listing any approved modification of requirements, waivers,
variances, special exceptions, conditional uses and/or any non-
conforming structures.

12). Statement for recordation of the plan with date, instrument
number/deed book, volume and page number and tax parcel numbers.

13). Certification of Professional Land Surveyors with seal and signature for
the accuracy of the plan survey.

14). Certification regarding presence or absence of wetland and flood plan.


16). Signature block for approval of the plans by Municipal Governing
Body.

17). Signature block for review of plan by County Planning Commission.

18). Signature block for Municipal Engineer for review of engineering
aspects of the plan.

19). A statement that a Highway Occupancy Permit (HOP) is required
pursuant to Section 4 20 of the Act of June 1, 1945 (P.L. 1242, No. 428)
known as the “State Highway Law,” as amended by Act No. 1986-43 of
May, 1986, before access to State Highway is permitted.

20). A statement regarding municipal highway occupancy permit. That:
“No building permit will be issued until a Municipal Occupancy Permit
has been issued”.

21). A statement indicating that a Non-Building Waiver Form B has been
approved by the Pennsylvania Department of Environmental Protection.

B. Plan Information

1). The plan shall be drawn no smaller than 100 feet to an inch. All
dimensions shall be in feet and hundredth of a foot.

2). Property plan showing the entire lot, tract or parcel to be effected by the
subdivision lot add-on plan.
3). Lot area, bearings and distances and lot numbers. If the remaining acreage is in excess of ten (10) acres, its boundary and the boundary of the remaining tract shall be described by a deed plotting drawn at a legible scale.

4). North arrow, graphic and written scale.

5). Name and deed reference of all adjoining land owners with abutting lot lines of both lots/tracts.

6). Primary control points, which shall be referenced to the PA Plane Coordinate System.

7). Existing and proposed concrete monuments and iron pin markers.

8). Name of existing public or private streets, and driveways on or adjacent to the lot, right-of-way and cartway width, curb and sidewalk.

9). Location of easements with bearings and distances and utilities on and/or adjacent to both lots/tracts.
ARTICLE 5

DESIGN AND IMPROVEMENT STANDARDS

SECTION 501. PURPOSE

The purpose of this Article is to provide reasonable design and improvement standards for public improvements related to subdivision and land development. This Article combines design and improvement specification which complies with sound engineering and design with suitable improvement standards.

SECTION 502. GENERAL

The applicant shall design and provide all improvements required by this Ordinance and any other applicable State or Federal regulation. The following design principles, standards, specifications and requirements will be applied by the (Name of Governing Body), Planning Commission and Municipal Engineer in their review and evaluation of all subdivision and land development plan applications. The standards and requirements contained herein shall be considered the minimum for the promotion of the public health, safety, convenience, and general welfare.

1. Where literal compliance with the standards and requirements contained herein is clearly impractical, the (Name of Governing Body) may modify the requirements in accordance with the process set forth in Article 9 of this Ordinance.

2. Subdivision and Land development plans shall give due consideration to the Municipal Comprehensive Plan and other "Official Plans" of the Municipality or to such parts thereof as may be approved.

3. Proposed land uses shall conform to standards and requirements of the Municipal Zoning Ordinance.

SECTION 503. SITE DESIGN

The purpose of good Subdivision and Land Development design is to assist in (1) creating functional and attractive developments, (2) minimizing adverse effects and impacts of development and (3) ensuring that the project will become an asset to the community. To promote this overall purpose and meet the goals and objectives of the Municipal Comprehensive Plan, Subdivision and Land Development plans in the Township/Borough should conform to the following site design guidelines which will result in a well-planned and constructed community. These guidelines and standards are intended to encourage improved site design without adding unnecessarily to development costs.

1. Land which is unsuitable for development due to hazards to life, safety, health or property shall not be subdivided or developed until such hazards have been eliminated or unless adequate safeguards against such hazards are provided.
for in the subdivision or land development plan. Unsuitable characteristics for subdivision and land development include, but may not be limited to:

A. Land subject to flooding;

B. Land, which if developed, will aggravate a flooding condition upon other land;

C. Land subject to subsidence;

D. Land containing significant slope;

E. Land subject to ground and water pollution; and,

F. Land containing wetlands

2. Before laying out lots and structures on a site, developers should make an analysis of the site that addresses issues such as site surrounding, geology and soil, topography, climate, existing vegetation, structures, road networks, visual features, and past and present use of the site.

3. The design of the development should take into consideration existing local, county and regional plans for the community.

4. Development of the site shall be based on the site analysis. To the maximum extent practicable, development shall be located to preserve natural features of the site; to avoid areas of environmental sensitivity; to minimize negative impacts and alteration of natural features; and to avoid areas unsuitable for development.

5. Development and improvements shall be designed to avoid adversely affecting ground water and water recharge; to reduce cut and fill; to avoid unnecessary impervious cover; to prevent flooding; and to provide adequate access to lots and sites.

6. Lot and block layout should be designed to permit the safe, efficient, and orderly movement of vehicular and pedestrian traffic into, out of, through and within the site.

7. During site preparation of an approved Subdivision and/or Land Development, stockpiles of stripped topsoil and/or excavated material shall not be located closer than one hundred (100) feet from any residential zone, use or occupancy boundary. The maximum height of topsoil and excavated material stockpiles shall be not more than ten (10) feet when stockpiles are located between one hundred (100) and one hundred fifty (150) feet from any residential zone, use or occupancy boundary. The maximum height of topsoil and excavated material stockpiles shall be not more than fifteen (15) feet when stockpiles are located more than one hundred fifty (150) feet from any
residential zone, use or occupancy boundary. The maximum height of any
topsoil or excavated material stockpile in the Township/Borough shall not
exceed fifteen (15) feet.

SECTION 504. BLOCKS

The length, width, shape, and design of blocks shall be based on the site analysis and the
intended use proposed for the site.

Blocks shall not exceed one thousand six hundred (1600) feet in length and shall not be
less than five hundred (500) feet in length.

Depth of a block shall equal the depth of two approved lots which share the same rear lot
line. However, the block depth may vary from the requirement in cases where parallel
roads are utilized or where topographic limitations exist.

Interior pedestrian walks shall be required in blocks exceeding six hundred (600) feet in
length to provide for pedestrian circulation or access to community facilities and other
portions of the development as required in Section 507. Sidewalks.

SECTION 505. LOTS

1. General Standards

   A. The size, shape and orientation of lots shall be appropriate to the type of
development, topography, natural features and land use contemplated.

   B. Lot lines shall be at right angles to straight street lines or radial to curved
street lines.

   C. Where feasible, lot lines should follow municipal boundaries rather than
cross them, in order to avoid jurisdictional problems.

   D. If small or substandard remnant parcels of land exist after subdivision,
these parcels shall be incorporated into existing or proposed lots, or
dedicated for public use, if acceptable to the Municipality. Agreements
for dedicating remnant parcels of land shall be approved by the
Municipal Solicitor prior to acceptance.

   E. All remnants of land (areas remaining after subdivision) shall conform
to the lot area and configuration requirements.

   F. All lots shall be designed to provide sufficient building area based upon
building setbacks, easements, floodplains, etc.

   G. Lot Size and / or intensity shall conform to the prevailing Municipal
Zoning Ordinance.

2. Environmental Self Sufficiency
Each new lot created in (Name of Municipality) shall be designed in such a manner to be individually self-sufficient for both water supply and sewage disposal, or be connected to available public or private water and sewer facilities.

3. Lot Frontage

A. All lots shall abut an existing or proposed public street except:

1). Private streets are permitted in developments where the ownership arrangements are set up as a condominium or homeowners association.

2). A Private access drive is permitted to provide an access to not more than three (3) residential dwellings. The width of the private access drive /easement/ right-of-way shall be not less than fifty (50) feet. Maintenance arrangement of the access drive shall be provided to the municipality. Any additional lot(s) created on the access drive shall require construction of a public street.

3). Driveways to Single-family Dwellings, Duplex Dwellings, or Apartments Five Units or Fewer:

   a). Joint driveways. Joint or common driveways serving no more than three (3) single-family dwellings are permitted and shall be designed in accordance with the standards of this section.

   b). Curb Cuts. The minimum curb cut or driveway width at the cartway edge shall be 10 ft. The maximum curb cut or driveway width at the cartway edge shall be 20 ft.

   c). Curb return entrance. A curb return entrance is illustrated in Figure 5.1. When curb return entrances are used, the curb shall have a minimum 3-foot radius. However, any driveway entering into PennDOT right-of-way shall be designed in accordance with PA Code Title 67, Chapter 441.
d). Flared entrances: When flared driveway entrances are used, a minimum 2-foot flair shall be provided. A typical flared entrance is illustrated in Figure 5.2.

Figure 5.2. Typical Flared Driveway Entrance
Modified from Source: AASHTO
(Source: Pennsylvania Standards for Residential Site Development, 2007)

b). Non-curbed entrance: Non-curbed driveway entrances shall have a minimum edge-of-pavement radius of 5 feet as illustrated in Figure 5.3.
Figure 5.3 Typical Non-curbed Driveway Entrance
Modified from Source: AASHTO
(Source: Pennsylvania Standards for Residential Site Development, 2007)

f). Driveway Profile: Driveway profiles shall provide efficient access to the abutting residential street, allow for low-speed 90-degree turns into the driveway, and provide safe access to the residential garage or parking area. The following standards shall apply:

(1). The algebraic change in grade between the street cross slope and the driveway approach apron shall be less than or equal to 8%.

(2). When the algebraic change in grade at any point along the driveway exceeds 10%, a vertical curve having a length specified in Table 5.1 shall be used.

Table 5.1 Length of Vertical Curves for Extreme Changes in Driveway Grade

<table>
<thead>
<tr>
<th>Algebraic Change in Grade (%)</th>
<th>Length of Vertical Curve</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sag</td>
</tr>
<tr>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>15</td>
<td>35</td>
</tr>
<tr>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>25</td>
<td>55</td>
</tr>
</tbody>
</table>

(3). Driveway grades shall not exceed 10% for the first 18 feet from the street edge of pavement. In addition, the driveway grade shall not exceed 10% in any area used for designated parking along the driveway, or within 20 feet of garage entrances.
(4). Driveways serving residential dwellings should they generally be less than 15%, but in no case should exceed 20%.

B. Double or reverse frontage lots shall be avoided except where required to provide separation of residential development from major streets or industrial or commercial development; or to overcome specific disadvantages of topography or orientation.

C. No residential lots shall be created which front upon a limited access highway. Furthermore, no lots within a major subdivision shall be created which front upon an arterial street.

4. Dimension and Areas of Lots

The dimensions and areas of lots shall conform to the standards and requirements of the (Name of Municipality) Zoning Ordinance.

5. Building Setback Lines

The minimum setback line shall be in accordance with the (Name of Municipality) Zoning Ordinance and the applicable sections of this Ordinance.

6. Flag-Lots

Flag-lots shall only be permitted where specifically provided for within the municipal Zoning Ordinance, and in compliance with the following:
A. For the purposes of this Section a flag-lot shall be described as containing two parts: (1) The "flag" shall include that portion of the lot that is the location of the principal and accessory buildings. (2) The "pole" shall be considered that portion of the site that is used for vehicular access between the site and its adjoining road.

B. Requirements for the Flag

1). The minimum lot area and lot width requirements of the Municipal Zoning Ordinance shall be measured exclusively upon the flag.

2). For purposes of determining required yards and setbacks, the following shall apply:

Front yard - The area between the principal structure and that lot line of the flag which is most parallel to the street providing vehicular access to the site. Additionally, all areas of the pole shall be considered to be within the front Yard;

Rear yard - The area between the principal structure and that lot line of the flag that is directly opposite the front yard, as described above; and,
Side yards - The area between the principal structure and that one (1) outermost lot line which forms the flag and pole, plus the area on the opposite side of the principal structure. (See the preceding Flag-Lot Figure 5.4. for a graphic depiction of the yard locations);

3). The flag-lot shall contain adequate driveway dimension for vehicular backup so that ingress to, and egress from, the lot is in the forward direction.

C. Requirements for the Pole

1). The pole shall maintain a minimum width of twenty-five (25) feet.

2) The pole shall not exceed six hundred (600) feet in length, unless additional length is needed to avoid the disturbance of productive farmlands or some other significant natural or cultural feature.

3). No part of the pole shall be used for any portion of an on-lot sewage disposal system, well, nor any other improvement except a driveway and other permitted improvements such as landscaping, fencing, utility connections to off-site facilities, mailboxes, and signs.

4). The cartway contained on the pole shall be located at least five (5) feet from any adjoining property line, and twenty (20) feet from any existing structures on the site or any adjoining property.

5). No pole shall be located within two hundred (200) feet of another on the same side of the street, unless a joint-use driveway is utilized as regulated as follows:

D. Joint-Use Driveways, Private Street, Access Easement, and Right-of-Way

1). When more than one flag lot is proposed, such lots may rely upon a joint-use driveway for vehicular access.

2). Joint-use driveway must serve at least one flag-lot, but may also serve conventional lots up to a maximum of three total lots.
3). All joint-use driveways shall have a minimum cartway width of ten (10) feet, and a right-of-way/easement width of fifty (50) feet.

4). Cross access easements/right-of-way shall be required to ensure common use of, access to, and maintenance of, joint-use driveways; such easements shall be recorded in language acceptable to the Municipal Solicitor, and depicted on the subdivision plan.

5). Any additional lots created after three (3) lots on the access driveway shall require construction of a public street.
SECTION 506. STREET SYSTEM DESIGN AND CONSTRUCTION

1. General Design Guidelines

A. The general arrangement, character, extent, and location of all streets proposed shall conform to the Municipality’s Comprehensive Plan and shall be considered in their relation to existing or proposed streets, topographical conditions, the public convenience and safety, and the proposed uses of land to be served by such streets. The arrangement, width, grade and other design standards of streets shall conform to the provisions found herein. Further, proposed streets shall be properly related to County, Regional or State transportation plans as have been prepared and adopted.

B. Proposed street arrangements shall make provisions for the continuation of existing streets in adjoining areas; the proper projection of streets into adjoining undeveloped or unplanned areas; and the continuation of proposed streets to the boundaries of the tract being subdivided.

C. When a new subdivision adjoins unsubdivided land appropriate for subdivision, the new streets shall be carried to the boundaries of the tract to be subdivided.

D. Streets shall be laid out to facilitate the use for which they are intended. Local access streets shall be laid out to discourage their use by through
traffic and, where possible, collector and arterial streets shall be
designed for use by through traffic.

E. Streets shall be related to the topography so as to establish usable lots
and satisfactory street grades.

F. Proposed private service access for purposes of providing a secondary
means of access to a lot are permitted as deemed appropriate by the
(Name of Governing Body) and Municipal Engineer.

G. The design and construction standards stipulated herein are intended
primarily for residential development and use. Where industrial,
commercial or other uses would generate significant truck traffic or high
traffic volumes stricter standards may be required.

H. When the development is in the Highway Access Management District,
as defined by the Municipal Zoning Ordinance, all street and access
design shall be in accordance with Exhibit 5-1 of this Ordinance.

I. In a residential subdivision/land development of sixteen (16) or more
dwelling units shall provide for at least two street connections to existing
public streets.

J. In non-residential subdivision or land development, the (Name of the
Governing Body) may require at least two street connections, or if the
land is to be accessed by driveways, two driveway connections to
existing public streets where necessary to ensure safe and efficient
traffic flow.

2. Road/Street Classification

Three (3) functional classifications of streets and roads, as classified by
the Municipality Planning Commission in consultation with the (Name of
Governing Body) and the Pennsylvania Department of Transportation, or
as determined in the (Name of Municipality) Comprehensive Plan are
established as follows:

A. Arterial (Interstates, Principal Arterial)

This classification includes highways which provide intra-county or
inter-municipal traffic of substantial volumes. Generally, these
highways should accommodate operating speeds of 55 miles per hour.

B. Collector

This classification is intended to include those highways which
connect minor streets to arterial highways and generally serve intra-
county and intra-municipal traffic. They may serve as traffic corridors
connecting residential areas with industrial, shopping and other
services. They may penetrate residential areas. Generally, these
highways should accommodate operating speeds of 35 to 55 miles per hour or less.

C. Local Roads

This classification is intended to include streets and roads that provide direct access to abutting land and connections to higher classes of roadways. Traffic volumes will be low and travel distances generally short. These streets and roads should be designed for operating speeds of 25 to 35 miles per hour or less.
3. Street Right-of-Way Widths

A. Minimum street right-of-way and cartway widths shall be required as follows:

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Right-of-Way Width</th>
<th>Shoulders</th>
<th>Cartway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial</td>
<td>As determined by the (Name of Governing Body) and Planning Commission after consultation with the Township/Borough Traffic Engineer and Pennsylvania Department of Transportation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collector /shoulder</td>
<td>60 feet (8 ft each side)</td>
<td>16 feet (8 ft each side)</td>
<td>24 feet (w/shoulders) 36 feet (curbed)</td>
</tr>
<tr>
<td>Local Roads</td>
<td>50 feet (5 ft each side)</td>
<td>10 feet (5 ft each side)</td>
<td>24 feet (w/shoulders) 34 feet (curbed)</td>
</tr>
<tr>
<td>Cul-de-Sac</td>
<td>50 feet (5’ each side)</td>
<td>10 feet (5’ each side)</td>
<td>24 feet (w/shoulders) 34 feet (curbed)</td>
</tr>
<tr>
<td>Circular turnaround of Cul-de-Sac without center islands and without parking</td>
<td>55 feet radius (R/W)</td>
<td>45 feet paved radius (R/W)</td>
<td></td>
</tr>
<tr>
<td>Without center island and with parking</td>
<td>65 feet radius (R/W)</td>
<td>55 feet paved radius (R/W)</td>
<td></td>
</tr>
<tr>
<td>When fire hydrant is located</td>
<td>58 feet radius (R/W)</td>
<td>48 feet paved radius (R/W)</td>
<td></td>
</tr>
<tr>
<td>With fire hydrant and parking</td>
<td>68 feet radius (R/W)</td>
<td>58 feet paved radius (R/W)</td>
<td></td>
</tr>
</tbody>
</table>

For circular turnaround with island the minimum radii for circular turnarounds with center islands are the same as for circular turnarounds without center island as above. For centered island, the minimum allowed travel lane width shall be 24 feet. To minimize pavement within the circular turnaround, the travel lane can be offset with a 20-foot travel lane at the front and a 24 foot travel lane at the rear. If parking is to be accommodated on turnaround, an 8-foot lane parking lane shall be added adjacent to the travel lane. The minimum right-of-way for circular turnaround shall be 10 feet beyond the edge of pavement.
(For additional information on Cul-de-sac geometry see Pennsylvania Standards for Residential Site Development, 2007)

1). Traffic Volume -- Residential Access Street

Limiting traffic volumes for each residential access street class are tabulated in Table 5.2 Traffic volumes shall be computed using trip generation rates provided in most recent data published by the Institute of Traffic Engineers (Ref. 10) for propose use or housing type.

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Right-of-Way Width</th>
<th>Shoulders</th>
<th>Cartway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint-Use Driveway/Access Easement</td>
<td>50 feet</td>
<td>8 feet</td>
<td>16 feet (w/shoulders)</td>
</tr>
<tr>
<td></td>
<td>(4 ft one side)</td>
<td></td>
<td>26 feet (curbed)</td>
</tr>
<tr>
<td>Alley or Service Drive</td>
<td>20 feet</td>
<td>---------</td>
<td>20 feet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Street Class</th>
<th>Limiting Traffic Volume (ADT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA-A</td>
<td></td>
</tr>
<tr>
<td>Single Access</td>
<td>300</td>
</tr>
<tr>
<td>Multiple Access</td>
<td>800</td>
</tr>
<tr>
<td>RA-B</td>
<td>1600</td>
</tr>
</tbody>
</table>

Streets connected at both ends are “through streets” (Figure 5.6).

**Figure 5.6 Through Streets**

Modified from Source: Bucks County Planning Commission

(Source: Pennsylvania Standards for Residential Site Development, 2007)
Single access streets (self-looping streets and cul-de-sacs) are a sub-classification of residential access streets that have only one access point. Self-looping streets and cul-de-sacs are limited to an average daily traffic volume (ADT) of 300 trips per day. See Figure 5.7

![Figure 5.7 Single Access Streets](source: Bucks County Planning Commission)

*(Source: Pennsylvania Standards for Residential Site Development, 2007)*

2). Design Standards for Residential Access Streets (RA)

Residential access streets (RA) are classified as Type A (RA-A), and Type B (RA-B). Design standards for each class follow.

a). Design Speed

- Type A - 20 mph
- Type B - 25 mph

b). Street Width

Tables 5.3 through 5.6 provide design matrices for use in establishing street width.
Table 5.3  Residential Access Type A -- Curbed

<table>
<thead>
<tr>
<th>Traffic Pattern</th>
<th>Parking Type</th>
<th>(a) Travelway Width* (ft.)</th>
<th>(b) Parking Lane Width (ft.)</th>
<th>(c) Street Width (curb to curb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yield **</td>
<td>One Side or Alternating Sides</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>Slow</td>
<td>Alternating Sides</td>
<td>18</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Free</td>
<td>No Parking</td>
<td>18</td>
<td>n/a</td>
<td>18</td>
</tr>
<tr>
<td>Free</td>
<td>One Side</td>
<td>18</td>
<td>8</td>
<td>26</td>
</tr>
</tbody>
</table>

* All travelway widths are for two-way streets; for one-way use ½ of travelway width except for "yield" traffic pattern.

** Use only when ADT less than or equal to 300.

Table 5.4  Residential Access Type B -- Curbed

<table>
<thead>
<tr>
<th>Traffic Pattern</th>
<th>Parking Type</th>
<th>(a) Travelway Width* (ft.)</th>
<th>(b) Parking Lane Width (ft.)</th>
<th>(c) Street Width (curb to curb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow</td>
<td>Alternating Sides</td>
<td>20</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>Free</td>
<td>No Parking</td>
<td>20</td>
<td>n/a</td>
<td>20</td>
</tr>
<tr>
<td>Free</td>
<td>One Side</td>
<td>20</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Free</td>
<td>Two Sides</td>
<td>20</td>
<td>8 each side</td>
<td>36</td>
</tr>
</tbody>
</table>

* All travelway widths are for two-way streets; for one-way use ½ of travelway width.
3). Right-of-way Width
Rights-of-way shall be set aside to provide adequate space for the construction and maintenance of streets, shoulders, curbs, street gutters, and cross-drainage pipes and culverts. They may also accommodate sidewalks, snow storage, sight triangles, slope maintenance areas, and utilities such as water, sewer, storm drainage, electrical service, cable TV, and gas lines where appropriate.

B. Where a proposed subdivision abuts or contains an existing public street or road having a right-of-way width which is less than would be required by this Ordinance, sufficient additional right-of-way width shall be provided and dedicated to meet the current standards.
C. In the case of a subdivision or land development plan fronting on an existing or proposed street, the applicant/developer shall improve the portion of the roadway on which the proposed development fronts to meet the minimum standard as specified in this Ordinance. Road improvements shall include pavement, shoulders, embankments, gutters, berms, sidewalks and/or curbing and turning lane(s).

D. Provision for increased street width (right-of-way width) may be required when determined to be necessary by the (Name of Governing Body) in specific cases for:

1). Public safety and convenience;

2). Parking and/or travel in commercial and industrial areas and in areas of high density development;

3). Widening of existing streets (right-of-way) where the width does not meet with the requirements of the preceding paragraphs;

4). Installation of utilities;

5). Ponding of stormwater runoff;

6). Storage of plowed snow;

7). Emergency parking;

8). Temporary roadway adjustments during maintenance or traffic accident situations;

9). Future improvements.

E. When a subdivision and land development is proposed which fronts on an existing Municipal street, the required additional right-of-way shall be dedicated for only the lots and land development proposed. Right-of-way width dedication shall not be required for the remaining portion of the property, except (1) where the remaining road frontage is less than the required lot width of a lot, and (2) where a traffic impact study warrants additional right-of-way width due to the impacts of the development to that portion of the road system.

4. Street and Intersection Design

A. Horizontal Curves and Vertical Curves

In order to provide adequate sight distance, facilitate traffic mobility and ensure proper alignment of streets, horizontal and vertical curve design shall be in accordance with the Pennsylvania Department of
1. Vertical Curves shall be used at all changes of grade and shall be designed for maximum visibility. All intersections and streets shall be designed to provide adequate sight distance with regard to both horizontal and vertical alignment in accordance with A Policy on Geometric Design of Highways and Streets, AASHTO, current edition.

   a). Where tangent street lines deflect from each other at any one point, lines must be connected with a true, circular curve. The minimum radius of the center line for the curve must be as follows:

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Minimum Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial</td>
<td>500 feet</td>
</tr>
<tr>
<td>Collector</td>
<td>300 feet</td>
</tr>
<tr>
<td>Local Road, Private Streets, R/W</td>
<td>150 feet</td>
</tr>
</tbody>
</table>

   b). Straight portions of the street must be tangent to the beginning or end of curves. Except for Local Roads, there must be a tangent of at least one hundred (100) feet between curves.

B. Extensions

Short extensions of existing streets with lesser right-of-way and/or cartway widths than above may be permitted by the (Name of Governing Body), provided that no section of the new right-of-way shall be permitted which is less than forty (40) feet in width.

C. Grades

The grades of streets shall not be less than the minimum or more than the maximum requirements listed below:
### MINIMUM AND MAXIMUM GRADES

<table>
<thead>
<tr>
<th>Type of Street</th>
<th>Minimum Grade</th>
<th>Maximum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial</td>
<td>As determined by the (Name of Governing Body) and Planning Commission after consultation with the Township/Borough Traffic Engineer and Pennsylvania Department of Transportation.</td>
<td></td>
</tr>
<tr>
<td>Collector</td>
<td>1 %</td>
<td>7%</td>
</tr>
<tr>
<td>Local Road</td>
<td>1 %</td>
<td>10%</td>
</tr>
<tr>
<td>Alley</td>
<td>1 %</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>10%</td>
</tr>
</tbody>
</table>

D. Intersection Design

1). Intersection Angle.

Intersections must be nearly right angles wherever possible. However, no street shall intersect another at an angle of less than seventy-five (75) degrees.

2). Intersection Leveling Area and Grades.

Intersections shall be approached on all sides by a straight leveling area. Such leveling area shall have a minimum of fifty (50) feet (measured from the intersection of the center lines) within which no grade shall exceed a maximum of four (4) percent.

3). Intersection Separation Distance

Any street terminating at an existing or proposed street will do so in one of the two following ways: (1) directly across from the pre-existing or other newly proposed street as to create a four-way intersection, or (2) at least one hundred fifty (150) feet from any other intersection, existing or proposed. Offset intersections shall not be created by new streets.

Intersections with an Arterial street shall be located not less than six hundred (600) feet apart, measured from centerline to centerline, along the centerline of the street.

4). Multiple Intersections.

Intersections involving the junction of more than two (2) streets/driveways are prohibited.
5). Intersection Curb Radii.

At intersection of streets the curbs or edge of pavement radii shall not be less than the following:

<table>
<thead>
<tr>
<th>MINIMUM SIMPLE CURVE RADII</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intersection</td>
<td>of Curb or Edge of Paving</td>
</tr>
<tr>
<td>Arterial with Collector</td>
<td>35'</td>
</tr>
<tr>
<td>Collector with Local Road, Private Street</td>
<td>25'</td>
</tr>
<tr>
<td>Local Road with Local Road</td>
<td>15'</td>
</tr>
</tbody>
</table>

Radius corners or diagonal cutoffs must be provided on the property lines substantially concentric with, or parallel to, the chord of the curb radius corners.

6). Intersection Sight Distance and Clear Sight Triangles

a) Proper sight lines must be maintained at all street intersections. Adequate sight distances shall be provided at all intersections of streets, and for driveways intersecting a street. Sight distance must be provided with respect to both horizontal and vertical alignment. Sight distance shall be measured along the center line three and one-half (3.5) feet above grade, and ten (10) feet back from the edge of the pavement for driveways in accordance with the following:

<table>
<thead>
<tr>
<th>MINIMUM CLEAR SIGHT TRIANGLES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Type</td>
<td>Clear Sight Triangle</td>
</tr>
<tr>
<td>Arterial</td>
<td>150'</td>
</tr>
<tr>
<td>Collector, Local, Private Street</td>
<td>75’</td>
</tr>
<tr>
<td>Driveway</td>
<td>10’</td>
</tr>
</tbody>
</table>

(See Exhibit 5-2)

b). No building or obstruction higher than thirty (30) inches above the centerline grade of the street shall be permitted in the site triangle. No signs other than traffic control signs and devices shall be permitted in the clear sight triangle.

c). The Municipal Engineer reserves the right to use posted speed limits or actual speed, determined by traffic study, and road
grades to modify the calculation of the required sight triangles.

5. Street Construction

A. General Requirements

All street materials, construction procedures and testing requirements shall conform to the current editions of PennDOT Publication 408/2003; Publication 213; Publication 72M, Standards for Roadway Construction, Series RC-1M to 100M Publication 111M, Standards for Traffic Control Signing, Series 7700 and 7800, current edition, including all supplemental specifications, circular letters and amendments. All streets and related features shall be constructed to the line, grade and dimension shown on the plans, profiles and cross sections and typical sections as approved on the final land development plan.

B. Stake Out

1). Prior to rough cut, all streets shall be laid out in accordance with the approved design plans using hubs and stakes set at fifty (50) foot intervals to provide both horizontal and vertical control.

2). All existing property pins or monuments will be clearly marked four (4) foot high stakes before the beginning of construction.

C. Excavation

1). This work shall include excavation for roadways, shoulders, ditches, drainage structures and stream channels.

2). All suitable excavated materials, as determined by the Municipal Engineer, may be used for the construction and preparation of roadway embankments, subgrades, shoulders, driveway approaches, ditches, structures, stream channels and required backfilling.

4). During construction, excavation shall be graded to drain in accordance with the approved Erosion and Sediment Pollution Control Plan and/or stormwater management ordinance.

5). During site preparation of an approved Subdivision or Land Development, stockpiles of stripped topsoil and/or excavated material shall not be located closer than one hundred (100) feet from any residential zone, use or occupancy boundary. The maximum height of topsoil and excavated material stockpiles shall be not more than ten (10) feet when stockpiles are located
between one hundred (100) and one hundred fifty (150) feet from any residential zone, use or occupancy boundary. The maximum height of topsoil and excavated material stockpiles shall be not more than fifteen (15) feet when stockpiles are located more than one hundred fifty (150) feet from any residential zone, use or occupancy boundary. The maximum height of any topsoil or excavated material stockpile in the (Name of Municipality) shall not exceed fifteen (15) feet.

D. Embankment and Slopes Adjacent to Streets

1). Material for the construction of embankment shall consist of all excavation on the project except such materials as may be determined to be unsuitable under PennDOT Publication 408/2003, current edition, and when required will include borrowed excavation.

2). Placement of embankment shall be in layers not to exceed 8 inches prior to compaction.

3). Slope of embankment(s) along streets measured perpendicular to the street center line shall be no steeper than the following:
   a). One (1) foot of vertical measurement for three (3) feet of horizontal measurement for fills.
   b). One (1) foot of vertical measurement for two (2) feet of horizontal measurement for cuts.

E. Street Cartway/Pavement Construction Standards

Local streets shall be designed in accordance with this Article and shall be surfaced to the grades and dimensions drawn on the plans, profiles, and cross-sections submitted by the Applicant and approved by the (Name of Governing Body). Before paving the street surface, the Applicant shall install the required utilities and provide adequate underdrains and stormwater drainage for the streets, as deemed acceptable to the (Name of Governing Body) and Municipal Engineer. The pavement base and wearing surface must be constructed according to the following specifications.

1). General
   a). Streets must be constructed to the grades and dimensions depicted on the plans, profiles, and cross sections submitted by the applicant and approved by the Municipal Engineer/Governing Body.
b). Before any street construction can begin, the applicant must install the required utilities and provide, where necessary, adequate stormwater drainage from the street.

c). Pipe underdrain and pavement base drain shall be installed according to the specifications set forth in Section 610 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408, at such locations and in such quantities as determined necessary by the Municipal Engineer. Field conditions may cause underdrain and pavement base drain to be installed at locations not depicted on approved drawings.

2). Inspections

a). All street construction shall be subject to inspection at anytime by the Municipality or its agent.

b). A preconstruction meeting shall be held at the start of a project with a representative of the Municipality to determine what inspections will be required.

c). At a minimum, the following inspections and approval shall be made:

   (1). Inspection and approval of the subgrade immediately prior to the installation of the subbase.

   (2). Inspection and approval of the subbase immediately prior to the installation of the base course.

   (3). Inspection and approval of the base course immediately prior to the installation of the wearing course.

   (4). Final inspection of the completed street and related improvements in conformance with Article V, Section 510 of the Pennsylvania Municipalities Planning Code, Article 247 of 1968, as amended.

d). The developer shall notify the Municipality a minimum of 24 hours in advance of each required inspection.

e). Copies of all stone and material delivery slips shall be
kept on file and be made available for inspection until final approval by the Municipality is received.

3). Specifications.

The subgrade, subbase, base course, binder course, and wearing course of new, reconstructed, or resurfaced streets shall be designed using the DARWin Pavement Design and Analysis System or an acceptable alternate procedure that meets the requirements of the 1993 American Association of State Highway and Transportation Officials (AASHTO) Pavement Design procedures or the minimum depths indicated for each classification of street, whichever is greater, and constructed according to the following specifications:

a). Arterial Streets.

The developer shall consult with the Municipality in the matter of a Municipal-owned arterial street, and shall consult with the Pennsylvania Department of Transportation in the matter of Pennsylvania-owned arterial streets. The street specification shall be governed by whichever entity owns or will own the street. Unless special conditions exist, it shall be the Township policy to follow the construction standards of the Pennsylvania Department of Transportation.

b). Collector Streets.

(1). Subgrade. Prior to the installation of the subbase, the subgrade shall be prepared according to the specifications set forth in Section 210 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

(2). Subbase. The subbase shall consist of 8 (eight) inches of compacted 2A aggregate constructed in accordance with the specifications set forth in Section 350 and Section 703 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

(3). Base course. The base course shall consist of 5 (five) inches of compacted Hot Mix Asphalt Superpave Base Course, PG64-22, 25mm mix, 3.0 to 10.0 million ESALs, conforming to Section 309 of the current edition of the
(4). Wearing course. The wearing course shall consist of 1 ½ (one and one half) inches of compacted Hot Mix Asphalt Superpave Wearing Course, PG64-22, 9.5 mm mix, 3.0 to 10.0 million ESALs, SRL-G, conforming to Section 409 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

c). Minor Streets

(1). Subgrade. Prior to the installation of the subbase, the subgrade shall be prepared according to the specifications set forth in Section 210 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

(2). Subbase. The subbase shall consist of 8 (eight) inches of compacted 2A aggregate constructed in accordance with the specifications set forth in Section 350 and Section 703 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

(3). Base course. The base course shall consist of 3 (three) inches of compacted Hot Mix Asphalt Superpave Base Course, PG64-22, 25mm mix, .3 to 3.0 million ESALs, conforming to Section 309 of the current edition of the Pennsylvania Department of Transportation specifications, Publication 408.

(4). Wearing course. The wearing course shall consist of 1 ½ (one and one half) inches of compacted Hot Mix Asphalt Superpave Wearing Course, PG64-22, 9.5 mm mix, .3 to 3.0 million ESALs, SRL-M, conforming to Section 409 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

d). Additional paving items that may be required for each street classification are as follows:
(1). Binder course. Superpave Asphalt Mixture Design, HMA Binder Course. This course shall conform to Section 409 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

(2). Binder leveling course. Superpave Asphalt Mixture Design, HMA Wearing Course (Scratch). This course shall conform to Section 409 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

(3). Scratch course. Superpave Asphalt Mixture Design, HMA Wearing Course (Scratch). This course shall conform to Section 409 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

(4). Bituminous Tack Coat. This tack coat shall conform to Section 460 of the current edition of the Pennsylvania Department of Transportation Specifications, Publication 408.

e). Alleys. Alleys shall be constructed to the same specifications as minor streets.

f). Skid Resistance Level (SRL): All new construction, overlays, and resurfacing work shall use the following guidelines to determine the appropriate SRL for the coarse aggregate used in the bituminous wearing course:
<table>
<thead>
<tr>
<th>Initial or Current Two-Way ADT*</th>
<th>SRL Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 20,000</td>
<td>E</td>
</tr>
<tr>
<td>5,001 to 20,000</td>
<td>H</td>
</tr>
<tr>
<td>3,001 to 5,000</td>
<td>G</td>
</tr>
<tr>
<td>1,001 to 3,000</td>
<td>M</td>
</tr>
<tr>
<td>1 to 1,000</td>
<td>L</td>
</tr>
</tbody>
</table>

*When all traffic for the street travels in one direction, divide the ADT (Average Daily Traffic) values shown above by 2 to determine the required SRL.

g). Street crown and curbs.

(1). A street must be designed to provide for the discharge of surface water from its cartway and right-of-way.

(2). The slope of the crown on a street shall be not less than 1/8 of an inch per foot and not more than 3/8 of an inch per foot measured perpendicularly from the centerline of the street, unless special designs, such as super elevation, required alternate slope designs which shall be reviewed on an individual basis by the Municipality.

h). General

(1). Superpave Asphalt Mixture Design, HMA Binder Course or Superpave Asphalt Mixture Design, HMA Wearing Course (Scratch) shall be used to provide proper crown on resurfaced sections of streets when directed by the Municipality.

(2). Existing sections of streets to be resurfaced will be prepared with Bituminous Tack Coat prior to resurfacing.

(3). Paving of bituminous pavement courses will not be allowed between the dates of October 15 and
April 15 without the expressed written permission of the Municipal Engineer.

4). Shoulders

Shoulders shall be provided where curbing is not required and shall conform to PennDOT Type 6 Shoulders as shown on PennDOT RC-25M.

5). Curbs

a). Curbs shall be installed in all subdivision and land developments in order to control stormwater runoff, prevent erosion, prevent the deterioration of public streets and provide a contained area for vehicular movements. The Governing Body, upon the recommendation of the Planning Commission may waive the requirements of curbs through the modification of requirements procedures in Article 9 of this Ordinance. In cases where curbs are not provided, stabilized/reinforced shoulders of six (6) to eight (8) feet width shall be provided.

b). Curbs shall be constructed on both sides of the interior streets and on the side of any street that bounds the development.

c). Curbs shall be constructed of concrete and designed as vertical or slant type. The height of vertical curbs shall be eighteen (18) inches. The width of vertical curbs shall be eight (8) inches. The height of slant curbs shall be twelve (12) inches at the face and sixteen (16) inches at the back of the curb. The width of slant curbs shall not be less than fourteen (14) inches.

d). Curbs shall be inspected by the Municipal Engineer after the forms or grade pins and string lines for slip forming have been placed, and after completion of all work.

e). Terminal concrete curb ends shall have an exposed face of two inches (2) and be tapered two feet (2).

f). Backfill must be placed within forty-eight (48) hours after slip forming or removal of curb forms and the backfill shall be compacted in place along the rear face.
of the curb within six (6) of the top of the curb.

g). When curbing is to be removed to construct a driveway or access drive, the length of curbing to be removed shall be carried to the nearest expansion joint or saw cut if the joint is located less than five feet (5) from the end of the curb removal.

h). Vertical curb height at driveway entrances may be reduced to a minimum of one and one half (1 1/2) inches for driveway entrances along streets where curbs are required.

i). No partial breakout of the curb shall be permitted. No cutting of the curb shall be permitted without approval by the Municipal Engineer.

j). Curb ramps must be installed in accordance with ADA requirements.

6). Underdrains

a). Underdrains shall be required in low points on the street at a distance equal to the length of the vertical curve, and as necessary to address springs, spring like conditions or spongy areas under the road. Underdrains required shall be constructed in accordance with the specifications as set forth in the Pennsylvania Department of Transportation, Publication 408/2003, as amended, and as detailed on the Roadway Construction Standard Drawings (RC-30).

b). Combination storm sewer, clear water and underdrains shall be constructed in accordance with the specifications as set forth in the Pennsylvania Department of Transportation, Publication 408/2003, as amended, and as detailed on the Roadway Construction Standard Drawings (RC-30).

c). Where required, underdrains shall be constructed prior to base course construction.

d). Underdrain shall be inspected by the Municipal Engineer or his designated agent after completion of all work, just prior to the base course application.

7). Street Trees
a). Trees shall be permitted within the public right-of-way of streets.

b). Such trees shall be 2 inch to 2.5 inch in diameter, measured at chest height, when planted, and shall be spaced at the intervals no greater than forty feet along both sides of each street or determined from the anticipated crown width of the tree at maturity. The planting strip area between the curb and sidewalk shall be seeded.

c). All trees with branches overhanging sidewalks and/or streets shall be kept trimmed to a height of eight (8) feet over sidewalks and to a height of twelve (12) feet over streets from curb to curb or between edges of pavement.

d). Species shall be selected according to the following criteria:

   (1). Cast moderate to shade to dense shade in summer.

   (2). Long-lived (over 60 years).

   (3). Mature height of at least 50 feet.

   (4). Be tolerant of pollution and direct or reflected heat.

   (5). Require little maintenance, by being mechanically strong (not brittle) and insect and disease-resistant.

   (6). Be able to survive two years with no irrigation after establishment.

   (7). Be of native origin.

e). Plans for new street trees and/or replacement of existing street trees shall be submitted to the Municipal Environmental Advisory Council/Parks and Recreation Board, if any, and the Planning Commission for review, and recommendations to the (Name of Governing Body). Viable alternative plans not meeting these standards for street trees may be considered. Acceptable street trees included but are not limited to the following list:
Sycamore or London Plane, Sweet gum, Red maple, Green ash, Shademaster golden locust, Littleleaf linden and Village green zelkova. (For further information refer to Street Trees Factsheets, Henry Gershold, Editor, School of Forest Resources, Pennsylvania State University, 1989.). Additional information is provided in Section 522 Landscaping, Buffering and Screening.

SECTION 507. SIDEWALKS AND CORE CIRCULATION TRAIL

1. Sidewalks

Sidewalks shall be required in all subdivision or land developments on both sides of all proposed streets.

In residential developments sidewalks shall be provided where lot sizes is less than or equal to 22,000 square feet (1/2 acre). Sidewalks shall be located on both sides of the street having average lot frontages (width at the front setback line) equals to or less than 100 feet. Where average lot frontages are greater than 100 feet but less than 125 feet, sidewalks shall be located along at least one side of the street.

Sidewalks shall also be provided along both sides of all collector roadways. In addition, sidewalks or accessible pathways should be considered along all residential collector roadways to enhance pedestrian connectivity among neighborhoods, commercial centers, and other pedestrian destinations.

The sidewalks shall be designed and constructed in accordance with the following additional requirements:

A. Sidewalks shall be located within the right-of-way of the street and shall extend in width from the right-of-way line toward the curb line.

B. Sidewalks must be at least four (4) feet wide. In the vicinity of shopping centers, schools, recreation areas and other high pedestrian traffic areas, sidewalks must be at least five (5) feet wide.

C. Sidewalks must be constructed in accordance with the Municipal’s "Standard Material and Construction Specifications for Public Improvements,” if established, otherwise with PennDOT Publications 408 and 72 Standards.

D. In order to provide for the drainage of surface water, sidewalks shall slope from the right-of-way line toward the curb. Such slope shall be one fourth (1/4) inch per foot.

E. Sidewalks shall be boxed out around light standards, fire hydrants, signs, etc., with a pre-molded expansion joint, one quarter (1/4) inch in
thickness.

F. Where a sidewalk abuts a curb, wall, building or any other structure, a pre-molded expansion joint of one-quarter (1/4) inch of thickness, shall be placed between the sidewalk and said structure for the full length of said structure.

G. Sidewalks shall be inspected by the Municipal Engineer or his designated agent after the forms have been placed, just prior to the pouring of concrete and after completion of all work.

H. Any stabilized pedestrian walks proposed in addition to required sidewalks shall be approved by the Municipal Engineer. Interior pedestrian walks within blocks shall be located in easements not less than ten (10) feet in width, or as required by Section 520.5

2. Core Circulation Trails

Core circulation trails are paved multi-purpose facilities whose primary function is to provide pedestrian interconnectivity between neighborhoods and other destinations. They are used primarily for walking and biking. These trails have the heaviest use. These trails can also be used for emergency access.

The core circulation trails should be located to provide pedestrian circulation through and between neighborhoods, and to other recreational and commercial destinations. Core circulation trails can also be used as a substitution for sidewalks to provide circulation routes parallel to residential collector streets. Core circulation trails shall be located within public rights-of-way or easements to which access is not restricted.

Any trail identified on the official map of the municipality that crosses over or adjacent to the land included within the development proposal shall be designed and installed as a part of the infrastructure improvement for the development. The municipal governing body may waive this requirement at their discretion.
SECTION 508. OTHER STREET DESIGNS AND STANDARDS

1. Dead End Streets and Temporary Cul-de-Sacs

Dead end streets shall be prohibited, except when the developer designs and constructs temporary cul-de-sac streets on the developer’s own land in order to permit future street extensions into adjoining properties. Temporary cul-de-sacs, upon approval of the Municipal Engineer, may be constructed without asphalt base or wearing course. The developer may be exempt from providing curbing at the terminus of temporary cul-de-sacs, unless curbs are required for drainage control. A temporary cul-de-sac shall be removed by the developer and replaced with the permanent street upon extension of the existing street.

2. Cul-de-Sacs and Self-Looping Single Access Streets

A. Cul-de-sac shall not be approved wherever a through street or loop is practicable, except where the cul-de-sac is clearly the only practical design for the subdivision or land development.

B. Permanent cul-de-sacs and self-looping single access streets are limited to an average daily traffic volume (ADT) of 150 trips a day which equals 15 Single Family Dwellings based on a trip generation rate of 10 trips per day cul-de-sac street, and 300 trips a day which equals 30 Single Family for self looping single access street. The length of cul-de-sac shall not exceed one thousand (1000) feet in length. The turnaround at the end of a cul-de-sac shall be designed for proper movements of emergency and fire truck apparatus. In developments with more than fifteen dwellings only twenty percent (20%) of the dwelling units in a development shall be served by streets terminating in cul-de-sacs. In a self-looping single access street, the number of single family dwellings may be increased when the access from the street to the intersection to the loop is provided by a boulevard street with a median. An emergency access connected to the public street system should be considered which is usable by emergency vehicles and fire truck apparatus during all season.

C. The minimum cul-de-sac length shall be two hundred fifty (250) feet.

D. Where the turnaround right-of-way of a cul-de-sac street approaches or abuts the tract boundary, a fifty (50) foot right-of-way shall be extended to the adjacent property to permit future extension of the street at full width, unless future extension is not possible.

E. Cul-de-sac streets, whether permanently or temporarily designed as such, shall be provided with a snow removal easement with a width of twenty (20) feet located at the terminus of the cul-de-sac street for plowed snow during the winter months.
F. Drainage of cul-de-sac streets shall preferably be towards the open end. If drainage is toward the closed end it shall be conducted away in an underground storm sewer.

G. Turnaround radius at the end of cul-de-sacs shall comply with Section 506.3.A of this Ordinance.

3. Snow Dump Areas in Turnaround of a Cul-de-sac

A. In permanent turnaround, a snow dump area shall be provided within the turnaround right-of-way and delineated on the subdivision and land development plan.

B. Snow dump area shall be a minimum of thirty (30) feet in width and shall extend to the full depth of the cul-de-sac right-of-way from the curb or edge of cartway.

C. Snow dump area shall not encroach on driveways, trees, fire hydrant, water or gas shutoff valves, mail box, street light, utility pole or similar encroachments.

4. Partial and Half Streets

A. New half or partial streets shall not be permitted, except where the Applicant justifies to the Municipality that it is essential to the reasonable subdivision of a tract in conformance with the other requirements and standards of these regulations, and where, in addition, satisfactory assurance for dedication of the remaining part of the street can be obtained.

B. Whenever there is an existing half street adjacent to a parcel to be developed, then the other half of the street shall be platted and dedicated within such parcel, unless otherwise determined by the (Name of Governing Body).

5. Hammerheads

Streets less than 250 feet and serving six (6) lots or fewer may be designed as symmetrical “hammerheads,” in accordance with standards contained in Residential Streets (latest edition), coauthored by the American Society of Civil Engineers, as amended. Such hammerheads shall be designed to facilitate three-point turns. The minimum dimensions of hammerheads shall be 30 feet by 85 feet with curbing of 30 feet by 85 feet which includes four-foot shoulders. The right-of-way diameter for the hammerhead shall be 10 feet greater than the edge of curb or shoulder.
SECTION 509. STREET SIGNS, NAMES AND NUMBERING

1. Where signs are required in conjunction with a subdivision and or land development plan, it shall be the responsibility of the applicant/developer to provide street name signs and traffic control signs for the development in accordance with the approved signage plan and the Municipal specifications if provided or meet the following standards.

A. The design and placement of traffic control and other street signs placed in a public right-of-way shall follow the requirements specified in the most current edition of the FHWA Manual of Uniform Traffic Control Devices for Streets and Highways.

B. On non-public streets, all traffic control signs must be designed in accordance with the most recent version of the Manual of Uniform Traffic Control Devices for Streets and Highways. Non-traffic control signs on non-public streets do not have to meet these standards.

C. At least one street-name sign pole shall be placed at each intersection identifying all crossing street names. Signs shall be placed so that they do not obstruct sight distances, and shall be under light standards if present. The design of street-name signs shall be consistent, of a style appropriate to the community, of a uniform size and color, and erected in accordance with any municipal standards.

D. At signalized intersections, street signs shall be located on the overhead arm supporting the traffic signal, otherwise suitably suspended over the intersection. Street clearance shall be a minimum of 16 feet and 6 inches from the bottom of any sign or supporting equipment and the top of the paved surface.

2. Names of new streets shall not duplicate or display similarities in sound or spelling with respect to existing or planned street names, or approximate such names by the use of suffixes such as "lane", "way", "drive", "court", "avenue". In approving the names of streets, cognizance should be given to existing or planned street names within the postal delivery district served by the local post office and emergency service providers. New streets shall bear the same name or number of any continuation of alignment with an existing or planned street.

3. In order to ensure efficient identification and location of homes and residences by emergency response units, a systematic approach to residence numbering is desired. Building Numbers for residential and commercial subdivisions on existing and future Municipal streets shall be coordinated with existing residence address ranges where possible.
SECTION 510. DRIVEWAYS AND SERVICE DRIVES

The following standards shall apply to driveway construction within the public right-of-way in any subdivision and land development:

1. Private driveways on corner lots shall be located at least forty (40) feet from the point of intersection of the nearest street right-of-way lines. Private driveways shall be setback a minimum of five (5) feet from side property lines unless a joint use driveway is proposed.

2. In order to provide a safe and convenient means of access, grades on private driveways shall be so designed to allow for the unimpeded flow of storm water runoff. In addition, driveways must be stabilized to their full width to prevent erosion. Entrances shall be rounded at a minimum radius of ten (10) feet, or shall have a flare construction that is equivalent to the radius at the point of intersection with the cartway edge (curb line). The maximum width of a residential driveway shall not be more than twenty-five (25) feet measured at the cartway edge or curb line. (Refer to Pennsylvania Department of Transportation, Guidelines for Design of Local Roads and Streets - Publication No. 70M, as revised.).

3. All driveways shall be located, designed and constructed in such a manner as not to interfere or be inconsistent with the design and maintenance and drainage of streets or the safe and convenient passage of traffic.

4. All driveways on a State Highway must have a valid highway occupancy permit from the PA Department of Transportation.

5. Direct access from residential lots to an arterial or minor arterial shall be avoided. Where such direct access cannot be avoided, adequate maneuvering and turnaround space shall be provided behind the right-of-way line.

6. The grades on service drives or driveways shall not be less than 0.5% and shall not exceed the following:
   A. Eight (8) percent when access is to a Collector Street;
   B. Ten (10) percent when access is to a Local Street.

7. Driveway Entrances
   A. Driveway entrances or aprons within the street right-of-way shall be surfaced to their full width. In no case shall the driveway entrance be more than ten (10) feet wider than the driveway. The type of surface may be either concrete or asphalt, constructed following the specifications in PennDOT Publication RC-25M Type 6 Shoulder (asphalt) or Type 2 Shoulder (concrete). Where sidewalks are installed, the required driveway surfacing shall end at the street side of the sidewalk.
B. Driveway entrances along streets where curbs are not required shall be constructed to provide proper drainage along the streets and from the streets by the continuation of gutters, swales or ditches. Such continuation may be provided by having an approved pipe of not less than eighteen (18) inches in diameter across such driveway entrances.

C. Driveway entrances along streets, where curbs are not required, shall be constructed so that the driveway meets the edge of the cartway as a continuation of at least the slope from the crown of the street for not less than five (5) feet.

D. Sidewalks across driveway entrances, where required, shall be constructed in accordance with the requirements in Section 507 herein.

E. Driveways serving single family residences shall intersect streets at angles of no less than seventy-five (75) degrees. All other driveways or service drives shall intersect streets at right angles.

8. Sight Distance

A. The clear sight distance for driveways shall be in accordance with Section 506.4.D.6 and Exhibit 5-2.

SECTION 511. BICYCLE PATHS

A separate bicycle path shall be required when such paths are required as part of an adopted municipal plan or recommended by the planning commission/recreation board.

1. The bicycle path should have a minimum right-of-way / easement width of ten (10) feet within the development to insure public use.

2. The surface material shall be either bituminous mixes, concrete, limestone dust or an equivalent stabilized material depending on the intensity of development and shall be approved by the planning commission.

3. The grade of bicycle paths shall not exceed five percent (5%), except for short distance the grade shall not exceed fifteen percent (15%).

4. The radius of curvature shall be based on the grade of the path entering the curve. The radius shall be determined as below.

<table>
<thead>
<tr>
<th>Percent Grade</th>
<th>Minimum Radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5%</td>
<td>70 feet</td>
</tr>
<tr>
<td>5-15%</td>
<td>125 feet</td>
</tr>
</tbody>
</table>
9. Design consideration shall consider the intersection of bicycle path and a street to provide maximum safety.

10. Design consideration should be made for connection to adjacent bicycle paths and bicycle paths identified in Municipal Recreation Plan.

SECTION 512. MONUMENTS AND MARKERS

1. Monuments and markers must be placed by a Registered Professional Engineer or Professional Land Surveyor so that the scored or marked point coincides exactly with the point of intersection of the lines being monumented. They must be set so that the top of the monument or marker is level with the finished grade of the surrounding ground. Monuments must be marked on top with a copper or brass plate or dowel set in the concrete.

2. Location of Monuments

   A. At least two (2) corners of the boundary of the original tract of the development or subdivision shall be monumented.

   B. A minimum of two (2) monuments shall be set on the street right-of-way lines of each street. Monuments shall be set on the same street right-of-way line.

   C. On the street right-of-way lines, monuments may be set at the following locations:

      1). At the intersection of street right-of-way lines.
      2). At the intersection of a street right-of-way line and the side line of an interior lot.
      3). At either or both ends of curved street right-of-way lines.
      4). At such other points along the street right-of-way lines as may be determined by the Municipal Engineer so that any street may be readily defined in the future.

   D. A monument shall be set at the Primary Control Point determined for the development or subdivision.

3. Construction of Monuments and Markers

   Monuments and markers shall be the following sizes and made of the following materials:

   4. Monuments shall be six (6) inches square or four (4) inches in diameter and shall be thirty (30) inches long. Monuments shall be made of concrete, stone or by setting a four (4) inch cast iron or steel pipe filled with concrete.
5. Markers shall be three quarters (3/4) of an inch square or three quarters (3/4) of an inch in diameter and twenty-four (24) inches long. Markers shall be made of iron pipes or iron or steel bars.

6. Bonding and Inspection

Monuments required by this Ordinance to be set at locations shown on the approved Final Plan shall be bonded in accordance with Article 6 herein at the rate determined by an Engineering estimate but at a minimum of two hundred fifty (250) dollars per monument to be set. Monument placement shall be inspected by the Municipal Engineer prior to releasing the bond.

7. Replacement

Any monuments or markers that are discovered to have been removed must be replaced by a Professional Land Surveyor at the expense of the Developer and/or Owner.

SECTION 513. LIGHTING

These lighting requirements provide appropriate standards to ensure adequate night time safety and security while minimizing the spillover of light and glare on operators of motor vehicles, pedestrians and land uses near the light source. It is the safety, welfare, nuisance, and hazardous aspects of lighting that form the basis of these regulations.

1. Lighting shall be required in subdivisions and land developments.

2. Streetlights shall be provided with the construction of all new streets. A plan for streetlights, approved by the local utility company, shall be provided by the applicant upon submission of final Subdivision or land development plans.

3. Streetlights shall be provided at locations designated by the local utility company, consistent with current policy, at all street intersections and all other locations considered necessary for safety reasons as approved by the Governing Body.

4. Requirements. Exterior lighting shall be provided in parking areas, pedestrian sidewalks and walkways, and nonresidential driveway intersections in accordance with the following standards. Lighting used for security purposes shall also conform to the following standards. These regulations permit an option of providing a lower light post for luminaries with a no cutoff design or a higher pole, up to 60 feet, for luminaries that totally cut off light spillover at a cutoff angle smaller than 90 degrees. The maximum height light post permitted shall be dependent upon the amount of cutoff provided. Exterior lighting shall meet one of the following standards:

A. When the light source or luminaire has no cutoff:
Maximum Permitted Illumination (footcandles) | Maximum Permitted Height of Luminaire (feet)
---|---
Residential equals 0.2 | 10
Nonresidential equals 0.3 | 20

B. When a luminaire has a total cutoff angle greater than 90 degrees, the maximum illumination and the maximum permitted luminaire height shall be:

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Maximum Permitted Illumination (foot candles)</th>
<th>Maximum Permitted Height at Illumination (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>0.75</td>
<td>25</td>
</tr>
<tr>
<td>Residential Multifamily</td>
<td>1.0</td>
<td>30</td>
</tr>
<tr>
<td>Commercial</td>
<td>1.5</td>
<td>35</td>
</tr>
<tr>
<td>Manufacturing /Industrial</td>
<td>2.0</td>
<td>40</td>
</tr>
</tbody>
</table>

C. When a luminaire has a total cutoff of light at an angle less than 90 degrees and is located so that the bare light bulb, lamp, or light source is completely shielded from the direct view of an observer five feet above the ground at the point where the cutoff angle intersects the ground, then the maximum permitted illumination and maximum permitted height at the luminaire shall be:

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Maximum Permitted Illumination (foot candles)</th>
<th>Maximum Permitted Height at Illumination (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>1.5 to 2.0</td>
<td>25</td>
</tr>
<tr>
<td>Residential Multifamily</td>
<td>2.0</td>
<td>35</td>
</tr>
<tr>
<td>Commercial</td>
<td>3.0</td>
<td>40</td>
</tr>
<tr>
<td>Manufacturing /Industrial</td>
<td>5.0</td>
<td>60</td>
</tr>
</tbody>
</table>

D. Exemption for specified uses.
1) Because of their unique requirements for nighttime visibility and their limited hours of operation, public and private recreational uses such as ball diamonds, playing fields, tennis courts, and volleyball courts are exempt from the above requirements.

2) Outdoor public and private recreational uses specified above shall not exceed a maximum permitted post height of 80 feet.

3) Outdoor public and private recreational uses may exceed a total cutoff angle of 90 degrees, provided that the luminaire is shielded to prevent light and glare spill over to adjacent residential uses. The maximum permitted illumination at the interior buffer yard line shall not exceed two foot candles.

4) Low level pedestrian lighting for sidewalks should be provided as necessary for safety. Low level sidewalk illumination for nonresidential uses shall be between 0.5 to 0.1 foot candle. Low level sidewalk illumination for residential uses shall be between 0.2 to 0.13 foot candle.

5) Additional requirements.
   a) Flickering or flashing lights shall not be permitted.
   b) Light sources or luminaries shall not be located within buffer yard areas except for pedestrian walkways.
   c) The location and type of lighting required by this chapter shall be shown on the site plan submitted for development.
   d) Low level pedestrian lighting for sidewalks should be provided as necessary for safety. Low level sidewalk illumination for nonresidential uses shall be between 0.5 to 1.0 foot candle. Low level sidewalk illumination for residential uses shall be between 0.2 and 0.3 foot candle.

SECTION 514. WATER SUPPLY

Each new dwelling created in (Name of Municipality) shall be individually self-sufficient for water supply and the water supply system. The Applicant shall provide an adequate and potable water supply and distribution system to service the proposed subdivision or land development which shall be: (1) individual, (2) public, or (3) private community and maintained and operated in accordance with the PA Department of Environmental Protection (DEP). The purpose of these provisions are to ensure that each dwelling unit and each commercial and industrial building in all subdivisions hereafter granted approval shall have an adequate supply of potable water for domestic use and for fire protection.
1. Hydrogeologic/Water Supply Study

Hydrogeologic/Water Supply Study for ground water supply shall be required for greater than twenty-five (25) residential dwellings (single or cumulative), or commercial, industrial or recreational uses which propose the single or cumulative groundwater system greater than seven thousand five hundred (7500) gallons per day in or near the proposed subdivision or land development.

A. The Hydrogeologic/Water Supply Study shall be prepared by a Professional Engineer or Hydrogeologist experienced in the field and procedures involved. Two (2) copies of the report shall be submitted in conjunction with Preliminary and Final Plans for review by the Municipal Engineer.

B. The Hydrogeologic/Water Supply Study shall be prepared as a written report and shall include the following basic data in textual and tabular form:

1. A project narrative describing the overall project.

2. Study Area - The Study shall focus on the development site and an area of 1/4 mile buffer surrounding the site.

3. Study shall consist of an examination of the possible use of on-site water supply systems and the impact of such systems on ground water supply, connection to an existing water supply system or the construction of a central community system.

4. The study shall include a complete geologic profile and plan and a discussion of the effect of the proposed development and construction activity on the ground water supply.

5. The study shall also include a statement and justifiable analysis by the professional firm as to the sufficiency of the subsurface aquifers to support on-lot water systems for the proposed development, verified by well testing and other appropriate means, as well as analyzing the impact on existing sources.

6. The study shall describe the distance from the nearest public water supply system and the capacity of the system to accommodate the proposed subdivision and/or land development.

7. Where a central community water system is proposed, the report shall provide evidence that the system will have an adequate supply of potable water for domestic or other proposed use and that each unit or building will have adequate
2. On-lot Water Supply

A. Where there is no existing public water supply and the Hydrogeologic/Water Facilities Study indicates that connection to a public water supply system or central community system is not feasible, each lot in the development must be provided with an individual on-lot water supply system in accordance with the standards required by the Pennsylvania Department of Environmental Protection (DEP). The (Name of Governing Body) shall approve the use of individual on-lot water supply systems (wells) when:

1). The Hydrogeologic/ Water Feasibility Study indicate that justification of the project necessitates the use of this type of water supply;

2). The anticipated water supply yield is adequate for the type of development proposed;

3). The installation of an on-lot system(s) will not endanger or decrease the groundwater supplies to adjacent properties.

B. Construction of wells for individual small water supplies shall conform to DEP's Construction Standards for Individual Water Supplies, as revised.

3. Public Water Supply

Where there is an existing public water supply system within one-thousand (1,000) feet from a proposed subdivision and development and such system has adequate planned capacity and is willing to serve that subdivision or land development, a complete water supply system connected to the existing water supply system must be provided and fire hydrants shall be installed in accordance with Section 516 of this Ordinance.

A. Where plans approved by a public water supplier provide for the installation of such public water supply system within four (4) years, the developer shall provide a complete water system for connection to the planned water main supply system.

B. Where connection to a public water supply is possible or feasible, the plan for the installation of such water supply system must be prepared for the development with cooperation of the appropriate water utility company and reviewed by the Municipal Engineer.

C. Where a public water supply system is not feasible for the proposed development as evidenced in the Hydrogeology/Water Facilities
Study, developer shall provide information related to the construction and installation of a central community water supply system.

4. Central Community Water Supply System

The design and installation of a central community water supply system shall be subject to the approval of the (Name of Governing Body) and the PA Department of Environmental Protection (DEP).

A. Standards and materials for the construction of any central community water supply system shall meet or exceed those requirements described in the Public Water Supply Manual of the Pennsylvania Department of Environmental Protection (DEP) and shall be subject to approval by the Township/Borough Engineer. Where a permit is required by DEP, it shall be presented as evidence of such review and approval before construction of the system will commence.

B. Where the central community water supply system is proposed under the jurisdiction of the Pennsylvania Public Utilities Commission (P.U.C.), the water supply study shall also incorporate those items of information required by the P.U.C.

C. The central community water system shall be designed to furnish an adequate supply of water to each lot, with adequate water main sizes and fire hydrant locations to meet the specifications of the Middle States Department Association of Fire Underwriters. A technical study shall be submitted to the Township/Borough for review by the Township/Borough Engineer and Fire Marshal. Fire hydrants shall be placed and constructed in accordance with Section 517 of this Ordinance.

D. All suitable agreements, including financial guarantees shall be established for the ownership and maintenance of the system. Ownership and maintenance of the central community water system shall be the responsibility of an organization formed and operated in accordance with Section 518 of this Ordinance. Such a system shall be designed and constructed in a manner that would permit adequate connection to a public water supply system in the future.

E. All water systems located in flood-prone areas, whether public or private, shall be flood proofed to a point one and one-half (1-1/2) feet above the one hundred (100) year flood elevation.

F. Ground Water for Central Community Water Systems

Ground water for community water systems must conform to the Pennsylvania Department of Environmental Protection requirements and standards. A minimum of two (2) sources of ground water must
be provided for each community water system. Each ground water source shall be capable of supplying the average daily demand of the proposed dwelling units.

SECTION 515. SEWAGE SERVICE FACILITIES

1. Each new dwelling created in the Municipality shall be self-sufficient for sewage disposal and the sewage disposal system shall be public, community or individually owned, maintained and operated.

2. As specified in Article 4, all plan submissions must be accompanied by the appropriate Sewage Facilities Planning Module for subdivision land development provided by the PA Department of Environmental Protection (DEP). All planning module reviews shall conform to the Pennsylvania Sewage Facilities Act of 1965, P.L. 1535, No. 537, as amended; DEP’s Chapter 71 regulations, Administration of Sewage Facilities; the Municipality’s Act 537 Plan; and this and any other Municipal Ordinances.

3. Individual (On-lot) Sewage Disposal

   A. Where public sanitary sewers are not feasible, the use of on-lot sewage disposal systems shall be permitted. The use of such on-lot systems is governed by regulations of the PA Department of Environmental Protection (DEP) and enforced by the Municipal Sewage Enforcement Officer (SEO).

   B. Prior to approval of any plan depicting on-lot sewage disposal systems, the developer shall have had soils testing performed on each lot to determine the suitability for such systems, and shall have secured the approval of the Municipal SEO and/or DEP through the use of a Planning Module for Land Development. Each on-lot sewage disposal system must be approved by the Municipal SEO and/or DEP.

   C. An individual sewage disposal system shall be located on the lot which it serves, or within adjacent open space that is designated for that purpose.

4. Public Sewage Systems

   A. Where a public sanitary sewage system exists within one thousand (1,000) feet of the development site, the Applicant must install a complete sanitary sewerage system within the development as required to connect the site to the available sanitary sewage system.

   B. Where a public sanitary sewage system does not currently exist within one thousand feet (1,000) of the development site, but is identified in the municipal 537 plan and in the opinion of the (Name of Governing Body) will become available within five (5) years, the Applicant shall
install a complete sanitary sewage collection system in accordance with the following requirements:

1). A collector main installed in the street or approved right-of-way;

2). Lateral installations to the right-of-way lines of streets, lot or parcel property lines or sewer easement right-of-way lines, whichever pertains to the individual situation;

3). All termini shall be capped in a manner that will insure that all collector mains, laterals, and house connections shall be watertight pending connections with the public sanitary sewage system.

C. Design and Construction

1). The construction of the system, including all service connections, pumping stations and interceptors shall be constructed at the developer's expense and shall not commence until written authorization to proceed with construction has been obtained from the Municipality and DEP.

2). The system shall be designed by a Registered Professional Engineer and approved by the Municipal Engineer.

3). When a public sanitary sewage system is installed and capped by the Applicant, the Applicant may also install temporary on-site sewage disposal facilities provided that the system is designed to provide connection to the public sewer when it becomes operable. At that time the temporary on-site system shall be disconnected.

4). Sanitary sewers and sewage disposal systems shall not be combined with storm water sewers, and shall not be constructed to receive effluent from any storm water collection system.

5). Pipe sizes for sanitary sewer mains and sewer laterals and locations for manholes shall meet the Municipal “Standard Material and Construction Specifications for Public Improvements." if established otherwise with PennDOT Publications 408 and 72 Standards. The Municipality Engineer shall inspect the sewer line before it is backfilled.

5. Central Community Sanitary Sewage Facilities

A. A central community sanitary sewage facility shall be permitted if it
can be shown that such an approach would provide more reliable and effective treatment of waste than individual on-lot systems or if a central community system is required as part of cluster or open space development.

**B** The design and installation of a central community sanitary sewage facility shall be subject to the approval of the Governing Body and the DEP.

**C.** The system shall be designed by a Registered Professional Engineer and approved by the Municipal Engineer. The construction of the system, including all pumping stations, interceptors, drainage fields and treatment plants, shall be at the developer's own expense.

**D.** All suitable agreements, including financial guarantees, shall be established for the ownership and maintenance of the system. Ownership and maintenance of the central community sanitary sewage system shall be the responsibility of an organization formed and operated in accordance with Section 517 of this Ordinance.

**E.** Central community sanitary sewage facilities shall be located on a separate lot under the ownership of an organization approved by the Municipality. The lot shall be used solely for the central community sanitary sewage facility. The area of the lot shall be of sufficient size to accommodate the system, the required area for a complete alternate or replacement system, and all required setbacks.

**F.** The Municipality shall have the right to inspect and test community service systems at any time. The Municipality may require the owner to provide the results of regular professional testing of the system when the Municipality deems necessary. The cost of inspections and testing shall be the responsibility of the owner.

**SECTION 516. FIRE HYDRANTS**

1. Where public and central community water systems are provided for subdivision and land development, fire hydrants suitable for coupling with fire equipment serving the Municipality shall be installed as specified by the Insurance Services Offices of Pennsylvania. The fire protection system shall be designed by a Registered Professional Engineer and approved by the Municipal Engineer. The construction of the system shall be at the developer's own expense.

2. The location performance standards for fire hydrants shall meet the following standards and shall be approved by the **(Name of Governing Body)** upon review and recommendation by the Municipal Engineer and Municipal Fire Marshal:
A. All fire hydrants will be located on an eight (8) inch line or a looped six (6) inch line. Where a dead end line is required to contain a fire hydrant, the portion of the line between the main loop and the hydrant shall have a minimum diameter of eight (8) inches.

B. Fire hydrants shall be spaced in a development so that all proposed buildings will be no more than four hundred (400) feet from the hydrant measured along traveled ways.

C. All central community water systems must provide a minimum of 500 GPM at a residential pressure of 20psi for a two (2) hour period.

SECTION 517. COMMON FACILITIES

1. Ownership Standards

Facilities to be held in common, such as central community water supply, storm water management facilities or community sewage service systems shall be held using one of the following methods of ownership, subject to the approval of the (Name of Governing Body).

C. Homeowners Association - The facilities may be held in common ownership by a Homeowners Association which is formed and operated in accordance with the provisions of Section 517.2 of this Ordinance.

D. Condominium. The facilities may be held as common element under a condominium agreement. Such agreement shall be in conformance with the Pennsylvania Uniform Condominium Act as amended.

2. Homeowners Association

Homeowners Associations will be governed in accordance with any applicable laws of the Commonwealth of Pennsylvania. Where required, the organizational framework of the homeowners association shall be described in a report forwarded to the Municipality for review by the (Name of Governing Body) and Municipal Solicitor. At a minimum, the following information and standards shall be met prior to final approval of the subdivision or land development:

A. By-laws describing the formation and duties of the association, including the responsibilities for maintenance of common open space areas, shall be defined and presented to the Municipality for review and approval as part of the final plan submission.

B. Membership shall be mandatory by all residents served by the common facilities. Membership and voting rights shall be defined.
C. Rights and duties of the Municipality and members of the association, in the event of a breach of covenants and restrictions, shall be defined.

D. The By-laws shall include a statement which grants to the Association the legal authority to place liens on the properties of members who are delinquent in the payment of their dues. The By-laws shall also grant the Municipality such power, but not the duty, to maintain the common facilities, and to assess the cost of the same as provided in the PA Municipalities Planning Code, Act 247.

3. Maintenance Standards

A. The common facility (i.e. Sanitary and storm sewage system, detention pond, community water systems, swimming pools, ponds, common ground, playgrounds, etc.) shall be operated and maintained by a professional organization specializing in the required services and approved by the (Name of Governing Body). The agreement between the Association or Condominium and the professional organization shall be subject to review by the Municipal Solicitor and approved by the (Name of Governing Body).

B. The Municipality shall, upon request, be given access to all records of the Association or Condominium and all records of the professional organization relating to the common facility or facilities.

C. Delinquency

In the event that the Association or Condominium established to own and maintain the common facility, or any successor organization, shall at any time after the establishment of the common facility, fail to maintain said facility or facilities in reasonable working order and condition in accordance with established standards, guidelines and agreements, the (Name of Governing Body) may serve written notice upon the Association or Condominium and/or the residents served by the common facility stating:

1). The manner in which the Association or Condominium has failed to maintain the common facility in reasonable condition.

2). A demand that such deficiencies of maintenance be corrected within thirty (30) days.

3). The date and place of a public hearing which shall be held within forty-five (45) days of public notice.

D. Public Hearing

At the said public hearing scheduled in accordance with Section
517.3.C.3, the **(Name of Governing Body)** may amend the terms of the original notice concerning the deficiencies and may give an extension of time within which they shall be corrected. If the deficiencies or any modifications thereof were not corrected within thirty (30) days of the notice of deficiencies or within any extension, the Municipality may enter upon the common facility and maintain the same for a period of one (1) year. The said maintenance by the Municipality shall not constitute a taking of said common facility, nor vest the public any rights to use the same. Maintenance of common facilities shall include all activities related to the operation of the facility, including, but not limited to, administration, assessing and collecting of fees, testing, and necessary improvements.

**E. Burden of Proof**

Before the expiration of said year, the Municipality shall, upon its initiative or upon request of the Homeowners Association or Condominium call a public hearing upon notice to the Association or Condominium and to the residents served by the facility. At the hearing, the Association or Condominium or the residents shall show cause as to why such maintenance by the Municipality shall not, at the option of the Municipality, continue for a succeeding year. If the **(Name of Governing Body)** shall determine the Association or Condominium is prepared, willing and able to maintain such common facility in reasonable working order and condition, the Municipality shall cease to maintain said common facility at the end of said year. If the Governing Body shall determine that the Association or Condominium is not prepared, willing or able to maintain said common facility in a reasonable and working order and condition, the Municipality may, at its discretion, continue to maintain said common facility during the next succeeding year and, subject to a similar hearing and determination, in each year thereafter.

**F. Cost Reimbursement**

Any and all costs the Municipality incurred as a result of maintenance of common facility and any additional penalties or fees set by the Municipality shall be paid by the Association or Condominium and the residents served by the facility. Any invoices from the Township/Borough for such costs which remain unpaid following a period of forty-five (45) days shall be subject to an increase of 1.5% a month (18% annually) and a lien which shall be filed against the premises of the owner or resident in the same manner as other municipal claims.
SECTION 518. UTILITIES

1. Telephone, electric, gas, TV cable and such other utilities shall be installed underground and shall be provided with easements to be dedicated for such utilities and in accordance with plans approved by the (Name of Governing Body) and the applicable utility company.

2. Lots which abut existing easements or public rights-of-way where above ground utility lines have been previously installed may be supplied with electric and telephone service from those overhead lines, but service connections from the utilities' overhead lines shall be installed underground.

3. Where road widening and other conditions resulting from subdivision and land development necessitate replacement or relocation of overhead utility lines, new facilities shall be installed underground. Costs of any relocation of public utilities shall be the responsibility of the developer.

4. Underground installation of the utility distribution and service lines shall meet the prevailing standards and practices of the company providing the service and shall be completed prior to street paving and gutter, curbing and sidewalk installation.

5. Where overhead lines are permitted as the exception, the placement and alignment of poles shall be designed to lessen their visual impact.

6. Underground Utility Notifications

In accordance with the provisions of PA Act 38, as amended, the applicant shall contact all applicable utilities and accurately determine and show the location and depths of all underground utilities within the boundaries of the tract proposed for development and in the vicinity of any proposed off-site improvement, prior to excavation.

SECTION 519. EASEMENTS (Utility, Stormwater/Sanitary Sewer, Drainage, Conservation, Pedestrian)

1. Utilities

Easements shall be provided for poles, wires, conduits, storm and sanitary sewer lines, gas, water and heat mains, and other utilities intended to serve the abutting lots and for access to facilities. The minimum width of utility easements shall be thirty (30) feet. Wherever possible such easements shall be centered on the side or rear lot lines, or along the front lot lines.

2. Storm Water, Sanitary Sewage and Clear Water Collection Systems

Where a subdivision and/or land development is traversed by storm water, sanitary sewage or clear water collection system facilities, a utility easement
shall be provided. In no case shall the easement be less than thirty (30) feet in width. Additional width may be required by the (Name of Governing Body) depending on the purpose and use of the easements. All stormwater easements are to be dedicated to private property owners unless the easement is designed to carry stormwater away from stormwater infrastructure already owned by the Municipality.

3. Stream, Watercourse, Drainage Channel, Pond or Lake

Where a subdivision and/or land development is traversed by a watercourse, drainage way, channel or stream, there shall be provided a drainage easement conforming substantially with its location for the purpose of widening, deepening, relocating, improving or protecting such watercourses, provide proper maintenance, or for the purpose of installing a storm water or clear water system. The following standards shall apply:

   i. Perennial Streams - Fifty (50) feet from the stream bank.
   ii. Intermittent stream, drainage way, channel or swale - Fifty (50) feet from the edge of the watercourse.
   iii. An access easement shall be provided to the drainage easement. The width of such access points shall not be less than thirty (30) feet.

In no case shall any drainage easement be less than thirty (30) feet in width and determined based on 100 year flood plain and which is greater. Any such easement shall be dedicated, if deemed appropriate by the (Name of Governing Body), to private property owners or other third parties.

4. Conservation

Where environmental protection and flood plain overlay zones exist, a conservation easement shall be depicted on the plan within the overlay area.

In all subdivision and land developments, a fifty (50) foot conservation easement shall be provided around all delineated wetland areas to ensure minimal disturbance and encroachment in these areas.

5. Pedestrian

Where necessary for access to private, public or common lands, a pedestrian easement shall be provided with a width of no less than ten (10) feet. Additional width, fencing and/or planting may be required by the (Name of Governing Body) depending on the purpose and use of the easement.

SECTION 520. NATURAL FEATURES PROTECTION

1. General Standards
The design and development of all subdivision and land development plans shall preserve, whenever possible, natural features which will aid in providing open space for recreation and conditions generally favorable to the health, safety and welfare of the residents of the Municipality. These natural features include the natural terrain of the site, woodland areas, large trees, natural watercourses and bodies of water, wetlands, rock outcrops and scenic views.

2. Tree Preservation

Trees, with a caliper of six (6) inches or more as measured at a height of four and one-half (4 1/2) feet above existing grade, shall not be removed unless they are located within the proposed cartway, driveway, parking areas, utility easements, stormwater facilities, or sidewalk portion of the street right-of-way, or within fifteen (15) feet of the foundation area of a proposed building, or as required by the Sewage Enforcement Officer for installation of an on-lot septic system. In areas where trees are retained, the original grade level shall be maintained, if possible, so as not to disturb the trees.

3. Stream Frontage and Wetland Preservation

Stream frontage and designated wetland areas shall be preserved as open space whenever possible.

4. Topography

The existing natural terrain of the proposed subdivision and land development tract shall be retained whenever possible. Cut and fill operations shall be kept to a minimum.

5. Topsoil Preservation

Topsoil removal shall be minimized and, if at all possible, restricted to only the building, driveway and public improvement areas of the lot. All of the topsoil from areas where cuts and fills have been made should be stockpiled and redistributed uniformly after grading.

6. Landscaping

That portion of a lot not covered with impervious material and not required to be otherwise developed as part of the stormwater management facilities required by this Ordinance shall be planted and maintained by the land owner with vegetative material.

For all multi-family dwelling, office, commercial and industrial land developments, a landscaping plan shall be provided and shall propose plantings in the open space areas, which include: planting strips, perimeter screenings, formal gardens, shade trees and natural barriers.
SECTION 521. LANDSCAPING, BUFFERING and SCREENING.

1. Landscaping

It is the intent of this section to provide a set of minimum standards for landscaping to improve and maintain community appearance, the environment, rural character and value of properties within the (Name of Municipality) in accordance with the Comprehensive Plan. Landscaping shall subdivision.

A. Minimum required landscaping.

Nonresidential and multifamily residential land development in the residential districts shall have a minimum of 20% landscaping of the total gross lot area excluding building floor area, impervious surface.

1). At least 60% or all trees, shrubs, and groundcover required by this section shall be native plants, except that a minimum of 30% of the vegetation chosen for erosion control shall be native plants from the list of Vegetation Acceptable for Erosion Control Plants (listed below) chosen shall be appropriate for their intended function and location based on plant characteristics.

2). The required landscaped area shall include a minimum of 12 deciduous or evergreen trees for each one acre with a minimum of 2 1/2 inch caliper at time of planting. As an alternative, six trees for each one acre shall be required if deciduous trees are four inches in caliper or greater at the time of planting, and evergreen trees are nine feet in height or greater at the time of planting. A combination of tree sizes is permitted where at least one of larger sized trees may be substituted for two smaller sized trees.

3). Five deciduous shrubs or hedges may be substituted for one deciduous tree for a maximum of 20% of the tree requirement.

4). The preservation of existing deciduous or evergreen trees of four-inch caliper or greater within the net lot area may be substituted for 50% of the tree requirement. (Net lot area for this section shall be total gross lot area minimum building floor area, impervious surface, and sensitive environmental features as defined in the Comprehensive Plan.) The number of existing trees must meet or exceed 50% of the number of trees required in Subsection A (1), above.

5). The remaining area required to be landscaped shall be ground cover.

6). Cost estimate for posting of securities in accordance with this
7). All trees, shrubs, hedges, or ground cover that die or are destroyed shall be replaced within six months.

B. Street trees.

Reasonable effort shall be made by the applicant to preserve existing shade trees and, in addition, deciduous hardwood trees with a minimum caliper of 1 1/2 inches shall be provided in accordance with conditions as recommended by the Planning Commission, Parks and Recreation Board and agreed upon by the Governing Body, and, if necessary, the Municipal Authority and/or appropriate public utility. Shade trees shall be required along with all existing and new streets within a subdivision land development. Where provided, such trees shall be planted between the sidewalk and the building setback line at least five feet from the sidewalk, provided the planting strip is a minimum of six feet wide.

1). Location. Street trees shall be installed along the street frontage or both sides of the street, where applicable. Street trees shall be planted along the street frontage within five feet of the right-of-way line. Where trees are planted along streets, spacing shall depend on the tree spread at maturity as follows:

<table>
<thead>
<tr>
<th>Tree Spread at Maturity</th>
<th>Planting Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large -- more than 50 feet</td>
<td>40 to 80 on center</td>
</tr>
<tr>
<td>Medium 31 to 50 foot</td>
<td>25 to 55 feet-on center</td>
</tr>
<tr>
<td>Small -- less than 30 feet</td>
<td>15 to 35 feet-on center</td>
</tr>
</tbody>
</table>

2). When the spacing interval exceeds 40 feet, small ornamental trees may be placed between the large trees. If a street canopy effect is desired, trees may be planted closer together, following the recommendations of a landscape architect.

3). Street trees shall be planted as not to interfere with utilities, roadways, sidewalks, streetlights, clear sight triangles, and safe sight distance.

C. Minimum planting specifications at the time of planting, except as specified in Section 522.3-Screening.

1). Deciduous trees shall have a minimum caliper measurement of 2 1/2 inches, measured a minimum of six inches above the soil line.
2). Coniferous trees shall have a minimum height of six feet.

3). Evergreen shrubs, except for those used as low ground cover, shall have an average height of 20 inches.

4). Deciduous shrubs shall have an average height of 30 inches.

5). Trees with less than three inches in caliper shall be properly staked or trees with more than three inches in caliper shall be guyed and be properly protected for a period of one year from the date of planting.

6). Any nylon rope used in balling the tree must be cut and removed from the root ball.

7). Trees and shrubs shall be hardy, not prone to disease or pests and suitable for use as a screening hedge, including dense foliage.

8). Shrubs to be used on slopes steeper than 3:1 shall be chosen from the list of Vegetation Acceptable for Erosion Control Plants (listed below). Ground cover to be used on slopes steeper than 3:1 shall be chosen from the list titled "Vegetation Acceptable for Erosion Control," except that no more than 50% of berm area may be composed of ornamental grass or legume mixture.

9). Mulch for grass seed mix must be straw mulched as specified in PennDOT Publication Number 408, except slopes steeper than 3:1 shall receive erosion control blankets/mats as specified in PennDOT Publication Number 408. Mulch shall be placed around trees, shrubs, and groundcover. Mulch shall be shredded bark or other organic mulch, if approved by Borough officials, in continuous beds surrounding vegetation. Mulch shall not be the sole cover but shall be used in conjunction with vegetation groundcover which shall cover 95% of the area within two years of planting. A system of staking, matting and/or netting shall be installed on slope/mound areas steeper than 3:1 to be mulched, but that will not inhibit vegetative growth and that will not be visible two years after planting.

10) Stabilization measures shall include erosion control blankets or mats as specified in PennDOT Publication Number 408 for slopes steeper than 3:1.

D. Landscape plan.

All landscaping shall be drawn to scale on a site development plan and submitted to the Zoning Officer prior to the issuance of a zoning permit or with the land development or major preliminary or final subdivision application. The landscape plan shall be prepared and
certified by a landscape architect licensed by the Commonwealth of Pennsylvania. The landscape plan shall contain the following data as a minimum:

1. An on-site inventory identifying type, size and height of existing plant materials.

2. A plant schedule describing plant materials, including names (common and botanical), location, qualities, caliper sizes, heights, spread, and spacing at installation.

3. Location, height, and type of plant material proposed for buffer yards, screening and fencing.

4. The manner in which trees and shrubs are to be planted shall be indicated on a tree and shrub planting detail.

5. The manner in which lawn areas and ground cover are to be planted shall be indicated on a ground cover detail.

6. A description of how existing healthy trees are proposed to be retained and protected from damage during construction should be described in the construction detail.

7. Size, height, location and material of proposed seating, lighting, planters, sculptures, and water features.

8. Location and dimension of clear sight triangles.

E. Native plant requirements.

The use of native species (Refer to Rhoads & Klein, "Atlas of the Flora of Pennsylvania") benefits land developers by reducing landscape maintenance costs and will benefit the community and the environment by reestablishing a native plant community.

1) Vegetation acceptable for erosion control:

<table>
<thead>
<tr>
<th>Type</th>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>S*</td>
<td>Siberian Dogwood</td>
<td>Cornus alba</td>
</tr>
<tr>
<td>S and N</td>
<td>Red-Osier Dogwood</td>
<td>Cornus sericea</td>
</tr>
<tr>
<td>S and N</td>
<td>Gray Dogwood</td>
<td>Cornus racemosa</td>
</tr>
<tr>
<td>S*</td>
<td>Cranberry Cotoneaster</td>
<td>Cotoneaster apiculata</td>
</tr>
<tr>
<td>Gc*</td>
<td>Ground Cotoneaster</td>
<td>Cotoneaster horizontalis</td>
</tr>
<tr>
<td>S*</td>
<td>Scotch Heather</td>
<td>Calluna vulgaris</td>
</tr>
<tr>
<td></td>
<td>Common Name</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>------</td>
<td>----------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>S*</td>
<td>Weeping Forsythia</td>
<td>Forsythia suspensa</td>
</tr>
<tr>
<td>Gc*</td>
<td>Shore Juniper</td>
<td>Juniper contorta</td>
</tr>
<tr>
<td>Gc*</td>
<td>Creeping Juniper</td>
<td>Juniper horizontalis</td>
</tr>
<tr>
<td>Gc*</td>
<td>Savin' Juniper</td>
<td>Juniper sabina</td>
</tr>
<tr>
<td>S and N</td>
<td>Northern Bayberry</td>
<td>Myrica pensylvanica</td>
</tr>
<tr>
<td>Gc*</td>
<td>Japanese Spurge</td>
<td>Pachysandra terminallis</td>
</tr>
<tr>
<td>Gc*</td>
<td>Crispa Cutleaf</td>
<td>Stephandra incise 'crispa'</td>
</tr>
<tr>
<td>Gc</td>
<td>Prostrate Chenault</td>
<td>Symphoricarpos x chenaultii 'hancock'</td>
</tr>
<tr>
<td>S*</td>
<td>Candles of Heaven</td>
<td>Yucca filamentosa</td>
</tr>
<tr>
<td>Gc</td>
<td>PennDOT formula &quot;W&quot;</td>
<td>grass legume seed mix (tall fescue, birdsfoot, trefoil, and retop)</td>
</tr>
<tr>
<td>S</td>
<td>Various types of ornamental grasses</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**  
S = Shrub     Gc = Groundcover     N = Native     * = Not Native to Central Pennsylvania

2). Native plants acceptable for landscaping.

a). Shrubs.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azalea, sweet</td>
<td>Rhododendron arborescens</td>
</tr>
<tr>
<td>Azalea, rhodora</td>
<td>Rhododendron canadense</td>
</tr>
<tr>
<td>Azalea, flame</td>
<td>Rhododendron calendulaeum</td>
</tr>
<tr>
<td>Azalea, mountain</td>
<td>Rhododendron canescens</td>
</tr>
<tr>
<td>Azalea, pinxter</td>
<td>Rhododendron periclymenoides</td>
</tr>
<tr>
<td>Azalea, roseshell</td>
<td>Rhododendron prinophyllum</td>
</tr>
<tr>
<td>Azalea, swamp</td>
<td>Rhododendron viscosum</td>
</tr>
<tr>
<td>Blueberry, highbush</td>
<td>Vaccinium corymbosum</td>
</tr>
<tr>
<td>Chokeberry, red</td>
<td>Aronia arbutifolia</td>
</tr>
<tr>
<td>Chokeberry, black</td>
<td>Aronia melanocarpa</td>
</tr>
<tr>
<td>Bayberry*</td>
<td>Myrica pensylvanica</td>
</tr>
<tr>
<td>Bearberry</td>
<td>Arctostaphylos uva-ursi</td>
</tr>
<tr>
<td>Common Name</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Buttonbush</td>
<td>Cephalanthus occidentalis</td>
</tr>
<tr>
<td>Carolina Allspice*</td>
<td>Calycanthus floridus</td>
</tr>
<tr>
<td>Cinquefoil, shrubby</td>
<td>Potentilla fruiticosa</td>
</tr>
<tr>
<td>Dogwood, pagoda</td>
<td>Cornus alternifolia</td>
</tr>
<tr>
<td>Dogwood, silky</td>
<td>Cornus amomum</td>
</tr>
<tr>
<td>Dogwood, gray</td>
<td>Cornus racemosa</td>
</tr>
<tr>
<td>Dogwood, red</td>
<td>Cornus sericea</td>
</tr>
<tr>
<td>Elderberry</td>
<td>Sambucus canadensis</td>
</tr>
<tr>
<td>Hazelnut</td>
<td>Corylus americana</td>
</tr>
<tr>
<td>Inkberry*</td>
<td>Ilex glabra</td>
</tr>
<tr>
<td>Mountain Laurel</td>
<td>Kalmia latifolia</td>
</tr>
<tr>
<td>Rhododendron, rosebay</td>
<td>Rhododendron maximum</td>
</tr>
<tr>
<td>Shadbush Serviceberry</td>
<td>Amelanchier canadensis</td>
</tr>
<tr>
<td>St. Johnswort</td>
<td>Hypericum prolificum</td>
</tr>
<tr>
<td>Spicebush</td>
<td>Lindera benzoin</td>
</tr>
<tr>
<td>Strawberry bush</td>
<td>Euonymus americana</td>
</tr>
<tr>
<td>Sumac, fragrant</td>
<td>Rhus aromatica</td>
</tr>
<tr>
<td>Sumac, shining</td>
<td>Rhus copallina</td>
</tr>
<tr>
<td>Sumac, smooth</td>
<td>Rhus glabra</td>
</tr>
<tr>
<td>Sumac, staghorn</td>
<td>Rhus typhina</td>
</tr>
<tr>
<td>Sweet Pepperbush*</td>
<td>Clethra alnifolia</td>
</tr>
<tr>
<td>Viburnum, mapleleaf</td>
<td>Viburnum acerifolium</td>
</tr>
<tr>
<td>Viburnum, arrowwood</td>
<td>Viburnum dentatum</td>
</tr>
<tr>
<td>Viburnum, nannyberry</td>
<td>Viburnum lentago</td>
</tr>
<tr>
<td>Viburnum, blackhaw</td>
<td>Viburnum prunifolium</td>
</tr>
<tr>
<td>Winterberry</td>
<td>Ilex verticillata</td>
</tr>
</tbody>
</table>

* Not Native to Central Pennsylvania

b). Small trees.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Hornbeam</td>
<td>Carpinus caroliniana</td>
</tr>
<tr>
<td>Serviceberry</td>
<td>Amelanchier arborea</td>
</tr>
<tr>
<td>Common Name</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>River Birch</td>
<td>Betula nigra</td>
</tr>
<tr>
<td>Redbud</td>
<td>Cercis canadensis</td>
</tr>
<tr>
<td>Fringe Tree*</td>
<td>Chionanthus virginicus</td>
</tr>
<tr>
<td>Eastern Dogwood</td>
<td>Cornus florida</td>
</tr>
<tr>
<td>Witch Hazel</td>
<td>Hamamelis virginiana</td>
</tr>
<tr>
<td>Red Cedar</td>
<td>Juniperus virginiana</td>
</tr>
<tr>
<td>Pawpaw</td>
<td>Asimina triloba</td>
</tr>
<tr>
<td>Persimmon</td>
<td>Diospyros virginiana</td>
</tr>
</tbody>
</table>

* Not Native to Central Pennsylvania

c). Shrubs or small trees for dry, sunny sites

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayberry*</td>
<td>Myrica pensylvanica</td>
</tr>
<tr>
<td>Bearberry*</td>
<td>Arctostaphylos uva-ursi</td>
</tr>
<tr>
<td>E. Red Cedar</td>
<td>Juniperus virginiana</td>
</tr>
</tbody>
</table>

* Not native to Central Pennsylvania

d). Shrubs or small trees for moist sites; i.e., edges of ponds, streams, swamps, and lower slopes of hills. Most will tolerate somewhat drier conditions as well.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chokeberry</td>
<td>Aronia arbutifolia, A. melanocarpa</td>
</tr>
<tr>
<td>Elderberry</td>
<td>Sambucus canadensis</td>
</tr>
<tr>
<td>Inkberry*</td>
<td>Ilex glabra</td>
</tr>
<tr>
<td>Rosebay</td>
<td>Rhododendron maximum</td>
</tr>
<tr>
<td>Shrubby Dogwoods</td>
<td>Cornus sericea, C. amomum, C. racemosa</td>
</tr>
<tr>
<td>Spicebush</td>
<td>Lindera benzoin</td>
</tr>
<tr>
<td>Sweet Pepperbush*</td>
<td>Clethra alnifolia</td>
</tr>
<tr>
<td>Winterberry</td>
<td>Ilex verticillata</td>
</tr>
<tr>
<td>Witch Hazel</td>
<td>Hamamelis virginiana</td>
</tr>
</tbody>
</table>
* Not Native to Central Pennsylvania

e). Shrubs or small trees for wetlands or seasonally flooded sites or at the edge of water bodies.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>American hornbeam</td>
<td>Carpinus caroliniana</td>
</tr>
<tr>
<td>Buttonbush</td>
<td>Cephalanthus occidentalis</td>
</tr>
<tr>
<td>Inkberry*</td>
<td>Ilex glabra</td>
</tr>
<tr>
<td>River Birch</td>
<td>Betula nigra</td>
</tr>
<tr>
<td>Spicebush</td>
<td>Lindera benzoin</td>
</tr>
<tr>
<td>Swamp Azalea</td>
<td>Rhododendron viscosum</td>
</tr>
<tr>
<td>Sweet Pepperbush*</td>
<td>Clethra alnifolia</td>
</tr>
<tr>
<td>Winterberry</td>
<td>Ilex verticillata</td>
</tr>
</tbody>
</table>

* Not Native to Central Pennsylvania

f). Shrubs or small trees for shaded sites.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azaleas</td>
<td>Rhododendron canadense, R. calendulaceum, R. periclymenoides</td>
</tr>
<tr>
<td>Hazelnut</td>
<td>Corylus americana</td>
</tr>
<tr>
<td>Maple-leaved Viburnum</td>
<td>Viburnum acerifolium</td>
</tr>
<tr>
<td>Mountain Laurel</td>
<td>Kalmia latifolia</td>
</tr>
<tr>
<td>Rhododendrons</td>
<td>Rhododendron maximum</td>
</tr>
</tbody>
</table>

g). Shrubs or small trees for wildlife food and cover.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayberry*</td>
<td>Myrica pensylvanica</td>
</tr>
<tr>
<td>Chokeberry</td>
<td>Aronia melanocarpa, A. arbutifolia</td>
</tr>
<tr>
<td>Elderberry</td>
<td>Sambucus canadensis</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Inkberry*</td>
<td>Ilex glabra</td>
</tr>
<tr>
<td>Winterberry</td>
<td>Ilex verticillata</td>
</tr>
<tr>
<td>Serviceberry</td>
<td>Amelanchier canadensis, A. arborea</td>
</tr>
<tr>
<td>Shrubby Dogwoods</td>
<td>Cornus amomum, C. racemosa, C. sericea</td>
</tr>
<tr>
<td>Spicebush</td>
<td>Lindera benzoin</td>
</tr>
<tr>
<td>Sumacs</td>
<td>Rhus glabra, R. copallina, R. typhina</td>
</tr>
<tr>
<td>Viburnums</td>
<td>Viburnum prunifolium, V. lentago, V. dentatum, V. acerifolium</td>
</tr>
</tbody>
</table>

* Not Native to Central Pennsylvania

h). Large trees.
(See next page)
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern hemlock</td>
<td>Tsuga canadensis</td>
</tr>
<tr>
<td>Eastern white pine</td>
<td>Pinus strobus</td>
</tr>
<tr>
<td>American beech</td>
<td>Fagus grandifolia</td>
</tr>
<tr>
<td>Black gum</td>
<td>Nyssa sylvatica</td>
</tr>
<tr>
<td>Black walnut</td>
<td>Juglans nigra</td>
</tr>
<tr>
<td>Black willow</td>
<td>Salix nigra</td>
</tr>
<tr>
<td>Red maple</td>
<td>Acer rubrum</td>
</tr>
<tr>
<td>Sugar maple</td>
<td>Acesaccharun</td>
</tr>
<tr>
<td>Sycamore</td>
<td>Platanus occidentalis</td>
</tr>
<tr>
<td>Northern red oak</td>
<td>Quercus rubra</td>
</tr>
<tr>
<td>Pin oak</td>
<td>Quercus palustris</td>
</tr>
<tr>
<td>White oak</td>
<td>Quercus alba</td>
</tr>
<tr>
<td>White ash</td>
<td>Fraxinus americana</td>
</tr>
<tr>
<td>Mockernut hickory</td>
<td>Carya tomentosa</td>
</tr>
<tr>
<td>Shagbark hickory</td>
<td>Carya ovate</td>
</tr>
<tr>
<td>Shellbark hickory</td>
<td>Carya laciniosa</td>
</tr>
<tr>
<td>Hackberry</td>
<td>Celtis occidentalia</td>
</tr>
</tbody>
</table>

i). Native grasses and wildflowers for groundcover, wildlife, or aesthetics.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big bluestem</td>
<td>Andropogon gerardii</td>
</tr>
<tr>
<td>Bushy bluestem</td>
<td>Andropogon glomeratus</td>
</tr>
<tr>
<td>Broom sedge</td>
<td>Andropogon virginicus</td>
</tr>
<tr>
<td>Pennsylvania sedge</td>
<td>Carex pensylvanica</td>
</tr>
<tr>
<td>Fraser' sedge</td>
<td>Cymophyllus fraseri</td>
</tr>
<tr>
<td>Hairgrass, tufted</td>
<td>Deschampsia cespitosa</td>
</tr>
<tr>
<td>Purple lovegrass</td>
<td>Eragrostis spectabilis</td>
</tr>
<tr>
<td>Soft rush</td>
<td>Juncus effusus</td>
</tr>
<tr>
<td>Muhly grass</td>
<td>Muhlenbergia capillaris</td>
</tr>
<tr>
<td>Switch grass</td>
<td>Panicum virgatum</td>
</tr>
<tr>
<td>Native Grasses</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Sideoats grama</td>
<td>Bouteloua curtipendula</td>
</tr>
<tr>
<td>Little bluestem</td>
<td>Andropogon scoparius</td>
</tr>
<tr>
<td>Indian grass</td>
<td>Sorghastrum nutans</td>
</tr>
<tr>
<td>Eastern gamma grass</td>
<td>Tripsacum dactyloides</td>
</tr>
<tr>
<td>Sundrops</td>
<td>Oenothera fruticosa</td>
</tr>
<tr>
<td>Butterfly-weed</td>
<td>Asclepias tuberosa</td>
</tr>
<tr>
<td>Wild blue phlox</td>
<td>Phlox divaricata</td>
</tr>
<tr>
<td>Indian paintbrush</td>
<td>Castilleja coccinea</td>
</tr>
<tr>
<td>Beard-tongue</td>
<td>Penstemon digitalis</td>
</tr>
<tr>
<td>Common yarrow*</td>
<td>Achillea millefolium</td>
</tr>
<tr>
<td>Boneset</td>
<td>Eupatorium pefoliatum</td>
</tr>
<tr>
<td>New England Aster</td>
<td>Aster novae-angliae</td>
</tr>
<tr>
<td>Blazing star</td>
<td>Liatris spicata</td>
</tr>
<tr>
<td>Prairie coneflower</td>
<td>Ratibida pinnate</td>
</tr>
<tr>
<td>Black-eyed Susan</td>
<td>Rudbeckia hirta</td>
</tr>
<tr>
<td>Ox-eye sunflower</td>
<td>Heliopsis helianthoides</td>
</tr>
<tr>
<td>Canada goldenrod</td>
<td>Solidago canadensis</td>
</tr>
<tr>
<td>Stiff goldenrod</td>
<td>Solidago rigida</td>
</tr>
<tr>
<td>Showy goldenrod</td>
<td>Solidago speciosa</td>
</tr>
</tbody>
</table>

* Not Native to Central Pennsylvania

j). Native trees or hybrids acceptable for street trees.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugar Maple</td>
<td>Acer saccharum</td>
</tr>
<tr>
<td>White Ash</td>
<td>Fraxinus americana</td>
</tr>
<tr>
<td>Green Ash</td>
<td>Fraxinus pennsylvania laceolata</td>
</tr>
<tr>
<td>Maidenhair Tree*</td>
<td>Ginkgo biloba</td>
</tr>
<tr>
<td>Thornless Honey Locust</td>
<td>Gleditsia triacanthos inermis</td>
</tr>
<tr>
<td>Sweet Gum</td>
<td>Liquidambar styraciflua</td>
</tr>
<tr>
<td>Oriental Plane Tree*</td>
<td>Platanus acerifolia</td>
</tr>
<tr>
<td>American Plane Tree</td>
<td>Platanus occidentalis</td>
</tr>
<tr>
<td>Tree Name</td>
<td>Scientific Name</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>White Oak</td>
<td>Quercus alba</td>
</tr>
<tr>
<td>Red Oak</td>
<td>Quercus rubra</td>
</tr>
<tr>
<td>Scarlet Oak</td>
<td>Quercus coccinea</td>
</tr>
<tr>
<td>Pin Oak</td>
<td>Quercus palustris</td>
</tr>
<tr>
<td>American Linden, Basswood</td>
<td>Tilia americana</td>
</tr>
<tr>
<td>Silver Linden*</td>
<td>Tilia tomentosa</td>
</tr>
<tr>
<td>American Elm</td>
<td>Ulmus americana</td>
</tr>
</tbody>
</table>

* Not Native to Central Pennsylvania

F. Maintenance plan.

Landscaping required in this section shall be maintained in a healthy, growing condition at all times. It shall be the responsibility of the property owner of record or his delegated representative to properly maintain and care for any landscape screen or other treatment as approved by the Governing Body. In order to insure proper maintenance of landscaping, a maintenance plan, addressing the following, shall be required:

1). The maintenance plan shall be prepared and certified by a landscape architect, registered and licensed in the Commonwealth of Pennsylvania.

2). Project narrative.

3). Description of short-term maintenance procedures for the first year following the date of planting.

4). Long-term lawn and planting maintenance.

5). One-year contractor's warranty of all lawn and plant materials.

2. Buffering.

Buffer yards required by this section are intended to separate different land uses from each other and are intended to eliminate and/or minimize nuisances such as dirt, litter, noise, glare, signs, unsightly buildings or parking areas, and to provide spacing to reduce adverse impacts of noise, light, odor, or danger from fire and explosion.

In Buffer yards 1) Space trees and shrubs randomly, 2) Avoid trees in a single row, 3) Group trees and shrubs to simulate a natural appearance, and 4) Create interest by combining canopy trees, intermediate trees, shrubs, vines and ground covers.
For walls 1) Use undulating, concerting, and piers to increase structural stability and reduce wall sections and 2) use varying types of wall material such as rough cut, ledge, flagstone, formed concrete, stacked block, tile, or precast units. Buffer yards shall meet the following requirements.

A. A buffer yard shall be located at the perimeter of the lot for any given use and shall not be located in any portion of a public right-of-way or proposed right-of-way.

B. Permitted uses in a buffer yard: stormwater management facilities, underground utility facilities, picnic areas, greenways or pedestrian walkways. Buildings or storage of any kind shall not be permitted in a buffer yard.

C. A buffer yard and screening shall be provided between districts and used as follows:

1). A buffer yard of 50 feet shall be required between residential uses or districts and nonresidential uses or districts. Level three screening (see Section 522.3-Screening) shall be required within the buffer yard.

2). A buffer yard of 25 feet shall be required between multifamily residential use or district and single-family/two-family residential uses or districts. Level one screening (see Section 522.3-Screening) shall be required within the buffer yard.

3). A buffer yard of 50 feet shall be required between residential uses or districts and industrial uses and districts. Level three screening (see Section 522.3-Screening) shall be required within the buffer yard.

4). A buffer yard of 25 feet shall be required between commercial uses or district and industrial uses or district. Level two screening (see Section 522.3-Screening) shall be required within the buffer yard.

5). A buffer yard of 50 feet shall be provided where residential uses or districts are adjacent to minor arterial streets; in this case Level one screening (see Section 522.3-Screening) shall be required. A buffer yard of 100 feet shall be provided where residential uses or districts are adjacent to interstate highways; in this case Level three screening (see Section 522.3-Screening) shall be required.

D. Parking lots shall not encroach into a buffer yard. Buffer yards shall not be used for parking.

E. A buffer yard shall not be required in front yards except as required in this Subsection C (5) of this section.

3. Screening.
Screening shall be provided as required. The purpose of screening is to provide an effective visual barrier and to protect property against traffic, trespass, noise, heat, glare, dust, unsightly or distracting activity, to preserve property values, and assure compatibility of uses.

A. The following list describes various levels of screening:

1). Level One

   This buffer shall contain screening materials which, at maturity, provide intermittent visual obstruction from the ground to a height of four feet as well as intermittent visual obstruction from a height of four feet to a height of 30 feet. Vegetative screening materials within intermittent visual obstruction areas shall contain horizontal openings no greater than 20 feet in width upon the plant's maturity. Grouping of plant materials is encouraged to achieve a more natural appearance.

   a). Evergreen trees: minimum five-foot planting height.
   b). Deciduous trees: minimum two-inch caliper and six-foot planting height.
   c). Shrubs: eighteen-inch planting height, reaching a minimum of 30 inches within two years. All shrubs (deciduous or evergreen) must have a minimum spread of 12 to 15 inches when planted.
   d). Minimum planting width: 10 feet.

2). Level Two

   This buffer shall contain screening materials which, at maturity, provide semi-opacity from the ground to a height of six feet and intermittent visual obstruction from a height of six feet to a height of 30 feet. Vegetative screening materials within intermittent visual obstruction areas shall contain horizontal openings no greater than 20 feet in width; and vegetative screening material within semi-opaque areas shall contain openings no greater than 15 feet in width upon the plant's maturity. Grouping of plant material is encouraged to achieve a more natural appearance.

   a). Evergreen trees: minimum five-foot planting height.
   b). Deciduous trees: minimum two-inch caliper and six-foot planting height.
c). Shrubs: minimum eighteen-inch planting height, reaching a minimum of 30 inches with two years. All shrubs (deciduous and evergreen) must have a minimum spread of 12 to 15 inches when planted.

d). Minimum planting width: 10 feet.

3) Level Three:

This buffer shall contain screening materials which, at maturity, provide opacity from the ground to a height of 30 feet. Vegetative screening materials within opaque areas shall contain no horizontal openings upon the plant's maturity. Trees within this buffer shall consist primarily of Eastern white pine and Norway spruce grouped to achieve a desired opacity. Screening shall consist of a combination, in longitudinal series, of at least two of the following options.

a) Option A: fence screen.
   i). Minimum six-foot-high freestanding/retaining wall or solid fence.
   ii). Evergreen trees: minimum five-foot tree planting height.
   iii). Minimum planting width: 12 feet.

b) Option B: evergreen tree screen.
   i). Evergreen trees: minimum eight-foot tree planting height.
   ii). Composition adequate to achieve a solid screen from zero to six feet in height two years after planting.
   iii). Minimum planting width: 12 feet.

c) Option C: berm screen.
   i). Berm: minimum six-foot height, and berm slopes 3:1 and less steep, and eight-foot minimum top width.
   ii). Lawn, groundcover, shrubs, and trees: minimum six-foot tree planting height and adequate to provide a continuous bed of vegetative groundcover over at least 95% of the berm area within two years of planting.

d). Option D: steep berm screen.
   i). Steep berm: minimum six-foot tree planting height, composed of lightly compacted soil with stability measures adequate to retain stable soil structure and prevent erosion, with slopes greater that 3:1 up to 2:1 maximum slope, and eight-foot minimum top width.
ii). Groundcover, shrubs and trees: adequate to achieve a continuous bed of vegetative cover over at least 95% of the berm within two years of planting, groundcover and shrubs to be chosen from the listing titled Vegetation Acceptable for Erosion Control, and composition adequate to achieve a solid screen from zero-foot to six-foot height two years after planting considering the expected plant size two years after planting.

B. Uses.
The following specific uses or features shall be screened with a Level Three screening from adjacent properties and from public view from a street:

1) Dumpster and trash-handling areas.
2) Loading docks or spaces.
3) Outdoor storage or any material stocks, or equipment, including but not limited to motor vehicles, farm or construction equipment or other similar items.
4) Rooftop equipment shall be visually screened with a wall, fence or permanent enclosure.
5) Service entrances and utility facilities.
6) Natural and/or man-made swales, basins, and stormwater management facilities.

C. Maintenance.
All required plantings shall comply with Section 522. All required fences or walls shall be permanently maintained in good condition and whenever necessary repaired and replaced.

5. Perimeter Landscaping

When a parking lot abuts a street, a landscaped strip shall be provided along the entire street line. This landscaping strip may be located within any other landscape strip required to be located along a street.

The following lists the required width of landscape strips:

<table>
<thead>
<tr>
<th>Number of Spaces in Parking lot including Joint use Facilities</th>
<th>Landscape Strip Width in Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Side and Rear Yard</td>
</tr>
<tr>
<td>Less than 100</td>
<td>10</td>
</tr>
<tr>
<td>100 to 250</td>
<td>10</td>
</tr>
<tr>
<td>Over 250</td>
<td>10</td>
</tr>
</tbody>
</table>
Vegetative ground cover alone is not sufficient to meet this requirement. A mixture of deciduous and evergreen trees, shrubs, or other approved material shall be provided. At least one (1) shade tree shall be provided for each seventy-five (75) linear feet of landscaping area. These trees shall have a clear trunk at least five (5) feet above finished-grade level.

List of plants provided by PA Natural Heritage Program is provided in Appendix-6

SECTION 522. PARK AND RECREATION

A Park and Recreation Report for residential development of fifty (50) or more unit shall be prepared. The report shall include the following minimum requirements.

1. Description of the total projected number of residents and their respective age group.

2. Description of existing public recreation facilities located within a one–half mile radius of the site.

3. Description of the adequacy of existing recreation facilities to serve the residents, taking into consideration current usage.

4. Discussion of potential for any recreation facilities to be provided by the developer to accommodate new residents and/or compensate for any anticipated deficiencies of the municipal recreation facilities.

5. Description of any recreation facilities to be provided by the developer.

6. Discussion on the relationship of the proposal to the prevailing Municipal Park and Recreation Study.

7. Description of responsibility for maintenance of any recreational facilities to be provided by the developer.

8. Description of accessibility of the proposed facilities to the general Municipal residents.

9. Description of any contributions in accordance with this ordinance that the developer plans to make for Municipal recreation to compensate for expected impact.

10. Source of standards used in the data presented.

The Park and Recreation Report shall be provided to the Planning Commission and Municipal Recreation Advisory Board/Parks and Recreation Board if any.
SECTION 523. CONTRIBUTION FOR RECREATION PURPOSES

1. It is the policy of the Municipality to provide recreational facilities for all the residents of the Municipality in accordance with the adopted Recreation Plan. Centralized facilities are preferred over local neighborhood facilities. New and additional facilities at the centralized location are required in direct proportion to increases in the population of the Municipality. Developers causing increases in the population of the Municipality by adding new residential dwelling units must share in the cost of providing additional recreation facilities.

2. The Municipality may require land to be dedicated, and if agreeable to the developer, require the construction of recreational facilities, or payment of a fee in-lieu thereof.

3. A contribution for recreational purposes shall be made at the rate set or amended by resolution of the (Name of Governing Body) from time to time, payable upon and as a condition of making application for a building permit pursuant to the ordinances of this Municipality.

4. The requirements of Section 524.3 shall be noted upon the Final Subdivision and Land Development Plan which notation shall be deemed not to constitute a lien or encumbrance on the title of the land.

5. All fees paid to the Municipality for this purpose shall be deposited in a capital reserve fund established as provided by law. Fees in such fund may be combined for investment purposes, if permitted by law, but shall be used only for the acquisition of land or capital improvements for open space, park and recreation purposes.

SECTION 524. TIME LIMITATIONS

All improvements shall be installed according to the time schedule which has been approved by the (Name of Governing Body).

SECTION 525. HISTORIC PRESERVATION

Measures to mitigate the impact of the proposed development upon archeological and historic resources, agreed to with the Pennsylvania Historic and Museum Commission, shall be reviewed by the Municipality during the planning process, shall meet the requirements of any Municipal Ordinance and shall be subject to review and approval by the (Name of Governing Body).

All applications involving structures involving structures or land that:

1. Are listed on the National Register of Historic Places.

2. Receive a determination of eligibility from the national Register from the National Park Service.
3. Are listed on the County Historical Society Register.

Shall be designed to preserve, adapt reuse, or otherwise provide for the historic features. Modifications and exterior alterations to historic features or sites, or new construction adjacent to historic features, shall be consistent with the Secretary of the Interior’s Standards for Rehabilitation of Historic Properties, as published by the National Park Services.

Subdivisions and land developments shall also be designed so that the new structures do not block historic views, or obstruct the view of the historic properties, and new construction shall be consistent with the Secretary of Interior’s Guidelines. If, because of size, construction material, or type of use a purposed subdivision or land development would jeopardize the historic value of a site or structure, such new construction shall be screened or otherwise visually buffered.

SECTION 526. IMPORTANT NATURAL HABITATS

All applications for lands that possess an important natural habitat, as defined herein, shall plot the location of the natural resources. Important natural habitat is defined as follows;

1. Wetlands, as defined by criteria of the U.S. Department of Interior, Fish and Wildlife Service; or

2. Pennsylvania Natural Diversity Inventory (PNDI) confirmed extant plant and animal species and communities that are listed as Pennsylvania Threatened or Pennsylvania Endangered; or,

3. PNDI-confirmed extant plant and animal species and communities with a State Rank of S1, S2 or S2.

SECTION 527. ARCHAEOLOGICAL RESOURCES

All applications involving lands identified on the Municipal Comprehensive Plan’s Natural and Cultural Features Map or by the Pennsylvania Historical and Museum Commission (PHMC) as containing a potential or known site of archaeological significance shall plot the location of the archaeological resource.

SECTION 528. TRAFFIC IMPACT STUDY

A Traffic Impact Study shall be performed for all developments that generate, individually or cumulatively, total traffic volumes of 800 or greater trips per day as determined by the trip generation rates published by the Institute of Traffic Engineers (ITE). (On state highways, PennDot criteria is 3000 ADT (1500 vehicles) or 100 directional peak hour trips.)

The traffic study shall be prepared by municipality or consulting transportation engineer selected by the municipality and the cost shall be reimbursed by the applicant.
In addition to the above, the (Name of Governing Body) may require a Traffic Impact Study when, in their opinion, the following conditions exist:

- Current traffic problems exist in the local area (e.g., high accident location, confusing intersection, congested intersection), or

- The capability of the existing road system to handle increased traffic is questionable.

A Traffic Impact Study shall conform to the following:

1. Area of Traffic Impact Study

   The Traffic Impact Study area shall be based on the characteristics of the surrounding area. The intersections to be included in the Study shall be adjacent to the site or have direct impact upon the access to the site, including corridor considerations. The intersections shall be mutually agreed upon by the Municipal Engineer and the traffic engineer preparing the Study. The (Name of Governing Body) shall resolve any dispute between the Municipal Engineer and the traffic engineer.

2. Preparation by Transportation Engineer Required.

   Traffic impact studies shall be prepared under the supervision of qualified and experienced transportation engineers with specific training in traffic and transportation engineering, and at least two (2) years experience related to preparing traffic studies for existing or proposed developments.

3. Horizon Year.

   The traffic forecasts shall be prepared for the anticipated opening year of the development, assuming full buildout and occupancy. This year shall be referred to as the horizon year in the ordinance.


   Estimates of non-site traffic shall be made, and will consist of through traffic and traffic generated by all other developments within the study area for which preliminary or final plans have been approved. Non-site traffic may be estimated using any one of the following three methods: “Build-up” technique, area transportation plan data or modeled volumes, and trends or growth rates.

5. Trip Generation Rates Required.
The Traffic Impact Study report shall include a table showing the categories and quantities of land uses, with the corresponding trip generation rates or equations (with justification for selection of one or the other), and resulting number of trips. The trip generation rate used must be either from the latest edition of Trip Generation by ITE, or from a local study of corresponding land uses and quantities. All sources must be referenced in the Study.

6. Consideration of Pass-By Trips.

If pass-by trips, including goods movement, or shared trips are a major consideration for the land use in question, studies and interviews at similar land uses must be conducted or referenced.

7. Rate Sums.

Any significant difference between the sums of single-use rates and proposed mixed-use estimates must be justified in the Study report.

8. Explanations Required.

The reasoning and data used in developing a trip generation rate for special/unusual generators must be justified and explained in the report.

9. Definition of Influence Area.

Prior to trip distribution of site-generated trips, an influence area must be defined which contains eighty percent (80%) or more of the trip ends that will be attracted to the development. A market study can be used to establish the limits of an Influence area, if available. If no market study is available, an influence area should be estimated based on a reasonable documented estimate. The influence area can also be based on a reasonable convenient travel time to the site, or delineating area boundaries based on locations of competing developments and industrial or commercial operations.

Other methods, such as using trip data from an existing development with similar characteristics or using an existing origin-destination survey of trips within the area can be used in place of the influence area to delineate the boundaries of the impact.

10. Estimates of Trip Distribution Required.

Trip distribution can be estimated using any one of the following three methods:

A. Analogy
B. Trip distribution model
C. Surrogate data
Whichever method is used, trip distribution must be estimated and analyzed for the horizon year. A multi-use development may require more than one distribution and coinciding assignment for each phase (for example, residential and retail phases on the same site). Consideration must also be given to whether inbound and outbound trips will have similar distribution.

11. Trip Assignments.

Assignments must be made considering logical routings, available roadway capacities, left turns at critical intersections and projected (and perceived) minimum travel times. In addition, multiple paths should often be assigned between origins and destinations to achieve realistic estimates, rather than assigning all of the trips to the route with the shortest travel time. The assignments must be carried through the external site access points and in large projects (those producing five hundred (500) or more additional peak direction trips to or from the site during the development’s peak hour) through the internal roadways. When the site has more than one access driveway, logical routing and possibly multiple paths should be used to obtain realistic driveway volumes. The assignment should reflect conditions at the time of the analysis. Assignments can be accomplished either manually or with applicable computer models.

If a thorough analysis is required to account for pass-by trips, the following procedures should be used:

A. Determine the percentage of pass-by trips in the total trips generated.
B. Estimate a trip distribution for the pass-by trips.
C. Perform two separate trip assignments, based on the new and pass-by trip distributions.
D. Combine the pass-by and new trip assignment.

Upon completion of the initial site traffic assignment, the results should be reviewed to see if the volumes appear logical given characteristics of the road system and trip distribution. Adjustments should be made if the initial results do not appear to be logical or reasonable.

12. Total Traffic Impacts.

Traffic estimates for any site with current traffic activity must reflect not only new traffic associated with the site's development, but also the trips subtracted from the traffic stream because of the removal of a land use. The Traffic Impact Study should clearly depict the total traffic estimate and its components.

Capacity analysis must be performed at each of the major street and project site access intersection locations (signalized and unsignalized) within the Study area. In addition, analyses must be completed for roadway segments deemed sensitive to site traffic within the Study area. These may include such segments as weaving sections, ramps, internal site roadways, parking facility access points, and reservoirs for vehicles queuing off site and on site. Other locations may be deemed appropriate depending on the situation.

The recommended level of service analysis procedures detailed in the most recent edition of the Highway Capacity Manual must be followed. The Municipality considers the overall level of service ratings A, B, and C to be acceptable for signalized intersection; level of service D, E or F are considered to be unacceptable. (On state highway, PennDot criteria is D or above as acceptable in Urban areas, and C or above in Rural areas).

The operational analyses in the Highway Capacity Manual should be used for analyzing existing traffic impacts, access requirements or other future conditions for which traffic, geometric, and control parameters can be established.

14. Required Levels of Service.

The Traffic Impact Study shall identify the improvements necessary to meet the goals of the Study. The applicant shall be responsible for the improvements required to meet goals of the Traffic Impact Study. The off-site improvements are required if the Municipality has a traffic impact ordinance. The goals of the Traffic impact Study are to:

A. Provide safe and efficient movement of traffic within the site and on surrounding roads,
B. Minimize the impact of the project upon non-site trips,
C. Not allow the levels of service at intersections currently rated A or B to be worse than C, and,
D. Not reduce the current levels of service at intersections with ratings of C or lower

15. Documentation Required.

A Traffic Impact Study report shall be prepared to document the purpose, procedures, findings, conclusions and recommendations of the Study.

A. The documentation for a Traffic Impact Study shall include, at a minimum:

1). Study purpose and objectives.
2). Description of the site and study area.
3). Existing conditions in the area of the development.

4). Recorded or approved nearby development.

5). Trip generation, trip distribution and modal split (passenger and goods movement)

6). Projected future traffic volumes.

7). An assessment of the change in roadway operating conditions resulting from the development traffic.

8). Recommendation for site access and transportation improvements needed to maintain traffic flow to, from, within, and past the site at an acceptable and safe level of service.

B. The analysis shall be presented in a straightforward and logical sequence. It shall lead the reader step-by-step through the various stages of the process and resulting conclusions and recommendations.

C. The recommendations shall specify the time period within which the improvements should be made (particularly if the improvements are associated with various phases of the development construction), and any monitoring of operating conditions and improvements that may be required.

D. Data shall be presented in tables, graphs, maps, and diagrams wherever possible for clarity and ease of review.

E. To facilitate examination by the Planning Commission and the Governing Body, an executive summary of one or two pages shall be provided, concisely summarizing the purpose, conclusions and recommendations.

F. The report documentation outlined above provides a framework for site traffic access/impact study reports. Some studies will be easily documented using this outline. However, the specific issues to be addressed, local study requirements, and the Study results may warrant additional sections.
EXHIBIT 5-1

HIGHWAY ACCESS MANAGEMENT OVERLAY STANDARDS

Tier I - Access Management Techniques for Individual Parcels

1. Driveways

   A. Number of Driveways

      1). Only one access shall be permitted for a property. (On state highway, PennDot criteria are: 1 driveway for residential and 2 driveways for commercial. If the property has over 600 linear feet of frontage, an additional driveway may be considered).

      2). An additional access or accesses shall be permitted if the applicant demonstrates that an additional access or additional accesses are necessary to accommodate traffic to and from the site and it can be achieved in a safe and efficient manner.

      3). Access shall be restricted to right turn only ingress and egress or to another state maintained road or local road if safe and efficient movements cannot be accommodated.

      4). For a property that abuts two or more roadways, access shall be restricted to only that roadway which can more safely and efficiently accommodate traffic.

      5). If a property is proposed to be subdivided and that subdivision may result in an unacceptable number or arrangement of driveways, or both, the property owner shall be required to enter into an access covenant to restrict future access.

   B. Corner Clearance

      1). Corner clearance shall meet the following driveway spacing standards for arterial and major collector roads:

          a). Principal arterial: 600 feet
          b). Minor arterial: 400 feet
          c). Major Collector: 200 feet

      2). Access shall be provided to the roadway where corner clearance requirements can be achieved.
3) If the minimum driveway spacing standards cannot be achieved due to constraints, the following shall apply in all cases:

   a) There shall be a minimum ten foot tangent distance between the end of the intersecting roadway radius and the beginning radius of a permitted driveway.

   b) The distance from the nearest edge of cartway of an intersecting roadway to the beginning radius of a permitted driveway shall be a minimum of 30 feet.

3. If no other reasonable access to the property is available, and no reasonable alternative is identified, the driveway shall be located the farthest possible distance from the intersecting roadway. In such cases, directional connections (i.e., right in/right out only, right in only or right out only) may be required.

4. Restrictions at the driveway shall be required if the municipal engineer determines that the location of the driveway and particular ingress or egress movements will create safety or operational problems.

Upstream Corner Clearance

C. Safe Sight Distance

   1). Safe sight distance shall be available for all permitted turning movements at all driveway intersections.

   2) PennDOT’s Pub. 441 and Pub. 282 for driveways or Pub. 70 for local roads shall be referenced to determine minimum driveway and roadway intersection safe sight distance requirements.

   3) All driveways and intersecting roadways shall be designed and located so that the sight distance is optimized to the degree possible without jeopardizing other requirements such as intersection spacing,
including turning radii, and at least minimum sight distance requirements are met.

**D. Driveway Channelization**

1). For high and medium volume driveways, channelization islands and medians shall be used to separate conflicting traffic movements into specified lanes to facilitate orderly movements for vehicles and pedestrians.

2). Where it is found to be necessary to restrict particular turning
movements at a driveway, due to the potential disruption to the orderly flow of traffic or a result of sight distance constraints, a raised channelization island may be required.

3). Raised channelization islands shall be designed to prevent unwanted movements using criteria consistent with the latest AASHTO publication entitled *A Policy on Geometric Design of Highways and Streets*.

4). Unwanted movements should be defined so as not to prohibit or inhibit industrial and commercial vehicle movements and operations.

E. Joint and Cross Access

1). A joint driveway may be required in order to achieve the following driveway spacing standards that are desirable for arterial and major collector roads:

   a). Principal arterial: 600 feet

   b). Minor arterial: 400 feet

   c). Major Collector: 200 feet

2). Adjacent non-residential properties shall provide a joint or cross access driveway to allow circulation between sites wherever feasible along roadways classified as major collectors or arterials in accord with the functional classification contained in the Comprehensive Plan. The following shall apply to joint and cross access driveways:

   a). The driveway shall have a design speed of 10 mph and have sufficient width to accommodate two-way traffic including the largest vehicle expected to access the properties.

   b). A circulation plan that may include coordinated or shared parking shall be required.

   c). Features shall be included in the design to make it visually obvious that abutting properties are tied in to provide cross access.

3). The property owners along a joint or cross access driveway shall:
a). Record an easement with the deed allowing cross access to and from other properties served by the driveway.

b). Record an agreement with the Municipality guaranteeing that future access rights along the driveway will be granted at the direction of the Municipality with the design approved by the Municipal engineer.

c). Record a joint agreement with the deed defining the maintenance responsibilities of each of the property owners located along the driveway.

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**Joint Driveways and Cross Access**

**F. Access to Out Parcels**

1). For industrial, commercial and office developments under the same ownership and consolidated for the purposes of development or phased developments comprised of more than one building site, the municipality shall require that the development be served by an internal road that is separated from the main roadway.

2). All access to outparcels shall be internalized using the internal roadway.

3). The driveways for outparcels shall be designed to allow safe and efficient ingress and egress movements from the internal road.
4). The internal circulation roads shall be designed to avoid excessive queuing across parking aisles.

5). The design of the internal road shall be in accordance with the Subdivision and Land Development Ordinance.

6). All necessary easements and agreements required under Section 1.F.3) shall be met.

7). The Municipality may require an access covenant to restrict an outparcel to internal access only.

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2. Driveway Design Elements

A. Driveway Throat Length

1). For minimum use driveways, the throat length shall be a minimum of 25 feet.

2). For low volume driveways, the throat length shall be a minimum of 50 feet or as determined by queuing analysis.

3). For medium volume driveways, the throat length shall be a minimum of 120 feet or as determined by a queuing analysis.

4). For high volume driveways, the throat length shall be a minimum of 150 feet or as determined by a queuing analysis provided by the applicant and reviewed by the Municipality.
B. Driveway Throat Width

1). For driveways without curb:

a). A minimum use driveway shall have a minimum width of ten (10) feet.

b). Low and medium volume driveways shall have a minimum width of ten feet for one-way operation and a minimum width of twenty (20) feet for two-way operation.

c). The design of high volume driveways shall be based on analyses to determine the number of required lanes.
d). In addition to volume, the vehicle size should also be considered

2). For driveways with curb, two (2) feet should be added to the widths contained in Section B.1).a) and B.1).b) above.

3). The Municipality may require additional driveway width to provide turning lanes for adequate traffic flow and safety.

4). The Municipality may require that the driveway design include a median to control turning movements. Where medians are required or permitted, the minimum width of the median shall be four feet to provide adequate clearance for signs.

C. Driveway Radius

1). The following criteria shall apply to driveway radii:

a). For minimum use driveways, the radii shall be a minimum of 15 feet.

b). For low volume driveways, the radii shall be a minimum of 25 feet curbed.

c). For medium volume driveways, the radii shall be a minimum of 25 feet curbed.

d). For high volume driveways, the design should be reviewed by the Municipal engineer on Township roadways and PennDOT on state maintained roadways.

2). For all driveways, the radii shall be designed to accommodate the largest vehicle expected to frequently use the driveway.

3). Except for joint driveways, no portion of a driveway radius may be located on or along the frontage of an adjacent property.

D. Driveway Profile

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

a). Shoulder slopes vary from four percent to six percent. When shoulders are present, the existing shoulder slope shall be maintained across the full shoulder
width.

b). The change in grade between the cross slope of the connecting roadway or shoulder and the driveway shall not exceed eight percent.

c). The driveway grade shall not exceed eight percent within ten feet of the edge of travel lane for minimum use driveways and within 40 feet for low, medium and high volume driveways.

d). A 40-foot minimum vertical curve should be used for a high volume driveway.

2). Driveway grade requirements where curbs and sidewalks are present:

a). The difference between the cross slope of the roadway and the grade of the driveway apron may not exceed eight percent.

b). The driveway grade shall not exceed eight percent within ten feet of the edge of travel lane for minimum use driveways and within 40 feet for low, medium and high volume driveways.

c). If a planted area exists between the sidewalk and curb, the following shall apply:

(1). The grade of the planted area shall not exceed eight percent.

(2). If the driveway grade would exceed eight percent in the area between the curb and the sidewalk, the outer edge (street side) of the sidewalk may be depressed to enable the driveway grade to stay within eight percent. A maximum sidewalk cross slope of eight percent must be maintained.

(3). If the sidewalk cross slope exceeds two percent, the entire sidewalk may be depressed. The longitudinal grade of the sidewalk may not exceed six percent.

(4). Although site conditions may not allow strict adherence to these guidelines in this ordinance,
every effort should be made to design and construct the safest and most efficient access onto the township or state roadway.

Driveway Profile
1. Auxiliary Lanes

Auxiliary lanes separate turning vehicles from through traffic, thus they increase capacity and improve operations at intersections. They reduce the potential for rear-end crashes and interference or disruption of the flow of through traffic.

A. Right Turn Lane/Deceleration Lane

1). Unsignalized intersections.

a). A right turn lane shall be considered on the major road (not stop controlled) at an unsignalized intersection when any one or a combination of the following conditions exists:

   (1). Forty or more right turns in the peak hour.

   (2). 3% or more downgrade with 20 or more right turns in the peak hour.

   (3). 85th percentile speed in excess of 40 mph.

   (4). High average daily traffic on the through road (5000 vpd or more).

b). A right turn lane shall be required on the minor road or driveway (stop controlled) approach if a capacity analysis shows an unacceptable LOS for the approach, and the installation of a right turn lane will improve operations.

2). Signalized intersections.

a). A right turn lane shall be required when a capacity analysis shows unacceptable LOS, and the operation of the intersection can be improved by the installation of one or more right turn lanes. Level of Service F shall be considered unacceptable in the overlay district.

3). Design Criteria

a). The desirable width for a right turn lane is 14 feet with curb and 12 feet without curb. The minimum width of
right turn lanes shall be 13 feet with curb and 11 feet without curb. If not curbed, shoulders shall be designed in accordance with PennDOT 3R criteria found in PennDOT Publication 13M: Design Manual Part II.

b). The required lengths of right turn lanes shall consider the following components as may be applicable:

(1). Storage bay length:

(a). Shall accommodate the 95th percentile queue length for signalized intersections.

(b). The stop controlled approach of an unsignalized intersection, shall accommodate the number of turning vehicles likely to arrive in an average two minute period during the peak hour.

(2). Deceleration distance in accordance with AASHTO publication A Policy on Geometric Design of Highways and Streets.

(3). Taper length in accordance with AASHTO publication A Policy on Geometric Design of Highways and Streets.

(4). The right turn or deceleration lane shall be designed based on an analysis that projects traffic volumes for a ten year period from the anticipated opening of the proposed development.

(5). The 85th percentile speed shall be used for the retrofit of existing deceleration or right turn lanes. The design speed of the roadway shall be used for the design of auxiliary lanes for new roads.

B. Left Turn Lane

1). Unsignalized Intersections.

a). For the major street, Highway Research Record 211 (HRR 211) provides warrants for requiring a left turn lane.
b). A left turn lane shall be required when the appropriate HRR 211 nomograph indicates that the warrant for a 100 foot long left turn lane is met for the anticipated completion date of the development.

c). A left turn lane shall be required if the visibility of the rear of a vehicle stopped to turn left into the proposed access does not meet minimum stopping sight distance requirements and no alternative is available.

2). Signalized Intersections.

a). A left turn lane shall be required when a capacity analysis indicates that the operation of an intersection, approach, or movement will operate at unacceptable levels of service and the operation of the intersection, approach, or movement can be improved with the installation of one or more left turn lanes. Level of Service F shall be considered unacceptable in the overlay district.

3). Design Criteria

a). The desirable width for left turn lanes is 12 feet. The minimum width shall be 10 feet, unless the percent of trucks using the lane will exceed 5%, then 11 feet shall be the minimum width.

b). The length of a left turn lane shall consider the following components as may be applicable:

(1). Storage bay length.

   (a). Shall accommodate the 95th percentile queue length for signalized intersections.

   (b). Shall be determined from the appropriate nomograph in HRR 211 for the uncontrolled approach of an unsignalized intersection.

(2). Deceleration length in accordance with AASHTO publication A Policy on Geometric Design of Highways and Streets.

(3). Taper length in accordance with AASHTO
publication A Policy on Geometric Design of Highways and Streets.

L1 = lane shift taper length,
L2 = taper length,
L3 = full-width segment length, and
L4 = turn bay length (L2 + L3).

**Isolated Left-turn Lane Length**

C. Acceleration Lane

1). May be required on arterial highways where operating speeds are in excess of 40 mph and where access points are located a sufficient distance apart to permit the installation of acceleration lanes.

2). The design length and width shall follow criteria found in the latest edition of A Policy on Geometric Design of Highways and Streets and shall conform to PennDOT requirements on State maintained highways.

D. Driveway Spacing Requirements

1). Driveway Spacing

   a). Driveway spacing is measured from the end of one driveway radius to the beginning of the next driveway radius.

   b). The following driveway spacing standards are required for arterial highways and major collector roads:

   (1). Principal arterial: 600 feet
(2). Minor arterial: 400 feet

(3). Major Collector: 200 feet

c). Driveways shall be aligned with other driveways and roadways on the opposite side of the intersecting roadway on arterials and major collector roads in order to meet spacing requirements.

d). If these driveway spacing standards cannot be met, a system of joint or cross access driveways, frontage roads or service roads may be required.

2). Signalized Intersection Spacing

a). Uncoordinated traffic signals shall be located a distance from adjacent signalized intersections as established by PennDOT.

b). The progression speed shall be determined by the municipal engineer and PennDOT.

c). Warrants for the signalization of an intersection must be met and may be found in the Manual on Uniform Traffic Control Devices (MUTCD).

d). If a driveway or local road requires signalization and will be located within an existing coordinated traffic signal system, the traffic signal must be incorporated in the system.

3). Driveway Clearance from Interchange Ramps

a). A driveway shall not be permitted on or within an interchange ramp.

b). A driveway shall not be permitted within 300 feet from either the end of a ramp radius or the intersecting edge of the pavement of the ramp speed change lane to the beginning of the access radius.
EXHIBIT 5-2

CLEAR-SIGHT TRIANGLES

A

B

C

D
SECTION 529. EROSION AND SEDIMENTATION AND STORMWATER MANAGEMENT

Special precautions must be made with regards to erosion/sedimentation control and stormwater management which are related to subdivision and land development and construction activities. This Section outlines reasonable standards for erosion and sedimentation control and stormwater management in order to: (1) promote the general health, welfare and safety of residents in Municipality; (2) regulate the modification of the natural terrain and alteration of existing drainage from new subdivision and land developments in order to control erosion and sedimentation from soils, minimize the effect of pollution, and preserve stream channels; (3) provide design, construction and maintenance criteria for permanent on-site stormwater management facilities for the purpose of controlling stormwater, erosion and sedimentation pollution; (4) encourage recharge of groundwater and the preservation and restoration of the flood carrying capacity of streams; (5) and provide for the proper installation and maintenance of stormwater management facilities. This article does not imply that areas within or outside any identified flood-prone areas shall be free from flooding or flood damage.

1. Erosion and Sedimentation Control Plan

A. General Requirements and Standards.

1). In conjunction with the submission of a subdivision or land development plan and for any activities involving earth disturbance of more than 5,000 square feet, an Erosion and Sedimentation Control (E&S) Plan must be submitted to the County Conservation District for their approval in accordance with the requirements of the "Rules and Regulations", Chapter 102, EROSION CONTROL authorized under P. L. 1987, June 22, 1987. A copy of the E&S Plan must be provided to the Municipality.

Subsequently, an approved Erosion and Sedimentation Control Plan, together with a letter from the County Conservation District indicating whether a National Pollutant Discharge Elimination System (NPDES) Permit from the Department of Environmental Protection for earthmoving activity is required, must be provided to the Municipality.

2). The applicant shall be responsible to prepare and forward all applicable erosion and sedimentation control plan information and other data to the appropriate County and State Agencies.

3). The Municipality shall not issue a building permit to those engaged in earth moving activities requiring a Department of Environmental Protection permit or other NPDES Permits, until the Department has reviewed and issued any applicable
permit.

4). Maintenance of Erosion and Sediment Control Measures is required by the applicant/developer. The County Conservation District and the Municipality, as authorized by the Municipalities Planning Code, reserve the right to inspect these measures at any time before the Building Occupancy permit is issued and may issue a Notice of Violation if the installed measures are found to be in significant non-compliance. Said Notice will list the specific type, location and scope of each Violation, and a period of time during which the person(s) responsible for the earth-moving activity must correct the violations. Failure to comply with the Notice or multiple Violations may result in a Cease and Desist order issued by the Municipality to prevent or restrain building, construction or conduct of business, and to correct or abate accelerated erosion and sediment pollution to Waters of the Commonwealth.

5). Earth disturbance activities other than those necessary for preparation of sites for building foundations, stormwater and sediment control devices and on-site sewage disposal systems, should be minimized between October 15 and February 15 of the succeeding year.

6). In the preparation of Erosion and Sedimentation Control Plans the person preparing such plans shall consult with the County Conservation District to determine the measures needed to control erosion and sedimentation pollution. The "Erosion and Sediment Pollution Control Program Manual," prepared by the Pennsylvania Department of Environmental Protection in accordance with Chapter 102 shall be used in the preparation of such plans. Copies are available in the County Conservation District office.


A. A Stormwater Management Plan shall be submitted when any person, partnership, business or corporation shall undertake any of the following activities and in no case will these activities be undertaken without written approval from Township/Borough:

1). Subdivision and Land Development;

2). Earth disturbing activity involving 5,000 square feet or more, except agricultural activity, provided such activity conforms to USDA Natural Resource Conservation Service guidelines;
3). Diversion or piping of any natural or manmade stream channel;

4). Installation of stormwater systems or appurtenances thereto;

5). Movement or alteration to an existing stormwater management system, included but not limited to, pipes, swales, basins, infiltration trenches, etc;

6). Placement of fill, structures or pipes in the floodplain as designated on the official flood plain map, and as may be documented by other pertinent sources of flood plain information used by the Municipality;

7). Installation of impervious cover totaling 5,000 square feet or more on a single lot, or two or more lots when proposed as part of an overall plan.

8). In accordance with Article 9, Modifications of Requirements, the Township/Borough may waive the requirements of this Section in favor of the following:

   a). Whenever any activity set forth in this Section is determined by the Municipal Engineer not to require retention or detention of stormwater runoff and direct discharge of stormwater runoff is approved by the Governing Body, the owner/developer shall be required to determine the impact of said direct discharge on all downstream drainage facilities and property as identified by the Municipal Engineer and shall submit, with the Preliminary and Final Plans, a report of the study of the impacts on downstream facilities and property.

   b). If direct discharge of stormwater is approved, then the owner/developer shall make a contribution for downstream improvements to drainage facilities at the rate of $100.00 per lot, whether residential or commercial/industrial, or the amount as amended by resolution of the Governing Body, payable upon and as condition of making application for a building permit pursuant to the ordinances of the Municipality.

   c). When direct discharge is approved, the Final Plan shall bear a note for the direct discharge fee.
B. Content of the Stormwater Management Plan

The stormwater management plan shall be submitted in mapped tabular and digital form in accordance with the standards contained in Exhibits 5-3 through 5-6 and shall identify all proposed stormwater management facilities and supportive information outlined in this Section. In addition Act 167 Stormwater Management Plans governing in watershed that are enacted provide standards in these plans. Stormwater management data shall be prepared by a professional engineer or landscape architect registered in the Commonwealth of Pennsylvania to perform such duties. A certificate of accuracy must accompany stormwater management plans, and a signature and seal of the engineer or landscape architect responsible must appear on the plan. For subdivision and land development activities, the Stormwater Management Plan shall be included as part of the subdivision and land development plan submission(s) to the Municipality and shall include the following items:

1). A general statement describing the project, the date the project is expected to begin and end, a description of existing and proposed conditions; ownership and maintenance of facilities, and conclusions. Conclusions shall include a comparison of existing and proposed peak rates of runoff at all points where runoff leaves the applicant’s property;

2). A 7 1/2 minute USGS topographic map, or equivalent, illustrating the project location and its total watershed(s), and additional maps as necessary, to clearly indicate the delineation of all drainage areas, both on site and off site, used in all computations for all drainage and stormwater management facilities;

3). Existing and finished contours, two (2) foot intervals, except in areas where slope is greater than twenty (20) percent, in which case the contour interval shall be five (5) feet;

4). Aerial extent of the project soils from Perry/Cumberland Soil Survey with annotations for erodeable soils, hydric soils, and soils with hydric inclusions;

5). Boundary lines of the project area;

6). Existing drainage on project and adjoining properties such as floodplain, wetlands, streams, lakes, ponds and easements;
7). All calculations, assumptions, criteria, and references used in the design of the stormwater management facilities, the establishment of existing facilities capacities, and the pre- and post-development discharges;

8). All plans and profiles of the proposed stormwater management facilities, including horizontal and vertical location, size and type of material;

9). For all basins, a plotting or tabulation of the storage volumes and discharge curves with corresponding water surface elevations, inflow hydrographs, and outflow hydrographs, including all assumptions and calculation methodologies;

10). The guidelines for lot grading within the subdivision. This information shall identify the direction of stormwater runoff flow within each lot and the areas where stormwater runoff flows will be concentrated. This information shall be shown by topographical data including contours and spot elevations. Plans which assume future transfer of lot ownership shall show individual lot grading which maintains the proposed stormwater management plan, or a phasing plan shall be submitted with separate calculations which address interim stormwater management.

11). When stormwater management plans are for a portion of a larger project or include offsite flows through the subject property, a generalized stormwater management plan for the entire project shall be included in the Plan. This generalized plan shall demonstrate how the stormwater for the proposed section will relate to the entire development. If temporary facilities are required for construction of a section, such facilities shall be included in the submitted plans. In the event temporary measures cannot adequately handle the stormwater runoff, the main outfall shall be included as part of the construction of the proposed sections and detailed information regarding these facilities shall be included with the plan.

C. General Design Guidelines for Stormwater Management Facilities

1). The following design guidelines are presented as the minimum acceptable standards available at the time this Ordinance was adopted. New and innovative procedures are encouraged and shall be permitted on a case by case basis as approved by the Municipal Engineer or as outlined in local stormwater ordinance. Future stormwater ordinances, whether stand-alone or amended to the SALDO, shall be consistent with the
applicable county, state and/or federal watershed management plan(s).

a). In the interest of (1) reducing the total area of impervious surface; (2) preserving existing features which are critical to stormwater management; and (3) reducing the concentration of stormwater flow, the designer should consider the best utilization of land for the least disturbance of natural features, resources and terrain.

b). Existing on-site natural and manmade stormwater management facilities shall be utilized when and where possible.

c). Stormwater shall not be transferred from one watershed to another, unless (1) the watersheds are sub-watersheds of a common watershed which join together within the perimeter of the property; (2) the effect of the transfer does not alter the peak discharge onto adjacent lands; or (3) easements from the affected landowner are provided.

d). Consideration shall be given to the relationship of the subject property to the drainage pattern of the watershed. A concentrated discharge of stormwater to an adjacent property shall be within an existing watercourse or enclosed in an easement or returned to a pre-development condition.

e). Innovative stormwater best management practices (BMPs) and recharge facilities may be proposed (e.g., rooftop storage, drywells, cisterns, recreation area ponding, diversion structures, porous pavements, holding tanks, infiltration systems, stream channel storage, in-line storage in storm sewers, and grading patterns). They shall be located, designed, and constructed in accordance with the latest technical guidance published by the Pennsylvania Department of Environmental Protection provided they are accompanied by detailed engineering plans and performance capabilities and supporting site specific soils, geology, runoff and groundwater and infiltration rate data to verify proposed designs. Additional guidance from other sources may be accepted at the discretion of the Municipal Engineer (a pre-application meeting is suggested).
f). Infiltration/groundwater recharge stormwater management facilities shall be located, designed, and constructed in accordance with the Pennsylvania Department of Environmental Protection’s NPDES Permit, Post Construction Stormwater Management (PCSM) guidelines for stormwater discharges associated with construction activities, and standards and specifications for infiltration practices detailed in publications on file with the Municipal Engineer.

g). Infiltration Guidelines and Criteria:

Land development in which impervious cover of natural ground is increased shall provide facilities to minimize the total increase in stormwater runoff to that which would have occurred from the land prior to development. A Post-Construction Stormwater Management Plan (PCSM) shall be designed to control stormwater resulting from the 2-year – 24-hour frequency storm through activities that retain site soil permeability, maintain or restore the site’s vegetative cover, maintain or replicate the original contours, and do not result in direct stormwater discharges to surface waters and allow sites to maintain their natural ability to control runoff volume and velocity, infiltrate stormwater, filter sediments and pollutants, and recycle nutrients.

Stormwater Best Management Practice (BMP) Facilities which provide for percolation and/or storage of water, including: cisterns, French drains, seepage pits, and seepage terraces shall be provided to limit site runoff increases in those areas where soils and water table conditions permit, as determined by soils analysis.

On wooded lots, future runoff increases shall be limited through notes or graphics on approved land development plans prescribing “minimum disturbance/minimum maintenance” areas where special care is taken to preserve existing site vegetation through careful control of the envelope of disturbance during proposed new construction.

Vegetated berms or other approved runoff trapping devices such as cisterns may be used in lieu of or in
conjunction with infiltration facilities where site conditions limit the use of infiltration techniques.

Measures may be imposed to protect against ground or surface water pollution where the type of business or the nature of the soils underlying a runoff structure would constitute a substantial risk of contamination. These measures shall be outlined in a Pollution Prevention Contingency (PPC) plan prepared under the NPDES permit requirements for Post-Construction Stormwater Management (PCSM) plan.

D. Drainage Design and Construction Standards

1). Peak Flow

Stormwater management facilities shall be designed so that the peak discharge of calculated post-development runoff to an adjacent property does not exceed the peak discharge of the calculated pre-development runoff for the required storm frequencies at any point on the perimeter of the land being develop. The design plan and construction schedule must incorporate measures to minimize soil erosion and sedimentation pollution. Because it is not economically sound to provide facilities that can manage the greatest storm on record unless danger to life may be involved, property may be destroyed, or traffic flow on main highways may be interrupted, the runoff calculations for the post-development and pre-development comparison shall use two and one third (2.33), five (5), ten (10), twenty-five (25), fifty (50) and one hundred (100) year frequency storm events unless, as stated above, danger to life, property, or traffic may be involved.

In these cases, the Municipality may require the comparison, design, and storage of a greater storm event and/or the comparison of a greater post development storm event with a smaller pre-development storm event. In all cases undeveloped land within the project shall be considered good sod surface or natural forest, whichever best describes the pre-development condition.

Runoff coefficient for post development condition shall be based on the land uses listed in Exhibit 5-3.

In cases where impervious cover exists, the Municipal Engineer, at the request of the Governing Body, will determine the characteristics of the pre-developed site for
appraising stormwater management requirements.

2). System Design

a). The design of stormwater management facilities (i.e. grass waterways, open channels, swales, ditches, etc.) and all other water carrying facilities shall be based upon a post ten (10) year frequency storm event.

b). The design of pipes and inlets and their appurtenances shall be based on a post twenty-five (25) year storm event.

c) Stormwater management facilities that convey off-site stormwater through the site shall be designed to convey a post development fifty (50) year frequency storm event.

d). Stormwater management designs must include provisions that allow for the overload conveyance of the post development one-hundred (100) year frequency storm event to flow through the site without damage to any public or private property.

3). Rain Fall

Runoff calculations for the purposes of developing hydrographs shall be based on the Natural Resources Conservation Service Soil-Cover-Complex Method. The Rational Formula of Q=CIA shall be used for all conveyance calculations.

When the Soil-Cover-Complex Method is used, stormwater runoff calculations shall be based on the following 24-hour events:

<table>
<thead>
<tr>
<th>Storm Event</th>
<th>Inches of Rainfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years</td>
<td>2.69</td>
</tr>
<tr>
<td>5 years</td>
<td>3.58</td>
</tr>
<tr>
<td>10 years</td>
<td>4.27</td>
</tr>
<tr>
<td>25 years</td>
<td>5.33</td>
</tr>
<tr>
<td>50 years</td>
<td>6.28</td>
</tr>
<tr>
<td>100 years</td>
<td>7.38</td>
</tr>
</tbody>
</table>

When the Rational Method is used, appropriate values of rainfall intensity shall be from the latest edition of the Commonwealth of Pennsylvania, Department of Transportation Design Manual, Part 2, Highway Design, and Chapter 10 (Exhibit 5-4).

4). Time of Concentration

Times of concentration shall be based on NRCS Segmental Methodology utilizing the following design parameters:

a). Overland Flow

The maximum length for each reach of overland flow before concentrated swale flow develops is three hundred (300) feet, one hundred (100) feet for sheet flow and two hundred (200) feet for shallow concentrated flow. The appropriate value of Manning’s “n” factor for the given conditions shall be used for determining the times of concentration.

b). Concentrated Flows

At points where overland flows concentrate in field depressions, swales, gutters, curbs, or pipe collection systems, the time of concentration between these design points shall be based on the Manning Equation and/or acceptable engineering design standards as approved by the Municipal Engineer.

5). Any proposed direct stormwater discharge at the perimeter of the site shall not be beyond the capacity of any existing, immediately contiguous, stormwater management facility into which the discharge flows, regardless of pre-existing conditions.

6). Natural drainage ways shall be utilized to the maximum extent possible in carrying stormwater runoff, provided such use remains consistent with the purpose of this Article.

7). Detention and Retention Basins

a). Basins shall be designed to safely pass the peak discharge of a post-development one-hundred (100) year frequency storm event through an emergency spillway with one foot of freeboard between the maximum pool elevation and the top of the facility
assuming that the outlet structure is 100% clogged. The spillway shall be no more than fifty (50) feet wide and shall be located in undisturbed material and clearly located on the plan. All outlets shall be combined in a manner which will not damage the integrity of the basin or the downstream drainage area.

b). Retention basins and/or detention basins, and water carrying facilities shall be stabilized promptly in accordance with current Soil Conservation Service practices.

c). Retention basins and/or detention basins shall be designed and maintained to insure the design capacity after sedimentation has taken place.

d). Basins which are not designed to release all stormwater shall be specifically identified as retention basins or permanent pond basins. Such basins should not be mown, but rather encouraged to generate ecosystems to maximize recharge, including infrequent planting of native species.

e.) All other basins shall have provisions for de-watering, including the bottom of the basin, and shall not create swampy conditions which are difficult to maintain. Low flow channels and tile fields may be used to de-water the bottom of a basin.

f). Retention basins and/or detention basins which are designed with earth fill dams shall incorporate the following minimum standards:

(1). The maximum water depth shall not exceed six (6) feet in depth unless otherwise approved by the Governing Body:

(2). The minimum top width of a dam breast shall be five (5) feet unless otherwise approved by the Governing Body after consultation with the Municipal Engineer.

(3). The height of the dam shall not exceed eight (8) feet from the inside toe of slope, unless otherwise approved by the Governing Body after consultation with the Municipal Engineer.

(4). The side slopes of the compacted earth fill shall
not be steeper than three (3) horizontal to one (1) vertical (3:1).

(5). Basins without restricted access shall have impoundment areas with side slopes no steeper than five (5) horizontal to one (1) vertical. Basins with steeper side slopes shall be protected by fencing that will restrict access. Fencing at an adequate height to protect the public from entering any retention or detention basin shall be provided.

(6). A cutoff trench of impervious material shall be provided under all dams, with side slopes of three (3) horizontal to one (1) vertical or flatter. A dam with steeper sides shall be provided with a key trench.

(7). All pipes and culverts through dams shall be fitted with watertight joints and shall have properly spaced concrete cutoff collars or factory welded anti-seep collars.

(8). Minimum floor elevations for all structures that would be affected by a basin, other temporary impoundments, or open conveyance systems where ponding may occur shall be two (2) feet above the 100 year stormwater surface, if basement or underground facilities are proposed, detailed calculations addressing the effects of stormwater ponding on the structure and water-proofing and/or flood-proofing design information shall be submitted for approval.

(9). Trash racks are to be placed on detention basin structures and/or pipe inlets/outlets

8). Piping

a). The capacities of pipes shall be calculated by the Manning Equation or any other method of equal caliber which is acceptable to the Municipal Engineer.

b). Curved pipes, tee joints, elbows, and wyes are prohibited except for pipes with at least a 36-inch diameter or height. Minor horizontal deviations for smaller pipe shall be reviewed on a case by case basis.
c). All piping used in the storm drainage system shall be in accordance with PennDOT 408 specifications. A minimum pipe size of eighteen (18) inches in diameter shall be used in all roadway systems (public or private) proposed for construction in the Municipality. A minimum pipe size of fifteen (15) inches in diameter for on-site surface drainage requirements is permitted on private facilities which receive no off-site drainage. Pipes shall be designed so as to provide a minimum velocity of two and one-half (2 1/2) feet per second when flowing full. Arch pipe of equivalent cross-section area may be used in lieu of round pipe where cover or utility conflict conditions exist.

d). All storm drainage piping discharging to the ground surface shall be provided with either reinforced concrete headwalls and end sections or plastic and metal pipe end sections compatible with the pipe size involved in accordance with PADOT 408 and RC standards. A stabilized apron of adequate length shall be provided at all surface discharge points in order to minimize erosion. The apron shall extend to the crown of the pipe.

e). The following chart shall be used to determine the “n” factors for corrugated pipe:

<table>
<thead>
<tr>
<th>Pipe Diameter (Inches)</th>
<th>&quot;n&quot; Factors</th>
<th>Capacity</th>
<th>Velocity</th>
<th>Capacity</th>
<th>Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Helical</td>
<td></td>
<td></td>
<td>Annular</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capacity</td>
<td>.017</td>
<td>.014</td>
<td>.026</td>
<td>.024</td>
</tr>
<tr>
<td></td>
<td>Velocity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 and 18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 through 30</td>
<td>.021</td>
<td>.017</td>
<td>.026</td>
<td>.021</td>
<td></td>
</tr>
<tr>
<td>larger than 30</td>
<td>.026</td>
<td>.019</td>
<td>.026</td>
<td>.019</td>
<td></td>
</tr>
</tbody>
</table>

f). The "n" factor for concrete or any other smooth pipe shall be .010 for velocity and .013 for capacity.

9). Swales and Channels

The capacities of swales and roadside gutters shall consider all possible hydraulic conditions. Swales shall meet the following requirements:
a). For grass swales and roadside gutters, two design considerations shall be met:

(1). The channel velocity and stability of the swale or gutter shall be based upon a low degree of retardance (“n” of 0.03);

(2). The channel capacity shall be based on a high degree of retardance (0.050).

b). The "n" factor to be used for paved or rip-rap swales or gutters shall be in accordance with the "Erosion and Sediment Pollution Control Program Manual," prepared by the Pennsylvania Department of Environmental Protection.

c). Grass lined or planted channels shall have a minimum slope of seven-tenths (0.7) percent.

10). Inlets and Culverts

a). Inlets and culverts shall be constructed in accordance with specifications set forth in the PA DOT, Publication 408, and as detailed in the Roadway Construction Standard Drawings contained in PennDOT Standards for Roadway Construction (RC-34) or other detail approved by the Municipal Engineer.

b). All inlets shall have weep holes covered with geotextile fabric placed at the appropriate elevations to completely drain the subgrade prior to placing the base course and surface course.

c). The maximum allowable spread of water on streets in a 25 year storm event is one-half (1/2) of a travel lane.

d). Stormwater management calculations shall include an inlet capacity analysis in order to verify spacing and to compute by-pass flow.

e). All inlets in paved areas shall have heavy duty bicycle safe grating. A note to this effect shall be added to the subdivision and land development plan.

f). All pipes entering or exiting inlets shall be cut flush with the inlet wall.
g). Inlets deeper than five (5) feet shall be provided with man hole type steps for access. A note to this effect shall be added to the subdivision and land development plan.

h). At the bottom of any inlet, additional concrete shall be added and adequately formed to provide for a smooth and efficient flow of water within the inlet. (Refer to PennDOT Standards for Roadway Construction RC-34).

11). Manholes

a). Manholes, when proposed, shall be spaced not more than four hundred (400) feet apart. Additionally, manholes shall be placed at points of abrupt changes in the horizontal or vertical direction of storm sewers. Inlets may be substituted for manholes where they will serve a useful purpose.

b). Manholes shall be constructed in accordance with specifications set forth in the PennDOT, Publication 408, and as detailed in the Roadway Construction Standard Drawings (RC-34).

12). Runoff Velocity

a). The maximum velocity of stormwater runoff shall be maintained at levels which result in a stable channel both during and after channel construction. The following are characteristics of a stable channel:

1. It neither aggrades nor degrades beyond tolerable limits;

2. The channel banks do not erode to the extent that the channel cross-section is changed appreciably;

3. Excessive sediment bars do not develop;

4. Excessive erosion does not occur around culverts and bridges or elsewhere;

5. Gullies do not form or enlarge due to the entry of uncontrolled stormwater runoff.

6. Where channel or swale bends occur, the computed velocities shall be multiplied by the
following factor for the purpose of designing channel erosion protection:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Swale Bend Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>0 to 30 degrees</td>
</tr>
<tr>
<td>1.75</td>
<td>30 to 60 degrees</td>
</tr>
<tr>
<td>2.00</td>
<td>60 to 90 degrees</td>
</tr>
<tr>
<td>2.50</td>
<td>90 degrees or greater</td>
</tr>
</tbody>
</table>

Where the velocity of stormwater runoff exceeds the allowable velocity for soils, erosion protection must be provided. The methods of erosion protection proposed must be supported by the appropriate design information and references.

b). Grass lined or planted channels shall be considered stable if the calculated velocity does not exceed the allowable velocities shown below:

1. Three (3) feet per second where only sparse vegetation can be established and maintained because of shade or soil conditions, and for all roadside swales.

2. Four (4) feet per second where normal growing conditions exist and vegetation is to be established by seeding.

3. Five (5) feet per second where a dense, vigorous sod can be quickly established or where water can be temporarily diverted during establishment of vegetation. Netting and mulch or other equivalent methods for establishing vegetation shall be used.

4. Six (6) feet per second where there exists a well established sod or vegetation of good quality. These calculated grass lined or planted channel flows may be exceeded if the designer can provide supportive design criteria as proof of erosion prevention.

5. Calculated grass lined or planted channel flows may be exceeded if the designer can provide acceptable supportive design criteria as proof of erosion prevention. Where the velocity of stormwater runoff exceeds the allowable velocity for soils, erosion protection must be provided.
velocity, erosion protection must be provided. The method of erosion protection proposed must be supported by the appropriate design information and/or references.

13). Compliance with Department of Environmental Protection (DEP) Chapter 105 Regulations

A DEP permit in accordance with Chapter 105 shall be required for any obstruction or encroachment in the regulated waters and wetlands of the Commonwealth, prior to the approval of the final plan. All areas of the Municipality shall be classified as suburban or urban (see DEP Section 105.141) for bridge and culvert designs. In the event any question or conflict arises between this article and the DEP Chapter 105 Regulations, the design criteria contained in the DEP regulations shall govern.

14). Compliance with Pennsylvania Department of Transportation Section 408 Specifications.

All materials, workmanship and methods of work shall comply with the Pennsylvania Department of Transportation Form 408 specifications and/or the Municipal Standard Materials and Construction Specifications for Public Improvements, as accepted and commonly used by the Municipality. Requests for modification of requirements for relief of the requirements of this Article and/or from the Form 408 Specifications may be approved by the Governing Body after consultation with the Municipal Engineer in accordance with the procedures set forth in Article 9 of this Ordinance.

E. Emergency Spillways

An emergency spillway shall be provided to safely pass the proposed peak 100-year storm with one foot of freeboard between the maximum pool elevation and the top of the facility assuming that the spillway is 100% clogged and there is no storage available.

F. Seasonal High Groundwater Table

The invert of all stormwater ponds and underground infiltration/ storage facilities shall be located a minimum of two (2) feet above the seasonal high groundwater table. The invert of stormwater ponds can be lowered if adequate subdrainage is provided.

G. Easements.
Drainage easements in accordance with Section 520 of this Ordinance shall be provided along all areas where stormwater runoff from land development facilities is proposed. The easements shall run from the origin of such facilities through all areas of a project where piping, swales or natural watercourses exist. In the event that runoff from a project is to discharge to other than a natural watercourse on an adjoining property, appropriate easement agreements shall be executed by the developer with adjoining property owners. In no case shall any drainage easement be less than thirty (30) feet in width.

3. Clear Water Systems

A. General

In order to provide for the efficient and effective disposal of concentrated rainfall runoff from roof drains and area drains, and the collected ground water from floor drains, footer drains and sump pump pits, clear water collection systems shall be designed and installed in all subdivision and land developments.

B. Pipe Specifications

1). Clear Water Systems shall be either smooth lined corrugated plastic pipe (S.L.C.P.P.) or polyvinyl chloride pipe (P.V.C.P.) Schedule 40 or equal approved by the Municipal Engineer

2). Minimum pipe diameter for Clear Water System piping shall be six (6) inches.

3). All pipe fittings shall be the type and size adequate to make all necessary connections.

C. Connections

1). Proposed Clear Water Systems shall be connected to an existing or proposed stormwater system, or, if a storm sewer is not available for connection, the system may be daylighted to an existing watercourse within an appropriate drainage easement and the outfall shall be provided with proper outlet protection.

2). Lateral connections shall be made to parallel storm sewer systems by means of proper fittings.

3). Where parallel storm sewers do not exist or are not planned, then the Clear Water System shall be connected to any available stormwater inlet. Inlets proposed to have a Clear Water System connection shall be fabricated with the
appropriate size opening to accept such connection.

D. Location

1). Clear Water System main lines shall be located within a thirty (30) foot wide drainage easement when not constructed within a public right-of-way. All drainage easements containing Clear Water Systems shall be dedicated to Municipality on the Final subdivision and land development plan.

2). Laterals in the clear water system shall be privately owned and maintained and do not require a utility easement.

3). When Clear Water Systems are constructed within a public street right-of-way, the pipe shall be beneath the pavement, six (6) inches from the face of curb.

4). Details for Clear Water System trenches, lateral connections and locations contained in Municipal Standard Materials and Construction Specifications for Public Improvements.

E. Laterals

1). One (1) lateral connection shall be provided for each lot in the subdivision

2) All clear water drainage piping for each lot shall be connected to the Clear Water System via the lateral connection.

3). Lateral connections shall be a minimum of six (6) inch diameter pipe.

F. Computations

1). The size of the main pipe and lateral connections for a Clear Water System shall be computed hydraulically for the maximum number of potential connections.

2). Hydraulic computations for sizing the main pipe and lateral connections of the Clear Water System shall be included in the Stormwater Management Plan computations.

G. Clear Water Systems Plan

The type, size and location of the Clear Water System piping shall be shown on the Preliminary and/or Final Construction drawings including sufficient details for construction of the
system as designed.

4. Other Approvals

Compliance with Article 5 does not preclude the need to obtain other permits and approvals as required by Municipality, the County Conservation District, the Commonwealth of Pennsylvania, the US Government and other agencies. Other permits and approvals may include zoning and building permits from the Municipality, and Erosion and Sedimentation Control Plan, National Pollutant Discharge Elimination System Permit (NPDES), Water Obstruction and Encroachment Permit, Dam Safety Permit, Submerged Lands License Agreement, Sections 401 and 404 of the Clean Water Act, and others. The most stringent of all pertinent requirements shall apply.

5. Ownership and Maintenance of Erosion and Sedimentation Control and Stormwater Management Facilities

A. Before the Municipality grants approval of the Erosion and Sedimentation Control Plan and/or Stormwater Management Plan and Final Plan applications, the applicant shall provide information to the Municipality in writing describing the ownership and maintenance responsibilities for such facilities. A note to this effect shall be placed on any Preliminary and/or Final Plan.

B. In cases where permanent erosion and/or stormwater management facilities are held as common facilities and/or owned by a home owners association, land owner, corporation, partnership, etc., it shall be the responsibility of that entity to maintain the facilities. In such cases, a legally binding agreement between the owner and the Municipality shall be prepared by the applicant describing the ownership arrangement and the provisions for maintaining all permanent stormwater management facilities. The agreement shall include provisions providing for the inspection of all facilities by the Municipality on a regular basis and after each major flood event, where facilities are critical to the public welfare. In addition, the applicant shall present to the Municipality a copy of restrictions and agreements with an affidavit stating that such restrictions and agreements shall be added to the deed of conveyance to each grantee to whom property of the development is to be conveyed. Agreements shall conform to the BMP Maintenance and Monitoring Agreement contained in Exhibit 5-10 and Appendix- 4.

C. Delinquency

In the event that the owner of stormwater management facilities shall, at any time after the construction or establishment of the facility, fail
to adhere to the ownership and maintenance agreement and keep any said facility or facilities in reasonable working order and condition in accordance with established standards, guidelines and agreements, the Governing Body may serve written notice upon the owner, Association, Condominium, Corporation, Partnership, etc. in accordance with the procedures set forth in Article 5, Section 517 of this Ordinance.

D. In cases where permanent erosion and stormwater management facilities, rights-of-way, and access easements to these facilities are dedicated to the Municipality and accepted by the Governing Body, it shall be the Municipality’s responsibility to maintain these facilities.

7. Municipal Liability

The degree of stormwater management sought by the provisions of this Section is considered reasonable for regulatory purposes. This Section shall not create liability on the part of the Municipality, any appointed or elected official of the Municipality, the County Conservation District, or any officer, engineer or employee thereof for any erosion, sedimentation pollution or flood damages that may result from reliance on this article or any administrative decision lawfully made there under.
### EXHIBIT 5 - 3

**RAINFALL COEFFICIENT “C” FOR RATIONAL FORMULA AND “CN” RANGE**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>C Min.</th>
<th>C Max.</th>
<th>Approx. CN Range</th>
<th>Percent Impervious</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Sites &lt;30% slope</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bare packed soil, smooth</td>
<td>.30</td>
<td>.60</td>
<td>60-90</td>
<td>0</td>
</tr>
<tr>
<td>Bare packed soil, rough</td>
<td>.20</td>
<td>.50</td>
<td>66-77</td>
<td>0</td>
</tr>
<tr>
<td><strong>Wooded Areas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Ground Litter</td>
<td>.10</td>
<td>.20</td>
<td>55-70</td>
<td>0</td>
</tr>
<tr>
<td>Light Ground Litter</td>
<td>.15</td>
<td>.30</td>
<td>60-73</td>
<td>0</td>
</tr>
<tr>
<td>Steep Rocky Slopes</td>
<td>.20</td>
<td>.50</td>
<td>66-77</td>
<td>0</td>
</tr>
<tr>
<td><strong>Reverting Farmland/Meadow</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100% Vegetative Cover</td>
<td>.10</td>
<td>.20</td>
<td>48-65</td>
<td>0</td>
</tr>
<tr>
<td>80% Vegetative Cover</td>
<td>.15</td>
<td>.30</td>
<td>56-70</td>
<td>0</td>
</tr>
<tr>
<td>50% Vegetative Cover</td>
<td>.25</td>
<td>.60</td>
<td>60-80</td>
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<tr>
<td><strong>Open Grass-Covered Areas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80%+ Covering</td>
<td>.10</td>
<td>.20</td>
<td>61-74</td>
<td>1</td>
</tr>
<tr>
<td>50-80% Covering</td>
<td>.20</td>
<td>.50</td>
<td>69-79</td>
<td>1</td>
</tr>
<tr>
<td><strong>Rural Areas</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 home per 10 acres</td>
<td>.15</td>
<td>.30</td>
<td>74-82</td>
<td>5</td>
</tr>
<tr>
<td><strong>Residential</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Acre Lots</td>
<td>.15</td>
<td>.40</td>
<td>68-79</td>
<td>20</td>
</tr>
<tr>
<td>½ Acre Lots</td>
<td>.25</td>
<td>.50</td>
<td>70-80</td>
<td>25</td>
</tr>
<tr>
<td>¼ Acre Lots</td>
<td>.40</td>
<td>.60</td>
<td>75-83</td>
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<tr>
<td>Multiunits (attached)</td>
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<td>.75</td>
<td>85-90</td>
<td>65</td>
</tr>
<tr>
<td><strong>City Business Area</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75% Area Covered</td>
<td>.50</td>
<td>.70</td>
<td>88-91</td>
<td>72</td>
</tr>
<tr>
<td>Dense Development</td>
<td>.70</td>
<td>.95</td>
<td>92-94</td>
<td>85</td>
</tr>
<tr>
<td><strong>Industrial Area</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Light to Medium Density</td>
<td>.50</td>
<td>.80</td>
<td>88-91</td>
<td>70</td>
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<tr>
<td>High Density</td>
<td>.60</td>
<td>.95</td>
<td>92-94</td>
<td>70</td>
</tr>
<tr>
<td><strong>Streets and Parking Lots</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Asphalt</td>
<td>.70</td>
<td>.95</td>
<td>98</td>
<td>95</td>
</tr>
<tr>
<td>Concrete</td>
<td>.80</td>
<td>.95</td>
<td>98</td>
<td>95</td>
</tr>
</tbody>
</table>

**NOTE:** The C values provided in Table 4.2 have been equated to approximate CN values (Hydrologic soil groups B & C) and percent imperviousness through use of the Rossmiller C factor nomograph. If required, a specific C value may be developed by use of Figure 4.1 – Rossmiller’s nomograph. In most cases, however, use of Table 4.2 will provide a sufficiently accurate “C” value. This table should not be used to determine CN numbers for the TR – 55 Method.
EXHIBIT 5-4

RAINFALL INTENSITY COMPUTATION

The following figure contains generalized rainfall intensity-duration curves to be used especially for storm durations less than 60 minutes. A one-hour storm must be supplied from the previously described rainfall estimating procedure, and entered at duration 60 minutes in the following Figure. From the intersection of the 1-hour storm intensity and the 60-minute ordinate the user follows the path of the nearest curve to the duration of the design storm, then moves horizontally to the y-axis to read the corresponding storm intensity in inches/hour.

Example: Given a 1-hour storm of 2.5 in./hr., find the 30-minute intensity for the same storm recurrence frequency. Start at 60-minute duration and 2.5 in./hr. intensity, move along curves to 30 minutes, and read the 30-minute intensity as 3.9 in./hr.

![Rainfall Intensity-Duration Curve](image)

Standard rainfall intensity-duration curves or standard curves.

NOTES: Curve numbers correspond to 1-h values of rainfall or supply indicated by respective curves; all points on the same curve are assumed to have the same average frequency of occurrence. From *Engineering Manual by Corps of Engineers*. U.S. Army.

EXHIBIT 5-5

Time of Concentration Nomograph (Rational Method)
EXHIBIT 5-6

Runoff Coefficients for the Rational Formula versus Hydrologic Soil Group (A, B, C, D) and Slope Range

<table>
<thead>
<tr>
<th>Land Use</th>
<th>A</th>
<th></th>
<th></th>
<th>B</th>
<th></th>
<th></th>
<th>C</th>
<th></th>
<th></th>
<th>D</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-2%</td>
<td>2-6%</td>
<td>6%+</td>
<td>0-2%</td>
<td>2-6%</td>
<td>6%+</td>
<td>0-2%</td>
<td>2-6%</td>
<td>6%+</td>
<td>0-2%</td>
<td>2-6%</td>
<td>6%+</td>
</tr>
<tr>
<td>a Cultivated land</td>
<td>0.08</td>
<td>0.13</td>
<td>0.16</td>
<td>0.08</td>
<td>0.13</td>
<td>0.16</td>
<td>0.08</td>
<td>0.13</td>
<td>0.16</td>
<td>0.08</td>
<td>0.13</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>0.15</td>
<td>0.18</td>
<td>0.22</td>
<td>0.15</td>
<td>0.18</td>
<td>0.22</td>
<td>0.15</td>
<td>0.18</td>
<td>0.22</td>
<td>0.15</td>
<td>0.18</td>
<td>0.22</td>
</tr>
<tr>
<td>Pasture</td>
<td>0.12</td>
<td>0.20</td>
<td>0.30</td>
<td>0.12</td>
<td>0.20</td>
<td>0.30</td>
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<td>0.12</td>
<td>0.20</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>0.15</td>
<td>0.25</td>
<td>0.37</td>
<td>0.15</td>
<td>0.25</td>
<td>0.37</td>
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<td>0.25</td>
<td>0.37</td>
<td>0.15</td>
<td>0.25</td>
<td>0.37</td>
</tr>
<tr>
<td>Meadow</td>
<td>0.10</td>
<td>0.16</td>
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<td>0.10</td>
<td>0.16</td>
<td>0.25</td>
<td>0.10</td>
<td>0.16</td>
<td>0.25</td>
<td>0.10</td>
<td>0.16</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>0.14</td>
<td>0.22</td>
<td>0.30</td>
<td>0.14</td>
<td>0.22</td>
<td>0.30</td>
<td>0.14</td>
<td>0.22</td>
<td>0.30</td>
<td>0.14</td>
<td>0.22</td>
<td>0.30</td>
</tr>
<tr>
<td>Forest</td>
<td>0.05</td>
<td>0.08</td>
<td>0.11</td>
<td>0.05</td>
<td>0.08</td>
<td>0.11</td>
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<td>0.11</td>
<td>0.05</td>
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<td>0.11</td>
<td>0.14</td>
<td>0.08</td>
<td>0.11</td>
<td>0.14</td>
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a. Runoff coefficients for storm recurrence intervals less than 25 years.
b. Runoff coefficients for storm recurrence intervals of 25 years or longer.
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EXHIBIT 5-8

Stormwater Management Report
Example Format

1. Table of Contents with page numbers

2. Stormwater Management Summary

3. Project Narrative

4. Pre-Development Hydrograph Calculations
   A. Weighted CN Calculations
   B. Tc Calculations
   C. Hydrographs – 2, 10, 25, 50 and 100 Year Frequencies

5. Post-Development Hydrograph Calculations (for each Drainage Area)
   A. Design Point 1 (Drainage Area 1)
      1). Weighted CN Calculations
      2). Tc Calculations
      3). Hydrographs – 1, 2, 10, 25, 50 and 100 Year Frequencies
   B. Design Point 2 (Drainage Area 2)
      1). Weighted CN Calculations
      2). Tc Calculations
      3). Hydrographs – 1, 2, 10, 25, 50 and 100 Year Frequencies

6. Post-Development Hydrograph Combinations – Drainage Area 1 and 2

7. Detention Basin Calculations
   A. Basin Characteristics
      1). Basin Stage Storage – Elevation Data
      2). Outlet Structure Configuration
         a). Schematic Details: Orifice, Elevation, Cross-Section, Trash Rack, Anti-Seep Collar, Clay Core
      3). Basin Routing Table
   B. Outflow Hydrographs – 1, 2, 10, 25, 50 and 100 year Frequencies
   C. Outfall Protection/Level Spreader Design Calculations
   D. Emergency Spillway Calculations
1). Orifice Blocked Outflow Hydrograph – 100 Year Frequency
2). Spillway Sizing – Weir Equation

E. Anti-Seep Collar Calculations

8. Extended Detention of 1 Year Frequency Hydrograph Calculations

9. Basin Empty Time Analysis – 100 Year Storm

    A. Water Quality
       1). Volume Calculations
       2). BMP Design and Application
    B. Groundwater Recharge
       1). Geologic Analysis
       2). Volume Calculations – 2-Year 24 Hour rainfall
       3). BMP Design and Application

11. Conveyance Calculations
    A. Pipe Design Calculations
       1). Weighted CN Calculations
       2). Tc Calculations
       3). Peak Flow or Hydrographs, 10, 25 and 100 Year Frequencies
       4). Hydraulic Grade Line Calculations, using 10, 25 and 100 Year Frequency Peak Flows
       5). Pipe Outlet Lining Calculations – rip-rap or matting
    B. Culvert Design Calculations
    C. Swale Design Calculations
       1). Weighted CN Calculations
       2). Tc Calculations
       3). Peak Flow or Hydrographs, using 10, 25 and 100 Year Frequencies
       4). Capacity Calculations – permanent/lined condition
       5). Stability Calculations – temporary and permanent conditions

Appendix A: Pre-Development Drainage Area Map, including Tc information
Appendix B: Post-Development Drainage Area Map, including Tc information
Appendix C: Off Site Drainage Area Map, including Tc information
Appendix D: Inlet Drainage Area Map
Appendix E: SCS Runoff Curve Numbers
Appendix F: Regional Rainfall Curve Chart
Appendix G: C Values for Rational Method
Appendix H: Hydrologic Soil Group Listing

Assumptions:

1. If off-site runoff drains to design point, include calculations under Pre-Development Hydrograph Calculations.
2. If an existing detention facility discharges to the site, the hydrograph analysis to document discharge rate will be added to Pre-Development Hydrograph Calculations using the same format as Post-Development.
3. Hydraulic Grade Line Calculations use a program that considers inlet efficiency and bypass, and ponding over inlets (depth at curb line).
EXHIBIT 5-9

STORMWATER MANAGEMENT SUMMARY

Project: ___________________________________  Date: ____________________________

Drainage Area: ID Number______ Acres_________ Release Rate: ________

Note: Use a separate sheet for each Drainage Area.

Design Year Storm Event

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WATER QUALITY REQUIREMENTS

Computed Water Quality Volume: ________________ cubic feet

Proposed BMP(s) to meet the WQ requirements: __________________________________________

GROUNDWATER RECHARGE REQUIREMENTS

Computed Groundwater Recharge Volume: ________________ cubic feet

Proposed BMP(s) to meet GR requirements: __________________________________________

GENERAL PROTECTION REQUIREMENTS

Dewatering Time:  1-year storm event:

____________ hours

SWM Facility Maximum Capacity: ____________ hours
EXHIBIT 5-10

OPERATION AND MAINTENANCE PLAN FOR STORMWATER BMPs

A. INSPECTIONS

1. Stormwater facilities and permanent BMPs must be inspected, at a minimum on an annual basis, or as requested by the Township, in accordance with this O & M Plan. The property owner has two options:

   i. Employing a qualified registered professional to conduct the inspections and prepare reports; or
   ii. Entering into an agreement with the Municipality for the Municipality to conduct the inspections and prepare reports. This can be included in the Stormwater Facilities and Best Management Practices (BMP) Maintenance and Monitoring Agreement (M & M Agreement).

2. If Option i. is chosen, the entity conducting the inspection shall be required to submit a report to the Municipality within thirty days following completion of the inspection. The report shall document the condition of the facilities and recommend needed repairs. Recommended repairs and other corrective actions shall be implemented by the property owner within thirty days of the report date.

3. If Option ii. is chosen, the property owner shall be responsible for reimbursing the Municipality for the costs involved in accordance with the M & M Agreement.

4. Inspections of open basins shall include but not be limited to:
   i. Structural integrity and operation of outlet structures and appurtenances.
   ii. Stability of embankments and other soil areas.
   iii. Integrity, condition and recharge capacity of vegetation.
   iv. Collection, storage and release of stormwater in accordance with the facility design.
   v. Sediment accumulation.
   vi. Safety.

5. Inspections of subsurface storage facilities shall include but not be limited to:
   i. Structural integrity and operation of outlet structures and appurtenances.
   ii. Stability of soil over and adjacent to the facility.
   iii. Collection, storage and release of stormwater in accordance with the facility design.
   iv. Sediment accumulation.
   v. Safety.
B. MAINTENANCE

1. Vegetation in and adjacent to basins shall be maintained in accordance with the approved plan, applicable watershed management plans and in accordance with Municipal Ordinances.

2. Debris shall be removed from basins on a quarterly basis. Floatable debris that may impact operation of the outlet structure shall be removed immediately.

3. Groundwater Recharge and Water Quality BMPs shall be observed quarterly during runoff events to insure operation as designed. BMPs shall be cleaned as required to insure continued operation as designed.

SECTION 530. DESIGN STANDARDS IN FLOODPLAIN (Alternate-1)

Floodplain areas shall be established and preserved on all development sites. In addition, floodplain areas shall be delineated on development plans as provided below:

1. A one-hundred (100)-year floodplain shall be established for all water courses and shall be delineated by one of the following methods:
   A. A FEMA flood insurance study.
   B. A floodplain study prepared by an agency of the county, State, or U.S. Government.
   C. A floodplain report or study prepared and certified to by a professional engineer registered in the Commonwealth of Pennsylvania duly qualified by education and experience to perform such duties.

2. Whenever a floodplain boundary is located within or along a lot, the plan shall include the boundary of the floodplain, along with the elevation or location dimensions from the centerline of the water; a plan note that the floodplain shall be kept free of structures, fill, and other encroachments; an a plan note that floor elevation for all structures adjacent to the floodplain shall be two (2) feet above the one-hundred (100)-year flood elevation.

The above provisions shall not be construed to prohibit the following construction activities within flood plain:

A. Stormwater management facilities.
B. Stream improvements whose sole purpose is to improve aquatic habitat and that are approved by the Pennsylvania Fish Commission.
C. Farm ponds.
D. Flood-proofing and flood hazard reduction structures to protect existing buildings.
E. Water-oriented uses (except buildings), e.g., docks, piers, boat launching ramps, hatcheries, etc.
F. Water monitoring devices.
G. Culverts, bridges, and their approaches for floodplain crossings by streets, access drives, and driveways.
H. Other fill activities as authorized under a permit issued by the U.S.
Army Corp of Engineers, Pennsylvania Department of Environmental Protection, or other authorizing agency.

State regulations for encroachments within floodplains are contained at Title 25, Chapter 105 of the Pennsylvania State Code.

Any subdivision or land development proposal, which includes encroachments into Federally mapped floodplain, must include evidence that the applicant has contacted and gained approval for said encroachments from the Pennsylvania Department of Environmental Protection (Waterways, Wetlands, and Erosion control Division), and Federal Emergency Management Agency.

SECTION 530. DESIGN STANDARDS IN FLOODPLAIN (Alternate-2)

1. General Standards.
   A. Where not prohibited by this or any other laws or ordinances, land located in any identified floodplain area or district may be platted for development with the provision that the developer construct all buildings and structures to preclude flood damage in accordance with this and any other local, state and federal laws and ordinances regulating such development. For flood proofing the U.S. Army Corps of Engineers publication “Flood Proofing Regulations” revised EP 1165-2-314, dated December 15, 1995 shall apply.

   B. Building sites for residences or any other type of dwelling or accommodation shall not be permitted in any identified floodway area or district. Sites for these uses may be permitted outside the elevated two (2) feet above the regulatory flood elevation. If fill is used to raise the elevation of a site, the fill area shall extend out laterally for a distance of at least 15 feet beyond the limits of the proposed structures.

   C. Building sites for structures or buildings other than for residential uses shall not be permitted in any identified floodway area or district. Also, such sites for structures or buildings outside the floodway shall be protected as provided for in Subsection A(2) above. However, the Governing Body may allow the subdivision and/or development of areas or sites for commercial and industrial uses at an elevation below the regulatory flood elevation if the developer otherwise protects the area to that height or assures that the buildings or structures will be flood proofed at least up to that height.

   D. If the Zoning Officer determines that only a part of a proposed plat can be safely developed, he shall limit development to that part and shall require that development proceed consistent with this determination.

   E. When a developer does not intend to develop the plat himself and the
Municipality determines that additional controls are required to insure safe development, it may require the developer to impose appropriate deed restrictions on the land. Such deed restrictions shall be inserted in every deed and noted on every recorded plat.

2. Where any excavation or grading is proposed or where any existing trees, shrubs or other vegetative cover will be removed, the developer shall consult the County Conservation District representative concerning plans for erosion and sediment control and to also obtain a report on the soil characteristics of the site so that a determination can be made as to the type and degree of development the site may accommodate. Before undertaking any excavation or grading, the developer shall obtain a grading and excavation permit, if such is required.

3. Drainage facilities.
   A. Storm drainage facilities shall be designed to convey the flow of stormwater runoff in a safe and efficient manner. The system shall insure proper drainage along streets and provide positive drainage away from buildings.
   B. Plans shall be subject to the approval of the Municipality. The Municipality may require a primarily underground system to accommodate frequent floods and a secondary surface system to accommodate larger, less frequent floods. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to prevent the discharge or excess runoff onto adjacent properties.

4. Streets.
   The finished elevation of proposed streets and driveways shall not be more than one foot below the regulatory flood elevation. The Municipality may require profiles and elevations of streets to determine compliance with the requirements. Drainage openings shall be sufficient to discharge flood flows without unduly increasing flood heights.

5. Sanitary sewer facilities.
   All sanitary sewer systems located in any designated floodplain district shall be flood proofed up to the regulatory flood elevation.

   All water systems located in any designated floodplain district shall be flood proofed up to the regulatory flood elevation.

7. Other utilities and facilities.
   All other public and private utilities including gas and electric shall be elevated or flood proofed to not less than two (2) feet above the regulatory flood elevation.
SECTION 531 WETLANDS

All subdivision and land development plans shall identify the location of existing wetland as determined by the standards of either the U.S Army Corps of Engineers, U.S. Environmental Protection Agency, Pennsylvania Department of Environmental Resources, or the U.S. Soil Conservation Service. Wetland areas are not limited to those areas delineated on wetland maps prepared by the U.S. Fish and Wildlife Service. Any proposed encroachment into the wetland shall include a copy of the permit or approval from the applicable State and Federal agencies. No action by the municipality shall be relied upon in lieu of a permit issued by the appropriate agency.

1. The applicant must determine if wetlands exist on the property in the proposed subdivision or land development. The applicant must also determine if any wetlands will be impacted off-site from the property. This determination shall be made in accordance with the current requirements of the Department of Environmental Protection (DEP) and the United States Army Corps of Engineers (USACOE).

2. If there are no wetlands on the property and no wetlands will be impacted off-site, then the following certification note must be placed on the plan:

“I, (signature of consultant and date), hereby certify that there are no wetlands on the subject property, the proposed project will not impact off-site wetlands, and wetland permits are not required from the state or federal government.”

3. If there are wetlands on the property and/or wetlands will be impacted off-site, then the following is required:

   A. A wetland study must be submitted to the Municipality prepared in accordance with the current requirements of the DEP and USACOE and the following:

      1). A narrative describing the site features, including:

         a). Property address

         b). Property tax number

         c). Property owner’s name

         d). Location of the property in the Municipality

         e). Date of the site survey

         f). General conditions and findings of the site survey
g). Permit requirements

B. A drawing (scale one inch equals 100 feet), on a sheet or series of sheets no larger than 17 inches by 22 inches in size, containing the following information:

1). The outline of the property and area being studied.

2). Wetlands from the National Wetlands Inventory (NWI) and County Soil Survey, delineated.

3). The extent and type of hydric soils delineated and identified using the Hydric Soils of County.

4). The extent of hydrophytic plans delineated and identified.

5). Streams, watercourses and floodplains delineated and the hydrology of the area.

6). Wetland delineation.

7). Drawing scale.

8). Property tax number.

C. A copy of any required completed permit applications such as a water obstruction and encroachment permit or general permit from the DEP and a Section 404 permit from USCOE.

D. Wetlands shall be verified by a site visit.

4. The following certification notes shall be placed on the subdivision or land development plan sheet that will be recorded and the notes shall also be placed on the plan included in the wetlands study:

   A. “I, (signature of consultant and date), hereby certify that a wetlands study was conducted in accordance with Municipal, state and federal wetlands.”

   B. “I, (signature of applicant and date), hereby certify that I am in receipt and aware of the results of the wetlands study.”

5. Any approval by the Municipality shall be contingent on full compliance with any requirements of any regulatory agency, and no action by the Municipality shall be relied on in lieu of a permit issued by the appropriate agency.
SECTION 532. STEEP SLOPE

A Steep Slope Report for all applications involving construction on lands that possess slopes exceeding twenty-five percent (25%). The Steep Slope Report shall include the following:

1. A topographic map of the site which highlights those areas that possess slopes exceeding twenty-five percent (25%). Also reflected on this map shall be all existing and proposed site alterations and improvements (e.g., buildings, streets, access drives, driveways, parking compounds, utilities, etc.) that are located within the steep slope area.

2. Only in those instances where construction and/or modifications is proposed to the existing topography and vegetative cover within areas of twenty-five percent (25%) or greater slope, the applicant shall provide a detailed description of the methods that are being used for:

   A. Protection and stabilization of areas that have a high potential for soil erosion;

   B. Accommodate storm water runoff;

   C. Assure structural safety and minimize harm to the environment associated with construction on steep slopes;

   D. Protection and preservation of on-site and off-site valuable natural wildlife, plant habitats, and water quality;

   E. Protection of steep slopes on adjoining properties; and,

   F. Assure adequate foundations for buildings and/or structures.

3. Only in those instances where construction and/or modifications to the existing topography and vegetative cover in areas of twenty-five percent (25%) or greater slopes, the applicant shall provide a soils engineering report.

   A soils engineering report shall be prepared by a registered professional engineer with expertise in soil, geology and construction. The report shall include:

   A. The nature, types, distribution and stability of the surface and subsurface soils for load bearing, stability and compaction;

   B. Extent, description and location of exposed rock and bedrock;
C. Erodability of surface soil; and,

D. Depth to seasonal high water table.

4. Steep slope standards shall apply to where construction and/or modifications to the existing topography or vegetative cover is located within areas which contain twenty-five percent (25%) or greater slope.

A. Boundary Interpretation – An initial determination as to whether the steep slope conservation standards apply to a subdivision or land development plan shall be based upon the presence of twenty-five percent (25%) or greater slope, as documented in one of the following:

1). The County Soil Survey, the U.S. Soil Conservation Service;
   or,

2). The topographic survey prepared by the United States Geodetic Survey.

Should a dispute arise concerning the boundaries of any steep slope conservation area, a topographic survey prepared by a registered land surveyor with minimum vertical intervals of five (5) feet shall be submitted. Final boundary interpretation shall be made by the municipality.

B. Average Slope. On property which contains slopes of twenty-five percent (25%) or greater, the average slope of the lot shall be determined by the following formula and identified on the plan.

\[
S = \frac{0.0023 \times I \times L}{A}
\]

0.0023 = conversion factor of square feet to acres
I = contour interval in feet
L = combined length in feet of all contour lines on parcel
A = lot area in acres
S = average slope of ground in percent (%)

This calculation use for General Design Requirements Section 533.4.B.and not for determination of Section 533 requirements.

C. General Design Requirements. The following requirements are based upon the average slope of a lot. Whenever other ordinances or regulations impose more restrictive standards than those contained herein, the more restrictive shall apply.
Average Slope of Lot | Minimum Percent of Undisturbed Area (1) | Maximum Impervious Surface
---|---|---
25 – 30% | 85% | 10%
Over 30% | 90% | 10%

(1) Undisturbed area shall be defined as land in its natural state before development.

D. Setback. No change in existing topography, which results in a slope greater than the pre-development condition, may be located within twenty-five (25’) feet of the neighboring property.

E. Design Information. The application shall include the information specified in Section 533.

SECTION 533 NOTIFICATION TO SCHOOL DISTRICT

When Twenty-five (25) or more dwelling units are proposed, written evidence that the school district in which the project is located has been informed of the proposal.
ARTICLE 6

IMPROVEMENT AND MAINTENANCE GUARANTEES

SECTION 601. GENERAL STATEMENT

1. No plat shall be finally approved unless the streets shown on such plat have been improved to a mud-free or otherwise permanently passable condition, or improved as may be required by the subdivision and land development ordinance and any walkways, curbs, gutters, street lights, fire hydrants, shade trees, water mains, sanitary sewers, storm sewers and other improvements as may be required by the subdivision and land development ordinance have been installed in accordance with such ordinance. In lieu of the completion of any improvements required as a condition for the final approval of a plat, including improvements or fees required pursuant to Section 502.2.B(4), the subdivision and land development ordinance shall provide for the deposit with the municipality of financial security in an amount sufficient to cover the costs of such improvements or common amenities including, but not limited to, roads, storm water detention and/or retention basins and other related drainage facilities, recreational facilities, open space improvements, or buffer or screen plantings which may be required. The applicant shall not be required to provide financial security for the costs of any improvements for which financial security is required by and provided to the Department of Transportation in connection with the issuance of a highway occupancy permit pursuant to Section 420 of the act of June 1, 1945 (P.L. 1242, No. 428) known as the “State Highway Law.”

2. If water mains and/or sanitary sewer lines, or both, along with apparatus or facilities related thereto, are to be installed under the jurisdiction and pursuant to the rules and regulations of a public utility or municipal authority separate and distinct from the municipality, financial security to assure proper completion and maintenance thereof shall be posted in accordance with the regulations of the controlling public utility or municipal authority and shall not be included within the financial security as otherwise required by this section.

3. No Final Plan shall be signed by the Governing Body for recording in the Office of the County Recorder of Deeds unless:

   A. Financial security in accordance with the requirements of Section 602 is accepted by the Governing Body, and/or;

   B. The improvements required by this Ordinance have been properly guaranteed or completed in accordance with this ordinance.
SECTION 602. FINANCIAL SECURITY FOR IMPROVEMENT GUARANTEE

1. General

A. The administration of the financial security shall comply with the provisions of Article V, Section 509 the PA Municipalities Planning Code, Act 247, as amended, and other applicable laws of the Commonwealth of Pennsylvania.

B. Such financial security shall provide for, and secure to the public, the completion of any improvements which may be required on or before the date fixed in the formal action of approval or in the Developer's Agreement for completion of the improvements. (See Appendix No.2)

2. Submission of Improvements Guarantee

Final plan applications that include public improvements that have not been installed shall include an improvement guarantee in the form of financial security.

A. Type of Financial Security

Without limitation as to other types of financial security which the municipality may approve, which approval shall not be unreasonably withheld, Federal or Commonwealth chartered lending institution irrevocable letters of credit and restrictive or escrow accounts in such lending institutions shall be deemed acceptable financial security for the purposes of this section.

Such financial security shall be posted with a bonding company or Federal or Commonwealth chartered lending institution chosen by the party posting the financial security, provided said bonding company or lending institution is authorized to conduct such business within the Commonwealth.

Such bond, or other security shall provide for, and secure to the public, the completion of any improvements which may be required on or before the date fixed in the formal action of approval or accompanying agreement for completion of the improvements.

B. Amount of Financial Security

1). The amount of financial security to be posted for the completion of the required improvements shall be equal to one hundred and ten (110) percent of the cost of completion estimated as of 90 days following the date scheduled for completion by the developer.
Annually, the municipality may adjust the amount of the financial security by comparing the actual cost of the improvements which have been completed and the estimated cost for the completion of the remaining improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the 90th day after either the original date scheduled for completion or a rescheduled date of completion. Subsequent to said adjustment, the municipality may require the developer to post additional security in order to assure that the financial security equals said 110%. Any additional security shall be posted by the developer in accordance with this subsection.

2). The amount of financial security required shall be based upon an estimate of the cost of completion of the required improvements, submitted by the Applicant prepared by a professional engineer licensed as such in Pennsylvania and certified by such engineer to be a fair and reasonable estimate of such cost. The estimate submitted to the Municipality shall be organized and itemized to provide a detailed line by line estimate of costs of all public improvements required. The Municipality, upon the recommendation of the Municipal Engineer, may refuse to accept such estimate for good cause shown. If the Applicant and the Municipality are unable to agree upon an estimate, then the estimate shall be recalculated and recertified by another professional engineer licensed as such in Pennsylvania and chosen mutually by the Municipality and the Applicant. The estimate certified by the third (3rd) engineer shall be presumed fair and reasonable and shall be the final estimate. In the event that a third (3rd) engineer is so chosen, fees for the services of said engineer shall be paid equally by the Municipality and the Applicant.

3). If the party posting the financial security requires more than one (1) year from the date of posting of the financial security to complete the required improvements, the amount of financial security may be increased by an additional ten (10) percent for each one (1) year period beyond the first anniversary date from posting of financial security, or to an amount not exceeding one hundred and ten (110) percent of the cost of completing the remaining required improvements as reestablished on or about the expiration of the preceding one-year period.

4). In the case where development is projected over a period of years, the Governing Body may authorize submission of final plans by section or stages of development subject to such requirements or guarantees as to improvements in future section or stages of
development as it finds essential for the protection of any finally approved section of the development.

C. Developer's Agreement

The applicant shall declare the intent to provide an improvement guarantee by executing the Developer's Agreement included in this Ordinance. The Developer's Agreement shall be executed prior to the recordation of the final plan.

3. Plan Approval Conditioned Upon Financial Security

When requested by the developer, in order to facilitate financing, the governing body or the planning agency, if designated, shall furnish the developer with a signed copy of a resolution indicating approval of the final plan contingent upon the developer obtaining a satisfactory financial security. The final plan or record plan shall not be signed nor recorded until the financial improvements agreement is executed. The resolution or letter of contingent approval shall expire and be deemed to be revoked if the financial security agreement is not executed within 90 days unless a written extension is granted by the governing body; such extension shall not be unreasonably withheld and shall be placed in writing at the request of the developer.

4. Release of Financial Security

A. As the work of installing the required improvements proceeds, the party posting the financial security may request the Governing Body to release or authorize the release, from time to time, of such portions of the financial security necessary for payment to the contractor or contractors performing the work. Any such requests shall be in writing addressed to the Governing Body, and the Governing Body shall have forty-five (45) day from receipt of such request within which to allow the Municipal Engineer to certify, in writing, to the Governing Body that such portion of the work upon the improvements has been completed in accordance with the approved plan. Upon such certification the Governing Body shall authorize release by the bonding company or lending institution of an amount as estimated by the Municipal Engineer fairly representing the value of the improvements completed or, if the Governing Body fails to act within said forty-five (45) days period, the Governing Body shall be deemed to have approved the release of funds as requested. The Governing Body shall always, prior to final release at the time of completion and certification by the Municipal Engineer, require retention of a minimum of ten (10) percent of the estimated cost of the aforesaid improvements. Such funds will be released only after certification by the Municipal Engineer that all required public improvements so guaranteed
have been completed satisfactorily.

B. When the developer has completed all of the necessary and appropriate improvements, the developer shall notify the municipal governing body, in writing, by certified or registered mail, of the completion of the aforesaid improvements and shall send a copy thereof to the municipal engineer. The municipal governing body shall, within ten days after receipt of such notice, direct and authorize the municipal engineer to inspect all of the aforesaid improvements. The municipal engineer shall, thereupon, file a report, in writing, with the municipal governing body, and shall promptly mail a copy of the same to the developer by certified or registered mail. The report shall be made and mailed within 30 days after receipt by the municipal engineer of the aforesaid authorization from the governing body; said report shall be detailed and shall indicate approval or rejection of said improvements, either in whole or in part, and if said improvements, or any portion thereof, shall not be approved or shall be rejected by the municipal engineer, said report shall contain a statement of reasons for such nonapproval or rejection.

1). The Governing Body shall notify the Applicant, within fifteen (15) days of receipt of the Municipal Engineer's report, in writing by certified or registered mail of the action of said Governing Body with relation thereto.

2). If the Governing Body or the Municipal Engineer fails to comply with the time limitation provisions contained herein, all improvements will be deemed to have been approved and the Applicant shall be released from all liability, pursuant to this performance guaranty bond or other security agreement.

3). If any portions of the said improvements are not approved or are rejected by the Governing Body, the Applicant shall proceed to complete the same with the required corrections and, upon completion, the same procedure of notification, as outlined herein, shall be followed.

Upon satisfactory completion of all required improvements, after consultation with the Municipal Manager and the Municipal Engineer, the Governing Body may release to the applicant any remaining financial security, including by not limited to, the withheld ten (10) percent minimum.

C. Nothing herein shall be construed as a limitation of the Applicant's right to contest or question by legal proceedings or otherwise, any determination of the Governing Body or the Municipal Engineer.
5. Remedies to Effect Completion of Improvements

In the event that any improvements which may be required have not been installed as provided in Article 5 or in accordance with the approved final plan, the Governing Body is hereby granted the power to enforce any financial security by appropriate legal and equitable remedies. If proceeds of the financial security are insufficient to pay the cost of installing or making repairs or corrections to all the improvements covered by said security, the Governing Body may, at its option, install all or part of such improvements and may institute appropriate legal or equitable action to recover the funds necessary to complete the remainder of the improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the applicant, or both, shall be used solely for the installation of the improvements covered by such security, and not for any other municipal purpose.

6. Other Effects of Financial Security

If financial security has been provided in lieu of the completion of improvements required as a condition for the final approval of a plan as set forth in this Section, the Municipality shall not condition the issuance of building, grading or other permits relating to the erection or placement of improvements, including buildings, upon the lots or land as depicted upon the final plan upon actual completion of the improvements depicted upon the approved final plan. Moreover, if said financial security has been provided, occupancy permits for any building or buildings shall not be withheld following: (1) the application of the asphalt binder course the streets providing access to and from existing public roads to such building or buildings as well as (2) the completion of all other improvements as depicted upon the approved plan, either upon the lot or lots or beyond the lot or lots in question if such improvements are necessary for the reasonable use of or occupancy of the building or buildings.
SECTION 603. INSPECTION OF IMPROVEMENTS DURING CONSTRUCTION

1. Prior to the initiation of construction, the developer shall notify the Municipality in order to coordinate an inspection schedule with the construction schedule. Additionally, the Municipal Engineer shall be notified four (4) working days in advance of any intended date of construction. The provisions stated herein shall be construed as mandating periodic inspections and the undertaking of periodic inspections shall not be construed as an acceptance of the work during construction or as a final inspection of the construction.

2. Reimbursement for Inspections

The Applicant shall reimburse the Municipality for the reasonable and necessary expense incurred for the inspection or improvements according to a schedule of fees adopted by resolution of the Governing Body and as amended from time to time.

A. In the event the Applicant disputes the amount of any such expense in connection with the inspection of improvements, the Applicant shall, within ten (10) working days of the date of billing, notify the Municipality that such expenses are disputed as unreasonable or unnecessary, in which case the Municipality shall not delay or disapprove a subdivision or land development application or any approval or permit related to development due to the applicant's request over disputed Municipal Engineer expenses.

B. If, within forty-five (45) days from the date of billing, the Municipality and the Applicant cannot agree on the amount of expenses which are reasonable and necessary, then the Applicant and the Municipality shall jointly, by mutual agreement, appoint another professional engineer licensed as such in Pennsylvania to review the said expenses and make a determination as to the amount thereof which is reasonable and necessary.

C. The professional engineer so appointed shall hear such evidence and review such documentation as the professional engineer in his sole opinion deems necessary and render a decision within fifty (50) days of the billing date. The Applicant shall be required to pay the entire amount determined in the decision immediately.

D. In the event that the Municipality and Applicant cannot agree upon the professional engineer to be appointed within twenty (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 (or if at the time there be no President Judge, then the senior active judge then sitting) shall appoint such engineer, who, in that case, shall be neither the Municipal Engineer nor any professional
engineer who has been retained by, or performed services for, the Municipality or the applicant within the preceding five (5) years.

E. The fee of the appointed professional engineer for determining the reasonable and necessary expenses 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 required in the decision is less than the original bill by one-thousand ($1,000) dollars or more, the Municipality shall pay the fee of the professional engineer, but otherwise the Municipality and the Applicant shall each pay one-half (1/2) of the fee of the appointed professional engineer.

SECTION 604. DEDICATION OF IMPROVEMENTS

All improvements shall be deemed to be private improvements and only for the specific project until such time as the same have been offered for dedication and formally accepted by the Governing Body. No responsibility of any kind with respect to improvements of the Final Plan shall be transferred until the improvements have been formally accepted. No improvements shall be accepted for dedication except upon submission of as-built drawings by the developer and inspection of the final construction by the Municipality in accordance with the provisions of this Ordinance.

SECTION 605. MAINTENANCE GUARANTEE

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

2. If water mains or sanitary sewer lines, or both, along with appurtenances or facilities related thereto, are to be installed under the jurisdiction and pursuant to the rules and regulations of a public utility or municipal authority separate and distinct from the Municipality, financial security to assure proper completion and maintenance thereof shall be posted in accordance with the regulations of the controlling public utility or municipal authority and shall not be included within the financial security as otherwise required by this Article.

SECTION 606. AS BUILT PLANS

Within ninety (90) of construction completion of all required improvements including facilities proposed for dedication to the municipality and prior to final inspection by the
Municipality of all improvements and site grading for which an improvement guarantee has been posted, the developer shall submit a plan labeled "As-Built Plan," which shall depict the actual location, dimensions and elevations of all existing improvements and site grading. In addition, the plan shall indicate that the existing grading, drainage structures and/or drainage systems and erosion and sediment control practices, including vegetative measures, are in substantial conformance with the previously approved drawings and required specifications. The plan shall note all deviations from the previously approved drawings. The applicant’s engineer shall certify that the construction of the storm water management facility was completed in accordance with the plans and specifications as originally submitted and approved by the Municipality. Three copies of the As-Built Plan (two paper and one transparency) shall be submitted to the Municipality, which shall distribute a paper copy to the Municipal engineer and retain two (2) copies for Municipal files for future reference.
ARTICLE 7
MOBILE HOME PARKS

Section 701. GRANT OF POWER

The governing body of each municipality may regulate subdivisions and land development within the municipality by enacting a subdivision and land development ordinance. Provisions regulating mobile home parks shall be set forth in separate and distinct articles of any subdivision and land development ordinance adopted pursuant to the "Pennsylvania Municipalities Planning Code" Act 247, as reenacted and amended, Article V, §501, as reenacted and amended.

Section 702. PURPOSE, AUTHORITY AND JURISDICTION

The purpose, authority, and jurisdiction for land development as a mobile home park are the same as contained in ARTICLE 2 of this ordinance.

Section 703. PLAT REQUIREMENTS AND PROCESSING PROCEDURE

The plat requirements and processing procedure for land development as a mobile home park shall be in accordance with the requirements contained in ARTICLE 4 of this Ordinance.

Section 704. DESIGN STANDARDS

The arrangement and other design standards of streets, easements, blocks, lots, stormwater management and erosion and sedimentation control shall be in accordance with the requirements contained in ARTICLE 5 of this Ordinance except as specified below:

1. Street Widths

   a. The minimum street right-of-way and cartway widths of public or private streets shall be as follows:

<table>
<thead>
<tr>
<th>Collector Streets</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right-of-Way</td>
<td>60 feet</td>
</tr>
<tr>
<td>Cartway</td>
<td>24 feet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor Streets</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right-of-way</td>
<td>50 feet</td>
</tr>
<tr>
<td>Cartway</td>
<td>20 feet</td>
</tr>
</tbody>
</table>
b. Where a subdivision or land development fronts on an existing street, the provision for additional street width (right-of-way, cartway, or both) may be required when determined necessary by the (Governing Body) in specific areas to address:

(1) Public safety and convenience;

(2) Where the number of mobile homes proposed to be located in the mobile home park exceeds one hundred (100) units;

(3) Widening of existing streets where the width does not meet the requirements of the preceding paragraphs.

2. Lots

a. Lots in a mobilehome park shall be served by both public or community water supply and sanitary sewerage collection systems.

b. Minimum lot widths and areas shall conform to applicable provisions of the municipal zoning ordinance.

or

Mobilehome lots shall be not Less than sixty (60) feet wide measured at the minimum required setback line nor less than seventy-two hundred (7,200) square feet in area, per mobilehome unit exclusive of streets and other public areas.

3. Front Yard Building Setback Lines

In a mobilehome park, the minimum front yard building setback line from the right-of-way of a street shall conform to applicable provisions of the municipal zoning ordinance.

or

The minimum front yard building setback line from the right-of-way of a street shall be as follows:

<table>
<thead>
<tr>
<th>Distance</th>
<th>Street Type</th>
<th>Minimum Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arterial</td>
<td>40 feet</td>
</tr>
<tr>
<td></td>
<td>Collector</td>
<td>25 feet</td>
</tr>
<tr>
<td></td>
<td>Minor</td>
<td>20 feet</td>
</tr>
</tbody>
</table>

4. Side and Rear Yard Building Setback Lines
a. In a mobilehome park, the side and rear building lines shall conform to applicable provisions of the municipal zoning ordinance.

or

The minimum side yard building setback lines for interior lots shall be ten (10) feet from the side lot lines of each mobilehome lot.

b. The minimum rear yard building setback lines shall be fifteen (15) feet measured from the rear lot line of each mobilehome lot.

c. Mobilehome units shall not be located closer than twenty-five (25) feet from the mobilehome park property lines on the sides and rear not adjacent to a street right-of-way.

5. Off-street Parking Requirements

a. Off-street parking areas shall be provided at the rate of at least two (2) vehicular parking spaces for each mobilehome lot.

b. Each such off-street parking space shall contain at least two-hundred (200) square feet of area and shall be located on the lot it is intended to serve.

5. Off-street Parking Requirements

a. Off-street parking areas shall be provided at the rate of at least two (2) vehicular parking spaces for each mobilehome lot.

b. Each such off-street parking space shall contain at least two-hundred (200) square feet of area and shall be located on the lot it is intended to serve.

Open Space Requirements

a. Not less than ten percent (10%) of the total land area shall be provided for usable open space. Such space shall be so located as to be free of traffic hazards and should, where the topography permits, be centrally located and easily accessible to all park residents.

b. Such open space shall be maintained with a durable vegetative cover that is capable of preventing soil erosion and the emanation of dust during dry weather.

7. Park Areas for Non-Residential Uses

a. No part of the mobilehome park shall be used for a non-residential purpose, except such uses that are specifically required for the direct servicing and well being of park residents, for management and maintenance of the park, or those uses permitted by applicable provisions of the municipal zoning ordinance, where one exists.

Section 705. IMPROVEMENT AND CONSTRUCTION REQUIREMENTS

In a mobilehome park all improvements, construction requirements, and engineering specifications for the improvements required, shall be provided in accordance with
ARTICLE 6 of this Ordinance and shall also provide the following additional improvements:

1. Buffer Strips

   A suitably screened or landscaped buffer strip at least ten (10) feet wide, shall be provided by the developer along all of the property lines separating the mobilehome park from adjacent land uses.

2. Signs and Lighting

   a. Signs may be permitted subject to applicable provisions of the municipal zoning ordinance.
   
   b. Signs may be permitted subject to the approval of the Planning Commission.
   
   c. All means of ingress, egress, walkways, streets, and parking lots shall be adequately lighted.

3. Other Site Improvements and Requirements

   a. Each mobilehome site shall be provided a concrete slab, constructed to current municipal building code standards, so as to provide a structurally stable pad for mobilehome placement.

   b. An enclosure of compatible design and material shall be erected around the entire base of each mobilehome. Such enclosure shall provide sufficient ventilation to inhibit decay and deterioration of the structure.

   c. Each mobilehome lot shall be provided with a four inch (4”) concrete slab on a stable surface at least ten (10) feet by eighteen (18) feet in size for use as a terrace and so located so as to be adjoining and parallel to the mobilehome and not extend into the front, side, or rear yard. Such slab shall contain an electrical outlet to which the electrical system of the mobilehome shall be connected, and shall be constructed in compliance with the municipal building and electrical codes.

   d. Individual tenants of the mobilehome park may construct attached enclosures or covered patios to individual mobilehomes, provided that such enclosure does not encroach into the front, side or rear yard areas.

   e. Tie downs shall be installed at strategic locations so as to prevent movement of the mobile home by natural causes.

   f. Provision shall be made by the Park operator to have garbage and waste collected at least once every week, and shall be deposited at an approved disposal site.
4. Mobilehome Parks in Floodplain Areas

a. Within any identified floodplain area, all mobile homes and any additions thereto shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse (Floodway).

b. Where permitted within any identified floodplain area, all mobilehomes and additions thereto shall be:

   (1) anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors in accordance with the American National Standards as specified in the Standard for the Installation of Mobile Homes Including Mobile Home Park Requirements (NFPA No. 501A-1974 ANSI A119.3-1975) as amended for Mobile Homes in Hurricane Zones or other appropriate standards such as the following:

   (a) over-the-top ties shall be provided at each of the four (4) corners of the mobile home, with two (2) additional ties per side at intermediate locations for units fifty (50) feet or more in length, and one (1) additional tie per side for units less than fifty (50) feet in length.

   (b) frame ties shall be provided at each corner of the mobile home, with five (5) additional ties per side at intermediate locations for units fifty (50) feet or more in length, and four (4) additional ties per side for units less than fifty (50) feet in length.

   (c) all components of the anchoring system shall be capable of carrying a force of four thousand, eight hundred (4800) pounds.

   (2) elevated in accordance with the following requirements:

   (a) the stands or lots shall be elevated on compacted fill, or on pilings so that the lowest floor of the mobile home will be one and one-half (1.5) feet or more above the elevation of the one hundred (100) year flood.

   (b) adequate surface drainage is provided.

   (c) adequate access for a hauler is provided.

   (d) where pilings are used for elevation, the lots shall be large enough to permit steps; piling foundations shall be placed in stable soil no more than ten (10) feet apart; reinforcement shall be provided for pilings that will extend for six (6) feet or more above the ground level.
c. An evacuation plan indicating alternative vehicular access and escape routes shall be filed with the (Municipal Official).

Section 706. FEES AND PERMITS

1. Fees

At the time of filing the Preliminary Plat and/or the Final Plat for the development of a tract of land for a mobile home park, the Applicant shall be required to pay to the (Municipality) fees in accordance with the requirements of ARTICLE 8 of this Ordinance and secure a permit.

2. Mobilehome Park Permits

Any person intending to develop a tract of land as a mobilehome park shall have a permit from the (Municipality) for each such park, issued in accordance with the following requirements:

a. Such permit shall be issued by the Municipal Code Enforcement Officer upon proper application and submission of evidence of compliance with the provisions of this Ordinance and all other applicable legal requirements, and upon payment of a fee provided herein.

b. Each permit shall be valid for one year, from the date of issue.

c. Each application shall be accompanied by a fee, payable to the (Municipality), in accordance with the fee schedule established for land developments found in Appendix ___.

d. The first application for a permit for a mobilehome park proposed for development, following the effective date of this Ordinance, shall be made to the Municipal Code Enforcement Officer on a form provided and shall be submitted together with copies of the following:

(1) A copy of the approved Final Plat signed by the (Governing Body).

(2) A receipt signed by the recorder of deeds, showing that the mobilehome park plat has been publicly recorded.

(3) A permit issued by the Department of Environmental Protection as required by the Chapter 179, Title 25, Rules and Regulations, Mobilehome Park.

e. The first application for a permit for a mobilehome park existing on the effective date on this Ordinance shall be made to the Municipal Code Enforcement Officer on a form provided and shall be submitted together with copies of the following.
(1) A copy of the plan submitted to the Pennsylvania Department of Environmental Protection as required by Chapter 179, Title 24, Rules and Regulations, Mobilehome Parks.

(2) A permit issued by the Department of Environmental Protection as required by Chapter 179, Title 25, Rules and Regulations, Mobilehome Parks.

(3) A receipt signed by the recorder of deeds showing that the mobilehome park plat has been publicly recorded together with the Deed Book and page number indicated and a copy of the recorded plat.

f. Application for the annual renewal of a permit shall be made by the holder of the permit, to the Municipal Code Enforcement Officer on a form provided, within fourteen (14) days preceding expiration of the preceding permit period, and shall be accompanied by a fee as required in Paragraph C above and any changes since the preceding permit was issued.

The Municipal Code Enforcement Officer shall inspect each mobilehome park prior to the issuance of a permit for conformance with the provisions of this Ordinance and all other applicable legal requirements.

g. It shall be incumbent upon the proprietor of a mobilehome park to keep a register and to report therein the name of the person of head of family occupying each mobilehome; the date of entry on said land; license number of automobile; serial number, make and size of trailer; and the names of all persons living in the mobilehome park.

h. The register and mobilehome park shall be subject to inspection by the Municipal Code Enforcement Officer annually, or upon the request of the

Section 707. ALTERATION OF REQUIREMENTS

The application for an alteration of any requirements shall be in accordance with the provisions of ARTICLE 9 of this Ordinance.

Section 708. ENFORCEMENT, PENALTIES, VIOLATIONS, APPEALS, SEVERABILITY AND AMENDMENTS

The enforcement, penalties, severability and amendments shall be in accordance with the provisions of ARTICLE 10 of this Ordinance.
ARTICLE 8

FEES

Section 801. FILING FEE

At the time of filing, all plats shall be accompanied by a check payable to the (municipality), in the amount specified herein, to defray the cost of reviewing the proposed plats and required data.

Section 802. ADMINISTRATIVE FEE SCHEDULE

1. The fee schedule is established and may be amended periodically by resolution of the (Municipal Governing Body). Said fee schedule includes but is not limited to:

   a. The fee for filing a Preliminary Subdivision Plat and a Final Subdivision Plat shall be as posted in Appendix ___ of this Ordinance.

   b. The fee for filing a Preliminary Land Development Plat and a Final Land Development Plat shall be as posted in Appendix ___ of this Ordinance.

   c. When (municipality name) is granted an extension of the review time by the applicant, (municipality name) may in turn charge a supplemental administrative fee as posted in Appendix ___ of this Ordinance.

Section 803. MUNICIPAL ENGINEER REVIEW FEE

1. As costs are incurred, the Applicant shall pay by a check, payable to the (municipality), an amount established and may be amended periodically by resolution of the (Municipal Governing Body). Said fee should be determined or approved by the Municipal Engineer and sufficient to cover the costs of:

   a. Reviewing the plat's engineering details.

   b. Inspecting the site layout for conformance with the plat.

   c. Reviewing cost estimates of required improvements (as applicable).

   d. Inspecting required improvements during installation.

   e. Final inspection on completion of installation of the required improvements.

   f. Other engineering verifications required by this Ordinance.
2. The engineering fees required to be paid by this Article shall be promptly paid to the municipality by the Applicant, as such fees are billed to the municipality or Municipal Authority by its or their engineers. The applicant is required to pay said bill within 30-days of receipt.

Section 804. RECORDING FEE (Optional)

1. A recording fee may be collected at the time application is made for final plat approval. Said fee shall be based on the current recording fee schedule set by the (Municipal Governing Body) Register and Recorder’s Office.

Section 805. OTHER FEES

1. Fees for all other permits required for and by (Municipality Name) for opening roads, connecting to municipal sewers, building construction, etc. shall also be paid by a check payable to the (Municipal Governing Body or Municipal Authority).

2. The Applicant at the time of application shall agree to cover the cost of advertising the Ordinance accepting the deed of dedication of applicable required improvements and its recording costs.

3. At the time of filing, all plats shall be accompanied by a check payable to the (Municipal Governing Body or Municipal Planning Commission), in the amount specified by the County, to cover the costs of County Planning Commission review and County Planning report.
ARTICLE 9

MODIFICATION OF REQUIREMENTS

Section 901. APPLICATION OF MODIFICATION PROVISIONS

Were, owing to special conditions, a literal enforcement of the provisions of these regulations will result in unreasonable hardship, the (Governing Body), on recommendation of the Planning Commission, may make such reasonable modification thereto as will not be contrary to the public interest and so that the spirit of these regulations shall be observed and substantial justice done.

Section 902. REQUESTS FOR MODIFICATION

Applications for a modification of requirements shall be submitted in writing by the applicant at the time the Preliminary Plat or Final Plat is filed with the Planning Commission.

The written modification request shall include the following:

1. The section number(s) for which the modification(s) is/are being requested.
2. The written request shall state in full the grounds and facts of unreasonableness or hardship on which the request is based. The request is required to cite the particular conditions associated with the land in question.
3. An explanation of how this constitutes the minimum modification necessary and how the modification is not contrary to the public interest.

Section 903. GRANTING OF MODIFICATION

In granting any alteration of requirements, the (Governing Body) shall record its action in its meeting minutes and the grounds for granting any modification to the applicant.

Section 904. DENIAL OF MODIFICATION

Whenever a request for a modification of requirements is denied, the (Governing Body) shall record its action and the grounds for such denial in its minutes. The (Governing Body) shall transmit a copy of its action and the grounds for such denial of any modification to the applicant.

Section 905. DISPLAYING ON PLANS

All subdivision or land development plans must display all granted modifications prior to their approval.
ARTICLE 10

ENFORCEMENT, AMENDMENTS, VIOLATIONS, APPEALS, PENALTIES, SEVERABILITY, AND REPEALER

Section 1001. ADMINISTRATION AND ENFORCEMENT

1. The Governing Body and the Planning Commission shall have the duty and authority for the administration and general enforcement of the provisions of this Ordinance, as specified or implied herein. Officials of (Municipality) having regulatory duties and authorities connected with or appurtenant to the subdivision, use, or development of land shall have the duty and authority for the controlling enforcement of the provisions of this Ordinance, as specified or implied herein or in other Ordinances of the (Municipality).

2. Permits required by the (Municipality) for the erection or alteration of buildings, the installation of sewers or sewage disposal systems, or for other appurtenant improvements to, or use of the land, shall not be issued by any municipal official responsible for such issuance until it has been ascertained that the site for such building, alteration, improvement or use is contained in a subdivision or land development plat approved and publicly recorded in accordance with the provisions of this Ordinance. Such permits shall be issued only after it has been determined that the site for such building, alteration, improvement or use conforms to the site description as indicated by the approved and recorded Final Plat or other land description acceptable in accordance with the provisions of this Ordinance, and that it is in compliance with all applicable provisions of this Ordinance.

3. The (Municipal Official) shall require that the Sewage Module and applications for sewage disposal system permits contain all the information necessary to ascertain that the site for the proposed system is acceptable in accordance with the provisions of this Ordinance, the "Rules and Regulations of the Department of Environmental Protection", and the provisions of other applicable ordinances of the (Municipality).

4. The approval of a subdivision and/or land development plat or of any improvement installed, or the granting of a permit for the erection and/or use of a building or land therein, shall not constitute a representation, guarantee or warranty of any kind or nature by the municipality or any official, employee, or appointee thereof, of the safety of any land, improvement, property or use from any cause whatsoever, and shall create no liability upon, or a cause of action against the municipality or such official, employee or appointee for any damage that may result pursuant thereto.
Section 1002. AMENDMENTS

1. Amendments to this Ordinance shall become effective only after a public hearing held pursuant to public notice as defined, and in accordance with the Pennsylvania Municipalities Code, Act 247, Article V, §505(a), as reenacted and amended.

2. All amendments to this Ordinance shall be forwarded to the Municipal Planning Commission, at least thirty (30) days prior to the public hearing on the amendment for recommendations.

3. All amendments to this Ordinance shall be forwarded to the County Planning Commission, at least thirty (30) days prior to the public hearing on the amendment for recommendations.

4. Within thirty (30) days after adoption, the (Municipal Governing Body) shall forward to the County Planning Agency, a certified copy of any amendment to the (Municipality) Subdivision and Land Development Ordinance in accordance with the Pennsylvania Municipalities Code, Act 247, Article V, §505(b), as reenacted and amended.

5. All amendments to the Ordinance after their enactment shall be affixed to (Municipality’s) Subdivision and Land Development Ordinance and all Ordinance copies offered to the public.

6. Upon passage of three (3) amendments to this Ordinance, the (Municipal Governing Body) shall consider the codifying said amendments under the advisement of the Municipal and County Planning Commissions.

Section 1003. VIOLATIONS

1. Any person being the owner or agent of the owner of any lot, tract or parcel of land shall layout, construct, open or dedicate any street, sanitary sewer, storm sewer, water main or other improvements for public use, travel or other purposes, or for the common use of occupants of buildings abutting thereon, or who sells, transfers or agrees or enters into an agreement to sell any land in a subdivision or land development whether by reference to or by other use of a plat of such subdivision or land development or erect any building thereon, unless and until a final plat has been prepared in full compliance with the provisions of this Ordinance and of the regulations adopted hereunder and has been recorded as provided herein, shall be deemed in violation of this Ordinance.

Section 1004. APPEALS

1. Any applicant aggrieved by a finding, decision or recommendation of the (Municipality) Planning Commission, may within thirty (30) days, request and receive opportunity to appear before the Commission, present additional relevant
information and request reconsideration of the original finding, decision or recommendation, provided an appropriate extension of time is granted by the applicant, to the municipality, to insure adequate time is available for the governing body to act on the application.

2. Any applicant aggrieved by a finding, decision or recommendation of the (Municipal Governing Body), may appeal to the Court of Common Pleas. All appeals shall be filed not later than thirty (30) days after the issuance of notice of the decision or report of the County Planning Commission.

Section 1005. PENALTIES

1. Any person, partnership, or corporation who or which has violated the provisions of this ordinance, upon being found liable therefore in a civil enforcement proceeding commenced by (Municipality), pay a judgment of not more than five hundred dollars ($500.00) plus all court costs, including reasonable attorneys fees incurred by (Municipality) as a result thereof.

2. No judgment shall commence or be imposed, levied, or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the municipality may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership, or corporation violating the Ordinance to have believed that there was no 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 the violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

3. The description by metes and bounds in the instrument of transfer, or other document used in the process of selling or transferring, shall not exempt the seller or transferor from such penalties or from the remedies herein provided. The (Municipality) may also enjoin such transfer or sale or agreement by action for injunction brought in any court of equity jurisdiction in addition to the penalty herein provided.

Section 1006. SEVERABILITY

1. If any section, clause, provision, or portion of these regulations shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such decision shall not effect any other section, clause, provision, or portion of these regulations. It is hereby declared to be the intent of the (Governing Body) that this Ordinance would have been adopted if such invalid or unconstitutional section, clause, provision or portion had not been included herein.
Section 1007. REPEALER

1. Any Ordinance or part thereof inconsistent herewith is hereby repealed to the extent of such inconsistency.

2. Subdivision and Land Development Ordinance No. (Prior Ordinance Number), as amended, is hereby repealed.

3. Nothing in this Ordinance hereby adopted shall be construed to affect any suit or legal proceeding now pending in any court, or any rights accrued or liability incurred, or any cause of action accrued or existing under any Ordinance hereby repealed; nor shall any right or remedy of any character be lost, impaired or affected.
ARTICLE 11
EFFECTIVE DATE AND ENACTMENT

Section 1101. CODIFICATION STATEMENT (as applicable)

It is the intention of the (governing body) and it is ordained that the provisions of this Ordinance shall become and be made a part of the Code of Ordinances of the (municipality), and the sections of this Ordinance may be re-numbered to accomplish this intention.

Section 1102. EFFECTIVE DATE

This Ordinance shall take effect on the _____ day of _________ 20_____.

Section 1103. ENACTMENT

ENACTED AND ORDAINED INTO AN ORDINANCE THIS _____ DAY OF _________, 20_____.

________________________________________
____________________
(Municipality)

ATTEST: ____________________________  ____________________________
(Secretary)     (President or Chairperson)

(Municipal Seal)
APPENDICES
APPENDIX 1

SAMPLE DEVELOPER’S AGREEMENT FOR COMPLETION OF IMPROVEMENTS

THIS AGREEMENT, entered into this__________day of ___________, 20____ by and between (Name of municipality), Commonwealth of Pennsylvania, hereinafter referred to as the “MUNICIPALITY” and ______________________________________hereinafter referred to as "DEVELOPER"

WHEREAS, DEVELOPER is the owner of a certain parcel of land situate within (Name of municipality), said parcel of land being more particularly described in Exhibit "A
attached hereto; and

WHEREAS, DEVELOPER is desirous of developing said lands under a Subdivision and Land Development Plan captioned

_______________________________
dated ______________________,20____, hereafter "Plan", as the same was approved by the (Name of governing body) of (Name of municipality) on____________________
copies of which plan are marked Exhibit "B" and attached hereto; and

WHEREAS, in the application to the MUNICIPALITY for approval of the Plan the DEVELOPER indicated his intention to construct at his sole cost and expense, including but not limited to engineering, inspection and legal expenses incurred by the MUNICIPALITY in connection with the Plan, all those improvements required by the Plan or by any conditions attached thereto, more particularly described in Appendix No. 3 attached hereto; and

WHEREAS, the DEVELOPER has agreed to deliver to the MUNICIPALITY a renewable Irrevocable Letter of Credit, or other forms of security such as a performance bond or cash, (in form and substance to be approved by the MUNICIPALITY from an institution licensed to do business in Pennsylvania in the amount of $__________ to guarantee the installation of the improvements and reimbursement to the MUNICIPALITY for expenditures directly incurred in connection with the improvements.

NOW, THEREFORE, IT IS AGREED:

1. The DEVELOPER covenants, promises and agrees to build, construct and install all improvements in accordance with the specifications of the MUNICIPALITY and in the manner provided and approved by the MUNICIPALITY, on or before the________ day of __________, 20__, time being of the essence of this agreement.
2. The DEVELOPER shall enter into contract(s) with such person or persons necessary to construct the improvements. The DEVELOPER shall notify the MUNICIPALITY promptly thereafter (a) that it has contracted for the construction of improvements, (b) specify an improvement construction schedule, (c) provide a schedule of job site meetings (no less than monthly), and (d) the name and address of the contractor and the supervisor of the work for the contractor. The contract between the DEVELOPER and his contractor shall contain a provision that the construction or installation is subject to the inspection and approval of the MUNICIPALITY.

3. The DEVELOPER concurrently delivers to the MUNICIPALITY its Irrevocable Letter of Credit, in the amount of $___________. The amount of financial security required shall be based upon an estimate of the cost of completion of the required improvements, submitted by the DEVELOPER and prepared by a Professional Engineer licensed as such in Pennsylvania and certified by such Engineer to be a fair and reasonable estimate of such cost. The MUNICIPALITY, upon the recommendation of the Municipal Engineer may refuse to accept such estimate for good cause shown.

The Letter of Credit shall be posted as security for performance of this agreement, including the construction of the improvements in a manner approved by the MUNICIPALITY. The term of such Letter of Credit shall be for the period agreed upon for the completion of construction of the improvements and, if required by the MUNICIPALITY, will include an "evergreen" clause which will allow for an automatic extension of term to cover any extended period of construction.

In the event the DEVELOPER shall fail to construct the improvements in a manner acceptable to the MUNICIPALITY, the MUNICIPALITY may, at its option, construct said improvements at the Developer’s expense, in which event the funds represented by and posted through said Letter of Credit shall be used to reimburse the MUNICIPALITY for the costs of such construction and its reasonable necessary ancillary expenses. In the event the funds secured by said Letter of Credit shall not be sufficient to satisfactorily construct the improvements or reimburse the MUNICIPALITY for its cost and expense to construct the same, the MUNICIPALITY may file an appropriate legal action against the DEVELOPER based upon this agreement for the balance of the funds required to so construct the improvements or reimburse the MUNICIPALITY for the same.

4. As the work of installing the required improvements proceeds, the party posting the financial security may request that the MUNICIPALITY release or authorize the release, from time to time, such portions of the financial security necessary for the payment to the contractor or contractors performing the work. Any such request shall be in writing addressed to the Municipal Engineer, and the Municipal Engineer shall have 45 days from receipt of such request within which to allow the Municipal Engineer to certify in writing to the (Name of governing
(Name of governing body) that such portion of the work upon the improvements has been completed in accordance with the approved plat. Upon such certification the Municipal Engineer shall authorize a reduction in the Letter of Credit by the lending institution by an amount as estimated by the Municipal Engineer fairly representing the value of the improvements completed or, if the (Name of governing body) fails to act within said 45 day period, the (Name of governing body) shall be deemed to have approved the release of funds as requested. The (Name of governing body) may, prior to final release at the time of completion and certification by its Engineer, require retention of 10% of the estimated cost of the aforesaid improvements.

5. The DEVELOPER will cause electric, telephone and cable utilities to be installed as underground facilities and not aerial.

6. The MUNICIPALITY shall designate an Engineer to review development plans and specifications for the improvements. If necessary, an escrow account shall be established by the DEVELOPER as provided for in the Subdivision and Land Development Ordinance and as adopted by the (Name of governing body) from time to time.

7. During construction, the MUNICIPALITY shall designate an inspector to determine whether the improvements are being made in accordance with the plans and capital improvement specifications. It shall be the duty of the DEVELOPER to request scheduling two (2) working days prior to the desired inspection. Lack of inspection does not constitute approval. The MUNICIPALITY shall do all things necessary to assure the timely arrival of its inspector at the site of the improvements following notice by the DEVELOPER. Inspections required shall include, as a minimum, the following:

   A. Erosion and sedimentation control, prior to any other earth moving activity occurring.

   B. Inlet boxes must be inspected for full concrete connections with piping and inlet tops. (Both outside and inside the box prior to C. below). Flushing of all storm sewers may be required by the Municipal Engineer should, in his/her sole judgment, the necessity exists.

   C. Road inspections (for roads to be dedicated to the MUNICIPALITY):

      1) Road sub-base shall be inspected prior to the base (stone) being installed. Contractor shall provide a loaded tri-axle for proof roll.

      2) Road base shall be inspected prior to the surface coat being installed.

      3) Road binder shall be inspected prior to the wearing surface being installed.
D. Sidewalks and curbs must be inspected prior to acceptance by the MUNICIPALITY.

8. All construction shall be in accordance with the construction plans and the Municipal Ordinances. If a conflict exists between the plans and ordinances, the stricter of the two will be used. The DEVELOPER is responsible, at his/her own expense, to correct any unforeseen conditions that are caused by this development.

9. All erosion and sedimentation controls shall be installed in accordance with the approved plan and the Subdivision and Land Development Ordinance prior to any other construction activity occurring at the site. The erosion and sedimentation controls will be properly maintained until all disturbed areas have become stabilized. This shall include all stormwater conveyance controls (such as detention ponds, swales, piping, etc). It is the Developers’ responsibility to stabilize the swales and detention facilities.

10. The DEVELOPER shall convey to the MUNICIPALITY by Deed of Dedication all streets, alleys, roads, courts, avenues, drives, public ways and park areas as these facilities are indicated and described on the Plan.

11. The DEVELOPER shall grant and convey, to third parties if appropriate, by Deed of Dedication easements for rights-of-way (including maintenance) for all sewer and water lines and telephone and electric facilities, bikeways and drainage ways. In the event easements are required from third parties, it shall be the duty of the DEVELOPER to obtain them at his sole cost and expense.

12. Upon completion of the improvements and before acceptance by the MUNICIPALITY, the DEVELOPER shall deposit with the MUNICIPALITY a maintenance escrow, in terms acceptable to the MUNICIPALITY, equal to 15% of the total cost of improvements to ensure repair of defective conditions appearing in said improvements within and for a period of eighteen (18) months from the date of acceptance thereof by the MUNICIPALITY, conditioned that if said improvements are in satisfactory condition by MUNICIPALITY standards at the end of said maintenance period (18 months), then said escrow will be returned to the DEVELOPER, otherwise to remain in full force and effect until all defective conditions are remedied to the Municipality’s specifications.

13. Upon the satisfactory completion and final inspection of the improvements, delivery of the appropriate Deeds of Dedication, their recording fees and the delivery of Maintenance Escrow, the MUNICIPALITY agrees to accept the improvements and to operate and/or maintain them. A stop work order may be issued by the MUNICIPALITY whenever any provision of this agreement is broken.
14. The DEVELOPER shall cause its contractors or subcontractors to obtain and maintain liability, workers' compensation and other insurance coverage, as may be required by law, and furnish certificates of such insurance as required by the MUNICIPALITY.

15. In addition to the aforesaid requirements, the DEVELOPER agrees that it will at his/her own expense:

   A. Pay to the MUNICIPALITY any fees required by outside/third party agencies for entering into the development plan and for fees and other expenses such as, but not limited to, the payment for Engineers, applications and approvals, as may be required by the ordinances and regulations of the MUNICIPALITY or other government entities.

   B. Connect any underground springs or other waters encountered during construction to the proposed storm sewers or to a proper outlet as designated by the Municipal Engineer.

   C. During construction, the DEVELOPER shall police the construction area daily, keeping it free and clear of all rubbish, refuse, brush and debris; the DEVELOPER will accumulate said material and deposit the same in an area specified by the Municipality’s representative until such time as the accumulated matter is removed from the site by the DEVELOPER; he shall contain such matter so that it will not become wind-blown spread, or otherwise become a nuisance. All soil washed or carried onto public streets during construction shall be cleaned up each day. Upon completion of the construction, the DEVELOPER shall remove from the site and dispose of all brush, rubbish, refuse and debris, leaving the area free and clear of same.

   D. Remove all temporary buildings or structures within one month after completion of the Improvements.

**THIS AGREEMENT** shall be binding upon the heirs, executors, administrators, successors and assigns of the DEVELOPER and the MUNICIPALITY.

**ATTEST:**

________________________________________
Signature of chief elected official

**ATTEST:**

________________________________________
(NAME OF MUNICIPALITY)

(NAME OF DEVELOPER)
APPENDIX 2

LIST OF SITE IMPROVEMENTS ITEMS FOR DEVELOPER’S AGREEMENT

1. Storm Sewers
2. Detention Ponds
3. Swales
4. Sanitary Sewers
5. Water Supply
6. Fire Hydrants
7. Streets
8. Curbs
9. Sidewalks
10. Survey Monuments and Iron Pins
APPENDIX 3

SAMPLE STORMWATER FACILITIES AND BEST MANAGEMENT PRACTICES (BMP) MAINTENANCE AND MONITORING AGREEMENT

THIS AGREEMENT, made and entered into this ____________ day of ____________, 20__, by and between ____________________________________, (hereinafter the “Owner”), and ____________________________, (Name of County) County; Pennsylvania, (hereinafter “Municipality”);

WITNESSETH

WHEREAS, the Owner is the owner of certain real property identified as (address) ____________________________________________, Tax Parcel Number ____________________________., (hereinafter “Property”).

WHEREAS, the Owner is proposing to make improvements to the Property; and

WHEREAS, the Drainage Plan (hereinafter “Plan”) for the Property which is expressly made a part hereof, as approved or to be approved by the Municipality, provides for detention, retention, infiltration and/or treatment of stormwater within the confines of the Property; and

WHEREAS, the Municipality and the Owner, successors, heirs and assigns agree that the health, safety, and welfare of the public require that on-site stormwater management facilities and BMPs be constructed and maintained on the Property: and

WHEREAS, the Municipality requires, through the implementation of its Stormwater Management Ordinance, that stormwater management facilities and BMPs as shown on the Plan be constructed and adequately maintained by the Owner, successors, heirs and assigns.

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:

1. The on-site stormwater management facilities and BMPs shall be constructed by the Owner, successors, heirs and assigns, in accordance with the terms, conditions, details and specifications identified in the Plan.

2. The Owner, successors, heirs and assigns, shall maintain the stormwater management facilities and BMPs in good working condition, acceptable to the Municipality so that they are performing their design functions.

3. The Owner, successors, heirs and assigns, hereby grant permission to the Municipality, its authorized agents and employees, upon presentation of proper identification, to enter upon the Property at reasonable times, and to inspect the stormwater...
management facilities and BMPs whenever the Municipality deems necessary. The purpose of the inspection is to assure safe and proper functioning of the facilities. The inspection shall cover the entire facilities, berms, outlet structures, pond areas, access roads, etc. When inspections are conducted, the Municipality shall give the Owner, successors, heirs and assigns, copies of the inspection report with findings and evaluations. At a minimum, maintenance inspections shall be performed in accordance with the schedule specified in the BMP Operations and Maintenance Plan.

4. All reasonable costs for said inspections shall be borne by the Owner, successors, heirs and assigns, and payable to the Municipality.

5. The owner shall convey to the Municipality easements and/or rights-of-way to assure access for periodic inspections by the municipality and maintenance, if required.

6. In the event the Owner, successors, heirs and assigns, fail to maintain the stormwater management facilities and BMPs in good working condition acceptable to the Municipality, the Municipality shall give proper notice to Owner setting forth the specifics of such failure to maintain, the remediation required, and deadline to complete such action. After failure by the Owner to remedy within the specified time limit, the Municipality may enter upon the Property and take such necessary and prudent action to maintain said stormwater management facilities and BMPs and to charge the costs of the maintenance and/or repairs to the Owner, successors, heirs and assigns. This provision shall not be construed as to allow the Municipality to erect any structure of a permanent nature on the land of the Owner, outside of any easement rights that the Municipality may have. 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.

7. The Owner, successors, heirs and assigns, will perform operation, maintenance and inspections in accordance with the BMP Operations and Maintenance Plan for the stormwater management facilities and BMPs including sediment removal as outlined on the approved Drainage Plan.

8. 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 on account of the Owner’s, successors’, heirs’ or assigns’ failure to perform such work, the Owner, successors, heirs and assigns, shall reimburse the Municipality upon demand, within 30 days of receipt of invoice thereof, for all costs incurred by the Municipality hereunder. If not paid within said 30-day period, the Municipality may enter a lien against the property, including any and all properties when the Owner is a Homeowners Association, in the amount of such costs, or may proceed to recover his costs through proceedings in equity or at law as authorized by law.

9. The Owner, successors, heirs and assigns, shall indemnify the Municipality and its agents and employees against any and all damages, accidents, casualties, occurrences or claims which might arise or be asserted against the Municipality for the
construction, presence, existence or maintenance of the stormwater management facilities and BMPs by the Owner, successors, heirs and assigns.

10. In the event a claim is asserted against the Municipality, its agents or employees, the Municipality shall promptly notify the Owner, successors, heirs or assigns, and they shall defend, at their own expense, any suit based on such claim. If any judgment or claims against the Municipality, its agents or employees shall be allowed, the Owner, successors, heirs and assigns shall pay all costs and expenses in connection therewith.

11. In the event of an emergency or the occurrence of special or unusual circumstances or situations, the Municipality may enter the Property, if the Owner is not immediately available, without notification or identification, to inspect and perform necessary maintenance and repairs, if needed, when the health, safety or welfare of the citizens is at jeopardy. However, the Municipality shall notify the Owner of any inspection, maintenance, or repair undertaken within five days of the activity. The Owner shall reimburse the Municipality for its costs.

12. It is agreed between the two entities known as Owner that they shall be bound jointly and severally by the terms, covenants and agreements herein.

13. Invalidation of any one of these provisions by judgment or Court Order shall in no wise affect any other provisions that shall remain in full force and effect.

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

ATTEST:

MUNICIPALITY: __________________________
(CORPORATE SEAL)

_________________________  By___________________________
Secretary      Title

______________________________
(Municipal Governing Body)

OWNER

(Individual)

Signature of Individual

Witness:     Trading and Doing Business as
(Partnership)

(Name of Partnership)

Witness:

_________________________  By______________________(Seal)

_________________________  By______________________(Seal)

_________________________  By______________________(Seal)

ATTEST:     (Corporation)

______________________________ ______________________________

(Assistant) Secretary    (Name of Corporation)

(CORPORATE SEAL)

By___________________________
Title

County of ___________________________, 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)
APPENDIX 4

SAMPLE CONSERVATION SUBDIVISION REGULATIONS
BY THE NATURAL LANDS TRUST
1031 Palmers Mill Road
Media, PA 19063
(610) 353-5587
SAMPLE CONSERVATION SUBDIVISION REGULATIONS BY THE NATURAL LANDS TRUST

(Model Language for Subdivision Ordinance)

Content:

ARTICLE 2 - Definitions
ARTICLE 4 - Plan Content Requirements
ARTICLE 5 - Plan Processing Procedures
ARTICLE 6 - Resource Conservation and Greenway Delineation Standards
ARTICLE 7 - Supplemental Design Standards for Option 5 Hamlets and Villages

ARTICLE 2 - Definitions

CALIPER - The diameter of a tree trunk measured at a point 6 inches above the ground for a tree measuring up to and including 4 inches in diameter and 12 inches above the ground for a tree measuring above 4 inches in diameter. The term is usually applied to nursery stock.

COMMON FACILITIES – All the real property and improvements, including without limitation, landscaped areas, buffers, Greenway Land not included within title lines of any privately owned lot, street rights-of-way not dedicated to (municipality), owned in common by residents within the development which is served by the facilities.

COMMUNITY ASSOCIATION - A non-profit organization comprised of homeowners or property owners, the function of which is to maintain and administer property owned in common by member of the association or by the association, to protect and enhance the value of the property owned individually by each of the members. Homeowners’ Associations and Condominium Associations are types of Community Associations.

CONDOMINIUM – Real estate, portions of which is designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of those separate portions, in accordance with the Pennsylvania Uniform Condominium Act 1980-82, as amended.

CONSERVATION AREAS, PRIMARY - Lands within the 100-year floodplain (including the floodway), wetlands and prohibitive steep slopes (above 25 percent). All Primary Conservation Areas are located within Greenway Lands.

CONSERVATION AREAS, SECONDARY – All landscape elements not included in the Primary Conservation Areas, which do not create severe limitations for development, but which should be considered for conservation due to their capacity for helping to provide, along with the Primary Conservation Areas, an interconnected system of open space and recreation. In conservation subdivision design, some Secondary Conservation Areas are located within Greenway Lands, and others are not.

CONSERVANCY LOT – A large, privately owned and maintained lot, containing an existing dwelling, farm complex, or historic structure, comprising part of the required Greenway Land in a conservation subdivision. An area of at least one acre surrounding the dwelling, farm complex or historic structure is set aside and is not counted toward the required minimum Greenway Land.
The remainder of the conservancy lot is permanently protected Greenway Land. Public access to conservancy lots is not required.

**CONSTRAINED LAND** - The acreage sum of certain features on the land, each of which is multiplied by a net-out factor set forth in the Zoning Ordinance.

**DBH (DIAMETER AT BREAST HEIGHT)** - The diameter of a tree trunk measured at a point 4.5 feet above the ground at the base of the tree. If a tree divides or splits into multiple trunks below 4.5 feet, the trunk is measured at its most narrow point beneath the split. The term is usually applied to trees in the field (not nursery stock).

**GREENWAY LAND** - A parcel or parcels of land and/or water, within a development site set aside for the protection of natural and cultural resources. It is also intended for the use and enjoyment by the residents of such development and possibly the general public. Greenway Land is substantially free of structures, but may contain such improvements as are in the finally approved development plan, and does not include individually owned private yards, except in the case of approved conservancy lots. Greenway Land may be a combination of natural or naturalized areas (such as the municipal greenway network and rural trails) and more manicured areas (such as common greens, squares, parks and playing fields). Greenway Land is permanently restricted against further development. Greenway and Greenway Land are synonymous.

**GREEN, COMMON** – An area of Greenway Land, surrounded by streets on at least two and often three or four sides, around which dwellings that face the green are organized. Common greens are often designed as terminal vistas within a street system.

**HEDGEROW** - A linear plant community dominated by trees and/or shrubs. Hedgerows often occur along roads, fence lines, property lines, or between fields, and may occur naturally or be specially planted (e.g. as a windbreak).

**HISTORIC RESOURCE** - Any structure that is:

A. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

B. 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;

C. 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; or

D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

   1. By an approved State program as determined by the Secretary of the Interior; or

   2. Directly by the Secretary of the Interior in states without an approved program.

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

INVASIVE PLANT SPECIES - Predominantly non-native, non-indigenous, alien tree, shrub, vine, or herbaceous species that grow or reproduce aggressively, usually because they have few or no natural predators, and which can so dominate that they kill off or drive out many indigenous plant species.

LAND DISTURBANCE - Any activity, which exposes soils, alters topography and/or alters woody vegetation, except for removal of a safety hazard, diseased trees, or invasive vegetation.

PRIMARY CONSERVATION AREA – see Conservation Area, Primary

SECONDARY CONSERVATION AREA – See Conservation Area, Secondary

SPECIMEN TREE - A unique, rare, or otherwise specifically selected tree or plan considered worthy of conservation by the municipality, because of its species, size, age, shape, form historical importance, or any other significant characteristics, including listing as a Species of Special Concern by the Commonwealth of Pennsylvania. All healthy trees over 20 inches dbh are considered specimen.

Commentary: Not all trees reach specimen size at the same diameter. For example, a dogwood or sassafras is considered large at 20 inches, while an oak may not be considered large until it is about 32 inches. A more accurate, but more complex, method of designating specimen trees is to give size parameters for each species, as in the following table.

Species not listed with a dbh 20 inches or greater are considered specimen.

<table>
<thead>
<tr>
<th>Species</th>
<th>Min. Size</th>
<th>Species</th>
<th>Min. Size</th>
<th>Species</th>
<th>Min. Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(dbh)</td>
<td></td>
<td>(dbh)</td>
<td></td>
<td>(dbh)</td>
</tr>
<tr>
<td>Locust</td>
<td>30”</td>
<td>Sassafras</td>
<td>20”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ash</td>
<td>32”</td>
<td>Maple</td>
<td>32”</td>
<td>Spruce</td>
<td>30”</td>
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<tr>
<td>Beech</td>
<td>32”</td>
<td>Sycamore</td>
<td>36”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cherry</td>
<td>24”</td>
<td>Oak</td>
<td>32”</td>
<td>Tulip Poplar</td>
<td>36”</td>
</tr>
<tr>
<td>Elm</td>
<td>30”</td>
<td>Osage Orange</td>
<td>20”</td>
<td>Walnut</td>
<td>30”</td>
</tr>
<tr>
<td>Hemlock</td>
<td>30”</td>
<td>Pine</td>
<td>30”</td>
<td>Hickory</td>
<td>32”</td>
</tr>
</tbody>
</table>

STEEP SLOPES - Areas of land where the grade is 15 percent or greater. Steep slopes are divided into two categories:

A. Precautionary slopes are those areas of land where the grade is 15 to 25 percent.
B. Prohibitive slopes are those areas of land where the grade is greater than 25 percent. Slope shall be measured as the change in elevation over the horizontal distance between consecutive contour lines. Slope shall be measured over three 2-foot contour intervals (six cumulative vertical feet of slope). All slope measurements shall be determined by a topographic survey signed and sealed by a registered surveyor or engineer licensed to practice in (insert name of state).

**TERMINAL VISTA** – The scene terminating the view down a road or street, as at an intersection or on the outside of a curve.

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

**TRACT AREA, ADJUSTED** – The gross tract area minus the constrained land.

**TRACT AREA, GROSS** – The total amount of land contained within the limits of the legally described property lines bounding the tract.

**WATERCOURSE -**

**WETLANDS** - 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, including swamps, marshes, bogs, and similar areas. Any area meeting the official wetland definition of the U.S. Army Corps of Engineers or the (state) Department of Environmental Protection, as amended, shall be considered a wetland for the purposes of this Ordinance. In the event the definition of wetland accepted by the U.S. Army Corps of Engineers conflicts with the definition of a wetland accepted by the (state) Department of Environmental Protection, the more restrictive definition shall apply.

**WOODLANDS** - A tree mass or plant community in which tree species are dominant or co-dominant and the branches of the trees form a complete, or nearly complete, aerial canopy. Any area, grove, or stand of mature or largely mature trees (larger than 6 inches dbh) covering an area of one-quarter acre or more, or consisting of 10 individual trees larger than 6 inches dbh, shall be considered a woodland. The extent of any woodland plant community or any part thereof shall be measured from the outer-most drip line of all the trees in the plant community.

**WOODLAND DISTURBANCE** - Any activity that 1) alters the existing structure of a woodland or hedgerow, including the cutting or removal of canopy trees, subcanopy trees, understory shrubs and vines, and herbaceous woodland floor species; 2) constitutes a land disturbance within a woodland or hedgerow. Woodland disturbance does not include the selective cutting or removal of invasive plant species. (See INVASIVE PLANT SPECIES)
ARTICLE 4 - Plan Content Requirements

Contents:
SECTION 400 - Purposes and Applicability
SECTION 401 - Sketch Plan Overlay Sheet
SECTION 402 - Documents Required For The Conceptual Preliminary Plan
SECTION 403 - Detailed Final Plan

SECTION 400 - Purposes and Applicability

The provisions of this Article shall apply to all subdivision and land development applications in this municipality. For the convenience of applicants, the municipality provides a complimentary Plan Requirements Checklist listing all the documents that this Ordinance requires to be submitted, at each step of the review process. Copies of this checklist are available from the Municipal Office. The checklist also facilitates review by staff and officials, as they review each application for completeness and conformance with relevant ordinance provisions.

SECTION 401 - Sketch Plan Overlay Sheet

A. A Sketch Plan may be submitted by the applicant as a diagrammatic basis for informal discussion with the Governing Body, the Planning Commission, and the County Planning Commission regarding the design of a proposed subdivision or land development. Sketch Plan submission is strongly encouraged by the municipality as a way of helping applicants and officials develop a better understanding of the property and to help establish an overall design approach that respects its special or noteworthy features, while providing for the density permitted under the zoning ordinance.

B. To provide a full understanding of the site's potential and to facilitate the most effective exchange with the Planning Commission, the Sketch Plan should include the information listed below. Many of these items can be taken from the Existing Resources and Site Analysis Plan, a document that must in any case be prepared and submitted no later than the date of the Site Inspection, which precedes the Conceptual Preliminary Plan (see Section 402C2). In fact, the diagrammatic Sketch Plan may be prepared as a simple overlay sheet placed on top of the Existing Resources and Site Analysis Plan.

1. Name and address of the legal owner, the equitable owner, and/or the applicant;
2. Name and address of the professional engineer, surveyor, planner, architect, landscape architect, or site designer responsible for preparing the plan;
3. Graphic scale (not greater than 1" = 200 ft.; however, dimensions on the plan need not be exact at this stage) and north arrow;
4. Approximate tract boundaries, sufficient to locate the tract on a map of the municipality;
5. Location map;
6. Zoning district;
7. Streets on and adjacent to the tract (both existing and proposed);
8. 100-year floodplain limits, and approximate location of wetlands, if any;
9. Topographic, physical, and cultural features including fields, pastures, meadows, wooded areas, trees with a diameter of fifteen inches or more, hedgerows and other significant vegetation, steep slopes (over 25%), rock outcrops, soil types, ponds, ditches, drains, dumps, storage tanks, streams within two hundred (200) feet of the tract, and existing rights-of-way and easements, and cultural features such as all structures, foundations, walls, wells, trails, and abandoned roads;
10. Schematic layout indicating a general concept for land conservation and development ("bubble" format is acceptable for this delineation of Step One of the four-step design process described in Section 602B of this ordinance);
11. Proposed general street and lot layout; and
12. In the case of land development plans, proposed location of buildings and major structures, parking areas and other improvements.

SECTION 402 - Documents Required For The Conceptual Preliminary Plan

The application for a Conceptual Preliminary Plan shall provide the name and address of the legal owner or equitable owner of the subject property, and the name and address of the applicant if not the same party, plus the following elements listed below. A deed or agreement of sale evidencing that the applicant is the legal or equitable owner of the land to be subdivided or developed shall be shown.

(Note: The approach advocated in this Article is to return to the original intent of the state enabling legislation, in which "Preliminary Plans" were much more conceptual in nature than they have evolved into within recent years, in many municipalities. The following model provisions strike a balance between the municipality's need for certain kinds of information prior to vesting, while at the same time avoiding the situation in which applicants become "locked in" to highly-detailed and so-called "preliminary" plans that cost them tens of thousands of dollars to prepare. It is not essential that such a high degree of detail be supplied at this early stage, and the practice of transforming "preliminary" plans into very expensive engineering documents has proven to be counter-productive in many cases, with applicants typically refusing to substantially modify their "preliminary" plans.)

A. Conceptual Preliminary Plan Application Submission Requirements
1. The submission requirements for a Conceptual Preliminary Plan shall consist of the following elements, and shall be prepared in accordance with the drafting standards and plan requirements described herein:
   a. Site Context Map
   b. Existing Resources and Site Analysis Plan
   c. Preliminary Resource Impact and Conservation Plan
   d. Preliminary Improvements Plan
   e. Preliminary Studies and Reports as set forth in other parts of this ordinance.

B. Drafting Standards

1. The plan shall be drawn to a scale of either 1"=100' or 1"=200', whichever would fit best on a standard size sheet (24" x 36"), unless otherwise approved by the Planning Commission.
2. Dimensions shall be set in feet.
3. Each sheet shall be numbered and the plan shall provide an adequate legend indicating clearly which features are existing and which are proposed.
4. All plans submitted shall be made on sheets no larger than 34" x 44" nor smaller than 17" x 22".

C. Plan Requirements

The following plans and maps shall bear the name, signature, address, and telephone number of the engineer, land surveyor, or landscape architect responsible for preparing the plan or map.

1. Site Context Map

   A map showing the location of the proposed subdivision within its neighborhood context shall be submitted. For sites under 100 acres in area, such maps shall be at a scale not less than 1"= 200', and shall show the relationship of the subject property to natural and man-made features existing within 1,000 feet of the site. For sites of 100 acres or more, the scale shall be 1" = 400', and shall show the above relationships within 2,000 feet of the site. The features that shall be shown on Site Context Maps include topography (from U.S.G.S. maps), stream valleys, wetland complexes (from maps published by the U.S. Fish & Wildlife Service or the U.S.D.A. Natural Resources Conservation Service), woodlands over one-half acre in area (from aerial photographs), ridge lines, public roads and trails, utility easements and rights of way, public land, and land protected under conservation easements.

2. Existing Resources and Site Analysis Plan
For all subdivisions (except those in which all proposed lots are to be ten or more acres in area), an Existing Resources and Site Analysis Plan shall be prepared to provide the developer and the municipality with a comprehensive analysis of existing conditions, both on the proposed development site and within 500 feet of the site. Conditions beyond the parcel boundaries may be described on the basis of existing published data available from governmental agencies, and from aerial photographs.

The municipality shall review the Plan to assess its accuracy, conformance with municipal ordinances, and likely impact upon the natural and cultural resources on the property. Unless otherwise specified by the Planning Commission, such plans shall generally be prepared at the scale of 1" = 100' or 1" = 200', whichever would fit best on a single standard size sheet (24" x 36"). The following information shall be included in this Plan:

a. A vertical aerial photograph enlarged to a scale not less detailed than 1 inch = 400 feet, with the site boundaries clearly marked.

b. Topography, the contour lines of which shall generally be at two-foot intervals, determined by photogrammetry (although 10-foot intervals are permissible beyond the parcel boundaries, interpolated from U.S.G.S. published maps). The determination of appropriate contour intervals shall be made by the Planning Commission, which may specify greater or lesser intervals on exceptionally steep or flat sites. Slopes between 15 and 25 percent and exceeding 25 percent shall be clearly indicated. Topography for major subdivisions shall be prepared by a professional land surveyor or professional engineer from an actual field survey of the site or from stereoscopic aerial photography and shall be coordinated with official U.S.G.S. benchmarks.

c. The location and delineation of ponds, streams, ditches, drains, and natural drainage swales, as well as the 100-year floodplains and wetlands, as defined in the Zoning Ordinance. Additional areas of wetlands on the proposed development parcel shall also be indicated, as evident from testing, visual inspection, or from the presence of wetland vegetation.

d. Vegetative cover conditions on the property according to general cover type including cultivated land, permanent grass land, meadow, pasture, old field, hedgerow, woodland and wetland, trees with a caliper in excess of fifteen inches, the actual canopy line of existing trees and woodlands. Vegetative types shall be described by plant community, relative age and condition.

e. Soil series, types and phases, as mapped by the U.S. Department of Agriculture, Natural Resources Conservation Service in the published soil survey for the county, and accompanying data published for each soil relating to its suitability for construction (and, in unsewered areas, for septic suitability).

f. Ridge lines and watershed boundaries shall be identified.
g. A viewshed analysis showing the location and extent of views into the property from public roads and from public parks, public forests, and state game lands.

h. Geologic formations on the proposed development parcel, including rock outcroppings, cliffs, sinkholes, and fault lines, based on available published information or more detailed data obtained by the applicant.

i. All existing man-made features including but not limited to streets, driveways, farm roads, woods roads, buildings, foundations, walls, wells, drainage fields, dumps, utilities, fire hydrants, and storm and sanitary sewers.

j. Locations of all historically significant sites or structures on the tract, including but not limited to cellarholes, stone walls, earthworks, and graves.

k. Locations of trails that have been in public use (pedestrian, equestrian, bicycle, etc.).

l. All easements and other encumbrances of property which are or have been filed of record with the Recorder of Deeds of ______ County shall be shown on the plan.

m. Total acreage of the tract, the Adjusted Tract Area and the constrained land area with detailed supporting calculations.

3. Four-Step Design Process for Subdivisions in the Conservation Design Overlay District

(Note: This process can also be used in other zoning districts where conservation design is encouraged or required under the municipality’s ordinance.

All Conceptual Preliminary Plans in the Conservation Design Overlay District shall include documentation of a four-step design process in determining the layout of proposed greenway lands, house sites, streets and lot lines, as described below. (See also Section 602.B)

1. Step 1: Delineation of Greenway Land, Areas for Stormwater and Wastewater Management and Areas for Development.

General locations for Greenway Land, development areas, and stormwater and wastewater management areas shall be delineated according to the following procedure:

a. Using the ER/SA Plan as a base map, Primary and Secondary Conservation Areas shall be delineated consistent with the Map of Potential Conservation Areas.

b. Greenway Land shall include all Primary Conservation Areas plus enough acreage within the Secondary Conservation Areas to meet at least
the minimum total acreage requirement for Greenway Land set forth in the Zoning Ordinance.

1) The applicant shall prioritize natural and cultural resources in terms of their highest to least suitability for inclusion in the proposed Greenway Land in accordance with Sections 603.A and B herein ("Prioritized List of Resources to be Conserved" and "Other Design Considerations").

2) The locations and boundaries of Primary Conservation Areas shall follow the actual boundaries of floodplains, wetlands and steep slopes over 25%.

3) The locations and boundaries of Secondary Conservation Areas shall be based on the priorities established above and practical considerations given to the tract's configuration, its context in relation to resources areas on adjoining properties, and the applicant's subdivision objectives. Those parts of the Secondary Conservation Areas with the highest resource significance shall be included in the Greenway Land.

The applicant shall also be guided by any written recommendations provided by the municipality regarding the delineation of Secondary Conservation Areas lands, following the Site Inspection or the Pre-Sketch Conference.

4) Greenway Land shall be delineated in a manner clearly indicating Greenway Land boundaries as well as the types of resources included within them.

c. Development areas constitute the remaining lands of the tract outside the Greenway Land, where dwellings, streets, and lots are to be delineated in accordance with steps 2, 3, and 4 below.

d. Preferred locations for stormwater and wastewater management facilities shall be identified using the ER/SA Plan as a base map.

1) The design of these facilities should strive to use the natural capacity and features of the site to facilitate the management of stormwater and wastewater generated by the proposal.

2) Opportunities to use these facilities as a buffer between the proposed Greenway Land and development areas are encouraged.

3) Stormwater management facilities should be located in areas identified as groundwater recharge areas.

4) Wastewater facilities shall comply with the requirements of Section 627 and the municipal Sewage Facilities Plan Update.

5) These facilities located within the Greenway Land may be counted toward the minimum Greenway Land requirement only
b. **Step 2: Location of House Sites**
Potential house sites shall be tentatively located, using the proposed greenway lands as a base map as well as other relevant data on the Existing Resources and Site Analysis Plan such as topography and soils. House sites should generally be located not closer than 100 feet from Primary Conservation Areas and 50 feet from Secondary Conservation Areas, taking into consideration the potential negative impacts of residential development on such areas as well as the potential positive benefits of such locations to provide attractive views and visual settings for residences.

c. **Step 3: Alignment of Streets and Trails**
Upon designating the house sites, a street plan shall be designed to provide vehicular access to each house, complying with the standards in Article 7 herein and bearing a logical relationship to topographic conditions. Impacts of the street plan on proposed greenway lands shall be minimized, particularly with respect to crossing environmentally sensitive areas such as wetlands and traversing slopes exceeding 15%. Street connections shall generally be encouraged to minimize the number of new cul-de-sacs to be maintained by the municipality and to facilitate access to and from homes in different parts of the tract (and adjoining parcels).

d. **Step 4: Drawing in the Lot Lines**
Upon completion of the preceding three steps, lot lines are drawn as required to delineate the boundaries of individual residential lots.

Applicants shall be prepared to submit four separate sketch maps indicating the findings of each step of the design process, if so requested by the Planning Commission or the Governing Body.

4. **Note on the Four-Step Site Design Process for Option 5: Hamlets and Villages**

The design process for laying out Option 5 Hamlets and Villages shall be a variation on the four-step process for conservation subdivisions, as described in Section 402.C.3 of this Ordinance. In hamlets and villages, where traditional streetscape and "terminal vistas" are of greater importance, Steps Two and Three may be reversed, so that streets and squares are located during the second step, and house sites are located immediately thereafter. The first step is to identify greenway lands, including both Primary and Secondary Conservation Areas.

5. **Preliminary Resource Impact and Conservation Plan**

a. A Preliminary Resource Impact and Conservation Plan shall be prepared for all major subdivision and land development applications to categorize
the impacts of the proposed activities and physical alterations on those resources shown on the Existing Resources and Site Analysis Plan (as required under Section 402.C.2). All proposed improvements, including but not necessarily limited to grading, fill, streets, buildings, utilities and stormwater detention facilities, as proposed in the other Conceptual Preliminary Plan documents, shall be taken into account in preparing the Preliminary Resource Impact and Conservation Plan, which shall clearly demonstrate that the applicant has minimized site disturbance to the greatest extent practicable.

b. Using the Existing Resources and Site Analysis Plan as a base map, impact areas shall be mapped according to the following categories: (1) primary impact areas, i.e., areas directly impacted by the proposed subdivision, (2) secondary impact areas, i.e., areas in proximity to primary areas which may be impacted, and (3) designated protected areas, either to be included in a proposed Greenway or an equivalent designation such as dedication of a neighborhood park site.

c. This requirement for a Preliminary Resource Impact and Conservation Plan may be waived by the Planning Commission if, in its judgment, the proposed development areas, as laid out in the Sketch Plan or in the Conceptual Preliminary Plan would be likely to cause no more than an insignificant impact upon the site's resources.

6. Preliminary Improvements Plan

This plan shall include the following items:

a. Historic resources, trails and significant natural features, including topography, areas of steep slope, wetlands, 100-year floodplains, swales, rock outcroppings, vegetation, existing utilities, and other site features, as indicated on the Existing Resources and Site Analysis Plan.

b. Existing and approximate proposed lot lines, lot areas, any existing easements and rights-of-way. For properties subject to the Conservation Design Overlay District, the boundaries of greenway lands shall be indicated.

c. Approximate location, alignment, width and tentative names of all proposed streets and street rights-of-way, including all street extensions or spurs that are reasonably necessary to provide adequate street connections and facilities to adjoining development or undeveloped areas; preliminarily-engineered profiles for proposed streets.

d. Approximate location of proposed swales, drainage easements, stormwater and other management facilities.

e. Where community sewage service is to be permitted, the conceptual layout of proposed sewage systems, including but not limited to the tentative locations of sewer mains and sewage treatment plants, showing
the type and degree of treatment intended and the size and capacity of treatment facilities.

f. Where central water service is to be permitted, the conceptual layout of proposed water distribution facilities including water mains, fire hydrants, storage tanks and, where appropriate, wells or other water sources.

g. Location of all percolation tests as may be required under this ordinance, including all failed test sites or pits as well as those approved and including an approved alternate site for each lot requiring a sand mound system. All approved sites shall be clearly distinguished from unapproved sites.

h. Limit-of-disturbance line (must be exact in relation to the retention of existing trees proposed to be saved).

i. Approximate location and dimensions of proposed playgrounds, public buildings, public areas and parcels of land proposed to be dedicated or reserved for public use.

j. If land to be subdivided lies partly in or abuts another municipality, the applicant shall submit information concerning the location and conceptual design of streets, layout and size of lots and provisions of public improvements on land subject to his control within the adjoining municipalities. The design of public improvements shall provide for a smooth, practical transition where specifications vary between municipalities. Evidence of approval of this information by appropriate officials of the adjoining municipalities also shall be submitted.

k. Where the applicant proposes to install the improvements in phases, he shall submit with the Conceptual Preliminary Plan a delineation of the proposed sections and a schedule of deadlines within which applications for final approval of each section are intended to be filed.

l. Typical street cross-section drawing(s) for all proposed streets shall be shown, including details relating to thickness, crowning and construction materials.

m. Utilities and Easements.

   1) Exact locations of existing utility easements and approximate locations of proposed utility easements.

   2) Approximate layout of all proposed sanitary and storm sewers and location of all inlets and culverts, and any proposed connections with existing facilities. (These data may be on a separate plan.)

   3) The tentative location of proposed on-site sewage and water facilities.

n. Approximate location of proposed shade trees, plus locations of existing vegetation to be retained.
7. Preliminary Studies and Reports

When required by the Board, typically in cases involving large subdivision and land development proposals (with more than 25 lots) or smaller development plans where the Governing Body believes that potential impacts could be significant, the Conceptual Preliminary Plan submission shall include one or more of the following studies to assist in determination of the impact of the application upon municipal services and facilities:

a. Sewer and Water Feasibility Report
b. Groundwater Protection and Replenishment Study
c. Erosion and Sedimentation Control Plan
d. Traffic Impact Study
e. Community Association Document

1) A Community Association Document, also known as a Homeowner's Association Document or a Condominium Association Document, shall be provided for all subdivision and land development applications which propose lands or facilities to be used or owned in common by all the residents of that subdivision or land development and not deeded to the municipality.

2) The elements of the Community Association Document shall include, but shall not necessarily be limited to the following:

a) A description of all lands and facilities to be owned by the Community Association. This description shall include a map of the proposal highlighting the precise location of those lands and facilities.

b) Statements setting forth the powers, duties, and responsibilities of the Community Association, including the services to be provided.

c) A Declaration of Covenants, Conditions, and Restrictions, giving perpetual easement to the lands and facilities owned by the Community Association. The Declaration shall be a legal document which also provides for automatic Association membership for all owners in the subdivision or land development and shall describe the mechanism by which owners participate in the Association, including voting, elections, and meetings. Furthermore, it shall give power to the Association to own and maintain the common property and to make and enforce rules.
d) Statements prescribing the process by which Community Association decisions are reached and setting forth the authority to act.

e) Statements requiring each owner within the subdivision or land development to become a member of the Community Association.

f) Statements setting cross covenants or contractual terms binding each owner to all other owners for mutual benefit and enforcement.

g) Requirements for all owners to provide a pro rata share of the cost of the operations of the Community Association.

h) A process of collection and enforcement to obtain funds from owners who fail to comply.

9) A process for transition of control of the Community Association from the developer to the unit owners.

10) Statements describing how the lands and facilities of the Community Association will be insured, including limit of liability.

11) Provisions for the dissolution of the Community Association, in the event the Association should become inviable.

*Please Note: See also Section 109 of the Zoning Ordinance, "Ownership and Management of Greenway Land and Common Facilities".*

E. Preliminary Greenway Ownership and Management Plan

Using the Conceptual Preliminary Plan as a base map, the boundaries, acreage and proposed ownership of all proposed Greenway areas shall be shown. In addition, the applicant shall also submit a Preliminary Greenway Ownership and Management Plan detailing the entities responsible for maintaining various elements of the property, and describing management objectives and techniques for each part of the property. Such management plans shall be consistent with the requirements of Section 109 of the zoning ordinance ("Ownership and Management of Greenway Land and Common Facilities").

F. Preliminary Engineering Certification

Prior to approval of the Conceptual Preliminary Plan, the applicant shall submit to the Planning Commission a "Preliminary Engineering Certification" stating that the approximate layout of proposed streets, house lots, and greenway lands complies with the municipality's zoning and subdivision ordinances, particularly those sections governing the design of subdivision streets and stormwater management facilities. This certification requirement is meant to provide the Planning Commission with assurance that the proposed plan is able to be accomplished within the municipality's current regulations. The certification shall also note any waivers needed to implement the plan as drawn.
SECTION 403 - Detailed Final Plan

Final plans shall conform to the Conceptual Preliminary Plan, including any conditions specified by the Governing Body. A Detailed Final Plan shall consist of and be prepared in accordance with the following:

A. Drafting Standards
All drafting standards as required in Section 402.B shall apply. Also, final plans shall be prepared at the scale of 1"=100'. However, Detailed Final Plans for low density "Option 4" subdivisions shall generally not be required to be prepared at scales finer than 1"=200', unless special conditions exist on the site.

B. Existing Resources and Site Analysis Plan
A plan as stipulated in Section 402.C.2 consistent with the terms of Conceptual Preliminary Plan approval and modified as necessary to reflect the proposal for final approval.

C. Final Resource Impact and Conservation Plan
1. This plan shall comply with all of the requirements for the Preliminary Resource Impact and Conservation Plan, as set forth in Section 402.C.5 to reflect all proposed improvements described in the other Detailed Final Plan documents as required under Section 403 herein.

2. In addition to the requirements of Section 402.C.5 the applicant shall submit an accompanying Resource Assessment Report divided into the following sections: (1) description of existing resources (as documented in Section 402.C.2), (2) impacts of the proposed subdivision on existing resources, correlated to the areas depicted in the Final Resource Impact and Conservation Plan, and (3) measures taken to minimize and control such impacts both during and following the period of site disturbance and construction. The qualifications and experience of the preparer of this report shall be provided.

D. Final Improvements Construction Plan
Where public or private improvements other than monuments and street traffic signs are to be required for any subdivision or land development, an Improvements Construction Plan and specifications, prepared by a registered professional engineer, shall be filed, setting forth the precise nature and exact location of the work and all engineering data necessary for completion of the work. The improvements construction plan and specifications shall be subject to approval of the Municipal Engineer and the Governing Body as a prerequisite to approval of the Detailed Final Plan. The Improvements Construction Plan shall conform with the following standards and contain the following information:

1. All information required in Sections 401.B and 402.C.6 relating to existing features and resources on the site.

2. Detailed profile sheets for all proposed streets within the tract.
3. If required, a plan, details and specifications of street lights to be installed, together with the necessary contract for street light installation for approval by the municipality.

4. Detailed design of any stormwater management facilities that may be required.

5. Where off-site or community sewer service is to be provided, the final detailed design of all facilities, including, but not limited to, sewer mains, manholes, pumping stations, and sewage treatment facilities.

6. Where off-site or central water service or water supply is to be provided, the final detailed design, including location and size of water service facilities within the subdivision, shall be shown, including wells, storage tanks, pumps, mains, valves, and hydrants.

7. Detailed designs for all other improvements as required by this ordinance.

E. Final Stormwater Management and Erosion & Sedimentation Control Plan

F. Final Greenway Ownership and Management Plan
Using the Detailed Final Plan as a base map, the precise boundaries, exact acreage, and proposed ownership of all proposed Greenway areas shall be shown. A narrative report shall also be prepared indicating how and by whom such Greenway areas will be managed, and demonstrating compliance with Article 1 of the Zoning Ordinance.

G. Final Landscape Plan

H. Additional Approvals, Certificates and Documents
1. All offers of dedication of realty or structures and all declarations, easements and covenants governing the reservation and maintenance of undedicated open space, for the Detailed Final Plan shall be in such form as shall be satisfactory to the Governing Body.

2. A copy of such deed restrictions, easements, covenants and declarations which are to be imposed upon the property to comply with the Detailed Final Plan as approved by the Governing Body. All such documents shall be in such form as is satisfactory to the Governing Body.
ARTICLE 5 - Plan Processing Procedures

Contents:

SECTION 500 – General
SECTION 501 - Plan Classification for Major and Minor Subdivisions
SECTION 502 - Submission and Review of Sketch Plan
SECTION 503 - Submission of Conceptual Preliminary Plan Documents
SECTION 504 - Review of Conceptual Preliminary Plan
SECTION 505 - Submission of Detailed Final Plan Documents
SECTION 506 - Review of Detailed Final Plan

SECTION 500 - General

A. All preliminary and final subdivision or land development plans shall be referred to and reviewed by the Planning Commission and shall be approved or disapproved by the Governing Body in accordance with the procedures specified in this Article and in other sections of this ordinance. Any application not processed as required herein shall be null and void unless it was made prior to the adoption of these regulations.

B. Overview of Procedures: Items 1-4 and 6-11 below are required under this Ordinance. Item 5 (Sketch Plan Submission and Review) is optional but strongly encouraged as an important, valuable and highly recommended step that will speed the review process and may result in lower costs for the project. These steps shall be followed sequentially, and may be combined only at the discretion of the municipality:

1. Pre-Application Meeting
2. Existing Resources and Site Analysis Plan, as described in Section 502.C of this Ordinance
3. Site Inspection by Planning Commission and Applicant
4. Pre-Sketch Plan Conference
5. Sketch Plan Submission and Review (diagrammatic sketch, optional step)
6. Conceptual Preliminary Plan: Determination of Completeness; Preliminary Resource Conservation Plan and Sewage Planning Module Submission; Review by Municipal and County Planning Commissions, Municipal Engineer and County Health Department; and Approval by the Governing Body on advice of the Municipal Planning Commission. (In the Conservation Design Overlay District, the Four-Step Design Process described in Section 402.E of this Ordinance must be followed.)
7. Detailed Final Plan, Preparation: Incorporation of all Conceptual Preliminary Plan Approval Conditions, Documentation of all other agency approvals, as applicable.
8. Detailed Final Plan, Submission: Determination of Completeness, Review, and Approval
9. Municipal Governing Body signatures
10. Recording of approved Detailed Final Plan with County Recorder of Deeds

SECTION 501 - Plan Classification For Major and Minor Subdivisions

A. Classification
For purposes of procedure, all applications shall be classified as either major or minor:

1. Minor: Any subdivision in which
   a. No public or private street is constructed or is required to be widened;
   b. No other completion of public improvement or guarantee thereof is required other than individual on-lot stormwater management systems;
   c. No earthmoving activities will take place except those incidental to construction of a single-family dwelling on each lot; and
   d. No more than three (3) lots are created.

2. Major: any land development or subdivision application not in compliance with Section 501.A.1 or any part thereof, or for any use other than single-family residential, shall be considered a major use plan.

B. Review
1. Major applications shall be subject to all review procedures specified in this article.

2. When an application includes only a portion of a landowner's entire tract, or when such portion is contiguous to an adjoining tract of the landowner, a sketch layout shall be included showing future potential subdivision of all the contiguous lands belonging to the landowner to ensure that subdivision may be accomplished in accordance with current codes and with appropriate access. Submission and review of the sketch plan described in this section shall not constitute approval of the future subdivision shown thereon.

SECTION 502 - Submission and Review of Sketch Plan

(Note: Municipalities shall determine whether an optional or mandatory Sketch Plan best suits their needs. The language below provides for optional Sketch Plans only because Pennsylvania law does not specifically provide for more than two 90-day review periods for subdivision plans. Municipalities that adopt the optional approach should evaluate, at the end of one year, whether applicants are generally choosing to follow the Sketch Plan process. If they are not, the municipality should consider requiring Sketch Plans, as a large number of municipalities in southeastern Pennsylvania have done. If the requirements are not onerous and are seen by applicants as a way to help them avoid delays, or to avoid situations in which they must substantially modify their original plans...
to comply with ordinance requirements, experience has shown that applicants will not litigate over a Sketch Plan requirement.)

A. Applicability
A diagrammatic sketch plan is strongly encouraged for all proposed minor or major subdivisions. Sketch Plans, as described in Section 401, shall be submitted to the municipality for review by the Planning Commission. Such plans are for informal discussion only. Submission of a Sketch Plan does not constitute formal filing of a plan with the Municipality, and shall not commence the statutory review period as required by the Municipalities Planning Code. The procedures for submission of a diagrammatic Sketch Plan are described in Section 502.F below, and may be altered only at the discretion of the Municipality.

B. Pre-Application Meeting
A pre-application meeting is encouraged between the applicant, the site designer, and the Planning Commission (and/or its planning consultant), to introduce the applicant to the municipality's zoning and subdivision regulations and procedures, to discuss the applicant's objectives, and to schedule site inspections, meetings and plan submissions as described below. Applicants are also encouraged to present the Existing Resources and Site Analysis Plan at this meeting.

C. Existing Resources and Site Analysis Plan
Applicants shall submit an Existing Resources and Site Analysis Plan, in its context, prepared in accordance with the requirements contained in Section 402.C.2. The purpose of this key submission is to familiarize officials with existing conditions on the applicant's tract and within its immediate vicinity, and to provide a complete and factual reference for them in making a site inspection. This Plan shall be provided prior to or at the site inspection, and shall form the basis for the development design as shown on the diagrammatic Sketch Plan (or on the Conceptual Preliminary Plan, if the optional Sketch Plan is not submitted).

D. Site Inspection
After preparing the Existing Resources and Site Analysis Plan, applicants shall arrange for a site inspection of the property by the Planning Commission and other municipal officials, and shall distribute copies of said site analysis plan at that on-site meeting. Applicants, their site designers, and the landowner are encouraged to accompany the Planning Commission.

The purpose of the visit is to familiarize local officials with the property's existing conditions and special features, to identify potential site design issues, and to provide an informal opportunity to discuss site design concepts, including the general layout of designated greenway lands (if applicable), and potential locations for proposed buildings and street alignments. Comments made by municipal officials or their staff and consultants shall be interpreted as being only suggestive. It shall be understood by all parties that no formal recommendations can be offered, and no official decisions can be made, at the Site Inspection.

E. Pre-Sketch Conference
Following the site inspection and prior to the submission of a diagrammatic sketch plan, the applicant shall meet with the Planning Commission to discuss the findings of the site inspection and to develop a mutual understanding on the general approach for subdividing and/or developing the tract in accordance with the four-step design procedure described in Sections 402.C.3 and 602.B of this ordinance, where applicable. At the discretion of the Commission, this conference may be combined with the site inspection.

F. Sketch Plan Submission and Review

1. Copies of a diagrammatic Sketch Plan, meeting the requirements set forth in Section 401, shall be submitted to the Municipal Secretary during business hours for distribution to the Governing Body, the Planning Commission, the Municipal Planner, the Municipal Engineer and applicable municipal advisory boards (such as the Parks Board, the Environmental Advisory Council, the Historic Architectural Review Board, the Shade Tree Commission, and the Open Space Committee) at least seven (7) days prior to the Planning Commission meeting at which the Sketch Plan is to be discussed. The Sketch Plan diagrammatically illustrates initial thoughts about a conceptual layout for greenway lands, house sites, and street alignments, and shall be based closely upon the information contained in the Existing Resources and Site Analysis Plan. The Sketch Plan shall also be designed in accordance with the four-step design process described in Sections 402.C.3 and 602.B, and with the design review standards listed in Sections 603.A and B.

2. The Planning Commission shall review the Sketch Plan in accordance with the criteria contained in this ordinance and with other applicable ordinances of the municipality. Their review shall informally advise him/her of the extent to which the proposed subdivision or land development conforms to the relevant standards of this Ordinance, and may suggest possible plan modifications that would increase its degree of conformance. Their review shall include but is not limited to:

   a. the location of all areas proposed for land disturbance (streets, foundations, yards, septic disposal systems, storm water 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 and on the Municipality's Map of Potential Conservation Lands;

   b. the potential for street connections with existing streets, other proposed streets, or potential developments on adjoining parcels;

   c. the location of proposed access points along the existing road network;

   d. the proposed building density and impervious coverage;

   e. the compatibility of the proposal with respect to the objectives and policy recommendations of the Comprehensive Plan and the Open Space Plan; and
f. consistency with the zoning ordinance.

The Commission shall submit its written comments to the applicant and the Governing Body. The diagrammatic Sketch Plan may also be submitted by the Governing Body to the County Planning Commission for review and comment.

(Note: Municipalities are advised to discuss the optional Sketch Plan review process with their County planning agency to determine whether the County is willing to conduct such a review and if so, whether fees will be charged.)

SECTION 503 - Submission Of Conceptual Preliminary Plan Documents

A. Conceptual Preliminary Plan

1. The Conceptual Preliminary Plan is a preliminarily-engineered scale drawing in which layout ideas are illustrated in more than the rough, diagrammatic manner appropriate for Sketch Plans, but before heavy engineering costs are incurred in preparing detailed alignments and profiles for streets, and/or detailed calculations for stormwater management. If an applicant opts not to submit a Sketch Plan, the Conceptual Preliminary Plan shall include all information required for Sketch Plans listed in Section 401, specifically including the Existing Resources and Site Analysis Plan, plus further details as noted below and in Section 402.

2. The applicant shall complete and sign the application form provided by the Municipality and shall accompany such application form with the type and number of plans, documents and other submissions required and the appropriate filing fee(s). The applicant must identify the name, address and telephone number of the record holder of legal title to the land involved (if different from the applicant), the nature of the applicant's interest in the land (whether holder of legal or equitable title or otherwise), and the name, address, and telephone number of the agent, if any. No application shall be deemed filed unless all requirements have been met and all fees therefor paid in full.

3. The Existing Resources and Site Analysis Plan shall be presented at the Pre-Application Meeting, and distributed to those municipal officials who attend the Site Inspection described in Section 502.D (which shall occur at the Conceptual Preliminary Plan stage if it has not already occurred at the Sketch Plan stage).

(Note: The timeframe in this section conforms to the enabling legislation for preliminary plans in Pennsylvania. Readers in other states are advised to seek legal counsel regarding statutory time limitations for acting on Preliminary Plan applications.)

4. The application "window" and deadline dates for submission of Conceptual Preliminary Plans shall be as follows: Applicants shall submit to the Municipal Secretary, at least 21 days (but not more than 28 days) prior to the
date of the next regularly scheduled Planning Commission meeting at which official review is requested, sixteen copies of a complete Conceptual Preliminary Plan and all other required documents and information, including the same number of copies of the Existing Resources and Site Analysis Plan drawn at the same scale (generally 1" = 100' or 1" = 200', at the discretion of the Zoning Officer). All applications shall be accompanied by full payment of the required fees and escrow deposits established in accordance with the terms of this ordinance for proposed subdivisions. The Municipal Secretary shall note the date of receipt of the application, fees, and escrow deposit, and shall forward copies of the proposed plan to the same individuals and bodies named in Section 502.F as recipients of Sketch Plans. The official 90-day review period provided for Preliminary Plans under the Municipalities Planning Code shall commence at the next scheduled meeting of the Planning Commission.

5. The date of receipt is subject to review by the municipality to determine if all required materials, fees and escrow deposits have been submitted by the applicant. If the application is defective or incomplete, the applicant shall be notified in writing within fifteen (15) days of the date of receipt and the application shall be null and void ad initi, and shall be deemed withdrawn by the applicant. If no such notice is given to the applicant that the application is defective or incomplete, then the date of filing shall be determined as follows. The review process for the plans required by the municipality shall include no more than ninety (90) days following the date of the next regular meeting of the Planning Commission following the date the application was filed, provided that should said next regular meeting occur more than thirty (30) days following the filing of the application, the said ninety (90) day period shall be measured from the thirtieth day following the day the application was filed. The applicant may agree to extend the time requirement.

SECTION 504 - Review Of Conceptual Preliminary Plan

A. Planning Commission Review

1. The Planning Commission shall review the plan and any recommendations made by County, State and Federal agencies and the Municipal Planner and the Municipal Engineer, to determine conformance of the Plan to this ordinance, the zoning ordinance, and any other relevant ordinances of the municipality.

2. After such review, the Planning Commission shall submit its report to the Governing Body, containing its findings, recommendations, and reasons, citing specific sections of the statutes or ordinances relied upon. A copy of said report shall be given to the applicant.

3. If the applicant agrees that this review period shall be extended for a period of 30 or more days, to provide additional time for him to submit all the required materials and for the Planning Commission to review the same, a written agreement to this effect shall be signed in duplicate, with a file copy being retained by the Planning Commission and by the applicant. Such an extension
shall be entered in good faith and for specific reasons relating to the review process, including but not limited to providing sufficient time for the municipality to receive the written report of the County Planning Commission, the County Health Department, the Municipal Planner and the Municipal Engineer, or to allow the applicant additional time in which to revise his/her application documents.

B. Board Review

1. When the recommendations on the Conceptual Preliminary Plan have been officially submitted to the Governing Body by the Planning Commission, such recommendations shall be placed on the Governing Body’s agenda for review and action.

2. In acting on the preliminary subdivision or land development plan, the Governing Body shall review the plan and the written comments of the Municipal Planner, the Municipal Engineer, the Planning Commission, the County Planning Commission, and the Health Department and all other reviewing agencies, and comments from public hearings. The Governing Body may specify conditions, changes, modifications or additions thereto which it deems necessary or appropriate, and may make its decision to grant preliminary approval subject to such conditions, changes, modifications or additions. Whenever the approval of a Conceptual Preliminary Plan is subject to conditions, the written action of the Board should (1) specify each condition of approval; and (2) request the applicant's written agreement to the conditions within ten (10) days of receipt of the Governing Body's written decision.

3. If the Conceptual Preliminary Plan is not approved, the Governing Body's decision shall specify the defects found in the plan, shall describe the requirements that have not been met, and shall cite in each case the provisions of the Ordinance relied upon.

4. Notwithstanding the foregoing procedure, unless the applicant agrees in writing to extend the period for decision, the Governing Body shall render a decision on all Conceptual Preliminary Plans not more than ninety (90) days from the date of the first regular meeting of the Planning Commission held after the complete application was filed. However, if that regular meeting of the Planning Commission occurred more than thirty (30) days after the complete application was filed, the ninety (90) day period shall be measured from the thirtieth day following the date the complete application was filed.

5. The decision of the Governing Body shall be in writing and shall be communicated to the applicant personally or mailed to him at his last known address not later than fifteen (15) days following the decision. The form and content of the decision shall comply with applicable requirements of the Municipalities Planning Code.

6. At the time a revised plan is submitted, it shall be accompanied by the applicant's written and executed agreement of an extension of the period for decision.
7. The decision of the Governing Body shall also be communicated to the governing body of any adjacent municipality, if the plan includes land in that municipality and/or directly abuts its boundaries.

SECTION 505 - Submission Of Detailed Final Plan Documents

A. Within one year after approval of the Conceptual Preliminary Plan, a Detailed Final Plan and all supplementary data, together with an application form provided by the Municipality and filing fees shall be officially submitted to the Municipal Secretary. The Detailed Final Plan shall conform to the requirements set forth in Section 403. It shall also conform to the Conceptual Preliminary Plan as previously reviewed by the Planning Commission and the Governing Body, and shall incorporate all conditions set by the Municipality in its approval of the Conceptual Preliminary Plan. No application shall be deemed filed unless all requirements have been met and all fees paid in full.

B. The Board may permit submission of the Detailed Final Plan in phases, each covering a reasonable portion of the entire proposed development as shown on the approved Conceptual Preliminary Plan; provided that the first Detailed Final Plan phase shall be submitted within one (1) year after approval of the Conceptual Preliminary Plan. Each subsequent phase shall be submitted within one (1) year of approval of the previous phase, provided all phases have been submitted within three (3) years after the date of Preliminary Plan approval.

C. Unless the filing deadline in Section 505.A is waived or extended by the Governing Body, failure to make timely submission of final plans renders void a Conceptual Preliminary Plan, and the applicant shall be required to file a new application and fee for Conceptual Preliminary Plan approval.

D. Official submission of the Detailed Final Plan to the Municipal Secretary shall consist of:

1. Three (3) copies of the application for review of final subdivision or land development plan.

2. Sixteen (16) or more copies of the Detailed Final Plan and all supporting plans and information to enable proper distribution and review, as required by the Governing Body.

3. Copies of all applications made or notices provided to Federal, State and County agencies by or on behalf of the applicant for permits, certifications, approvals or waivers required or sought for either subdivision or land development as proposed in the Conceptual Preliminary Plan or in the Detailed Final Plan, including, but not limited to, applications or notices provided to the U.S. Army Corps of Engineers, the U.S. Department of Agriculture Soil Conservation District, the U.S. Environmental Protection Agency, the state Department of Environmental Protection (DEP), or the state Department of Transportation and the County Health Department.

4. Payment of application fees and deposit of escrow, if required, for plan review costs.
E. Sixteen (16) or more copies of the Detailed Final Plan and all required supplementary data shall be submitted to the Municipal Secretary together with the required fees and escrow deposit as prescribed by resolution of the Governing Body. The Municipal Secretary shall note the date of receipt and shall then forward:

1. Five (5) copies of the Detailed Final Plan and application to the Planning Commission; and
2. One (1) copy each to the Municipal Planner and the Municipal Engineer;
3. Two (2) copies to the Governing Body;
4. Two (2) copies for the municipal files;
5. One (1) copy to the municipal Historical Commission, where applicable;
6. One (1) copy to the municipal Environmental Advisory Council;
7. One (1) copy to the municipal Parks Board;
8. One (1) copy to the municipal Shade Tree Commission;
9. One (1) copy, referral letter and sufficient fee to the _________ County Planning Commission, when required by the Board;
10. One (1) copy to other state and county agencies, including the _________ County Health Department, when required by the Board;
11. One (1) copy to governing body of any adjacent municipality or municipalities if tract to be subdivided abuts or lies partially in that municipality;
12. One (1) copy of the Sedimentation and Erosion Control Plan and application form to the U.S. Department of Agriculture Soil Conservation District, where applicable; and
13. One (1) copy of the Detailed Final Plan showing applicant's correct address to the Municipal Secretary.

F. Where the final plan is for a minor subdivision, the applicant shall submit the plan in accordance with the requirements of Section 504 above.

SECTION 506 - Review Of Detailed Final Plan

A. General

1. The Detailed Final Plan shall conform in all important respects to the Conceptual Preliminary Plan as previously reviewed and approved by the Governing Body, and shall incorporate all modifications and revisions specified by the Governing Body in its approval.

2. The Detailed Final Plan and supporting data (including reports from the State Department of Environmental Protection, the _________ County Board of Health, the _________ County office of the USDA Natural Resources...
Conservation Service, and the ________ County Planning Commission) shall comply with the provisions of this Ordinance and those of the zoning ordinance. Failure to do so shall be cause for denying the plan (or, in situations where only minor details are missing and when the official approval deadline allows, tabling the plan).

B. Planning Commission Review

1. The Planning Commission will review the Detailed Final Plan and the recommendations of the Municipal Engineer and any other reviewing agencies, to determine its conformance with the requirements of this ordinance and with those of the zoning ordinance.

2. After such review, and prior to any action by the Governing Body within the required ninety (90) day review period, the Planning Commission shall forward its recommendations, and its reasons to the Governing Body and the applicant. If the plan includes land in any adjacent municipality and/or directly abuts its boundaries, then such notice and recommendation should also be transmitted to the governing body of the adjacent municipality.

3. No recommendations shall be made by the Planning Commission until the municipality has received the written report of the County Planning Commission, the Municipal Engineer, the state Department of Environmental Protection (DEP), the ________ County Health Department and the Department of Transportation, if applicable, and the approval of the ________ County Soil Conservation District, provided, however, that if these reports are not received within forty-five (45) days after transmittal of the Detailed Final Plan to these agencies, then the Planning Commission may act without having received and considered such report.

C. Governing Body Review

1. Prior to the Detailed Final Plan review process, the Governing Body should complete its review of the proposed Sewage Facilities Planning Module in accordance with DEP and ________ County Health Department regulations and procedures. When approved or adopted by the Governing Body, the Planning Module shall be forwarded to DEP for review and approval.

2. No approval of the Detailed Final Plan shall be granted by the Governing Body until the Municipality receives notification of DEP's approval of the Sewage Facilities Planning Module. Should such notification not be received within the time limitations for Detailed Final Plan approval in accord with the Act, the time limitations shall be extended for not more than ninety (90) days at the written consent of the applicant. If the applicant refuses to provide such written consent, the Detailed Final Plan shall be disapproved.

3. When a recommendation on a Detailed Final Plan has been submitted to the Governing Body by the Planning Commission, such plan shall be placed on the agenda of the Governing Body for its review and action.

4. Upon receipt of the Planning Commission's recommendation and other supporting information, the Governing Body may, at one or more regular or
special public meetings, review the Detailed Final Plan and shall, within the
time limitations set forth herein below, either approve, approve with
conditions, or disapprove the plan. Whenever the approval of a Detailed Final
Plan is subject to conditions, the written action of the Governing Body shall
(1) specify each condition of approval; and (2) request the applicant's written
agreement to the conditions within ten days of receipt of the Governing
Body's written decision.

5. If the Final Plan is not approved, the decision shall specify the defects found
in the plan, shall describe the requirements that have not been met, and shall,
in each case, cite the provisions of the Ordinance relied upon.

6. Notwithstanding the foregoing procedure, unless the applicant agrees in
writing to extend the time period for decision, the Governing Body shall
render a decision on all Detailed Final Plans within the statutory time
limitations.

7. The decision of the Governing Body shall be in writing and shall be
communicated to the applicant as required by the Act.

8. If at any time the applicant submits a revised Detailed Final Plan, it shall be
deemed a new application and shall not be accepted unless it is accompanied
by the applicant's written and executed agreement of a ninety (90) day
extension of the period required by the Act for decision. No new application
fee shall be required for any revision submitted within two years of the first
final plan application.

9. Copies of the Detailed Final Plan, as finally approved with the appropriate
endorsement of the Board, shall be distributed as follows:
   a. At least three (3) copies to the applicant of which two (2) shall be recorded
      in accordance with Section ___.
   b. One (1) copy to the Municipal Planning Commission.
   c. One (1) copy to the County Planning Commission.
   d. One (1) copy to the County Health Department.
   e. One (1) copy to be retained in the municipal files.
   f. One (1) copy to the Municipal Engineer. If a new street is proposed, an
      additional "as built" plan with deed of dedication application shall be
      submitted.

D. Conditions of Detailed Final Plan Approval

Approval of any Detailed Final Plan shall, in addition to any other applicable
provisions of this ordinance, shall be subject to the following conditions:

1. The landowner shall execute a Subdivision Agreement in accordance with
   Section ___ of this ordinance, verifying that he agrees to construct all required
   improvements and common amenities, and further verifying that he
guarantees completion and maintenance of these improvements and amenities through a type of financial security acceptable to the municipality.

2. Where applicable, the landowner shall execute an Escrow Agreement to cover the cost of all required improvements and common amenities, in accordance with Section ___ of this ordinance.

3. The landowner agrees, if requested, to tender to the municipality a deed of dedication in a form satisfactory to the Municipal Solicitor for streets and improvements thereto, including street paving, water mains, fire hydrants, storm sewers, inlets, pumping stations and other appurtenances as shall be constructed as public improvements within the public right-of-way and are required for the promotion of public welfare, after all streets and improvements to be dedicated to the municipality are completed and are certified as being satisfactory by the Municipal Engineer. The Governing Body may require that the applicant provide a certificate from a duly licensed title insurance company certifying that the title to be conveyed is good and marketable, free of all liens and encumbrances, except utility easements, before any property is accepted by the municipality.

4. Whenever the landowner is providing greenway land as part of the development, an easement in perpetuity restricting such open space against further subdivision or development shall be executed between the landowner and the Municipality or a conservation organization acceptable to the Municipality.

5. The landowner shall submit to the municipality all required permits, approvals or waivers from agencies having jurisdiction over ancillary matters necessary to effect the subdivision or land development, such as Pennsylvania Departments of Transportation, Environmental Protection or Public Utility Commission, U.S. Army Corps of Engineers or Department of Agriculture Soil Conservation District and the ________ County Health Department.

6. All final approvals or waivers required by Federal, State and County agencies for development in accord with the Detailed Final Plan including, but not limited to, approval of the Sewage Facilities Planning Module by the DEP, approval by the U.S. Department of Agriculture Soil Conservation District, and a highway occupancy permit, if required, from the state Department of Transportation shall be presented to the municipality.
ARTICLE 6 - Resource Conservation and Greenway Delineation Standards

Contents:

SECTION 600 – Applicability
SECTION 601 - Planning and Design Standards
SECTION 602 - Design Process for Residential Subdivisions with Greenway Lands
SECTION 603 - Greenway Design Review Standards
SECTION 604 - Dedication of Greenway Land for Public Use
SECTION 605 - Resource Conservation Standards for Site Preparation and Cleanup

SECTION 600 - Applicability

The standards for resource conservation, as set forth in this Article, shall apply to all subdivision and land developments in the municipality. The standards for Greenway delineation shall apply to all subdivision and land developments within the Conservation Design Residential Overlay District.

SECTION 601 - Planning and Design Standards

A. General Standards to Minimize Adverse Impacts

All subdivisions and land developments shall avoid or minimize adverse impacts on the municipality's natural, cultural and historic resources, as defined below.

B. Groundwater Resources

This section is intended to ensure that the municipality's limited groundwater resources are protected for purposes of providing water supplies for its residents and businesses, and to protect the base flow of the Municipality's surface waters. These regulations shall be applied in conjunction with those provided for in other sections of this ordinance, dealing with groundwater conservation and replenishment.

1. The proposed subdivision and land development of any tract shall be designed to cause the least practicable disturbance to natural infiltration and percolation of precipitation to the groundwater table, through careful planning of vegetation and land disturbance activities, and the placement of streets, buildings and other impervious surfaces in locations other than those identified on the Existing Resources and Site Analysis Plan as having the greatest permeability where precipitation is most likely to infiltrate and recharge the groundwater.

C. Stream Valleys, Swales, Springs, and Other Lowland Areas

The municipality's Open Space Plan describes and maps stream valleys (which include stream channels and flood plains), swales, springs and other lowland areas as resources that warrant restrictive land use controls because of flooding hazards to human life and property, their ground water recharge functions, their
importance to water quality and the health of aquatic communities, and their wildlife habitats. They are generally poorly suited for on-site subsurface sewage disposal systems.

1. The following activities shall be minimized:

   a. Disturbance to streams and drainage swales.

   b. Disturbance to year-round wetlands, areas with seasonally high water tables, and areas of surface water concentration.

   c. Because of their extreme limitations, stream valleys, swales and other lowland areas warrant designation as greenway lands. They may also require adjoining buffer lands to be included in the Greenway, to be determined by an analysis of the protection requirements of such areas on a case-by-case basis. In certain instances, seasonal high water table soils may be excluded from the Greenway where it can be demonstrated that they are suitable for low density residential uses and conventional on-site sewage systems.

D. Woodlands

Woodlands occur extensively throughout the municipality, often in association with stream valleys and wet areas, poor and erodible agricultural soils, and moderate to steep slopes.

1. Woodland conditions within the municipality vary with respect to species composition, age, stocking, and health. They range from relatively recent post-agricultural young stands to mature mixed-age forests. Most woodlands in the Municipality represent one or more of the following resource values:

   a. As soil stabilizers, particularly on moderate to steep slopes, thereby controlling erosion into nearby streams, ponds, impoundments and roads. A closely related function is their enhancement of ground water recharge.

   b. As a means of ameliorating harsh microclimatic conditions, in both summer and winter.

   c. As a source of wood products, i.e., poles, sawtimber, veneer and firewood.

   d. As habitats for woodland birds, mammals and other wildlife.

   e. As recreation resources for walkers, equestrians, picnickers and other related outdoor activities.

   f. As visual buffers between areas of development and adjacent roads and properties.

2. Because of their resource values, all woodlands on any tract proposed for subdivision or land development shall be evaluated by the applicant to determine the extent to which such woodlands should be designated partly or entirely as Greenway or development lands. Evaluation criteria shall include:

   a. Configuration and size.

   b. Present conditions, i.e., stocking, health and species composition.
c. Site potential, i.e., the site's capabilities to support woodlands, based upon its topographic, soil and hydrologic characteristics.

d. Ecological functions: i.e., in protecting steep slopes, erodible soils, maintaining stream quality and providing for wildlife habitats.

e. Relationship to woodlands on adjoining and nearby properties and the potential for maintaining continuous woodland areas.

3. The evaluation of the tract's woodlands shall be undertaken by a forester, landscape architect, horticulturist or another qualified professional acceptable to the municipality. This evaluation shall be submitted as a report and made a part of the application for a preliminary plan. At a minimum, that report shall include one or more maps indicating boundaries and conditions of woodland areas accompanied by a report addressing the criteria in paragraph 1 above.

4. In designing a subdivision and land development plan for any tract, the applicant shall be guided by the following standards:

a. Healthy woodlands exceeding one acre shall be preserved and designated as Greenway areas, to the maximum extent possible. Proposed site improvements shall be located, designed and constructed to minimize the loss or degradation of woodland areas.

b. Subdivisions shall be designed to preserve woodlands along roadways, property lines and lines occurring within a site such as streams, swales, stone fences and hedgerows. Such lines and the native vegetation associated with them shall be preserved as buffers between adjacent properties and between areas being subdivided within a property. Preservation shall include ground, shrub, understory and canopy vegetation.

c. Disturbance or removal of woodlands occupying environmentally sensitive areas shall be undertaken only when approved by the Board and on a limited, selective basis to minimize the adverse impacts of such actions. This shall include but not necessarily be limited to, vegetation performing important soil stabilizing functions on wet soils, stream banks and sloping lands.

d. No clearing or earth disturbance (except for soil analysis for proposed sewage disposal systems) shall be permitted on a site before the completion of subdivision and land development agreements. The determination of sight distance clearances along roadways shall be made graphically and not by clearing on-site prior to final plan approval.

E. Upland Rural-Agricultural Areas

These areas comprise fields, pastures, meadows, and former agricultural areas in early stages of woodlands succession, with fences, stone walls, tree copses and hedgerows, typically bordered by stream valleys and upland woodlands. These comprise the Municipality's historic working landscape, dotted with historic houses, barns and other structures. They give the municipality much of its rural
character. They also contain the greatest concentration of prime agricultural soils. Because of their openness and high visibility, development in these areas is likely to be most readily seen and disruptive to the historic landscape. They sometimes provide habitat for wildlife, in conjunction with nearby woodlands and stream valleys. However, it is recognized that these areas also frequently offer the fewest constraints for development.

1. Several elements of these working landscapes lend themselves to incorporation into the municipality's Greenway network. These include prime agricultural soils and natural features which visually punctuate the landscape, such as hedgerows, tree copses, stone walls, and visually prominent places such as knolls and hilltops.

2. These areas can also accommodate development, with preferred locations being the non-prime agricultural soils and lower topographic settings where development will be visually less obtrusive. Compact clustered residential designs, with coordinated architectural and landscape architectural themes, are encouraged in highly visible locations where future development cannot be avoided (such as at the far edge of open fields).

F. Slopes

Moderately sloping lands (15 to 25 percent) and steeply sloping lands (over 25 percent) are prone to severe erosion if disturbed. Erosion and the resulting overland flow of soil sediments into streams, ponds and public roads, are detrimental to water quality and aquatic life, and a potential hazard to public safety.

1. Areas of steep slope shall be preserved in accordance with Article ___ of the Zoning Ordinance and as required below.

2. All grading and earthmoving on slopes exceeding 15 percent shall be minimized.

3. No site disturbance shall be allowed on slopes exceeding 25 percent except grading for a portion of a driveway accessing a single family dwelling when it can be demonstrated that no other routing which avoids slopes exceeding 25 percent is feasible.

4. On slopes of 15 to 25 percent, the only permitted grading beyond the terms described above, shall be in conjunction with the siting of a single family dwelling, its access driveway and the septic system (which should typically be designed with a long, narrow drainage field following the land contours.

5. Grading or earthmoving on all sloping lands of 15 percent or greater shall not result in earth cuts or fills whose highest vertical dimension exceeds six feet, except where in the judgment of the Governing Body no reasonable alternatives exist for construction of roads, drainage structures and other public improvements, in which case such vertical dimensions shall not exceed 12 ft. Roads and driveways shall follow the line of existing topography to minimize the required cut and fill. Finished slopes of all cuts and fills shall be as required to minimize disturbance of natural grades.
G. Significant Natural Areas and Features

Natural areas containing rare or endangered plants and animals, as well as other features of natural significance exist throughout the municipality. Some of these have been carefully documented, e.g., by the Statewide Natural Diversity Inventory, whereas for others, only their general locations are known. Subdivision applicants shall take all reasonable measures to protect significant natural areas and features either identified by the Municipality's Map of Potential Conservation Lands or by the applicant's Existing Resources and Site Analysis Plan (as required in Section 502.C) by incorporating them into proposed Greenway areas or avoiding their disturbance in areas proposed for development.

H. Historic Structures and Sites

The municipality's documented historical resources begin with the _____ Indians in the early 18th century and extend through its colonial agricultural, residential and industrial development in the late 18th and 19th centuries. Many of the Municipality's historic structures and sites have been extensively researched and remain intact. The municipality's extensive historic records are maintained by its Historical Commission.

1. All subdivisions and land developments shall comply with Article ----, Historic Preservation Standards of the Zoning Ordinance.

2. Plans requiring subdivision and land development approval shall be designed to protect existing historic resources of all classes. The protection of an existing historic resource shall include the conservation of the landscape immediately associated with and significant to that resource, to preserve its historic context. Where, in the opinion of the Governing Body, a plan will have an impact upon an historic resource, the developer shall mitigate that impact to the satisfaction of the Governing Body by modifying the design, relocating proposed lot lines, providing landscape buffers, or other approved means.

3. Municipal participation, review and approval of the applicant's interaction with the State Historical and Museum Commission with regard to the preservation of historic resources, as required for DEP approval of proposed sewage disposal systems, shall be required prior to Detailed Final Plan approval.

I. Historic Rural Road Corridors and Scenic Viewsheds

The municipality's Open Space Plan identifies a number of historic rural roads in various parts of the municipality. All applications for subdivision and land development shall attempt to preserve the scenic visual corridors along such roads by incorporating them into Greenway areas or otherwise providing for building setbacks and architectural designs to minimize their intrusion. In instances, where such designs fail to satisfactorily protect corridors, applicants will be required to provide naturalistic landscape buffers to minimize their adverse visual impacts. The species specified for such buffers shall be selected on the basis of an
inventory of tree and shrub species found in existing hedgerows and along wooded roadside edges in the vicinity of the development proposal.

**J. Trails**

1. When a subdivision or land development proposal is traversed by or abuts an existing trail customarily used by pedestrians and/or equestrians, the Governing body may require the applicant to make provisions for continued recreational use of the trail.

2. The applicant may alter the course of the trail within the tract for which development is proposed under the following conditions:
   a. The points at which the trail enters and exits the tract remain unchanged.
   b. The proposed alteration exhibits quality trail design according to generally accepted principles of landscape architecture (For example: Bureau of State Parks publication Non-Motorized Trails).
   c. The proposed alteration does not coincide with a paved road intended for use by motorized vehicles.

3. When trails are intended for public or private use, they shall be protected by a permanent conservation easement on the properties on which they are located. The width of the protected area in which the trail is located should be a minimum of ten feet. The language of the conservation easement shall be to the satisfaction of the Governing body upon recommendation of the Municipal Solicitor.

4. The land area permanently designated for trails for public use may be credited toward the greenway land requirement described in Section 104 of the Zoning Code.

5. An applicant may propose and develop a new trail. If said trail is available for use by the general public and connects with an existing trail, the land area protected for said trail may be credited toward the open space requirement described in **Section 104 of the Zoning Code**.

6. Trail improvements shall demonstrate adherence to principles of quality trail design.

7. Trails shall have a vertical clearance of no less than ten (10) feet.

8. Width of the trail surface may vary depending upon type of use to be accommodated, but in no case shall be less than three (3) feet or greater than six (6) feet.

9. No trail shall be designed with the intent to accommodate motorized vehicles.

**SECTION 602 - Design Process For Residential Subdivisions With Greenway Lands**

**A. Resource Inventory and Analysis.** The tract's resources shall be delineated on an Existing Resources and Site Analysis Plan, as required in Section 402.D.
B. **Four-Step Design Process.** Following the resource inventory and analysis, all residential subdivisions with greenway lands shall generally follow a four-step design process as described below. Applicants will be required to document the design process as described in Section 402.C.3.

1. **Step 1: Delineation of Greenway Lands and Development Areas**

   Greenway lands and development areas shall be delineated according to the following procedure, as illustrated below, using as an example a hypothetical 50-acre subdivision parcel.

<table>
<thead>
<tr>
<th>Total Tract Area</th>
<th>50 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Tract Area (ATA)</td>
<td>40 acres</td>
</tr>
<tr>
<td><strong>Minimum Greenway Requirements:</strong></td>
<td></td>
</tr>
<tr>
<td>Constrained Land</td>
<td>10 acres</td>
</tr>
<tr>
<td>Add</td>
<td></td>
</tr>
<tr>
<td>Secondary Conservation Areas (50% of ATA)</td>
<td>20 acres</td>
</tr>
<tr>
<td>Total</td>
<td>30 acres</td>
</tr>
<tr>
<td>Development Area (50% of ATA)</td>
<td>20 acres</td>
</tr>
</tbody>
</table>

   a. All lands deducted from the gross tract to determine Adjusted Tract Area, shall be delineated in their entirety as "Constrained Land", comprising 10 acres in the illustration.

   b. Additional minimum acreage requirements for Greenway areas consist of "Secondary Conservation Areas", to be calculated on the basis of the standards in Section 104 of the Zoning Ordinance. In the example, a minimum of 50% of the Adjusted Tract Area (or 20 acres) must be Class B greenway lands.

   c. Total Greenway area requirements are the sum of Constrained Land and Secondary Conservation Areas which, in the example, comprise 30 acres. All primary Conservation Areas (flood plains, wetlands, and slopes greater than 25%) shall be contained within the greenway lands.

   d. The locations and boundaries of Primary Conservation Areas shall follow the actual boundaries of floodplains, wetlands and slopes.

   e. The locations and boundaries of Secondary Conservation Areas shall be based upon the applicant's analysis of the tract's resource features, using the design standards in Section 403. The applicant shall also be guided by any written recommendations provided by the municipality regarding the delineation of Secondary Conservation Areas lands, following the Site Inspection or the Pre-Sketch Conference.

   f. Development areas constitute the remaining lands of the tract outside of the designated Greenway areas, which in the above example consist of 20
acres, where house sites, streets and lots are to be delineated in accordance with steps 2, 3 and 4 below.

2. Step 2: Location of House Sites
   a. Applicants shall identify house site locations in the tract's designated development areas, designed to: fit the tract's natural topography, served by adequate water and sewerage facilities, and provide views of and access to adjoining Greenway areas (without encroaching upon them in a manner visually intrusive to users of such areas). House sites should be located no closer than 100 feet and 50 feet from Primary and Secondary Conservation Areas, respectively.

3. Step 3: Alignment of Streets and Trails
   a. With house site locations identified, applicants shall delineate a street system to provide vehicular access to each house in a manner conforming to the tract's natural topography and providing for a safe pattern of circulation and ingress and egress to and from the tract.
   b. Streets shall avoid or at least minimize adverse impacts on the Greenway areas. To the greatest extent practicable, wetland crossings and new streets or driveways traversing slopes over 15 percent shall be avoided.
   c. Street connections shall generally be encouraged to minimize the number of new cul-de-sacs to be maintained by the municipality and to facilitate easy access to and from homes in different parts of the tract (and on adjoining parcels).
   d. A tentative network of trails shall also be shown, connecting streets with various natural and cultural features in the conserved greenway lands. Potential trail connections to adjacent parcels shall also be shown, in areas where a Municipal trail network is envisioned.

4. Step 4: Design of Lot Lines
   Lot lines for the subdivision should be drawn as the last step in the design procedure. They should follow the configuration of house sites and streets in a logical and flexible manner.

SECTION 603 - Greenway Design Review Standards

A. Prioritized List of Resources to be Conserved. The design of greenway lands in any subdivision or land development plan shall reflect the standards set forth in Section 601, resources identified on the Map of Potential Conservation Lands and, to the fullest extent possible, incorporate any of the following resources if they occur on the tract (listed in order of significance):

1. Stream channels, floodplains, wet soils, swales, springs and other lowland areas, including adjacent buffer areas which may be required to insure their protection.
2. Significant natural areas of species listed as endangered, threatened, or of special concern, such as those listed in the Statewide Natural Diversity Inventory.

3. Moderate to steep slopes, particularly those adjoining water courses and ponds, where disturbance and resulting soil erosion and sedimentation could be detrimental to water quality.

4. Healthy woodlands, particularly those performing important ecological functions such as soil stabilization and protection of streams, wetlands and wildlife habitats.

5. Areas where precipitation is most likely to recharge local groundwater resources because of topographic and soil conditions affording high rates of infiltration and percolation.

6. Hedgerows, groups of trees, large individual trees of botanic significance, and other vegetational features representing the site's rural past.

7. Class I, II and III agricultural soils as defined by the USDA Natural Resource Conservation Service.

8. Historic structures and sites.

9. Visually prominent topographic features such as knolls, hilltops and ridges, and scenic viewsheds as seen from public roads (particularly those with historic features).

10. Existing trails connecting the tract to other locations in the municipality. (see also Section 108.A)

B. Other Design Considerations. The configuration of proposed greenway lands set aside for common use in residential subdivisions shall comply with the following standards:

1. They shall be free of all structures except historic buildings, stone walls, and structures related to Greenway uses. The Governing body may grant approval of structures and improvements required for storm drainage, sewage treatment and water supply within the Greenway provided that such facilities would not be detrimental to the Greenway (and that the acreage of lands required for such uses is not credited towards minimum Greenway acreage requirements for the tract, unless the land they occupy is appropriate for passive recreational use).

2. They shall generally not include parcels smaller than three acres, have a length-to-width ratio of less than 4:1, or be less than 75 feet in width, except for such lands specifically designed as neighborhood greens, playing fields or trail links.

3. They shall be directly accessible to the largest practicable number of lots within the subdivision. Non-adjointing lots shall be provided with safe and convenient pedestrian access to greenway land.
4. They shall be suitable for active recreational uses to the extent deemed necessary by the Governing body, without interfering with adjacent dwelling units, parking, driveways, and roads.

5. They shall be interconnected wherever possible to provide a continuous network of Greenway lands within and adjoining the subdivision.

6. They shall provide buffers to adjoining parks, preserves or other protected lands.

7. Except in those cases where part of the greenway is located within private houselots, they shall provide for pedestrian pathways for use by the residents of the subdivision. Consideration shall be given to providing for public access on such trails if they are linked to other publicly-accessible pathway systems within the municipality. Provisions should be made for access to the greenway lands, as required for land management and emergency purposes.

8. They shall be undivided by public or private streets, except where necessary for proper traffic circulation.

9. They shall be suitably landscaped either by retaining existing natural cover and wooded areas and/or according to a landscaping plan to protect Greenway resources.

10. They shall be made subject to such agreement with the municipality and such conservation easements duly recorded in the office of the County Recorder of Deeds as may be required by the Governing body for the purpose of preserving the common open space for such uses.

11. They shall be consistent with the municipality's Comprehensive Plan and its Open Space Plan.

C. Ownership and Maintenance. Applicants shall demonstrate compliance with Greenway ownership and maintenance standards in Section 109 of the Zoning Ordinance.

SECTION 604 - Dedication Of Greenway Land For Public Use

A. Land Setasides for Public Recreational Use and the "Fee-In-Lieu" Alternative

The following standards shall apply to new subdivisions. All actions by the Governing Body under this section must also be consistent with the provisions of the state enabling legislation.

1. Applicants for new residential developments involving ten or more dwelling units shall be required to set aside five percent of their gross tract acreage as undivided recreational land designated for public usage. Such land shall be suitable for active and/or passive recreation, with at least half the land suitable for active sports, where such facilities are required by the Governing body.

2. In lieu of a setaside for public usage, two alternatives exist for the applicant proposing subdivision involving ten or more dwellings:
a. The applicant may offer a setaside limited to recreational usage by the residents of the proposed subdivision. If land is set aside in this manner for private recreational use, it shall also be permanently protected through a conservation easement enforceable by the municipality and/or a land trust, prohibiting future nonrecreational (or commercial recreational) uses.

b. The applicant may offer to pay a fee to the municipality in lieu of any recreational land setaside. Situations in which it would be appropriate for the municipality to accept such offers include cases where the land would not provide a particular public benefit because of its small size or location. Exceptions to this rule, where public use of relatively small land areas would still be appropriate, include situations in which the land could be used to buffer or extend public parks or public school grounds, or could provide potential linkage in a future township trail network.

c. The decision whether to accept a fee-in-lieu offer by the applicant shall lie with the Governing Body, which shall also establish the amount of the fee in lieu, based upon the municipality's estimated cost of acquiring land that is similar in area and attributes, which would better serve public recreational needs. In appraising alternative sites, the municipality shall be guided by the site selection criteria contained in its Open Space Plan. Such estimates shall be based on discussions with realtors or appraisers familiar with land values in the locality. All such fees collected shall be deposited in an interest-bearing account earmarked for recreational land or facility provision by the municipality, and the applicant shall be informed of the use to which the fee will be put. Alternatively, the Governing Body may establish a flat fee (based on discussions with realtors or appraisers familiar with land values in the area) for general use with subdivision applicants.

3. In Option 3 and 4 subdivisions involving fewer than five dwelling units where, in the judgment of the Governing body, there would be no particular public benefit accruing from a public dedication (as described above), or from a setaside for shared private recreational usage among the subdivision lot owners, the applicant may offer to place a conservation easement on certain areas of land within individual house lots where certain environmentally-sensitive features are present, without conferring common access rights or privileges for the subdivision residents or the broader public. The percentage of land that is thus protected shall generally be not less than twenty percent (20%) of the gross land area of the subdivision. This land may be access-restricted not only from the public but also from other residents in the subdivision.

4. In Option 1 and 2 subdivisions with fewer than ten dwelling units, where there would be no particular benefit accruing from a public dedication (as described above), the recreational land that is part of the requirement for undivided open space shall be designated for private shared recreational usage among the subdivision lot owners.

SECTION 605 - Resource Conservation Standards For Site Preparation and Cleanup
A. Conservation Practices during Site Preparation and Clean-Up

1. Protection of Vegetation from Mechanical Injury. Where earthwork, grading, or construction activities will take place in or adjacent to woodlands, old fields or other significant vegetation or site features, the Governing body may require that the limit of disturbance be delineated and vegetation protected through installation of temporary fencing or other approved measures. Such fencing shall be installed prior to commencing of and shall be maintained throughout the period of construction activity.

2. Protection of Vegetation from Grading Change. Grade changes to occur at any location of the property shall not result in an alteration to soil or drainage conditions which would adversely affect existing vegetation to be retained following site disturbance, unless adequate provisions are made to protect such vegetation and its root systems.

3. Protection of Vegetation from Excavations
   a. When digging trenches for utility lines or similar uses, disturbances to the root zones of all woody vegetation shall be minimized.
   b. If trenches must be excavated in the root zone, all disturbed roots shall be cut as cleanly as possible. The trench shall be backfilled as quickly as possible.

4. Protection of Topsoil
   a. No topsoil shall be removed from the site.
   b. Prior to grading operations or excavation, topsoil in the area to be disturbed shall be removed and stored on site.
   c. Topsoil removed shall be redistributed and stabilized as quickly as possible following the establishment of required grades for a project or project phase. All exposed earth surfaces shall be stabilized by hydroseeding on slopes of less than ten percent, and by sodding, hydroseeding, or rip-rap on slopes exceeding ten percent.
   d. Grading and earthmoving operations shall be scheduled to minimize site disturbance during the period from November 1 to April 1, when revegation of exposed ground is difficult.
ARTICLE 7 - Supplemental Design Standards for Option 5 Hamlets and Villages

Contents:

SECTION 700 – Purposes
SECTION 701 - Site Design and Building Location and Design
SECTION 702 - Streets and Streetscape Design
SECTION 703 – Modifications
SECTION 704 - Illustrated Design Principles

SECTION 700 - Purposes
A. This article is established to provide opportunities for creating compact housing developments of a traditional character in the form of hamlets and villages.

B. In order to ensure that new higher density development in the municipality will be compatible with historic village and hamlet building patterns in the rural parts of the County, and that they will reinforce the "sense of place" and neighborhood feeling experienced in traditional rural settlements, the standards herein are proposed to control the location, scale and physical character of such new development, as well as the manner in which they would fit into the existing pattern of fields, woodlands and developed areas.

SECTION 701 - Site Design and Building Location and Design
A. The Four-Step Site Design Process for Hamlets and Villages

1. The design process for laying out hamlets and villages shall be a variation on the four-step process for conservation subdivisions, as described in Section 502.E of this Ordinance. In hamlets and villages, where traditional streetscapes and "terminal vistas" are of greater importance, Steps Two and Three are generally reversed, so that streets and squares are located during the second step, and house sites are located immediately thereafter. The first step is to identify greenway lands, including both Primary and Secondary Conservation Areas.

B. Standards in both Hamlets and Villages

1. All lots shall front onto a street or a green (except for flag lots, where permitted).

2. At least two-thirds of the buildings shall have pitched gabled roofs with roof pitches between 8/12 and 12/12, and the orientation of those gable ends shall be mixed, with some facing the street and others with the ridgeline parallel to the street.

3. Readers are referred to Section 704, Illustrated Design Principles.

C. Building Design Standards for the Mixed Use/Commercial Subdistrict

1. New commercial buildings may be either traditional in their architectural character, or be a contemporary expression of traditional styles and forms,
respecting simply the scale, proportion and character of village shops. The massing of larger commercial buildings shall be softened in a variety of ways, including the use of projecting and recessed sections, to reduce their apparent overall bulk and volume.

To harmonize with the traditional scale of commercial buildings in historic hamlets and villages, new commercial buildings shall not contain more than 10,000 sq. ft. (above grade), and those with more than 6,000 sq. ft. of floor space (above grade) shall be of two-story construction.

2. Buildings shall not be less than one and one-half story in height, and at least half the buildings in any single development for commercial, mixed-use and institutional buildings shall be two stories in height, with respect to the average ground grade along the front building line.

3. Buildings shall generally be designed for multiple uses, with offices and/or residential units above, and shall generally have traditional sloping roofs with overhanging eaves. Desired roof materials include shingle (both wood and asphalt composition) and metal formed to resemble "standing seams." Roof color should be traditional (which encompasses a wide variety of hues, but which does not include white or tan composition shingles, or shiny unpainted metal). The use of dormers and gables is encouraged to provide visual interest.

4. Exterior wall materials may include stucco, wood clapboarding (including vinyl or aluminum imitation clapboard siding), native stone, or brick of a shape, color and texture very similar to that found in the historic villages and boroughs of the County. Specifically prohibited shall be brick that is white, tan, spray-painted, or used; except on rear walls, all forms of concrete block shall also be prohibited. In addition, concrete block and metal buildings shall also be excluded from this subdistrict.

5. Shopfront design shall be based upon historic examples in the area, with large display windows having low sills and high lintels. Traditional canvas awnings without interior illumination shall be encouraged, and all signs shall be of wood or metal, preferably with dark background colors and light-colored lettering.

6. Landscaping around commercial buildings and their parking lots shall emphasize native species trees, shrubs and flowers to reduce maintenance, help ensure longevity, and to reinforce the natural spirit of the area. Species should be selected partly on the basis of their visual interest at different times of the year (spring blossoms, summer foliage, autumnal berries, winter bark and foliage). Examples of appropriate shrub selections include viburnum, laurel, lilac, clethra (sweet pepperbush), winterberry, chokeberry, holly and red-osier dogwood. Interesting non-native shrub species that are recommended include: caryopteris (bluebeard), pyrocantha (firethorn), winged euonymus (burning bush), and spirea. An excellent source book is Elizabeth DuPont's Landscaping with Native Plants in the Middle Atlantic Region, published by the Brandywine Conservancy in 1978.
D. Building Design Standards for Residential Areas

1. Single-family homes on the smaller village-scale lots (especially those less than 8,000 sq. ft.) shall generally be designed so that approximately two-thirds are oriented with their gable-ends facing the street. At least 35% of the houses shall have a covered front entry porch, raised a minimum of eighteen inches above ground level. When front porches are screened, they may be located within 10 feet of the front property line (those enclosed with windows shall observe the minimum 15 ft. front setback).

2. Homes may be located at or within five feet of side lot lines if that side either has no windows, or window sills are at least 64 inches above the finished floor elevation. Such design allows houses to be located off-center on their lots, so that one side yard may be larger and therefore provide more usable outdoor space.

3. Residences housing more than one family shall be designed to emulate traditional buildings of this nature in historic settlements in the County, or shall be designed to resemble large single-family residences.

4. Stucco and painted wood clapboard siding shall be encouraged, as shall pitched roofs with slopes between 8/12 and 12/12. Housing styles, shapes and materials should be varied, within the overall theme of traditional village dwellings found in the rural parts of the County (which may also include contemporary interpretations of vernacular building forms).

5. If garages, carports or other accessory structures designed for accessory parking of automobiles in the Residential Areas are front-loaded (i.e., having their large entry door facing the street), they shall generally be set back at least 10 feet further (see also Section 104.G.5.a) from the front property line than the foremost facade of the principal building facing the front property line (stoops, porticos, open colonnades and open porches excluded).

6. Off-street parking for multi-family residences shall generally be located at the rest of the lot, in garages accessed by lanes or alleys.

SECTION 702 - Streets and Streetscape Design

A. Street Design

1. New streets proposed to be created as a part of any development proposal shall be integrated closely with the municipality's Official Map of existing and future streets. The Official Map shall show the realignment and redesign of certain intersections and road segments to facilitate traffic flow and improve safety.

2. Rectilinear street layouts are generally preferred, with occasional diagonal elements to enhance visual interest, although curvilinear layouts shall be acceptable when designed to interconnect and to produce terminal vistas of protected open space or prominent structures.
3. Streets shall be aligned so that their terminal vistas are of greens of other open space, or civic or institutional buildings, wherever possible. (See also Section 104.G.2.c) Where this is not possible, every effort shall be made to terminate those streets with buildings of above-average size, whose architecture shall be encouraged to be special in one way or another (See Section 704, Illustrated Design Principles).

4. Streets shall be interconnected as far as practicable (employing cul-de-sacs only where essential), and they may also be supplemented with back lanes or alleys. Where cul-de-sacs are deemed to be unavoidable, continuous pedestrian circulation shall be provided for by connecting sidewalks that link the end of the cul-de-sac with the next street (or open space).

5. To the greatest extent practicable, streets shall be designed to have maximum lengths of 600 feet between intersections, and maximum lengths of 1,200 feet before terminating at three-way "T" intersections or angling off in a diagonal direction. (This design approach helps to reduce traffic speed, making the development more friendly to pedestrians.) Blocks greater than 600 feet long shall generally be provided with cross-block pedestrian connections at mid-block locations.

6. Streets shall be laid out to promote pedestrian circulation and ease of access from all points in the Residential Areas to the Village Mixed Use/Commercial Area.

7. Easements shall be reserved to permit streets to be extended to allow adjoining properties to be connected in the future, if so desired.

8. Collector streets shall generally connect existing municipal roads to central greens in each subdistrict.

9. The street width standards listed below take into account the need for on-street parking spaces, which generally increase as lot widths decrease.

Table 702A.1 Street Design Standards for Hamlets and Villages

<table>
<thead>
<tr>
<th></th>
<th>Total Lanes</th>
<th>Parking Lanes</th>
<th>Pavement Width</th>
<th>Shoulders</th>
<th>R.O. W</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Collector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Parking</td>
<td>2</td>
<td>0</td>
<td>20' (22' curbed)</td>
<td>4' grassed</td>
<td>50'</td>
</tr>
<tr>
<td>Lots 80'+</td>
<td>2</td>
<td>0</td>
<td>22' (24' curbed)</td>
<td>4' grassed</td>
<td>50'</td>
</tr>
<tr>
<td>Lots 40' - 80'</td>
<td>3</td>
<td>1</td>
<td>28' (30' curbed)</td>
<td>4' grassed</td>
<td>50'</td>
</tr>
<tr>
<td>Lots &lt;40'</td>
<td>4</td>
<td>2</td>
<td>34' (36' curbed)</td>
<td>4' grassed</td>
<td>50'</td>
</tr>
<tr>
<td>Secondary Collector</td>
<td>Lots 80'+</td>
<td>Lots 40' - 80'</td>
<td>Lots &lt;40'</td>
<td>Local Access</td>
<td>Lots 80'+</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------</td>
<td>----------------</td>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>20' (22' curbed)</td>
<td>26' (28' curbed)*</td>
<td>32' (34' curbed)*</td>
<td>18' (20' curbed)</td>
<td>24' (26' curbed)</td>
</tr>
<tr>
<td></td>
<td>4' grassed</td>
<td>4' grassed</td>
<td>none</td>
<td>3' grassed</td>
<td>4' grassed</td>
</tr>
<tr>
<td></td>
<td>50'</td>
<td>50'</td>
<td>60'</td>
<td>50'</td>
<td>50'</td>
</tr>
</tbody>
</table>

* The paved width may be reduced by 6 feet when streets are "single-loaded" (lots on one side only), or when driveways are accessed only from rear service lanes or alleys.

**B. Street Trees**

1. The coordinated planting of deciduous shade trees within the right-of-way of all streets is a central unifying feature of development in villages and hamlets.

2. Such trees shall be 2" to 2.5" in diameter, measured at chest height, when planted, and shall be spaced at intervals no greater than forty feet along both sides of each street, including arterial roads, but not including rear access lanes or alleys.

3. Species shall be selected according to the following criteria:
   a. cast moderate shade to dense shade in summer;
   b. long-lived (over 60 years);
   c. mature height of at least 50 feet;
   d. be tolerant of pollution and direct or reflected heat;
   e. require little maintenance, by being mechanically strong (not brittle) and insect-and disease-resistant;
   f. be able to survive two years with no irrigation after establishment; and
   g. be of native origin, provided they meet the above criteria
Among the species that are recommended in this ordinance are sycamore or London Plane, sweet gum, red maple, green ash, Shademaster golden locust, littleleaf linden and Village Green Zelkova. For further relevant information, readers are specifically referred to Street Tree Factsheets, Henry Gershold, Editor, School of Forest Resources, Pennsylvania State University, 1989.

4. Readers are referred to Section 704, Illustrated Design Principles.

C. Streetscape Standards

1. Shade trees shall generally be planted in planting strips (sometimes called "tree lawns") at least four feet wide, located between the pavement or curb and the continuous sidewalk or footpath system (which shall also be required).

2. All village streets shall be provided with sidewalks, preferably of brick, stone or concrete paving block in commercial areas. Street lighting in villages shall utilize cast-iron posts that are decorative but not overly ornate and, in order to ensure consistency, the final decision on their style, height, color and brightness shall rest with municipal officials.

3. Sidewalks shall be constructed in villages along at least one side of all streets on which on-street parking is provided, and in front of civic, institutional or community uses (however, they are not required in back lanes or alleys). They shall be constructed of brick pavers, rectangular flagstones, or concrete "paving bricks" or "flagstones." Exceptions may be made for sidewalks of poured concrete, but not for asphalt.

4. In village commercial areas and in neighborhoods where lot sizes are 15,000 sq. ft. or less, on-street parking shall be provided in parking lanes parallel to curbs (which should also be required at such building densities, to channelize runoff and to protect the paved edge from damage by parked vehicles). Parking lanes shall be encouraged to be surfaced with alternative materials, textures or colors (such as asphalt with red-colored stone chips steamrolled in just after the asphalt is laid). Such on-street parking shall be supplemented, wherever necessary, by off-street parking areas that are screened from the street by landscaping and low fences or walls (vehicle "hood-height").

5. Buildings in the Village Mixed Use/Commercial Area shall generally be located close together with minimal-side yard areas, in order to form a fairly continuous row of shop fronts.

6. Readers are referred to Section 704, Illustrated Design Principles.

SECTION 703 – Modifications

A. The Governing Body may, with a positive recommendation from the Planning Commission and after a public hearing, permit by Conditional Use approval the modification of the provisions of this Article, in order to encourage a well-planned traditional town center. Applicants must demonstrate that such
modifications would not substantially diminish the traditional character of the proposed development, and that they would be within the spirit of this Article. However, in terms of modifying any dimensional requirement (lot area, width, setbacks, etc.), such modification may not be greater than twenty-five percent.

B. Any conditional use to permit such a modification shall be subject to the following criteria:

1. The design and modifications shall be in harmony with the purposes and the land-use standards contained in this article;

2. The design and modifications shall generally enhance the development plan, the central core area, the streetscapes, and the neighborhoods, or at least not be any less desirable than the plan that could be created in conformance with this article;

3. The design and modifications shall not produce lots or street systems that would be impractical or detract from the appearance of the District, and shall not adversely affect emergency vehicle access or deprive adjoining noncommercial properties of adequate light and air.

4. Increased residential density or intensification of nonresidential uses shall be offset by corresponding special efforts by the applicant to improve the appearance of the development through enhanced architectural and landscaping efforts.

5. The applicant shall demonstrate that the proposed modifications will produce equal or better results, from the municipality's perspective, and represent the minimum modification necessary.

C. If the Governing Body determines that the applicant has met his/her burden, it may grant a modification of the requirements of this article. In granting modifications, the Governing Body may impose such conditions as will, in its judgment, secure the objectives and purposes of this article.
SECTION 704 - Illustrated Design Principles
The illustrated design principles can be found on pages 196-222 in "Growing Greener: Putting Conservation into Local Plans and Ordinances" (1999, Island Press), the companion book to this CD-ROM. They were selected to provide guidance to applicants, designers, local officials, and interested residents, with respect to the intended ultimate visual appearance of the Hamlets and Villages. If a conflict occurs between the ordinance text and the information contained in the Illustrated Design Principles, the former shall prevail. These illustrations and their captions are not intended to be used as regulatory language but rather as guidelines. The illustrated commentary included throughout this VIC CD-ROM provide visual examples within the context of specific ordinance provisions.

For further information and considerably more detail about these design principles, readers are referred to a sister publication entitled "Crossroads, Hamlet, Village, Town: Design Characteristics of Traditional Neighborhoods, Old and New" (American Planning Association, Planning Advisory Service Report Number 487/488, September 1999) by Randall Arendt, pages 43-94.
### APPENDIX 5

**List of Native Plants provided by PA Natural Heritage Program**

Native plants recommended for landscaping.

NOTES: T = Tree, ST = Small Tree, S = Shrub, H = Herb, G = Grass-like, F = Fern

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Dry</th>
<th>Sunny</th>
<th>Wet</th>
<th>Shady</th>
<th>Erosion control</th>
<th>Wildlife value</th>
<th>Street tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red maple</td>
<td><em>Acer rubrum</em></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silver maple</td>
<td><em>Acer saccharinum</em></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar maple</td>
<td><em>Acer saccharum</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yellow birch</td>
<td><em>Betula alleghaniensis</em></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cherry birch</td>
<td><em>Betula lenta</em></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bitternutt hickory</td>
<td><em>Carya cordiformis</em></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pignut hickory</td>
<td><em>Carya glabra</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shellbark hickory</td>
<td><em>Carya laciniosa</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Shagbark hickory</td>
<td><em>Carya ovata</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Mockernut hickory</td>
<td><em>Carya tomentosa</em></td>
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<td></td>
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<td>X</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Hackberry, sugarberry</td>
<td><em>Celtis occidentalis</em></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American beech</td>
<td><em>Fagus grandifolia</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White ash</td>
<td><em>Fraxinus americana</em></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green ash</td>
<td><em>Fraxinus pensylvanica</em></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honey locust</td>
<td><em>Gleditsia triacanthos</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thornless Honey Locust</td>
<td><em>Gleditsia triacanthos inermis</em></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Butternut</td>
<td><em>Juglans cinerea</em></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Black walnut</td>
<td><em>Juglans nigra</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>Sweet Gum</td>
<td><em>Liquidambar styraciflua</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tulip tree</td>
<td><em>Liriodendron tulipifera</em></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cucumber tree</td>
<td><em>Magnolia acuminata</em></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black gum, tupelo</td>
<td><em>Nyssa sylvatica</em></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pitch pine</td>
<td><em>Pinus rigida</em></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Eastern white pine</td>
<td><em>Pinus strobus</em></td>
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<td></td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>Virginia pine</td>
<td><em>Pinus virginiana</em></td>
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<td></td>
<td>X</td>
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</tr>
<tr>
<td>Sycamore, plane-tree</td>
<td><em>Platanus occidentalis</em></td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>Eastern cottonwood</td>
<td><em>Populus deltoides</em></td>
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<tr>
<td>Large-toothed aspen</td>
<td><em>Populus grandidentata</em></td>
<td></td>
<td></td>
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<tr>
<td>Quaking aspen</td>
<td><em>Populus tremuloides</em></td>
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<tr>
<td>Wild plum</td>
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<td></td>
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<tr>
<td>Fire or pin cherry</td>
<td><em>Prunus pensylvanica</em></td>
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<td>X</td>
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<td>X</td>
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<tr>
<td>Black cherry</td>
<td><em>Prunus serotina</em></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### Native plants recommended for landscaping.

NOTES: T = Tree, ST = Small Tree, S = Shrub, H = Herb, G = Grass-like, F = Fern

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Dry, Sunny</th>
<th>Wet</th>
<th>Slidy</th>
<th>Erosion control</th>
<th>Wildlife value</th>
<th>Street tree</th>
</tr>
</thead>
<tbody>
<tr>
<td>T White oak</td>
<td><em>Quercus alba</em></td>
<td></td>
<td>X</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>T Swamp white oak</td>
<td><em>Quercus bicolor</em></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>T Scarlet oak</td>
<td><em>Quercus coccinea</em></td>
<td>X</td>
<td>X</td>
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<tr>
<td>T Chestnut Oak</td>
<td><em>Quercus montana</em></td>
<td>X</td>
<td></td>
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<td></td>
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<tr>
<td>T Yellow Oak</td>
<td><em>Quercus muhlenbergii</em></td>
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<td></td>
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<td></td>
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<tr>
<td>T Pin oak</td>
<td><em>Quercus palustris</em></td>
<td></td>
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<td></td>
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<tr>
<td>T Red oak</td>
<td><em>Quercus rubra</em></td>
<td>X</td>
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<td>X</td>
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<tr>
<td>T Black oak</td>
<td><em>Quercus velutina</em></td>
<td>X</td>
<td></td>
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<tr>
<td>T Black willow</td>
<td><em>Salix nigra</em></td>
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<td>T Sassafras</td>
<td><em>Sassafras albidum</em></td>
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<tr>
<td>T American Basswood</td>
<td><em>Tilia americana</em></td>
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<tr>
<td>T American elm</td>
<td><em>Ulmus americana</em></td>
<td></td>
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<tr>
<td>T Red elm, slippery elm</td>
<td><em>Ulmus rubra</em></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ST Mountain maple</td>
<td><em>Acer spicatum</em></td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>ST Serviceberry</td>
<td><em>Amelanchier arborea</em></td>
<td>X</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>ST Shadbush Serviceberry</td>
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### Native plants recommended for landscaping.

**NOTES:** T = Tree, ST = Small Tree, S = Shrub, H = Herb, G = Grass-like, F = Fern

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<th>Common Name</th>
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<th>Dry, Sunny</th>
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<th>Erosion control</th>
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### Native plants recommended for landscaping.

NOTES:  
- T = Tree, ST = Small Tree, S = Shrub, H = Herb, G = Grass-like, F = Fern

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Native plants recommended for landscaping.

NOTES: T = Tree, ST = Small Tree, S = Shrub, H = Herb, G = Grass-like, F = Fern

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<th>Common Name</th>
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<th>Slady</th>
<th>Erosion control</th>
<th>Wildlife value</th>
<th>Street tree</th>
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## Native plants recommended for landscaping.

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<td>G  Broom sedge</td>
<td>Andropogon virginicus</td>
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<td>G  Brachyelytrum</td>
<td>Brachyelytrum erectum</td>
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<td>G  Brome grass</td>
<td>Bromus altissimus</td>
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<td>G  Canada brome</td>
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<td>G  Bluejoint grass</td>
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</table>
Native plants recommended for landscaping.

NOTES: T = Tree, ST = Small Tree, S = Shrub, H = Herb, G = Grass-like, F = Fern

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Dry, Sunny</th>
<th>Wet</th>
<th>Slady</th>
<th>Erosion control</th>
<th>Wildlife value</th>
<th>Street tree</th>
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<tr>
<td>G Sedge</td>
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<td>Carex folliculata</td>
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<td>Carex pensylvanica</td>
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<td>Cinna arundinacea</td>
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<td>G Fraser' sedge</td>
<td>Cymophyllus fraseri</td>
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<td>G Nodding fescue</td>
<td>Festuca obtusa</td>
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<td>Glyceria grandis</td>
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<td>G Soft rush</td>
<td>Juncus effusus</td>
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<td>Muhlenber gia capillaris</td>
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<td>Panicum clandestinum</td>
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<td>G Little bluestem</td>
<td>Schizachyrium scoparium</td>
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<td>G Freshwater cordgrass</td>
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<td>G Purple top</td>
<td>Tridens flavus</td>
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<tr>
<td>F Lady fern</td>
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<td>F Crested wood fern,</td>
<td>Dryopteris cristata</td>
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<td>F Marginal wood fern</td>
<td>Dryopteris marginalis</td>
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<td>F Sensitive fern</td>
<td>Onoclea sensibilis</td>
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<td>F Cinnamon fern</td>
<td>Osmunda cinnamomea</td>
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<td>F Interrupted fern</td>
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<td>F New York fern</td>
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<tr>
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<td>Thelypteris simulata</td>
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</table>
MUNICIPALITY NAME

SUBDIVISION & LAND DEVELOPMENT PLAN APPLICATION

Please complete entire form before submission

<table>
<thead>
<tr>
<th>Municipality:</th>
<th>Plat Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveyor:</td>
<td>Engineer:</td>
</tr>
</tbody>
</table>

Plan Classification:  
- □ Subdivision  
- □ Land Development  
- □ Combined  
- □ Preliminary  
- □ Lot Addition  
- □ Final  
- □ Preliminary/Final  

<table>
<thead>
<tr>
<th>Landowner(s):</th>
<th>Phone Number:</th>
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<tbody>
<tr>
<td>Address:</td>
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</table>

<table>
<thead>
<tr>
<th>Landowner’s Agent:</th>
<th>Phone Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
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</table>

SUBDIVISION RELATED QUESTIONS

- Total tract area in acres:  
- Subdivided area in acres: (Subdivision)

<table>
<thead>
<tr>
<th>Existing # of Developable Lots:</th>
<th>Proposed # of Developable Lots:</th>
<th>Proposed # of New Dwelling Units:</th>
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<tbody>
<tr>
<td>□ Public</td>
<td>□ Proposed Municipal Sewerage</td>
<td>□ Public</td>
</tr>
<tr>
<td>□ On-Lot Septic System</td>
<td>□ Proposed Municipal Sewerage</td>
<td>□ Public</td>
</tr>
<tr>
<td>□ None</td>
<td>□ Proposed Municipal Sewerage</td>
<td>□ Public. Community /Package Sewer</td>
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</table>

<table>
<thead>
<tr>
<th>Existing Water:</th>
<th>Proposed # of Non-Developable Lots:</th>
<th>Reason for not showing lot developability:</th>
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<tbody>
<tr>
<td>□ Public</td>
<td>□ Proposed Individual Well(s)</td>
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<tr>
<td>□ Individual Well(s)</td>
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</tr>
<tr>
<td>□ None</td>
<td>□ Community Water System</td>
<td>None</td>
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</table>

LAND DEVELOPMENT RELATED QUESTIONS

- Proposed Impervious Area:  
- Developed Area: (Area of Land Proposed to be Disturbed)

- Proposed Building Floor Area:  
- Proposed Structural Improvements:

ZONING QUESTIONS

(Where Applicable) Have you contacted the Municipal Zoning Officer?  ___YES ___NO

If yes, what is the Zoning District(s) for this property:

<table>
<thead>
<tr>
<th>Existing Land Use:</th>
<th>Proposed Land Use:</th>
</tr>
</thead>
</table>

A-71
Are any zoning variances/subdivision and land development modifications (waivers) requested?  ___YES  ___NO

List zoning variances/subdivision and land development modifications (waivers) requested:

**OTHER RELEVANT QUESTIONS FOR DISCLOSURE AND DIRECTION**

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
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</thead>
<tbody>
<tr>
<td>Is this property enrolled in the Clean and Green Program?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>If you answered yes, please contact the County Assessment Office.</td>
<td></td>
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</tr>
<tr>
<td>Is this property located in an Agricultural Security Area?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Have the development rights been purchased on this property for any easement purchase program?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Have any deed restrictive covenants been placed on the present deed for the property?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>If you answered yes to the previous question, please provide a copy of the deed with your application.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Purpose of the Plan:

Fees Submitted: $  
Check Number:  
Signed by:  
Date:  

**NOTE:** The (County) Planning Commission meeting is held on (Date) of each month. The cut off date for plan submission for County Approval is (Number) days prior to the meeting.

Signature of Person Completing this application: ________________________________  
Date: ____________  
Printed Name of Person Completing the application: ________________________________  

The following authorization statement must be completed by the landowner(s) when he, she or they will not be handling their application for subdivision and land development.

*I/We am/are the exclusive landowner(s) of record for the land involved in this Subdivision or Land Development and do hereby authorize (Name of Entrusted Agent) to be my/our agent and to handle this application on my/our behalf. We also entrust all formal correspondence, including written acceptance of conditions should the need arise, after discussing such matters with me/us.*

Signed: ________________________________ Date: ____________

Signed: ________________________________ Date: ____________

For Official Use Only:

**MUNICIPAL ACCEPTANCE STATEMENT**

The Township/Borough of ________________________________ has received the above plan and hereby authorizes the bearer to deliver same to the **County Planning Commission**.

Signed: ________________________________ Date: ____________

Printed Name of Municipal Official: ________________________________
APPENDIX 7

SAMPLE CHECKLIST FOR SUBDIVISION AND LAND DEVELOPMENT PLAN CONTENT

Name of Plan ___________________________________________________________

Name of Municipality __________________________________________________

<table>
<thead>
<tr>
<th>Cover Sheet Information</th>
<th>Preliminary</th>
<th>Final</th>
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<tbody>
<tr>
<td>1. Title Block</td>
<td></td>
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</tr>
<tr>
<td>2. Name of proposed development, municipality, county and plan label: Preliminary, Final or Preliminary/Final.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Name, address, email address and telephone number of owner, equitable owner, subdivider/developer, engineer, landscape architect and land surveyor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Instrument number/plan book and page number and tax parcel number.</td>
<td></td>
<td></td>
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<tr>
<td>5. Location map with north arrow and scale.</td>
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</tr>
<tr>
<td>6. Date of plan preparation and revision date(s).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Zoning data in a table form to include: Zoning district, minimum lot area, building setbacks, and lot width, density, building height and number of floors, floor area ratio, lot and building coverage, parking, open space, landscape, buffer screening requirements, public or private water and sewer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Site data in a table form to include: Total area of tract, proposed use, proposed number of lots/number of units, floor area for non-residential uses, floor area ratio, lot and building coverage, density, building height, open space area, developable area, area of public right-of-way, public or private water supply and sanitary sewer, total length of proposed and/or improved street(s) in feet and parking calculations including handicap parking.</td>
<td></td>
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<tr>
<td>9. Existing and proposed protective covenants running with the land, if any or a note stating none exist.</td>
<td></td>
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</tr>
<tr>
<td>10. List of utilities with address and telephone number</td>
<td></td>
<td></td>
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<tr>
<td>11. List of modification of requirements, waivers, variances, special exceptions, conditional uses and/or any non-conforming structures and zoning variances.</td>
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<td></td>
<td>Preliminary</td>
<td>Final</td>
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</tr>
<tr>
<td>12.</td>
<td>List of permits/approvals required by other agencies and the date submitted and approval dates.</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Statement of recordation of plan with date, instrument number/deed book, volume and page number and tax parcel number.</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Index of drawings and identify sheets to be recorded</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>PA. one call system with serial numbers.</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>List of utilities with address and telephone numbers.</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Parcel(s) of land to be dedicated.</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>A statement regarding public improvements.</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Development and improvements phases with number of lots and time schedule in a table form, if applicable.</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Statement regarding presence or absence of archaeological resource, historical features and important natural habitat.</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Statement regarding conformance to construction requirements.</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Certification of ownership and dedication statement for roads or streets and right-of-ways duly notarized.</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>Certification of land surveyor with seal and signature for the accuracy of the plan survey.</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Certification of engineer/landscape architect with seal and signature that all information shown is correct.</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Certification regarding presence or absence of wetlands and floodplain.</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Certification regarding stormwater management system as shown is adequate to meet the requirements.</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>Contribution of recreation land or fee for residential development.</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>A statement regarding highway occupancy permit</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>A statement regarding municipal highway occupancy permit.</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Signature blocks for planning commission, governing body, municipal engineer and county planning commission.</td>
<td></td>
</tr>
</tbody>
</table>

**Plan information and Other Requirements**

<p>| | |</p>
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Title block.</td>
</tr>
<tr>
<td>2.</td>
<td>Total tract, layout of lots, lot area, lot dimensions and lot numbers. Plans drawn to scale no smaller than 100 feet to an inch.</td>
</tr>
<tr>
<td>3.</td>
<td>North arrow, graphic and written scale on all sheets.</td>
</tr>
<tr>
<td></td>
<td>Preliminary</td>
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<td>---</td>
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</tr>
<tr>
<td>4.</td>
<td>Name and deed reference of all adjoining land owners.</td>
</tr>
<tr>
<td>5.</td>
<td>Primary control point/Point of beginning referenced to the PA plane coordinate system.</td>
</tr>
<tr>
<td>6.</td>
<td>Existing and proposed monuments and pins.</td>
</tr>
<tr>
<td>7.</td>
<td>Contours with reference to NGVD.</td>
</tr>
<tr>
<td>8.</td>
<td>Tract and lot boundary with bearings and distances.</td>
</tr>
<tr>
<td>9.</td>
<td>Name of existing and proposed public or private street(s) and driveways on or adjacent to the tract, right-of-way and cartway width, curbs and sidewalks and traffic regulatory signs.</td>
</tr>
<tr>
<td>10.</td>
<td>Location of existing sewer and water main, fire hydrant, gasoline, power line, stormwater management facilities and other significant manmade features on or adjacent to within 200 ft. of tract.</td>
</tr>
<tr>
<td>11.</td>
<td>Location of existing building(s) or structure(s) on the tract.</td>
</tr>
<tr>
<td>12.</td>
<td>Location of easements with bearings and distances.</td>
</tr>
<tr>
<td>13.</td>
<td>Existing natural features, wetlands, 100 year flood elevation, flood fringe and floodway, tree masses, watercourses, soil types, steep slope, rock outcrops and other features.</td>
</tr>
<tr>
<td>14.</td>
<td>Existing and proposed protective covenants running with the land, if any or a note stating none exist.</td>
</tr>
<tr>
<td>15.</td>
<td>Archaeological resources, historical features and important natural habitat map, as applicable.</td>
</tr>
<tr>
<td>16.</td>
<td>Existing and proposed protective covenants.</td>
</tr>
<tr>
<td>17.</td>
<td>Minimum building setback lines for each lot.</td>
</tr>
<tr>
<td>18.</td>
<td>First floor building elevation.</td>
</tr>
<tr>
<td>20.</td>
<td>Clear sight triangle and sight distance at proposed street intersections and driveways.</td>
</tr>
<tr>
<td>21.</td>
<td>Snow dump areas in the turnaround of a cul-de-sac, if applicable.</td>
</tr>
<tr>
<td>22.</td>
<td>Typical street cross section of proposed streets.</td>
</tr>
<tr>
<td>23.</td>
<td>Street centerline profiles for each proposed street.</td>
</tr>
<tr>
<td>24.</td>
<td>Proposed street names approved by the post office.</td>
</tr>
<tr>
<td>25.</td>
<td>Location of site improvements, such as traffic signs, fire hydrant, snow dump areas, community mail box, trash dumpster, etc.</td>
</tr>
<tr>
<td>26.</td>
<td>Preliminary design of water, sewer and storm sewer main.</td>
</tr>
<tr>
<td>27.</td>
<td>Preliminary stormwater management plan and all supporting calculations.</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>28.</td>
<td>Traffic impact study, if applicable.</td>
</tr>
<tr>
<td>27.</td>
<td>Erosion and sedimentation control plan.</td>
</tr>
<tr>
<td>29.</td>
<td>Landscaping, buffering and screening plan, if required.</td>
</tr>
<tr>
<td>30.</td>
<td>Grading and earth moving plan.</td>
</tr>
<tr>
<td>31.</td>
<td>Hydrogeologic/water supply study, where on-site wells are proposed, if applicable.</td>
</tr>
<tr>
<td>32.</td>
<td>Lighting plan for outdoor and street lighting, if applicable.</td>
</tr>
<tr>
<td>33.</td>
<td>Location of well for on-lot water supply and distance to on-lot sewerage facilities.</td>
</tr>
<tr>
<td>34.</td>
<td>Location of perc and probe for primary and secondary sites for on lot sewerage facilities and distance to well, if applicable.</td>
</tr>
<tr>
<td>35.</td>
<td>Review of plans by school district, fire department, and other agencies, as applicable.</td>
</tr>
<tr>
<td>36.</td>
<td>Wet land study, if applicable.</td>
</tr>
<tr>
<td>37.</td>
<td>Traffic studies required by state laws to warrant traffic control devices such as stop signs, traffic signals, speed limits, turning lanes, etc.</td>
</tr>
<tr>
<td>38.</td>
<td>DEP sewage facilities planning module or appropriate waiver request and approval.</td>
</tr>
<tr>
<td>39.</td>
<td>Condominium/Homeowners owners’ association document, if applicable.</td>
</tr>
<tr>
<td>40.</td>
<td>Filing fee and escrow fee for plan review cost.</td>
</tr>
<tr>
<td>41.</td>
<td>Distance between buildings/structures (for land development plan).</td>
</tr>
<tr>
<td>42.</td>
<td>Floor area ratio (for land development plan).</td>
</tr>
<tr>
<td>43.</td>
<td>Legend</td>
</tr>
<tr>
<td>44.</td>
<td>Statement regarding date and/or ordinance of the Zoning and Subdivision Ordinance</td>
</tr>
<tr>
<td>45.</td>
<td>Notification regarding blasting activities</td>
</tr>
</tbody>
</table>

For items marked NA (Not Applicable), provide statement as to why.

**Plan Preparer’s Name** ____________________________________________________

**Plan Preparer’s Signature** ______________________________________________

**Date of Submission** ____________________________________________________

**Received by (Name)** ____________________________________________________

**Signature** ____________________________________________________________
APPENDIX 8

SAMPLE FINANCIAL SECURITY STATEMENT

KNOW ALL MEN BY THESE PRESENT, That we, ____________________________
__________________________, as Principals, _________________________________ and the
_______________________________ Lending Institution/Surety-Bond Company, a corporation
authorized to do business in the Commonwealth of Pennsylvania, having an office and place of
business at ___________________________
_______________________________________ as Surety, are held and firmly bound unto the
municipality, as Obligee, in the sum of DOLLARS ($                          ) lawful money of the United
States of America, for the payment whereof to the oblige, the Principal and Surety bind themselves,
their heirs, executers, administrators, successors, and assigns, jointly and severally, firm to these
presents:

SIGNED, SEALED, AND DATED, this _____ day of ____________________, 20____

WHEREAS, application was made to the Obligee for the approval of a subdivision shown on the plat
entitled and numbered
#”_____________________________________________________________________”
filed with ______________________________________ on (Date), said final plat was approved
upon certain conditions, once of which is that a Financial Security in the amount of  ($
).

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION in such that the above named
Principal shall complete the said improvements, outlined in the construction schedule, and  will truly
make and perform the required improvements and construction of public improvements in said
subdivision/land development in accordance with the local government specifications and the
Resolution of ______________________, 20____, then this obligation to be void, otherwise to
remain in full force and effect.

It is hereby understood and agreed that in the event that any required improvements have not been
installed as provided by said Resolution, within the term of Statement of Financial Security,
______________________________ may thereupon declare this bond to be in default and
collect the sum remaining payable there under and upon receipt of the proceeds thereof,
______________________________ shall install such improvements as are covered by this
bond and commensurate with the extent of building development that has taken place in the
subdivision/land development but not exceeding the amount of such proceeds.

_________________________________ Lending Institution/Surety-Bond Company

By ____________________________
          Attorney-In-Fact

BOND NUMBER: _________________________________
APPENDIX 9

SAMPLE PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, That we, ____________________________
__________________________, as the Principal and, a _______________________________
corporation authorized to do business in the Commonwealth of Pennsylvania, as a Surety, are held
and firmly bound unto ________________________________________ Township/Borough/City,
(Address) as Obligee, in the penal sum of ________________________________________ ($                          ) for the
payment which we bind ourselves, our legal representatives, administrators, executers, successors,
and assigns, jointly and severally, firmly by these presents.

WHEREAS, the above bounded Principal has been granted Final Approval by the above mentioned
Obligee for the completion of Required Improvements found on the subdivision/land development
plan #__________ as set forth at the _______________________, 200_____ meeting of the
_____________________________.

NOW, THEREFORE, the condition of the above obligation is such, that if said Principal shall
complete the said improvements in accordance with subdivision/land development shown on the plan
entitled _________________________________________________________________, numbered
___________ and filed with ______________________________________ on (Date
), and shall fully
indemnify and save harmless the _______________________________________
Township/Borough/City from all costs and damages which it may suffer by reason of failure to do so,
and fully reimburse and repay the Obligee any outlay and expense which it may incur in making good
on any such default, then this obligation shall be null and void, otherwise to remain in full force and
effect.

THE FOREGOING OBLIGATION, however, is limited by the following express conditions, the
performance of which shall be a condition precedent to any rights of claims or recovery hereunder:

1. Upon discovery of the Obligee, or by the Obligee’s agent or representative, of any act or
omission that shall or might involve a loss hereunder, the Obligee shall endeavor to give
written notice thereof with the fullest information obtainable at the time to its Surety at its
office in _______________________________________.
2. Legal proceedings for recovery hereunder may not be brought unless begun within twenty-
four (24) months from the date of the discovery of the act or omission of the Principal on the
account of which claim is made.
3. The Principal shall be made a party of any suit or action for recovery hereunder, and no
judgment shall be rendered against the Surety in excess of the penalty of this instrument.
4. No right of action shall accrue hereunder to or for the use or benefit of anyone other than the
Obligee, and the Obligee’s right hereunder may not be assigned without the written consent
of the Surety.

IN WITNESS WHEREOF, this instrument has been executed by the duly authorized representative of
the Principal and Surety.

SIGNED, SEALED AND DATED By: ________________________________

By: ________________________________
APPENDIX 10

SAMPLE OFFER OF IRREVOCABLE DEDICATION

AGREEMENT made this _____ day of ____________________, 20____, by and between
_______________________ and ____________________________, having its office and place of
business at ___________________________________________________________, herein
designated as Developer, and _______________________________________
Township/Borough/City having its principle office at
_________________________________________________________ herein designated as
__________________________________________ Township/Borough/City,

WHEREAS, the _______________________________ is in the process of approving a
subdivision/land development plan entitled
__________________________ , 200_____, prepared by ____________________________, and

WHEREAS, said map designates certain public improvements consisting of _________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
to be dedicated to the local government free and clear of all encumbrances and liens, pursuant to the
regulations and requirements of ___________________________ Township/Borough/City, and

WHEREAS, the Developer, simultaneously herewith shall post a Performance Bond with the
municipality for the construction, maintenance, and dedication of said improvements in the amount of
15% of the construction costs to the developer for a term of 18 months, and

WHEREAS, the developer is desirous of offering for dedication the said improvements and/or land to
the Township/Borough/City more particularly described in Schedule _________________ attached
hereto, and

WHEREAS, the developer has delivered deeds of conveyance to _________________________
Township/Borough/City for the said land and improvements as described herein,

NOW, THEREFORE, in consideration of the sum of ($                      ) lawful currency of the United
States of America paid by the local government to the developer and other good and valuable
consideration, it is mutually AGREED as follows:

1. The Developer herewith delivers to ________________________________
   Township/Borough/City deeds of conveyance for the premises described in Schedule
   ________________ attached hereto, said delivery being a formal offer of dedication to
   ________________________________ Township/Borough/City to be held by
   ________________________________ Township/Borough/City until the acceptance or
   rejection of such offer of dedication by the Governing Body.

2. The Developer agrees that said formal offer of dedication is irrevocable and cannot be
   accepted by ________________________________ Township/Borough/City at any time.

3. The Developer agrees to complete the construction and maintenance of the land
   improvements pursuant to the Performance Bond and the requirements of
   ________________________________ Township/Borough/City and any
ordinances, regulations, requirements, covenants, and agreements that may be imposed by Township/Borough/City with respect thereto and upon acceptance by Township/Borough/City. With the offer of dedication, the developer/owner shall furnish to the local government a title insurance policy issued by a licensed title insurance company authorized to do business in the Commonwealth of Pennsylvania in a minimum amount of ($                      ), certifying that the premises are free and clear of all liens and encumbrances and shall furnish to the local government a check for all necessary fees and taxes to record the deeds hereto delivered.

4. That this irrevocable offer of dedication shall run with the land and shall be binding upon all assigns grantees, successors, or heirs of the Developer.

(SEAL)
Attest: ____________________________ Township/Borough/City

_______________________________ By: ________________________________
(Recorder of Deeds)

_______________________________ ____________________________
(Developer/Landowner) (Developer/Landowner) (Date)

Commonwealth of Pennsylvania)
County of ____________) SS:

On the _______ day of ____________________________, 20______, before me personally appeared ____________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

_______________________________ Notary Public
Commonwealth of Pennsylvania)
County of ____________) SS:

On the _______ day of ____________________________, 20______, before me personally appeared ____________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

_______________________________ Notary Public

A-80
APPENDIX 11

SAMPLE LOT ADDITION/PART AND PARCEL DEED COVENANT FORM

On this, the ______ day of _________________________, 20_____, before me, the undersigned officer(s) appeared ____________________________________________, being duly sworn according to law, deposes and says he/she is or they are the grantee(s) of said lot as legally described and shown upon Survey Plan #______ as prepared by __________________________________, and dated __________.

The said grantee(s) acknowledge the following to be their act and plan, and hereby desire the following statement to be entered as a covenant within the deed to be recorded as such according to law following the lot description within the deed.

"The above legally described lot is to be added to the adjacent lot owned by ______________________________ described as tax parcel # ____________________________, and instrument # ____________________________, recorded in the _________ County Register and Recorders Office to form a single lot containing __________ acres, and not permitting the lot to remain a separate stand-alone lot, unless a new subdivision application is submitted and approved.

Signature(s) of Grantee(s)

____________________________________

____________________________________

Commonwealth of Pennsylvania)
County of ____________)  SS:

On the ______ day of ____________________________, 20______, before me personally appeared ____________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

____________________________________

Notary Public

Commonwealth of Pennsylvania)
County of ____________)  SS:

On the ______ day of ____________________________, 20______, before me personally appeared ____________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

____________________________________

Notary Public

A-81
APPENDIX 12

SAMPLE PRIVATE STREET/RIGHT-OF-WAY
MAINTENANCE AGREEMENT

THIS INDENTURE, made this ____ day of ________________, 20____, between
____________________ and ___________________ and ___________________ and _______________
and _______________ and ___________________,

WHEREAS, the parties hereto are the owners of the lots of land in (Municipality Name), (County),
Pennsylvania, described by survey Map Number __________, prepared on _______________,
20____;

WHEREAS the parties desire to enter into agreement regarding the construction, repair and
maintenance of the private street within the right-of-way described on the (subdivision or land
development) plan.

NOW THEREFORE, the parties hereto agree as follows:

1. The right-of-way is ____ feet in width and is described as follows:

   (INSERT LEGAL DESCRIPTION FOR THE RIGHT-OF-WAY HERE)

2. It is agreed the construction, repair, and maintenance of the private street and facilities within
   the described right-of-way will be the responsibility of ___________________ and
   ___________________, their heirs and/or assigns. Each party shall be responsible for their
   respective share(s) construction, street sign(s), maintenance, repair, stormwater management
   facilities, and snow plowing and removal if necessary.

3. The parties agree that no party will commit any of the other parties to an expense for
   maintenance or repairs without the consent of all parties concerned, however, if a repair or
   maintenance is necessary, and one party will not agree, the other parties shall be entitled to
   proceed to maintain or repair the right-of-way and shall be entitled to take whatever
   appropriate legal action is necessary to collect the other party’s share for the expense of
   maintenance or repair.

4. This agreement shall terminate upon the acceptance of this private street with its right-of-way
   by a municipality for the dedication purposes as a public street.

5. This agreement shall be binding upon the heirs, successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the said parties have hereunto set their hands and seals the day and year
written above.

Signatures of Parties
____________________________________ Date: ________________
____________________________________ Date: ________________
____________________________________ Date: ________________
Commonwealth of Pennsylvania)  
County of ____________)  SS:

On the ______ day of ____________________________, 20______, before me personally appeared __________________________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

____________________________
Notary Public

Commonwealth of Pennsylvania)  
County of ____________)  SS:

On the ______ day of ____________________________, 20______, before me personally appeared __________________________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

____________________________
Notary Public

APPENDIX 13

A-83
SAMPLE EASEMENT AGREEMENT FOR FACILITIES CONSTRUCTION, REPAIR, AND MAINTENANCE

This INDENTURE, made this _____ day of ________________, 20___, between
______________________________________________________________
and __________________________________________________________
and __________________________________________________________,
WHEREAS, ______________________________________________________
and __________________________________________________________
hereto is/are the owner(s) of a parcel of land in ______________ Borough/Township, _____________
County, Pennsylvania, described as lot # _____ on survey plat number _____________,
prepared by ____________________, dated, the _____ day of ______________, 20____;
WHEREAS, ______________________________________________________
and __________________________________________________________
are willing to grant ______________________________________________
and __________________________________________________________
the use of their land by way of an easement described on aforesaid survey for the purpose
WHEREAS, the parties desire to enter into an agreement regarding the establishment of an
 easement further described below, reserving the right of _________________ to construct,
repair, and maintain the facilities found within said easement;
NOW THEREFORE, the parties hereto agree as follows:

1. The _______ foot wide easement is described as follows:

(INsert LEGal DESCRIPTION)

2. It is agreed the construction, repair and maintenance of all facilities within the
 easement area will be the responsibility of ____________________ and
 ____________________ and ____________________, their heirs and assigns. Each party shall be
 responsible for their respective share(s) described of construction, repair, and
 maintenance. The parties agree the easement shall be maintained in its present
 condition as of the date of this agreement.

3. The parties agree that no party will commit any of the other parties to an expense for
 maintenance or repairs without the consent of all parties concerned, however, if a
 repair or maintenance is necessary to facilities within the easement, and one party will
 not agree, the other parties shall be entitled to proceed to maintain or repair said
 facilities and shall be entitled to take whatever appropriate legal action is necessary to
 collect the other party’s share of the expense of the maintenance or repair.

4. This agreement shall be binding upon the heirs, successors, and assigns.
IN WITNESS WHEREOF, the said parties have hereto set their hands and seals the day and year written above.

SIGNATURES

__________________________________ Date: _____________
__________________________________ Date: _____________
__________________________________ Date: _____________
__________________________________ Date: _____________
__________________________________ Date: _____________
__________________________________ Date: _____________

Commonwealth of Pennsylvania) County of ____________) SS:

On the ______ day of ____________________________, 20____, before me personally appeared __________________________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

____________________________________
Notary Public

Commonwealth of Pennsylvania) County of ____________) SS:

On the ______ day of ____________________________, 20____, before me personally appeared __________________________________________, to me known, who being by me duly sworn, did depose and say that he/she is the individual described in and who executed the foregoing instrument, and he duly acknowledgement to be that he executed the same.

____________________________________
Notary Public
APPENDIX 14

SAMPLE (MUNICIPALITY NAME) MUNICIPAL COMMENT FORM
for Subdivision and Land Development Application Review

In accordance with the (MUNICIPALITY NAME) Subdivision and Land Development Ordinance, Section #______, hereby provides your municipality the opportunity to offer comment on Subdivision or Land Development File #__________

File Name: ______________________________________________________________

This file was submitted and received by (MUNICIPALITY NAME) for review on the _____ day of _____________, 20____. Because of the location of this proposed Subdivision/Land Development, municipal officials in our municipality recognize the need to coordinate this review with your municipality.

Please return this completed review form with any additional documentation you would like to provide to aid us in our decision-making process.

_______________________________________________________________________

Reviewed by the (MUNICIPALITY NAME) Planning Commission or, (MUNICIPALITY NAME) Borough/City Council or, (MUNICIPALITY NAME) Township Supervisors/Commissioners, at their regular scheduled monthly meeting held on the _____ day of _____________, 20____. At the meeting the (MUNICIPALITY NAME) Planning Commission. (MUNICIPALITY NAME) Borough/City Council, or, (MUNICIPALITY NAME) Township Supervisors/Commissioners offered the following information regarding the proposal.

Please check one of the following and offer comments where appropriate.

(    ) The (MUNICIPALITY NAME) Borough/City/Township Planning Commission or, (MUNICIPALITY NAME) Borough/City Council or, (MUNICIPALITY NAME) Township Supervisors/Commissioners offers no adverse comments on this subdivision/land development.

(    ) The (MUNICIPALITY NAME) Borough/City/Township Planning Commission. (MUNICIPALITY NAME) Borough/City Council or, (MUNICIPALITY NAME) Township Supervisors/Commissioners would like to comment on the following items. (Please list your comments in the following space provided. If you need additional space for your comments you may write on the back of this form, and/or affix additional pages.)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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____________________________________________________________
This form was completed by: ________________________________________________  
(Printed name of Authorized Municipal Official)

Signature: _________________________________________ Date: ________________

Note: Municipal officials are encouraged to return this form within thirty (30) days to have  
their comments considered in ______________ Borough/City/Township Planning  
Commission’s review process. If this form is not returned within this specified time the  
________________ Borough/City/Township officials will conclude your municipality has  
no comment.

You may use the remainder of this form if you have any additional comments

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A-87
APPENDIX 15

SAMPLE (MUNICIPALITY NAME) MUNICIPAL ZONING COMMENT FORM
for Subdivision and Land Development Application Review

Directions: The applicant is required to provide this form to the (MUNICIPALITY NAME) Zoning Officer with a copy of the subdivision and land development plan for his/her completion and return to the municipal secretary for distribution to the (MUNICIPALITY NAME) Planning Commission and the (Governing Body).

To be completed by the Applicant or Applicant’s Agent

Plan Title: _______________________________________________________________

What land use(s) type(s) is/are being proposed with this subdivision or land development application?
___________________________________________________________________________
___________________________________________________________________________

List all applicable Zoning District(s) assigned to the property:
___________________________________________________________________________
___________________________________________________________________________

Will your subdivision or land development application require any variances that affect the subdivision and land development review process?

_____ Yes _____ No _____ Uncertain

For Official Use Only:

To be completed by the Authorized Municipal Official entrusted to accept plans.

Date Plan Received: _______________________________________________________

Received by:  ____________________________________________________________

Signature: _______________________________________________________________
To be completed by the Municipal Zoning Officer.

Plan received on: (INSERT DATE)

Will the plan require any variances? _____Yes _____No _____Uncertain

If your response was “yes” to the previous question, please list the variances in the following spaces:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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________________________________________________________________________

If you answered Uncertain, what must be clarified so that a formal determination can be provided to the applicant? Please specify:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Are all Zoning Districts affecting this application clearly displayed on the Plan? _____Yes _____No

Does the Plan accurately reflect the configuration/shape of the applicable zoning districts which influence this property? _____Yes _____No

Has the Plan’s preparer provided a sufficient listing of zoning related data to meet the requirements of the zoning ordinance? _____Yes _____No
APPENDIX 16

SAMPLE MODIFICATION (WAIVER) REQUEST FORM

As the landowner of the property I hereby request the following waivers to the Subdivision and Land Development Ordinance.

or

Acting on the landowner’s behalf, as permitted by authorization on my client’s current subdivision/land development application for which this form is intended, I hereby request the following waivers to the Subdivision and Land Development Ordinance.

In the following spaces provided, please list the appropriate section of the Borough/Township Subdivision and Land Development Ordinance for which you are requesting a modification.

Section Number: _______

What requirement of this Section cannot be achieved?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

What non-financial reason(s) can you offer for why this requirement cannot be achieved?
___________________________________________________________________________
___________________________________________________________________________
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Section Number: _______

What requirement of this Section cannot be achieved?
___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

What non-financial reason(s) can you offer for why this requirement cannot be achieved?
Section Number: __________

What requirement of this Section cannot be achieved?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

What non-financial reason(s) can you offer for why this requirement cannot be achieved?

___________________________________________________________________________
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Section Number: __________

What requirement of this Section cannot be achieved?

___________________________________________________________________________
___________________________________________________________________________
___________________________________________________________________________

What non-financial reason(s) can you offer for why this requirement cannot be achieved?

___________________________________________________________________________
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A-91
APPENDIX 17

SAMPLE (MUNICIPALITY NAME)
SUBDIVISION AND LAND DEVELOPMENT FEE SCHEDULE

REVIEW/REPORT

SUBDIVISION

$_____ base fee, plus $_____ per lot for the first 10 lots, plus $_____ per lot over 10 lots.

LAND DEVELOPMENT (RESIDENTIAL)

$_____ base fee, plus $_____ per unit for the first 10 units, plus $_____ per unit over 10 units.

LAND DEVELOPMENT (NON-RESIDENTIAL)

$_____ base fee, plus $_____ per acre for the first 10 acres, plus $_____ per acre over 10 acres.

COUNTY APPROVAL

SUBDIVISION

$_____ base fee, plus $_____ per lot for the first 10 lots, plus $_____ per lot over 10 lots.

LAND DEVELOPMENT (RESIDENTIAL)

$_____ base fee, plus $2.00 per unit for the first 10 units, plus $_____ per unit over 10 units.

LAND DEVELOPMENT (NON-RESIDENTIAL)

$_____ base fee, plus $2.00 per acre for the first 10 acres, plus $_____ per acre over 10 acres.

EFFECTIVE DATE: (Date)

Note: All checks to cover reviews should be made payable to: (To be Determined by the Municipality)
### ARTICLES V Subdivision and Land Development

<table>
<thead>
<tr>
<th>Section</th>
<th>Subject</th>
<th>Time Period</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>502(b)</td>
<td>County planning agency review of municipal subdivisions &amp; land developments</td>
<td>30 days</td>
<td>Time allotted to the county planning agency to for review and report on applications for subdivisions or land developments in municipalities with their own S&amp;LD ordinance. Municipalities shall not approve such applications until receipt of the county report or expiration of the 30 days.</td>
</tr>
<tr>
<td>503(1)(i)</td>
<td>Applicant dispute of S&amp;LD review fees</td>
<td>14 days</td>
<td>Time from the applicant’s receipt of the bill for the S&amp;LD fees within which the applicant shall notify the municipality that such fees are disputed (in which case the municipality shall not delay approval or disapprove the application).</td>
</tr>
<tr>
<td>504(a)</td>
<td>Municipal and county planning agency review of proposed S&amp;LD ordinance</td>
<td>At least 45 days</td>
<td>Time prior to a public hearing on a proposed S&amp;LD ordinance in which the governing body shall submit the proposed ordinance to the planning agency (unless the proposed ordinance was prepared by the planning agency) and the county planning agency (where one exists) for recommendations.</td>
</tr>
<tr>
<td>504(b)</td>
<td>Forwarding an adopted S&amp;LD ordinance to the county</td>
<td>30 days</td>
<td>Time after adoption within which a municipal (not including county) governing body shall forward a certified copy of the S&amp;LD ordinance to the county planning agency (or county governing body where no county planning agency exists).</td>
</tr>
<tr>
<td>505(a)</td>
<td>Municipal and county planning agency review of proposed S&amp;LD amendments</td>
<td>At least 30 days</td>
<td>Time prior to a public hearing on a proposed S&amp;LD ordinance in which the governing body shall submit the proposed ordinance to the planning agency (unless the proposed ordinance was prepared by the planning agency) and the county planning agency (where one exists) for recommendations.</td>
</tr>
<tr>
<td>505(b)</td>
<td>Forwarding an adopted S&amp;LD amendment to the county</td>
<td>30 days</td>
<td>Time after adoption within which a municipal (not including county) governing body shall forward a certified copy of a S&amp;LD amendment to the county planning agency (or county governing body where no county planning agency exists).</td>
</tr>
<tr>
<td>506(a)</td>
<td>Publication and advertisement of proposed S&amp;LD ordinance or amendment</td>
<td>60 days / 7 days</td>
<td>Time no more than (60 days) nor less than (7 days) prior to passage of a proposed S&amp;LD ordinance or amendment during which the governing body shall publish the proposed ordinance or amendment (or the title and a brief summary prepared by the municipal solicitor) in a newspaper of general circulation in the municipality.</td>
</tr>
<tr>
<td>506(b)</td>
<td>Readvertisement of proposed S&amp;LD ordinance or amendment in the event of changes</td>
<td>At least 10 days</td>
<td>In event substantial amendments are made to the proposed S&amp;LD ordinance or amendment, time prior to enactment in which the governing body shall readvertise in a newspaper of general circulation a brief summary of all the provisions in reasonable detail together with a summary of the amendments.</td>
</tr>
<tr>
<td>Section</td>
<td>Subject</td>
<td>Time Period</td>
<td>Description</td>
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<tr>
<td>508</td>
<td>Decision on applications for plat approval</td>
<td>No later than 90 days</td>
<td>Time during which the governing body or planning agency shall render its decision on an application for plat approval and communicate the decision to the applicant. The 90-day time period begins following the date of the regular meeting of the governing body or planning agency (whichever first reviews the application) next following the date the application is filed, or after a final order of court remanding an application, provided that should the said next regular meeting occur more than 30 days following the filing of the application, or the final order of the court, the said 90-day period shall be measured from the 30th day following the day the application has been filed.</td>
</tr>
<tr>
<td>508(1)</td>
<td>Decision on applications for plat approval</td>
<td>No later than 15 days</td>
<td>Time following a decision on an application for plat approval in which the governing body or planning agency shall communicate a written decision to the applicant personally or by mail to the last known address.</td>
</tr>
<tr>
<td>508(3)</td>
<td>Decision on applications for plat approval</td>
<td>No later than 90 days; no later than 15 days</td>
<td>Time frames, in accord with 508 and 508(1), within which if the governing body or planning agency fails to render or communicate a decision the plat shall be deemed approved unless the applicant agrees to a time extension or a change in the manner of presentation/communication of the decision.</td>
</tr>
<tr>
<td>508(4)(ii)</td>
<td>Application of S&amp;LD ordinance changes to approved plat</td>
<td>5 years</td>
<td>Time from approval of a plat within which no subsequent change or amendment in the zoning, subdivision, or other governing ordinance or plan shall be applied to adversely affect the right of the applicant to commence and complete any aspect of the approved development in accordance with the terms of such approval. (NOTE: Please refer to Sections 508(4)(iii), (iv), (v), (vi), and (vii) for additional criteria and provisions related to the 5-year vested interest in an approved plat.)</td>
</tr>
<tr>
<td>508(6)</td>
<td>Action on state high occupancy permit</td>
<td>60 days</td>
<td>Time from the date of an application for a state highway occupancy permit for driveway access (presumably for a proposed subdivision or land development, though the MPC is silent on this) within which the PA Department of Transportation shall act on the permit application by either approval, denial, return of the application for more information or correction, or determination that no permit is required.</td>
</tr>
<tr>
<td>509(b)</td>
<td>Resolution of contingent approval of a final plan</td>
<td>90 days</td>
<td>Time after which a resolution of the governing body or planning agency indicating approval of a final plat contingent on the developer obtaining satisfactory financial security shall expire unless a written extension, not to be unreasonably withheld, is granted in writing by the governing body.</td>
</tr>
<tr>
<td>509(f)</td>
<td>Estimate of cost of completion of required improvements</td>
<td>90 days following scheduled completion date</td>
<td>Date on which a cost estimate for required improvements in a subdivision or land development is based for purposes of determining the amount of required financial security (110% of said cost estimate)</td>
</tr>
<tr>
<td>Section</td>
<td>Subject</td>
<td>Time Period</td>
<td>Description</td>
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<tr>
<td>509(h)</td>
<td>Increase in amount of financial security</td>
<td>1 year</td>
<td>Time after posting of financial security in which, if more time is needed to complete required improvements, the amount of financial security may be increased by an additional 10% for each one-year period or to an amount not exceeding 110% of the cost of completing improvements as reestablished on the expiration of the preceding one-year period.</td>
</tr>
<tr>
<td>509(j)</td>
<td>Partial release of financial security</td>
<td>45 days</td>
<td>Time, after receipt of a request to release such portions of financial security necessary for payment to contractors performing work on required improvements, which the municipal engineer shall have to certify in writing to the governing body that such portion of work has been completed in compliance with the approved plat, and after which the governing body if failing to act shall be deemed to have approved the release of funds as requested. (The governing body may require retention of 10% of the estimated cost of said work.)</td>
</tr>
<tr>
<td>509(k)</td>
<td>Financial security for performance</td>
<td>Not to exceed 18 months</td>
<td>Term permissible for financial security which may be required to secure the structural integrity and functioning of required improvements.</td>
</tr>
<tr>
<td>510(a)</td>
<td>Release from improvement bond</td>
<td>10 days</td>
<td>Time, after receipt of notice by registered mail of the completion of required improvements, within which the municipality shall direct the municipal engineer to inspect said improvements.</td>
</tr>
<tr>
<td>510(a)</td>
<td>Release from improvement bond</td>
<td>30 days</td>
<td>Time, after receipt by the municipal engineer of the notice of completion of improvements, within which the engineer shall file with the governing body and make and mail to the developer by registered mail a written report indicating approval or rejection of said improvements.</td>
</tr>
<tr>
<td>510(b)</td>
<td>Release from improvement bond</td>
<td>15 days</td>
<td>Time, after receipt of the engineer’s report, in which the governing body shall notify the developer in writing by registered mail of the governing body’s action (presumably with regard to approval or rejection). (NOTE: If the governing body or engineer fail to comply with the specified time limitations, all improvements will be deemed to have been improved and the developer shall be released from liability pursuant to its financial security.</td>
</tr>
<tr>
<td>510(g)(1)</td>
<td>Developer reimbursement of inspection expense</td>
<td>10 working days</td>
<td>Time, after date of billing for reimbursement of expenses incurred for inspection of required improvements, within which an applicant shall notify the municipality that such expenses are disputed as unreasonable or unnecessary (in which case the municipality shall not delay approval or disapprove the subdivision or land development or related permit).</td>
</tr>
<tr>
<td>Section</td>
<td>Subject</td>
<td>Time Period</td>
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<tr>
<td>510(g)(2)</td>
<td>Failure to agree on amount of inspection expenses</td>
<td>20 days</td>
<td>Time, from the date of billing, within which, if the municipality and the applicant cannot agree on the amount of expenses that are reasonable and necessary, the applicant and municipality shall be mutual agreement appoint another licensed professional engineer to make a determination of the amount of reasonable and necessary expenses.</td>
</tr>
<tr>
<td>510(g)(3)</td>
<td>Decision on disputed amount of inspection expenses</td>
<td>50 days</td>
<td>Time, from the date of billing, within which the mutually appointed engineer shall hear evidence, review documentation, and render a decision on the amount of reasonable and necessary expenses.</td>
</tr>
<tr>
<td>510(g)(4)</td>
<td>Failure to agree on amount of inspection expense and appointed engineer</td>
<td>20 days</td>
<td>Time, from the date of billing, within which, if the municipality and applicant cannot agree on an engineer to resolve disputed inspection expenses, the President Judge of the Court of Common Pleas shall appoint such engineer who shall not be the municipal or applicant’s engineer.</td>
</tr>
<tr>
<td>513(a)</td>
<td>Recording of plats</td>
<td>90 days</td>
<td>Time, after final approval or the date the approval is noted on the plat, whichever is later, within which the developer shall record such plat in with the county recorder of deeds.</td>
</tr>
</tbody>
</table>