

BOROUGH OF CHRISTIANA  
Lancaster County, Pennsylvania

Ordinance 223

Subdivision and Land  
Development Ordinance

AN ORDINANCE SETTING FORTH PROVISIONS AND STANDARDS REGULATING SUBDIVISION AND LAND DEVELOPMENT WITHIN THE BOROUGH OF CHRISTIANA, LANCASTER COUNTY, PENNSYLVANIA, PURSUANT TO THE AUTHORITY GRANTED BY THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE ACT 247 OF 1968 AS RENACTED AND AMMENDED JANUARY 2001, AND ESTABLISHING THE PROCEDURES TO BE FOLLOWED BY THE CHRISTIANA BOROUGH PLANNING COMMISSION AND CHRISTIANA BOROUGH COUNCIL IN THE APPLICATION AND ADMINISTRATION OF SAID PROVISIONS AND STANDARDS.

BE AND IT IS HEREBY ORDAINED AND ENACTED by the Borough Council of the Borough of Christiana, Lancaster County, Pennsylvania as follows:

ADOPTION AND EFFECTIVE DATE:

This Ordinance shall take effect and be in force from and after its approval as provided by law.

DULY ORDAINED AND ENACTED the **4<sup>th</sup>** day of **August, 2015**, by the Borough Council of the Borough of Christiana, Lancaster County, Pennsylvania, in lawful session duly assembled.

BOROUGH OF CHRISTIANA  
Lancaster County, Pennsylvania

Attest: \_\_\_\_\_  
Manager/Secretary

By: \_\_\_\_\_  
President, Borough Council

# Christiana Borough Subdivision and Land Development Ordinance

## TABLE OF CONTENTS

### PART I: GENERAL

ARTICLE 1	GENERAL PROVISIONS-----	5
Section 1.1	Title-----	5
Section 1.2	Purpose and Intent-----	5
Section 1.3	Statutory Authority-----	5
Section 1.4	Applicability-----	5
Section 1.5	Enactment-----	7
Section 1.6	Interpretation, Conflict and Separability-----	7
Section 1.7	Saving Provision-----	7
Section 1.8	Repeal of Previous Ordinance-----	8
Section 1.9	Ordinance Amendments-----	8
Section 1.10	Enforcement and Penalties-----	9
ARTICLE 2	LANGUAGE AND DEFINITIONS-----	11
Section 2.1	General Rules of Construction-----	11
Section 2.2	Definitions-----	12
ARTICLE 3	ADMINISTRATION-----	26
Section 3.1	Modifications-----	26
Section 3.2	Acceptance of Conditions of Plan Approval-----	28
Section 3.3	Challenges and Appeals-----	28
Section 3.4	Records-----	28
Section 3.5	Fees-----	28
ARTICLE 4	PLAN PROCESSING PROCEDURES-----	30
Section 4.1	Sketch Plan-----	30
Section 4.2	Preliminary Plan-----	32
Section 4.3	Final Plan-----	36
Section 4.4	Preliminary/Final Plan -----	41
Section 4.5	<b>Centerline Separation/Lot Consolidation/Revised Subdivision/Lot Add-On Plan</b> -----	46
Section 4.6	Minor Urban Plan-----	51
ARTICLE 5	INFORMATION TO BE INCLUDED ON OR WITH PLANS-----	55
Section 5.0	General-----	55
Section 5.1	Sketch Plan-----	55
Section 5.2	Preliminary Plan-----	57
Section 5.3	Final Plan and Preliminary / Final Plan -----	63
Section 5.4	<b>Centerline Separation/Lot Add-On/Lot Consolidation/Revised Subdivision Plan</b> -----	69
Section 5.5	Minor Plan-----	72
ARTICLE 6	ASSURANCE FOR COMPLETION / MAINTENANCE OF IMPROVEMENTS-----	77
Section 6.1	Improvements Required-----	77
Section 6.2	Plan Improvements-----	77
Section 6.3	Improvement Construction Guarantee-----	78
Section 6.4	Inspection of Improvements-----	79
Section 6.5	Release of Funds-----	82

Section 6.6	Dedication of Improvements-----	83
Section 6.7	Maintenance Guarantee-----	83
<b>ARTICLE 7</b>	<b>SUPPLEMENTAL REQUIREMENTS, TESTS, AND STUDIES-----</b>	<b>84</b>
Section 7.1	Traffic Impact Study-----	84
Section 7.2	Historic and Cultural Resources-----	89
Section 7.3	Parks and Open Space-----	92
Section 7.4	Hydrogeologic Report-----	97
Section 7.5	Aquifer Study -----	98

**PART II: URBAN AREAS**

<b>ARTICLE 8</b>	<b>VISION STATEMENT AND DESIGN STANDARDS FOR URBAN GROWTH AREAS-----</b>	<b>101</b>
Section 8.1	General-----	101
Section 8.2	Streets, Access Drives, and Driveways-----	102
Section 8.3	Parking Facilities-----	115
Section 8.4	Blocks and Lots-----	120
Section 8.5	Easements-----	122
Section 8.6	Survey Monuments and Markers-----	123
Section 8.7	Sewage Facility Requirements-----	124
Section 8.8	Water Supply-----	124
Section 8.9	Hazards Associated with Carbonate Rocks-----	125
Section 8.10	Landscaping-----	126
Section 8.11	Lighting-----	131

<b>ARTICLE 9</b>	<b>VISION STATEMENT AND DESIGN STANDARDS FOR INFILL/REDEVELOPMENT AREAS-----</b>	<b>135</b>
Section 9.1	General-----	135
Section 9.2	Site Layout/Development Pattern-----	136
Section 9.3	Streets, Access Drives and Driveways-----	139
Section 9.4	Traffic Signs-----	148
Section 9.5	Dwelling Unit Identification-----	148
Section 9.6	Parking Facilities-----	148
Section 9.7	Pedestrian Access and Circulation-----	155
Section 9.8	Preservation of Natural, Historic, and Cultural Features-----	156
Section 9.9	Landscaping -----	157
Section 9.10	Lighting-----	157
Section 9.11	Easements-----	159
Section 9.12	Survey Monuments and Markers-----	160
Section 9.13	Sanitary Sewage Disposal-----	161
Section 9.14	Water Supply-----	162
Section 9.15	Hazards Associated with Carbonate Rocks-----	162

<b>ARTICLE 10</b>	<b>RESERVED FOR FUTURE USE-----</b>	<b>163</b>
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<b>ARTICLE 11</b>	<b>CONSERVATION SUBDIVISIONS-----</b>	<b>164</b>
Section 11.1	Reserved for Future Use-----	164

<b>ARTICLE 12</b>	<b>MOBILE HOME PARKS -----</b>	<b>165</b>
Section 12.1	General Standards-----	165

**APPENDICES**

Appendix A Certifications-----166  
Appendix B Application for Consideration of a Subdivision and/or Land Development Plan-----171  
Appendix C Application for Consideration of a Modification-----173  
Appendix D Memorandum of Understanding-----174  
Appendix D-1 Memorandum of Understanding and Financial Security-----176  
Appendix E Notice of Approval of New Street Name(s)-----180  
Appendix F General Design Guidelines with Historic Features-----181  
Appendix G Checklist for Street & Access Drive Design-----182  
Appendix H Street / Right-of-Way Matrix-----183  
Appendix I Unreasonable Economic Hardship -----184

# **ARTICLE 1**

## **GENERAL PROVISIONS**

### **1.1 TITLE**

This Ordinance shall be known, cited and referred to as the Subdivision and Land Development Ordinance of Christiana Borough (hereinafter “Ordinance”).

### **1.2 PURPOSE AND INTENT**

This Ordinance is adopted to regulate and manage the Subdivision and development of land within Christiana Borough for the following intent:

Traditionally, Lancaster City served as the social, cultural and commercial hub of Lancaster County while each of the boroughs served as distinct focal points for their particular region. The Urban centers of the future are envisioned to reflect these mixed-use, compact communities of the past; each with a strong sense of uniqueness, identity and cohesion. Communities within adopted Urban Growth Areas should develop with a mix of densities, housing types, and land uses, and allow people to walk to parks, and to obtain the needs of everyday life. Efficient growth within Designated Growth Areas that are served by the full range of public facilities and services necessary to support residential and economic development is intended to limit encroachment into the Rural countryside.

Compact and efficient Urban development, that encourages Infill and the retention of community character will, in combination with the Rural development strategies of farmland preservation and conservation, be instrumental in the successful implementation of the Christiana Borough growth management strategies.

Growth management, agricultural preservation and retention of Rural character are critical to the future of Lancaster County. Therefore, the protection of agricultural, natural, historic, architectural and scenic resources is necessary while designating Rural Centers (villages, crossroads communities and other existing developed areas) and directing development that would otherwise occur as scattered sprawl towards those Rural Centers is important. Designated natural areas should be managed to protect the resources with high scenic, recreational, and natural resource values. The Rural Centers of existing development should be managed and New Development that is not directly related to the Rural economy should be encouraged to locate around and within our Rural Centers.

### **1.3 STATUTORY AUTHORITY**

This Ordinance is adopted pursuant to the authority granted by the Pennsylvania Municipalities Planning Code (Act of 1968, P.L. 805, No. 247 as reenacted and amended, Fifteenth Edition, January 2001).

### **1.4 APPLICABILITY**

#### **1.4.1 Territorial Application.**

With the exception of Section 1.4.4 and Section 1.4.5, below, the provisions of this Ordinance shall apply to all Subdivisions and Land Developments within the corporate limits of Christiana

Borough.

**1.4.2 General Application.**

No Subdivision or Land Development of any Lot, Tract or Parcel of land located within Christiana Borough shall be effected and no Street, sanitary sewer, storm sewer, water main or other facilities in connection therewith shall be laid out, constructed, opened, or dedicated for travel or public use, or for the common use of occupants of Buildings thereon, unless and until a final Subdivision or Land Development Plan has been approved and recorded in the manner prescribed herein. Furthermore, no property shall be developed, no Building shall be erected and no Site Improvements shall be completed except in strict accordance with the provisions of this Ordinance.

**1.4.3 General Prohibition.**

No Lot in a Subdivision may be sold or transferred; no permit to erect, alter or repair any Building upon land in a Subdivision or Land Development may be issued; and no Building may be erected in a Subdivision or Land Development, unless and until a final Subdivision or Land Development Plan has been approved and recorded, and until construction of any required Site Improvements in connection therewith has been completed or guaranteed in the manner prescribed herein.

**1.4.4 Pending Applications.**

Per Article 5, as revised of the PMPC, the provisions of this Ordinance shall not affect an application for approval of a Subdivision and/or Land Development Plan which is pending action at the time of the effective date of this Ordinance, in which case Applicant shall be entitled to a decision in accordance with the governing ordinances as they stood at the time when the application for such Plan was duly filed. Additionally, this Ordinance shall not affect any suit or prosecution, pending or to be instituted, to enforce any provision of the Christiana Borough Subdivision and Land Development Ordinance, as amended, or any applicable predecessor regulations on an act done, contract executed, or liability incurred prior to the effective date of this Ordinance.

**1.4.5 Previously Approved Plans.**

If an Applicant has received approval of a Preliminary or Final Plan prior to the effective date of this Ordinance, no provision of this Ordinance shall be applied to adversely affect the right of the Applicant to commence and complete any aspect of the approved Preliminary or Final Plan in accordance with the terms of such approval within five (5) years of the date of such application, nor shall any provision of this Ordinance be construed to waive the obligations imposed upon an Applicant to complete a previously approved Preliminary or Final Plan, including the installation of all Improvements, in strict compliance with the requirements of such approval. When approval of a Final Plan has been preceded by approval of a Preliminary Plan, the five (5) years shall be counted from the date of Preliminary Plan approval. If there is any doubt as to the terms of approval, the terms shall be construed in light of the provisions of the governing ordinances as they stood at the time when the application for such approval was duly filed.

**1.4.6 Existing Improvements.**

If existing Improvements, including Stormwater Management Facilities, on the Subject Tract do not meet the requirements of this Ordinance, then such Improvements must be designed and upgraded to meet the requirements of this Ordinance in conjunction with an Application for Development.

## **1.5 ENACTMENT**

In order that land may be subdivided and/or developed in accordance with the policies and purposes of these regulations (see Section 1.2, Section 8.2 and Section 10.2), this Ordinance is hereby adopted and made effective as of August 4, 2015.

## **1.6 INTERPRETATION, CONFLICT AND SEPARABILITY**

### **1.6.1 Interpretation.**

In their interpretation and application, the provisions of this Ordinance shall be held to be the minimum requirements for the promotion of the public health, safety and general welfare, and shall be construed to achieve the purposes for which this Ordinance was adopted.

### **1.6.2 Conflict with Public and Private Provisions.**

#### **A. Public Provisions.**

This Ordinance is not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or other provision of law except as provided in this Ordinance. Where any provision of this Ordinance imposes restrictions different from those imposed by any other provision of this Ordinance or any other ordinance, rule or regulation, statute, or other provision of law, the provision that is more restrictive or imposes higher standards shall control.

#### **B. Private Provisions.**

This Ordinance is not intended to abrogate any Easement, covenant, or other private agreement or restriction, provided that where the provisions of this Ordinance are more restrictive or impose higher standards or regulations than such Easement, covenant, or other private agreement or restriction, the requirements of this Ordinance shall govern.

### **1.6.3 Separability.**

If any part or provision of this Ordinance or the application of this Ordinance to any person or circumstances is adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision or application directly involved in the controversy in which the judgment shall be rendered. It shall not affect or impair the validity and continued enforcement of any other parts or provisions of this Ordinance or the application of them to other persons or circumstances.

## **1.7 SAVING PROVISION**

This Ordinance shall not be construed as abating any action now pending under, or by virtue of, prior existing Subdivision or Land Development regulations, or as discontinuing, abating, modifying or altering any penalty accruing or about to accrue, or as affecting the liability of any person, firm or corporation, or as waiving any right of the Municipality under any section or provision existing at the time of adoption of this Ordinance, or as vacating or annulling any rights obtained by any person, firm or corporation by lawful action of the Municipality, except as shall be expressly provided for in this Ordinance.

## **1.8 REPEAL OF PREVIOUS ORDINANCE**

Upon the adoption of this Ordinance, all provisions of the Lancaster County Subdivision and Land Development Ordinance, as amended, are expressly repealed in their entirety to land within the corporate limits of Christiana Borough.

## **1.9 ORDINANCE AMENDMENTS**

### **1.9.1 Purpose.**

For the purpose of protecting the public health, safety and general welfare, amendments to this Ordinance may, from time to time, be proposed.

### **1.9.2 Procedure.**

All proposals for amendments shall be made in accordance with the following procedure:

#### **A. Proposal.**

Amendments to this Ordinance may, from time to time, be proposed by the Governing Body on its own motion, or by the Planning Commission. In addition, any Landowner may propose an amendment to this Ordinance, in which event the Governing Body, at its sole option, may initiate procedures for amendment by referring the proposed amendment to the Planning Commission.

#### **B. Review by Planning Commission.**

In the case of an amendment other than that proposed by the Planning Commission, the Governing Body shall submit each such amendment to the Planning Commission for recommendations at least forty-five (45) days prior to the date of the Public Hearing on the proposed amendment. The Governing Body shall also submit the proposed amendment to the Lancaster County Planning Commission for recommendations at least forty-five (45) days prior to the date of the Public Hearing.

#### **C. Action by Governing Body.**

Amendments shall be approved or disapproved by the Governing Body after a Public Hearing held pursuant to Public Notice, as defined in Section 2.2 in accordance with the procedural requirements of Section 505 and 506 of Act 247 as amended.

#### **D. Notification of Municipal Action.**

Within thirty (30) days of said approval, the Governing Body shall forward a certified copy of any amendment to this Ordinance the Lancaster County Planning Commission.

## **1.10 ENFORCEMENT AND PENALTIES**

### **1.10.1 Enforcement.**

It shall be the duty of the Manager to enforce this Ordinance and to bring any violations of these regulations to the attention of the Municipal Solicitor. Formal enforcement proceedings may be initiated by the Municipal manager in the name of the Municipality after authorization by the municipality.

### **1.10.2 Penalties.**

#### **A. Preventive Remedies.**

- 1.** In addition to other remedies, the Municipality may institute and maintain appropriate actions by law or in equity to restrain, correct or abate violations, to prevent unlawful construction, to recover damages, and to prevent illegal occupancy of a Building, Structure or premises. The description by metes and bounds in the instrument of transfer or other documents used in the process of selling or transferring shall not exempt the seller or transferor from such penalties or from the remedies herein provided.
- 2.** The Municipality may refuse to issue any permit or grant any approval necessary to further improve or develop any real property which has been developed or which has resulted from a Subdivision of real property in violation of this Ordinance. This authority to deny such a permit or approval shall apply to any of the following Applicants:
  - (a)** The owner/owners of record at the time of violation;
  - (b)** The vendee or lessee of the owner of record at any time of such violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation;
  - (c)** The current owner of record who acquired the property subsequent to the time of violation without regard as to whether such current owner had actual or constructive knowledge of the action; or
  - (d)** The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.
- 3.** As an additional condition for issuance of an approval to any such owner, current owner, vendee or lessee for the development of any such real property, the township may require compliance with the conditions that would have been applicable to the property at the time the Applicant acquired an interest in such real property.

**B. Enforcement Remedies.**

1. Any person, partnership or corporation who or which has violated the provisions of this ordinance shall, upon being found liable thereof in a civil enforcement proceeding commenced by the Municipality, pay a judgment of not more than five hundred dollars (\$500) plus all court costs including reasonable attorneys fees incurred by the Municipality as a result thereof. No judgment shall commence or be imposed, levied or be payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the Municipality may enforce the judgment pursuant to the rules of civil procedures. 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 been believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.
2. The court of common pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgment pending a final adjudication of the violation and judgment.
3. Nothing contained in this Section shall be construed or interpreted to grant to any person or entity other than the Municipality the right to commence any action for enforcement pursuant to this Section.

## **ARTICLE 2 LANGUAGE AND DEFINITIONS**

### **2.1 GENERAL RULES OF CONSTRUCTION**

The language set forth in the text of this Ordinance shall be interpreted in accordance with the following rules of construction:

#### **2.1.1 Tense and Form.**

Words used or defined in one tense or form shall include other tenses or derivative forms.

#### **2.1.2 Number.**

Words in the singular number shall include the plural number, and words in the plural number shall include the singular number.

#### **2.1.3 Gender.**

The masculine gender shall include the feminine and neuter. The feminine gender shall include the masculine and neuter. The neuter gender shall include the masculine and feminine.

#### **2.1.4 Person.**

The word "person" includes individuals, firms, partnerships, joint ventures, trusts, trustees, estates, corporations, associations and any other similar entities.

#### **2.1.5 Building.**

The word "Building" includes the word "Structure" and shall be construed as if followed by the words "or a part thereof".

#### **2.1.6 Lot.**

The word "Lot" includes the words "plot", "Tract", and "Parcel".

#### **2.1.7 Watercourse.**

The word "Watercourse" includes the words "drain," "ditch" and "Stream".

#### **2.1.8 Shall and May.**

The words "shall," "must" and "will" are mandatory in nature and establish an obligation or duty to comply with the particular provision. The words "may" and "should" are permissive.

#### **2.1.9 Time.**

The time, within which any act required by this Ordinance is to be performed, shall be computed by excluding the first day and including the last day. However, if the last day is a Saturday or

Sunday or a holiday declared by the United States Congress or the Pennsylvania General Assembly, it shall also be excluded. The word "day" shall mean a calendar day, unless otherwise indicated.

#### **2.1.10 Undefined Terms.**

Any words not defined in this Section or in Section 107 of Act 247 shall be construed as defined in standard dictionary usage.

#### **2.1.11 Illustrations and Tables.**

In case of any difference of meaning or implication between the text of this Ordinance and any caption, illustration or table, the text shall control. No caption, illustration or table shall be construed to limit the scope or intent of the text of this Ordinance.

### **2.2 DEFINITIONS**

For the purposes of this Ordinance, the following terms shall have the following meanings:

***Abutting.*** Having a common border with, or being separated from such common border by a Right-of-Way, Alley or Easement.

***Accessory.*** Additional, something extra or complementary.

***Access Drive.*** A public or private drive providing vehicular access to and between parking areas for more than two (2) parking spaces within a Land Development; or any drive servicing two (2) or more units of occupancy on a single Lot.

***Accessory Structure.*** A structure subordinate to, and detached from, the principal structure on the same lot and used for purposes customarily incidental to the principal building.

***Act 247.*** The Pennsylvania Municipalities Planning Code ("MPC") as heretofore and hereafter amended.

***Adjacent.*** The state of being side by side, next to, or adjoining one another.

***Adjoining Lot.*** A Lot that shares all or part of a common point or line with another Lot.

***Agricultural Areas.*** Land used exclusively for the cultivation of the soil, the production of crops or livestock, or the science of forestry; also, land diverted from agricultural use by an active Federal farm program, provided the diverted land has a conservation cover of grass, legume, trees or wildlife shrubs. Agricultural Land may include, to a minor degree, farmsteads inhabited by the cultivator of the land, housing for farm employees, and land used for preparation of agricultural products by the cultivator of the land.

***Agriculture.*** The cultivation of the soil and the raising and harvesting of the products of the soil including, but not limited to, nurseries, horticulture, forestry, and raising of customary domestic animals.

***Alley.*** A public thoroughfare other than a minor street which affords only a secondary means of access to abutting property and not intended for general traffic including.

**Area.** The extent of surface contained within the boundaries or extension of any object.

**Average Daily Traffic (ADT).** Computed by application of a day of the week by month factor to an average twenty-four (24) hour traffic count. Such information is available in the latest volume of the Pennsylvania Department of Transportation Traffic Data Collection and Factor Development Report.

**Applicant.** A Landowner and/or Developer, as hereinafter defined, including his heirs, successors and assigns, who filed an application for Subdivision and/or Land Development.

**Application for Development.** Every application, whether Preliminary or final, required to be filed and approved prior to start of construction or development, including, but not limited to, an application for a Building permit, for the approval of a Subdivision Plat or Plan, or for the approval of a Development Plan.

**Block.** Land surrounded on all sides by Streets (measured at the Right-of-Way) or other transportation or utility Rights-of-Way, or by physical barriers such as bodies of water or public open spaces.

**BMP's.** (Best Management Practice). Activities, facilities, control measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim, and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities.

**Borough.** Christiana Borough, Lancaster County, Pennsylvania

**Buffer.** A strip of land with Landscaping, fences and/or walls located between two (2) uses, or between one (1) use and a public Right-of-Way, that is intended to mitigate negative impacts, such as visual and noise, of the more intense use on the less intense use or on the public Right-of-Way.

**Buffer Area.** A strip of land within a public Right-of-Way which may include Signage, Street trees, and curbs, gutters, or swales.

**Building.** Any enclosed or open Structure, other than a boundary wall or fence, occupying more than four (4) square feet of area and/or having a roof supported by columns, piers or walls.

**Building, Accessory.** A detached, subordinate Building, the use of which is customarily incidental and subordinate to that of the Principal Building, which is located on the same Lot as that occupied by the Principal Building. Farm Buildings not intended for habitation are considered to be Accessory Buildings.

**Building, Principal.** A Building that is enclosed within exterior walls or firewalls, and is built, erected and framed of component structural parts. The Principal Building is also designed for housing, shelter, enclosure and support of individuals, animals or property of any kind, and is a main Structure on a given Lot.

**Building Setback Line.** A line within a Lot, designated on a Plan as the minimum required distance between any Structure and the adjacent Street centerline, or Right-of-Way line as specified by any applicable zoning ordinance.

**Capacity.** The maximum number of vehicles that can be expected to pass over a given section of roadway or on a specific lane.

**Cartway.** The portion of a Street Right-of-Way, paved or unpaved, customarily used by motorized and non-motorized vehicles in the regular course of travel over the Street.

**Clear Sight Triangle.** An area of unobstructed vision at Street intersections defined by lines of sight between points at a given distance from the intersection of the Street centerlines.

**Common Open Space.** A Parcel or Parcels of land or an area of water, or a combination of land and the water, within the development Site, designed and intended for the use or enjoyment of residents of the development, not including Streets, off-Street parking areas, and areas set aside for public facilities.

**Commonwealth.** Commonwealth of Pennsylvania.

**Community Water Supply.** A utility operated by a Municipality or a company, regulated by the Public Utility Commission, which supplies potable, domestic water for use by more than one (1) household, business or institution.

**Comprehensive Plan.** The official public document prepared and adopted in accordance with the Pennsylvania Municipalities Planning Code, consisting of maps, charts and textual material, that constitutes a policy guide to decisions about the physical and social development of the Municipality.

**Condominium.** A form of ownership of real property, as defined in the Pennsylvania Uniform Condominium Act of 1980, which includes a multiple unit Land Development in which there is a system of separate ownership of individual units of occupancy and undivided interest of land and common facilities.

**Contiguous.** Lots are Contiguous when at least one (1) boundary line of one Lot touches a boundary line or lines of another Lot.

**County.** Lancaster County, Pennsylvania.

**Dedication.** The deliberate appropriation of land by its owner for general public use as accepted by the Borough.

**Deed.** A written instrument whereby an estate in real property is conveyed.

**Density, Gross.** The number of dwelling units or units of occupancy per gross Lot Area acre (i.e., the total area within the Deeded property lines without exception).

**Density, Net.** The number of dwelling units or units of occupancy per net Lot Area acre (i.e. the total area within the Deeded property lines exclusive of existing Street Rights-of-Way).

**Designated Growth Area (DGA).** A region within a County or counties described in a Municipal or Multi-Municipal Plan that preferably includes and surrounds a city, borough or village, and within which residential and mixed-use development is permitted or planned for at densities of

one (1) unit to the acre or more, commercial, industrial and institutional uses are permitted and planned for, and public infrastructure services are provided or planned. (per MPC)

***Designated Rural Area.*** Areas within which Rural resources, Rural character, and a Rural way of life are to be sustained.

***Detention Basin.*** An impoundment structure designed to manage stormwater runoff by temporarily storing runoff and releasing it at a controlled rate.

***Developer.*** Any Landowner, agent of such Landowner, or tenant with the permission of such Landowner, including a firm, association, organization, partnership, trust, company, or corporation as well as an individual, for whom Subdivision or Land Development Plans are being or have been made.

***Development Plan.*** The provisions for development, including a Planned Residential Development, a Subdivision Plat or Plan and/or a Land Development Plat or Plan, all covenants relating to use, location and bulk of Buildings and other Structures, intensity of use or density of development, Streets, ways and parking facilities, Common Open Space and public facilities. The phrase “provisions of the Development Plan” when used in this Ordinance shall mean the written and graphic materials referred to in this definition.

***Drainage Easement.*** Rights to occupy and use another person’s real property for the installation and operation of stormwater management facilities, or for the maintenance of natural drainageways to preserve and maintain a channel for the flow of stormwater therein, or to safeguard health, safety, property and facilities..

***Dripline.*** A line marking the outer edges of the branches of the tree.

***Driveway.*** A private drive providing vehicular access between a Street or Access Drive and a parking area for four (4) or less residential units of occupancy.

***Easement.*** A strip of land granted for limited use of property by the Landowner for a public or quasi-public or private purpose, and within which the owner of the property shall not have the right to make use of the land in a manner that violates the right of the grantee.

***Elevation.*** The vertical alignment of a surface, as it exists or as it is made by cut and/or fill.

***Engineer.*** A professional Engineer licensed as such in the Commonwealth of Pennsylvania.

***Environmental Covenant.*** A servitude arising under an environmental response project which imposes activity and use limitation. (On December 18, 2007, Governor Ridge signed the Uniform Environmental Covenants Act (UECA) into law as Act 68 of 2007. Section 6517(a)(1) of UECA requires the use of Environmental Covenants whenever engineering controls or institutional controls are necessary to demonstrate attainment of an Act 2 remediation standard for any cleanup conducted under any applicable Pennsylvania environmental law. The covenant provides a tool to ensure that the conditions allowing for a risk-based cleanup will continue in the future.)

***Environmentally Sensitive Areas.*** An area not suitable for development that includes flood plains, flood plain soils, Steep Slopes, Wetlands, and riparian areas.

**Existing Wooded Area.** A biological community dominated by trees and other woody plants covering a land area of ¼ acre or more. Existing wooded areas includes areas that have at least 25 trees per ¼ acre with at least fifty (50%) percent of those trees having a two-inch or greater caliper at 4.5 feet above the ground and larger.

**Flagpole.** A narrow extension of property on a Lot or Parcel from the buildable area of a Lot to the public Right-of-Way, and which is not part of the Lot Area, but serves as access to the Lot or Parcel. See also Lot definition.

**Floodplain.** Any land area susceptible to partial or complete inundation by water from any natural source or delineated by applicable Department of Housing and Urban Development, Federal Insurance Administration Flood Hazard Boundary – Mapped as being a special flood hazard area. Also, the area of inundation that functions as a storage or holding area for floodwater to a width required to contain a base flood of which there is a one percent (1%) chance of occurrence in any given year. The floodplain contains both the floodway and the flood fringe.

**Floor Elevation.** The Elevation of the lowest level of a particular Building, including the basement.

**Footcandle.** A unit of light intensity stated in lumens per square foot and measurable with an Illuminance meter or light meter.

**Frontage.** That portion of the property which abuts and is measured along the Street Right-of-Way line.

**Fully Shielded.** A light constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal.

**Future Access Strip.** A Right-of-Way reserved for the future Improvement of a Street.

**Geologist.** A professional Geologist registered by the Commonwealth of Pennsylvania.

**Glare.** The sensation produced by lighting that causes an annoyance, discomfort, or loss in visual performance and visibility to the eye.

**Governing Body.** The council in cities and boroughs, the board of commissioners in townships of the first class, the board of supervisors in townships of the second class, or any other similar body with the final decision-making, budgeting and appointing authority of a general purpose unit of government.

**Historic Feature.** Any Building, Site, object, or district that:

- A.** Is listed on or eligible for listing on the National Register of Historic Places, either individually or as a contributing resource.
- B.** Is designated a historic resource by local, county, or State survey/inventory.
- C.** Is designated a historic resource by locally implemented preservation regulations.

**Horizon Year.** The anticipated opening year of a development, assuming full buildout and occupancy.

**Illuminance.** The quantity of light measured in Footcandles or Lux.

**Impervious Surface.** Material that is impenetrable and unable to absorb water, including, but not limited to, Buildings, Structures and paved areas.

**Improvement.** Physical changes to the land, including, but not limited to, Buildings, Streets, curbs, gutters, Streetlights and signs, water mains, hydrants, sanitary sewer mains, including Laterals to the Street Right-of-Way lines, Stormwater Management Facilities, walkways, recreational facilities, open space Improvements, shade trees, Buffer or screen plantings, and all other additions to the Tract which are required by ordinance or are deemed necessary to result in a complete Subdivision or Land Development in the fullest sense of the term.

**Improvement, Public.** Improvements for which the Municipality may ultimately assume the responsibility for maintenance and operation, or which may effect an Improvement for which Municipal responsibility is established.

**Indigenous Species.** Plants which have not been introduced by man and thrive in an area where it is considered native.

**Infill.** Development of land accessible to infrastructure that is within a Designated Growth Area or Rural Center and is generally surrounded by development and has been bypassed, remained vacant, and/or is underused.

**Invasive Species.** Plants which grow quickly and aggressively, spreading, and displacing other plants. Invasives typically are introduced into a region far from their native habitat.

**Land Development.** The development of property as specified below:

- A.** The Improvement of one (1) Lot or two (2) or more Contiguous Lots, Tracts or Parcels of land for any purpose involving:
  - 1.** A group of two (2) or more residential or non-residential 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.
  - 2.** The division or allocation of land or space, whether initially or cumulatively, between or among two (2) or more existing or prospective occupants by means of, or for the purpose of, Streets, common areas, leaseholds, Condominiums, Building groups or other features.
- B.** A Subdivision of land.
- C.** "Land Development" shall not include:
  - 1.** 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.

2. The addition of an Accessory Building, including farm Buildings, on a Lot or Lots subordinate to an existing Principal Building [Not to cumulatively exceed 1,000 square feet.]
3. The addition or conversion of Buildings or rides within the confines of an enterprise that would be considered an amusement park. For purposes of this sub clause, 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.

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

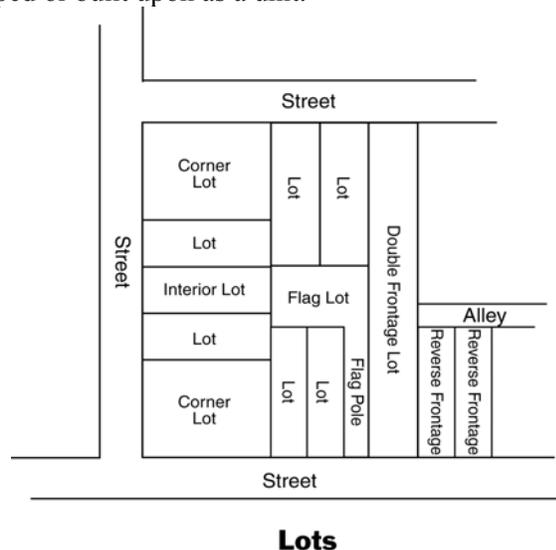
**Landscape Architect.** A Landscape Architect registered by the Commonwealth of Pennsylvania.

**Landscaping.** Acting with the purpose of meeting specific criteria regarding uses of outside space, including ground cover, Buffers and shade trees.

**Level-of-Service.** A measure of the effect of traffic on the Capacity of a road.

**Light Trespass.** Light emitted by a lighting installation which extends beyond the boundaries of the property on which the installation is Sited.

**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, Corner.** A Lot situated at the intersection of two (2) or more Streets with Frontage on two (2) or more adjacent sides.

**Lot, Double Frontage.** An Interior Lot with front and rear Street Frontage, where vehicular access occurs on either Street (See Section 8.4.3F).

**Lot, Flag.** A Parcel of land created by a Subdivision or partition which includes a narrow projection or "Flagpole" to the public Right-of-Way.

**Lot, Interior.** A Lot whose side Lot Lines do not abut upon any Street.

**Lot, Reverse Frontage.** An Interior Lot with front and rear Street Frontage, where vehicular access occurs on only the Street of lesser intensity (See Section 8.4.3.F).

**Lot Area.** The area contained within the property lines of the individual Parcel of land, excluding space within the Street Right-of-Way. The Lot Area includes the area of any utility Easement or Stormwater management facility, but does not include the "Flagpole" of a Flag lot unless otherwise specified in the Municipal zoning ordinance.

**Lot Frontage.** That portion of a Lot Abutting on the Street Right-of-Way and regarded as the front of the Lot.

**Lot Line.** A property boundary line of any Lot held in single or separate ownership, except that where any portion of the Lot extends into the Abutting Street or Alley, the Lot Line shall be deemed the Street or Alley line.

**Lot Line Marker.** A metal plate, pin, permanent stone or concrete Monument used to identify Lot Line intersections.

**Lot of Record.** A Lot which is a part of a Subdivision, the Plan of which was recorded, or a Parcel of land, the Deed of which was recorded in the office of the Lancaster County Recorder of Deeds prior to the adoption of this Ordinance.

**Lux.** A unit of light intensity stated in lumens per square meter. There is approximately 10.7 Lux per Footcandle.

**Manufactured Home or Mobile Home.** A transportable, single family dwelling, built on a permanent chassis, intended for permanent occupancy, contained in one unit, or in two or more units designed to be joined into one integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may used without a permanent foundation when attached to required utilities.

**Mobile Home Lot.** A Parcel of land in a Mobile Home Park, improved with the necessary utility connections and other appurtenances necessary for the erections thereon of a single Mobile Home.

**Mobile Home Pad.** That part of a Mobile Home Lot that is being reserved for the placement of the Mobile Home.

**Mobile Home Park.** A Parcel or Contiguous Parcels of land which has been so designated and improved that it contains two (2) or more Mobile Home Lots for the placement thereon of Mobile Homes.

**Modification.** A process for alleviating specific requirements imposed by this Ordinance, as described in Section 3.1.

**Monument.** A concrete or stone Monument used to identify Street Line intersections.

**Multi-Municipal Plan.** A Plan developed and adopted by any number of Contiguous municipalities, including a joint Municipal Plan as authorized by the Pennsylvania Municipalities Planning Code or a regional Plan.

**Municipal Solicitor.** The licensed attorney designated by the Governing Body to furnish legal assistance for the administration of this Ordinance.

**Municipal Engineer.** A professional Engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the Engineer for the Municipality.

**Municipality.** The Borough of Christiana, Pennsylvania.

**Native Plant.** A plant which grew in a defined region prior to European settlement. Indigenous Species and naturalized non-Native Plants may be included as a Native Plant if it has been brought into the region and has become established into the wild and is not considered invasive or displaces Native Plants. Naturally occurring hybrids and cultivars (cultivated varieties) of native genetic parent species which may or may not have been present prior to European settlement are considered Native Plants.

**New Development.** A project involving the construction, reconstruction, Redevelopment, conversion, structural alteration, relocation or enlargement of any Structure, or any use or extension of land. New Developments have the potential of increasing the requirements for capital Improvements, requiring either approval of a Plan pursuant to this Ordinance, the issuance of a Building permit, or connection to the Municipal water or sanitary sewer system.

**Non-motorized.** Accommodating various modes of surface transportation including but not limited to bicycles, non-motorized scooters, and horse drawn buggies.

**Non-Native / Introduced Plant.** Any plant species that has been introduced by humans and now grows independently of cultivation. A subset of Non-Native / Introduced species are the Invasive Species.

**Non-Site Traffic.** Vehicle Trips passing within the study area as defined in the traffic impact study that do not enter or exit the Site and are generally the result of through traffic and traffic generated by other developments.

**Off-Site.** Any premises not located within the area of the property to be subdivided or developed, whether or not in the common ownership of the Applicant for Subdivision or Land Development approval.

**Official Map.** A map adopted by ordinance pursuant to the Pennsylvania Municipalities Planning Code and recorded in the office of the Lancaster County Recorder of Deeds.

**Parcel.** See Lot.

**Peak Hour.** The hour during which the heaviest volume of traffic occurs on a road.

***Pedestrian Way.*** A Right-of-Way, publicly or privately owned, intended for human movement by walking.

***Pennsylvania Municipalities Planning Code (PMPC).*** Adopted as Act 247 of 1968, as reenacted and amended. This act enables municipalities to Plan for, and regulate community development with Subdivision and Land Development ordinances. The code also contains guidelines for Subdivision and Land Development ordinance content. For the purpose of this Ordinance, the Code may be referred to as "Act 247" and is intended to include the current code and any further amendments thereto.

***Pervious Material.*** Any material that would allow water to pass through at a rate at least equal to the pervious ground cover (e.g., porous pavement, stone parking areas, and preformed or prefabricated Blocks which would permit water to penetrate) and as approved by the Municipal Engineer.

***Phases.*** As defined under the PMPC, Article V, as stages or sections of development.

***Plan.*** A drawing, together with supplementary data, that describes a Subdivision or Land Development.

- A. *As-Built Plan.*** Engineering documents drawn to scale showing the constructed dimensions and materials of a Structure or other land Improvement. An as-built drawing differs from design drawings and construction drawings, which are design-oriented documents prepared prior to construction rather than a depiction of what has been constructed.
- B. *Centerline Separation Plan.*** A complete and exact Subdivision Plan that creates two (2) Lots by using a Street centerline as the common boundary, which meets the criteria specified in Section 4.5, and is designed in accordance with the requirements of Section 5.4.
- C. *Final Plan.*** A complete and exact Subdivision and/or Land Development Plan, including all supplementary data, designed in accordance with the requirements of Sections 4.3 and 5.3.
- D. *Lot Add-On Plan.*** A complete and exact Subdivision Plan, the sole purpose of which is to increase the Lot Area of an existing Lot or Tract, designed in accordance with the requirements of Sections 4.5 and 5.4.
- E. *Lot Consolidation Plan.*** A plan for the consolidation of two or more existing Lots or Tracts to create fewer Lots or Tract with revised Lot lines, designed in accordance with the requirements of Sections 4.5 and 5.4.
- F. *Minor Urban Plan.*** A Final Plan which has an expedited process when designed in accordance with the requirements of Sections 4.7 and 5.5
- G. *Modified Final Plan.*** A Final Plan modified to reflect a change to the Site or its surroundings that occurs after the Preliminary Plan approval as per Section 4.3.1.C.

- H. *Preliminary Plan.*** A Subdivision and/or Land Development Plan which is designed in accordance with the requirements of Sections 4.2 and 5.2, and is prepared for consideration prior to submission of a Final Plan.
- I. *Preliminary/Final Plan.*** A Final Plan which includes both Preliminary and Final Plan requirements and is designed in accordance with Section 4.4 and 5.3.
- J. *Record Plan.*** A Final Plan that contains the original endorsement of the Municipality, which is recorded with the Lancaster County Recorder of Deeds.
- K. *Revised Subdivision and/or Land Development Plan.*** Any Revised Plan due to survey corrections prepared in accordance with the requirements of Sections 4.5 and 5.4.
- L. *Sketch Plan.*** An informal Plan, not necessarily to exact scale, indicating salient existing features of a Tract and its surroundings, with the general layout of proposal prepared in accordance with the requirements of Sections 4.1 and 5.1.

***Planning Commission.*** The Borough of Christiana Planning Commission.

***Planning Commission, County.*** The Lancaster County Planning Commission.

***Plat.*** The map or Plan of a Subdivision or Land Development, whether preliminary or final.

***Public Hearing.*** A formal meeting held pursuant to Public Notice, intended to inform and obtain public comment, prior to taking action in accordance with this Ordinance and/or the Pennsylvania Municipalities Planning Code.

***Public Meeting.*** A forum held pursuant to notice under the act of July 3, 1986 (P.L. 388, No. 84), known as the "Sunshine Act".

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

***Redevelopment.*** Public and/or private investment made to re-create the fabric of an area by renovating previously developed land. Replacing, remodeling, or reusing existing Buildings and Structures to accommodate New Development.

***Retention Basin.*** A Stormwater Management Facility that includes a permanent pool for water quality treatment and additional capacity above the permanent pool for temporary runoff storage.

***Right-of-Way.*** The total width of any land reserved or dedicated as a Street, Alley or Pedestrian Way, or for any other public or private purpose.

***Runoff.*** Any part of precipitation that flows over the land surface.

***Rural.*** Land outside of Urban and Village Growth Areas, including Agricultural Areas and natural resource areas.

**Screening.** Planted (or having equivalent natural growth) shrubs or trees, earthen mounds, or fencing.

**Sedimentation.** The process by which soil or other surface material is accumulated or deposited by wind, water or gravity.

**Setback Line.** See Building Setback Line.

**Sewage.** A substance that contains the waste products or excrement or other discharge from the bodies of human beings or animals and noxious or deleterious substances being harmful or inimical to the public health, or to animal or aquatic life, or to the use of water for domestic water supply or for recreation. The term includes any substance which constitutes pollution under The Clean Streams Law.

**Sewage Facilities.** A system of Sewage collection, conveyance, treatment, and disposal which will prevent the discharge of untreated or inadequately treated Sewage or other waste into waters of this Commonwealth or otherwise provide for the safe and sanitary treatment and disposal of Sewage or other waste as recognized by the Department of Environmental Protection.

- A. **Public Sewage System.** A publicly owned system of piping, tanks, or other facilities serving two or more lots, which uses a method of Sewage collection, conveyance, treatment, and disposal other than renovation in a soil absorption area, or retention in a retaining tank.
- B. **Private Community Sewage System.** A privately owned system of piping, tanks, or other facilities serving two or more lots, which uses a method of Sewage collection, conveyance, treatment, and disposal other than renovation in a soil absorption area, or retention in a retaining tank.
- C. **On-Lot Sewage System.** An individual sewage system which uses a system of piping, tanks or other facilities for collecting, treating or disposing of sewage into a soil absorption area or spray field or by retention in a retaining tank.

**Shared Trips.** Vehicle Trips entering and exiting the Site that were using the facility on the adjacent Streets and therefore did not generate new Trips on the road.

**Sight Distance.** The length of road visible to the driver of a vehicle at any given point in the road when viewing is unobstructed by traffic.

**Significant Tree.** Non Invasive trees with eighteen (18) inch minimum caliper measured five (5) feet above grade located outside an existing wooded area.

**Site.** The existing Lot of Record proposed for Land Development, including Subdivision.

**Stormwater.** Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

**Stormwater Management Facility (SWM Facility).** Any structure, natural or manmade, that, due to its condition, design, or construction, conveys, stores, infiltrates/evaporates/transpires, cleans or otherwise affects stormwater runoff. Typical SWM facilities include, but are not limited to,

detention and retention basins, open channels, watercourses, road gutters, swales, storm sewers, pipes, BMP's, and infiltration structures.

**Stream.** A watercourse.

**Street.** A strip of land, including the entire Right-of-Way, publicly or privately owned, serving primarily as a means of motorized and non-motorized vehicular and pedestrian travel, and furnishing access to Abutting properties. This term shall include the terms avenue, boulevard, road, highway, freeway, parkway, lane, Alley, viaduct or any other way used for similar purposes. Streets shall conform to one of the following categories:

- A. Alley (Service Street and/or Access Drive).** A service road that provides secondary means of access to Lots. Alleys are on the same level as a Local Street, and are used in cases of narrow Lot Frontages. Alleys shall be designed to discourage through traffic. Alleys may be designed as one-lane Streets.
- B. Arterial.** An interregional road in the Street hierarchy system that carries vehicle traffic to and from the region as well as any through traffic. This Street should be a controlled access Street (designed to the Capacity analysis of the intersection (LOS) Level of Service).
- C. Collector.** A Street that provide connections with Local and Arterial Streets. They may serve a traffic corridor connecting villages, small boroughs, shopping points, and mining and Agricultural Areas on an intra-County or Municipal basis.
- D. Cul-de-sac.** A Street with a single means of ingress and egress and having a turnaround. The design of the turnaround may vary.
- E. Local.** This classification provides direct access to adjacent land and includes connections to farms, individual residences and commercial properties, and to higher classes of highway systems.

**Street Line.** The Right-of-Way line of any given Street.

**Street, Private.** A Street not accepted for Dedication by the Municipality.

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

**Subdivision.** The division or re-division of a Lot, Tract or Parcel of land by any means into two (2) or more Lots, Tracts, Parcels or other divisions of land, including changes in existing Lot Lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership, or Building, or Lot development.

**Subject Tract.** The Site proposed for Land Development, including Subdivision.

**Substantially Completed.** Where, in the judgment of the Municipal Engineer, at least ninety percent (90%) (based on the cost of the required Improvements for which financial security was posted) of those Improvements required as a condition for final approval have been completed in accordance with the approved Plan, so that the project will be able to be used, occupied or operated for its intended use.

**Surveyor.** An individual registered with the Commonwealth of Pennsylvania as authorized to measure the boundaries of Tracts of land, establish locations, and perform the requirements of a survey.

**Swale.** A low lying stretch of land which gathers or carries surface water runoff.

**Tie Bar.** The symbol on a survey, Plan, or Plat shown as “Z” indicating common ownership of two adjacent Lots or Tracts.

**Topography.** The relief features or surface configurations of an area of land.

**Tract.** The term “Tract” is used interchangeably with the term “Lot,” particularly in the context of Subdivision, where a “Tract” is subdivided into several Lots, Parcels, units, plots, Condominiums, Tracts or interests.

**Tree Protection Zone.** An area that is radial to the trunk of a tree in which no construction activity shall occur. The Tree Protection Zone shall be the distance from the trunk to the Dripline (a line marking the outer edges of the branches of the tree).

**Trip.** A single or one-directional motorized and/or non-motorized vehicle movement.

**Urban.** Lancaster City, all boroughs, and developed land in townships within an Urban Growth Area.

**Urban Growth Area.** An area that is designated as appropriate for future development and includes a city or borough at its center, developed portions of township, and development capacity to meet future land use needs. Urban Growth Areas are given official standing by their incorporation on Future Land Use Maps and through the adoption in County and local Comprehensive Plans.

**Watercourse.** A channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

**Watershed.** The entire region or area drained by a watercourse.

**Wetlands.** Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturate soil conditions, including swamps, marshes, bogs and similar areas.

**Yard.** An unobstructed open space at grade between a Building and the Adjoining Lot Line. Porches and car porch shall be considered part of the building. Normal overhanging eaves, gutters, and cornices shall not be considered an infringement of the yard requirements.

**Yard, Front.** The distance between the right-of-way line and the front set back line projected the full width of the lot.

**Yard, Rear.** The distance between the rear lot line and the rear setback line projected the full width of the lot.

***Yard, Side.*** The distance between the side lot line and the side setback line projected from the front yard to the rear yard.

## **ARTICLE 3 ADMINISTRATION**

### **3.1 MODIFICATIONS**

The Subdivision and Land Development ordinance requirements are minimum standards for the protection and promotion of the public health, safety, and welfare. The regulations preserve public order and establish interactions among citizens in a way that prevents a conflict of rights. The regulations ensure the uninterrupted enjoyment of rights by all of the citizenry by guiding development and growth and to permit municipalities to minimize such problems as may presently exist or which may be foreseen.

Modifications should only be granted to encourage flexibility and ingenuity in the layout and design of Subdivisions and Land Developments when meeting the intent and purpose of the ordinance, when literal compliance would be unreasonable, cause undue hardship, or when an alternative standard is demonstrated to provide equal or better results and if the Modification would not be contrary to the public interest.

#### **3.1.1 Purpose.**

The provisions of these regulations are intended as a minimum standard for the protection of the public health, safety and general welfare. If the literal compliance with any mandatory provision of these regulations is demonstrated by the Applicant to be unreasonable and to cause undue hardship because of peculiar conditions pertaining to the particular property, and if the Applicant demonstrates that an alternative proposal will provide equal or better results, the Governing Body may grant a Modification from such mandatory provision, so that substantial justice may be done and the public interest secured while permitting the reasonable utilization of the property. However, the granting of a Modification shall not have the effect of making null and void the purpose and/or intent of this Ordinance.

#### **3.1.2 Procedure.**

All requests for Modifications shall be made in accordance with the following procedure:

##### **A. Application Requirements.**

- 1.** All requests for Modifications shall be made in writing and shall accompany and be a part of the Application for Development. The request shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, or the alternative standard proposed to provide equal or better results, the provision(s) of this Ordinance which are requested to be modified, and the minimum Modification necessary. The request shall be accompanied by a Plan prepared at least to the minimum standards of a Sketch Plan (see Section 5.1).
- 2.** Should a revision to a submitted Plan require a Modification that was not apparent at the time of initial Plan submission, the request for a Modification shall be submitted in accordance with Paragraph A., above, at the time of resubmission of the Plans.

**B. Review by Planning Commission.**

At a scheduled Public Meeting, the Planning Commission shall review the Modification request and provide comments to the Governing Body.

**C. Action by Governing Body.**

At a scheduled Public Meeting, the Governing Body shall review the comments submitted by the Planning Commission, and the request to determine if the literal compliance with any mandatory provision of the Ordinance is demonstrated by the Applicant to exact undue hardship or to be unreasonable, or that an alternative standard has been demonstrated to provide equal or better results, provided that such Modification will not be contrary to the public interest and that the purpose and intent of this Ordinance is observed. The Applicant shall demonstrate that the alternative proposal represents the minimum Modification necessary. If the Governing Body determines that the Applicant has met his burden, it may grant a Modification from the literal compliance with the terms of this Ordinance.

**D. Notification of Municipal Action.**

1. After the meeting at which the Modification was reviewed, written notice of the Governing Body's action shall be sent to the following individuals:
  - (a) Landowner or his agent.
  - (b) Applicant.
  - (c) Firm that prepared the Plan.
2. If the Governing Body denies the request, it will notify the above individuals, in writing, of the justification for denial. If the Governing Body grants the request, the Final Plan shall include a note that identifies the specific Modification as granted.

**3.1.3 Authority to Impose Conditions.**

In granting a Modification, the Governing Body or Planning Commission, as applicable, may impose such conditions, as will, in its judgment, secure substantially the objectives of the standards and requirements of this Ordinance.

**3.1.4 Time Extension Modifications.**

In instances where the Applicant requires additional time to resolve outstanding conditions of approval, a written request with the associated fee shall be submitted for consideration of review for the last Governing Body or Planning Commission meeting, as applicable, prior to the deadline for Plan recordation. The written request must include an explanation necessary to justify the time extension.

### **3.1.5 Waiver of Preliminary Plan Modifications.**

In instances where the Applicant submits a Preliminary Plan and is approved for a waiver of Preliminary Plan processing, a written notification shall be provided to the Christiana Borough Planning Commission as part of their application so that the Municipality reviews the Plan as a Final Plan and creates recording papers.

### **3.2 ACCEPTANCE OF CONDITIONS OF PLAN APPROVAL**

When a Plan, whether Preliminary or Final, has been approved subject to conditions, and when the Applicant rejects one or all of the conditions, the Applicant shall so notify the Governing Body in writing within thirty (30) days of the date of the Governing Body's action. Such notification of rejection of one or more of the conditions of approval shall serve to automatically rescind the approval of the Plan.

Failure by the Applicant to notify the Governing Body of rejection of one or more of the conditions of approval within the time so specified shall serve as notice of acceptance of the conditions of approval and that the Applicant intends to fully comply with the conditions unless such condition is invalidated by final order of court upon appeal thereto by the Applicant.

### **3.3 CHALLENGES AND APPEALS**

#### **3.3.1 Right to Appeals.**

Any person aggrieved by a finding, decision or recommendation of the Governing Body or Planning Commission with respect to the approval or disapproval of a Plan or request for Modification may appeal as provided for in the Pennsylvania Municipalities Planning Code and other relevant statutes and rules.

#### **3.3.2 Mediation Option.**

As an alternative to an adjudicatory appeal proceeding, any party entitled to appeal a decision of the Governing Body or Planning Commission may request the utilization of mediation as an aid in resolving the dispute. Participation in mediation shall be wholly voluntary by the parties, and shall be conducted as prescribed in the Pennsylvania Municipalities Planning Code.

### **3.4 RECORDS**

The Municipality shall keep an accurate, public record of its findings, decisions and recommendations relevant to all applications filed with it for review or approval.

### **3.5 FEES**

#### **3.5.1 Review Fee.**

Each Subdivision or Land Development Plan application shall be accompanied by the required review fee as established and adopted by ordinance or resolution by the Governing Body. Fees shall be payable to the Municipality at the time of application (unless otherwise noted herein) and Plan processing, approval and recording shall not be completed until all required fees are paid. There shall be no refund or credit of fees or a portion of any fee should the Applicant withdraw the Plan during the review process or fail to receive Plan approval.

### **3.5.2 Professional Service Fees.**

In addition to the required review fee, it is anticipated that additional expenses will be incurred by the Municipality in processing the Preliminary and/or Final Plans which are submitted or which may be required to be submitted under this Ordinance, for engineering, legal or other professional consultant expenses. If the fees are not sufficient to cover these expenses incurred in the review of said Plans, the Municipality shall notify the person submitting the Plans for review of the additional expense and shall request payment of the same. All payment requested by the Municipality for engineering, legal or other professional expense shall be the actual cost of the services incurred by the Municipality. These services shall be billed at the normal established rate for engineering or legal services provided to the Municipality.

### **3.5.3 Professional Service Fee Disputes.**

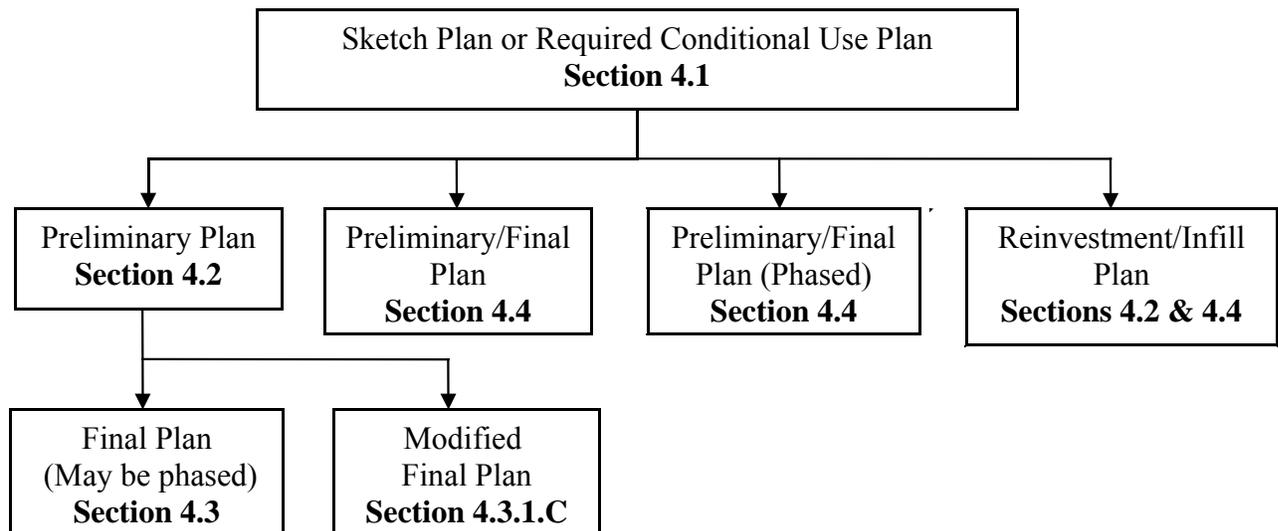
An Applicant must notify the Municipality within ten (10) days of the date billed if the fee is disputed. Once notified of the dispute, the Municipality cannot delay or disapprove an application based on differences over fees. If, within twenty (20) days of the date of billing the Applicant and Municipality cannot agree on the amount of expenses that are reasonable and necessary, a procedure shall be followed whereby another Engineer is mutually appointed to establish the cost. The Applicant must immediately pay the entire amount determined by the mutually appointed Engineer.

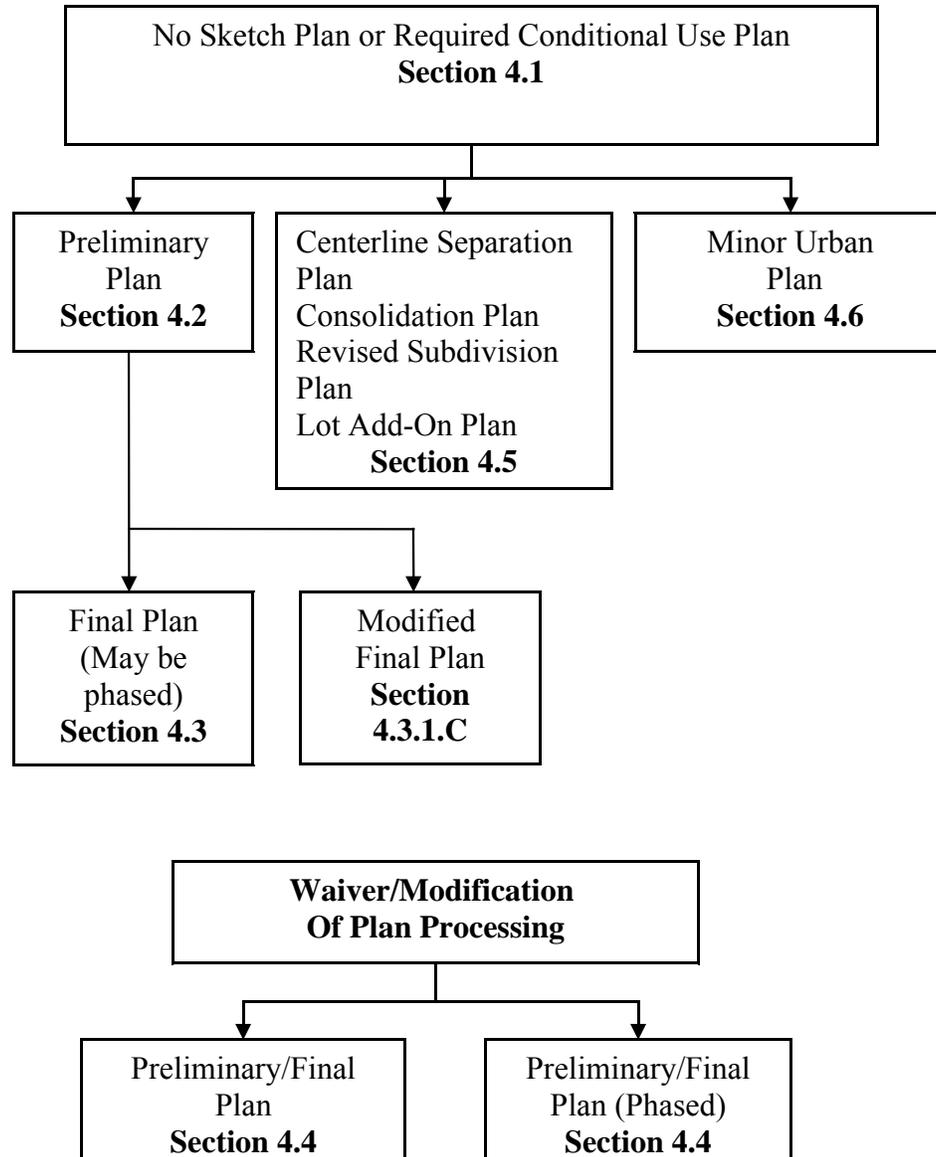
When the Applicant and Municipality cannot agree upon appointment of an Engineer, either party can apply to the court of common pleas who will appoint one. The court appointed Engineer will determine the amount of reasonable and necessary expenses. If that amount is equal to or greater than the original amount billed, the fee of the court appointed Engineer shall be paid by the Applicant. If the determined fee is less than the amount billed by one thousand dollars (\$1,000) or more, the fee of the court appointed Engineer shall be paid by the Municipality; differences less than one thousand dollars (\$1,000) are to be shared equally by the Applicant and Municipality.

# ARTICLE 4 PLAN PROCESSING PROCEDURES

## 4.1 SKETCH PLAN

Historically, Subdivision and Land Development Plans have been submitted and processed in steps, i.e. Preliminary Plan followed by Final Plan. This Municipality believes that certain Plans should be processed on an expedited basis without going through all of the traditional steps. This Municipality places great value on the open exchange of ideas between the Applicant and Municipality before the Applicant invests considerable time and funds in the preparation and submittal of the Applicant's Subdivision and/or Land Development Plan. The Applicant is encouraged, but not required, to initiate the Subdivision and Land Development process by initiating and completing the Sketch Plan process. The Sketch Plan shall be prepared in accordance with Article 5 and is a permissive and not a mandatory submission. The submission of the Sketch Plan would enable the Municipality to openly discuss the Applicants' Plans and project and to make recommendations for the Applicant to consider in preparing the formal submission. An Applicant who elects to take advantage of the Sketch Plan process, will, at the Applicant's option, have the right to proceed to a Preliminary/Final Plan and forego the Preliminary Plan phase/processing requirements. An Applicant who obtains a Required Conditional Use Plan approval of its project shall also have the right, at the Applicant's option, to proceed to a Preliminary/Final Plan and forego the Preliminary Plan phase/processing requirements. The Sketch Plan process is encouraged in all situations, but is not mandatory and will not prevent the Applicant from submitting a Modification request regarding Preliminary Plan processing requirements as part of its submission. The Municipality has prepared the following flow chart as a summary of the Plan processing procedures. The flow charts do not, nor shall be construed to, override or supersede the processing requirements set forth in this ordinance but are provided as an additional aid to the Applicant.





**4.1.1 General.**

All Applicants for Subdivision or Land Development may submit a Sketch Plan to the Municipality for review prior to submission of a formal application; however, submission of a Sketch Plan is not mandatory. Submission of a Sketch Plan does not constitute a formal Subdivision or Land Development application.

**4.1.2 Plan Information.**

Sketch Plan reviews are not required to be consistent with procedures of the Pennsylvania Municipalities Planning Code. Sketch Plans prepared for review and discussion should include those items listed in Section 5.1.

If the Developer accesses a Collector, Arterial, or state road, the Sketch Plan shall depict the proposed access and Frontage Improvements.

#### **4.1.3 Submission, Meeting, and Consultant Review.**

The Applicant shall submit sufficient copies of the Sketch Plan, along with any required supplemental data and an application form, to the Municipality; the requisite number of copies shall be as determined by the Governing Body. The Applicant shall schedule a review meeting with the Municipal Staff which shall include the Zoning Officer, Municipal Engineer, Planning Commission Member, County Community Planner, and others as determined by municipality. The Applicant may request that the Municipal Planning, Engineering, and/or legal consultant perform a written review of the Sketch Plan, at the Applicant's sole cost and expense. In such case, the written review shall be provided to the Applicant with copies to Municipal Staff and the Municipal Planning Commission.

#### **4.1.4 Review by Municipality Planning Commission.**

The Municipality Planning Commission shall review the Sketch Plan submission and as applicable, consultant reviews, and advise the Applicant how the proposed Subdivision or Land Development may conform or fail to conform to the requirements and objectives of this Ordinance and other applicable Plans and ordinances. The Municipality Planning Commission may then submit its written comments and recommendations to the Applicant. Said comments shall not be deemed to be an approval of any application or to vest any rights in the Applicant.

#### **4.1.5 Review by Governing Body.**

The Applicant may, but need not, request further review of the Sketch Plan submission by the Governing Body at a regularly scheduled meeting. The Governing Body may provide written comments to the Applicant. Said comments shall not be deemed to be an approval of any application or to vest any rights in the Applicant.

#### **4.1.6 Completion of the Sketch Plan Process**

After completion of the Sketch Plan Process or Conditional Use Process, the Applicant is allowed to do one of the following:

- A. Preliminary Plan submission** per Section 4.2 and then Final Plan submission per Section 4.3.
- B. Combined Preliminary /Final Plan submission.**  
Plan must be titled Preliminary/Final. Plans must be processed per Sections 4.4.
- C. Combined Preliminary/Final Phased Plan submission (multi phased final).**  
Plan must be titled Preliminary/Final. Plans must be processed per Section 4.4.

## **4.2 PRELIMINARY PLAN**

### **4.2.1 Purpose.**

The purpose of the Preliminary Plan is to require formal preliminary approval in order to: vest the Plan from changes in Municipal ordinances, phase development, and provide additional time to complete conditions of approval.

#### **4.2.2 Plan Requirements.**

All Preliminary Plans shall be prepared in conformance with the provisions of Section 5.2 and any other applicable requirements of law.

#### **4.2.3 Submission.**

Official submission of the Preliminary Plan application to the Municipality shall consist of:

**A. Preliminary Plan.**

Two (2) copies of the Preliminary Plan, plus one (1) additional copy if the subject Site is adjacent to the Municipal boundary, one (1) copy if required to be reviewed by the the Municipal Engineer, and one (1) additional copy if the subject Site abuts a State road.

**B. Supplemental Data.**

Two (2) copies of all reports, notifications and certifications that are not provided on the Preliminary Plan, including Stormwater management Plans and calculations.

**C. Application Form.**

One (1) application form completely and correctly executed, with all information legible, and bearing all required signatures.

**D. Filing Fee.**

A filing fee (in accordance with the Municipality's current fee schedule) consisting of a check or money order drawn to the Municipal Treasurer.

**E. Application Completeness Review.**

All required Plans and documents and the required filing fee shall accompany a Preliminary Plan application. The Municipality shall have seven (7) days from the date of submission to check the Plans and documents to determine if, on their face, they are in proper form and contain all the information required by this Ordinance.

**F. Lancaster County Planning Commission Review.**

A filing fee, one (1) Application form completely and correctly executed, one (1) copy of all reports, and one (1) full set of plans shall be submitted to the Lancaster County Planning Commission.

#### **4.2.4 Notification.**

The Municipality shall refer the Application to the Planning Commission for the first review of the Application, and shall notify the following of the Preliminary Plan Application and provide a copy of the Plan and application as requested:

**A.** Christiana Fire company

**B.** Municipal Engineer

**C.** Water / Wastewater Authority

**D.** Lancaster Countywide Communications (when creating a street)

#### **4.2.5 Planning Commission Action.**

In general, the Planning Commission will schedule the Preliminary Plan application for action at the first Planning Commission meeting that is at least thirty (30) days following the date of filing. In considering the Preliminary Plan application, the Planning Commission shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies and Municipal consultants.
- B.** Determine whether the Preliminary Plan meets the requirements and objectives of this Ordinance and other applicable ordinances.
- C.** If available, review Lancaster County Planning Commission comments.
- D.** Send meeting minutes or a written report recommending approval or disapproval of the Preliminary Plan and the reasons therefore; citing the provisions of the statute or ordinance relied upon, to the following:
  - 1.** Landowner or his agent.
  - 2.** Applicant.
  - 3.** Firm that prepared the Plan.
  - 4.** Governing Body.
  - 5.** Lancaster County Planning Commission.

#### **4.2.6 Governing Body Action.**

The Governing Body shall review the Preliminary Plan and render its decision at a Public Meeting following receipt of the Planning Commission's report within ninety (90) days following the first regular meeting of the Planning Commission after the date the application is filed and no later than the statutory review period prescribed in Section 508 of Act 247, as amended. In considering the Preliminary Plan application, the Governing Body shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies for compliance to all Municipal ordinances.
- B.** Review comments from the Lancaster County Planning Commission and Municipal Planning Commission.
- C.** Communicate the decision to the Applicant and other reviewing agencies as required in Section 4.2.7.

#### **4.2.7 Notification of Governing Body Action.**

##### **A. Written Notification.**

Within fifteen (15) days of the meeting at which the Preliminary Plan application is acted upon by the Governing Body, written notice of the Governing Body's action shall be sent to the following individuals:

- 1.** Landowner or his agent.
- 2.** Applicant.
- 3.** Firm that prepared the Plan.

4. Lancaster County Planning Commission.

**B. Disapproval of Application.**

If the Preliminary Plan application is disapproved, the Governing Body will notify the above individuals, in writing, of the defects in the application and will identify the requirements that have not been met; citing the provisions of the statute or ordinance relied upon.

**C. Failure of Governing Body to Act.**

Failure of the Governing Body to render a decision and communicate it to the Applicant within the time and manner required shall be deemed an approval of the application in terms as presented unless the Applicant has agreed in writing to an extension of time or change in prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change will have a like effect.

**4.2.8 Compliance with Governing Body Action.**

If the Governing Body conditions its Preliminary Plan approval upon receipt of additional information, changes and/or notifications, such data shall be submitted and/or alterations noted on two (2) copies of the Plan to be submitted to the Municipality for approval by the Governing Body within fourteen (14) days of the meeting at which the Preliminary Plan application is reviewed by the Governing Body or as part of the Final Plan Application.

Failure to reject the conditions in writing by the Applicant within thirty (30) days after written notification by the filing of an appeal shall constitute an acceptance of the conditions by the Applicant.

**4.2.9 Governing Body Approval and Certification.**

**A. Preliminary Plan Approval.**

Approval of a Preliminary Plan application shall constitute approval of the proposed Subdivision and/or Land Development as to the character and intensity of development and the general arrangement of Streets, Lots, Structures and other planned facilities, but shall not constitute Final Plan approval. The Preliminary Plan may not be recorded in the office of the Lancaster County Recorder of Deeds.

**B. Time Period of Approval.**

Preliminary Plan approval will be effective for a five-year period from the date of the Governing Body's approval of the Preliminary Plan application; therefore, construction of a project must be Substantially Completed within five (5) years of said date unless the Governing Body grants a waiver by extending the effective time period of the approval.

**4.2.10. Improvement Construction from Preliminary Plan.**

In accordance with the option as set forth in Section 509 of the MPC authorizing an Applicant to complete construction of the Subdivision/Land Development improvements prior to approval and recording of a Final Plan and, hence, avoiding the requirements for the deposit with the Municipality of financial security to cover the costs of such improvements, an Applicant electing to do so shall meet the following requirements:

**A. Requirements.**

1. The Applicant shall indicate in writing the intent to construct the Improvements prior to Final Plan approval to the Governing Body as part of the Preliminary Plan application process.
2. Plans must also receive approval, when applicable, from all authorities having jurisdiction including by way of example but not limited to, Highway Occupancy Permit, Erosion and Sedimentation Control Approval, etc.
3. The Applicant may, after receipt of acknowledgment from the Governing Body of the satisfactory completion of all conditions of Preliminary Plan approval, proceed to construct the Improvements required by this Ordinance and shown on the approved Preliminary Plan.
4. The Applicant shall complete and enter into the appropriate Developers agreement. The Applicant shall indicate the timetable for the construction of the Improvements including a schedule and Plan of the proposed phasing of sections of the Plan.
5. An As-Built Plan will be required to be recorded as the Final Plan after constructing Improvements from each phase of a Preliminary Plan.

**B. Limitations.**

Construction and completion of the Improvements shall not constitute permission to sell Lots or occupy proposed Buildings shown on the Plan. Such permission shall occur concurrently with the recordation of the Final Plan.

**4.3 FINAL PLAN**

**4.3.1 General.**

**A. Final Plan Submission.**

Applications for Final Plan approval can be submitted only after the following, when required, have been completed:

1. The Applicant has satisfied any conditions of preliminary approval which the Governing Body's Preliminary Plan Approval has required to be completed prior to the submission of a Final Plan.
2. When a Preliminary Plan is not required.
3. When a Preliminary Plan has been approved with conditions to be resolved during the Final Plan review process and the Applicant has not chosen to construct and complete the Subdivision/Land Development improvements pursuant to Section 4.2.10.

**B. Final Plan Submitted in Phases.**

The Final Plan may be submitted in Phases, each phase covering a reasonable portion of the entire proposed Subdivision or Land Development as shown on the approved Preliminary Plan; provided that each phase, except for the last, shall contain a minimum of twenty-five percent (25%) of the total number of dwelling units as depicted on the approved Preliminary Plan unless the Governing Body specifically approves a lesser percentage for one or more Phases.

**C. Modified Final Plan.**

The Governing Body may accept a Final Plan modified to reflect a change to the Site or its surroundings that occurs after the Preliminary Plan review. The Governing Body shall determine whether a Modified Final Plan will be accepted or whether a new Preliminary Plan shall be submitted.

**4.3.2 Purpose.**

The purpose of the Final Plan is to record the Subdivision and or Land Development according to state law, insure formal approval by the Governing Body before Plans are recorded, and to provide sufficient information so that the Governing Body can assure construction according to the requirements of this ordinance.

**4.3.3 Plan Requirements.**

All Final Plans shall be prepared in conformance with the provisions of Section 5.3 and any other applicable requirements of law.

**4.3.4 Submission.**

Official submission of the Final Plan application to the Municipality shall consist of:

**A. Final Plan.**

Two (2) copies of the Final Plan sheet(s) to be recorded, plus one (1) additional copy if the subject Site is adjacent to the Municipal boundary, one (1) copy if required to be reviewed by the Municipal Engineer, and one (1) additional copy if the subject Site abuts a State road.

**B. Supplemental Data.**

Two (2) copies of all reports, notifications and certificates that are not provided on the Final Plan, including Stormwater management Plans and calculations.

**C. Application Form.**

One (1) application form completely and correctly executed, with all information legible, and bearing all required signatures.

**D. Filing Fee.**

A filing fee (in accordance with the Municipality's current fee schedule) consisting of a check or money order drawn to the Municipal Treasurer.

**E. Application Completeness Review.**

All required Plans and documents and the required filing fee shall accompany a Final Plan application. The Municipality shall have seven (7) days from the date of submission of an application to check the Plans and documents to determine if, on their face, they are in proper form and contain all the information required by this Ordinance.

**F. Lancaster County Planning Commission Review.**

A filing fee, one (1) Application form completely and correctly executed, one (1) copy of all reports, and one (1) full set of plans shall be submitted to the Lancaster County Planning Commission.

**4.3.5 Notification.**

The Municipality shall refer the Application to the Municipal Planning Commission for the first review of the Application, and shall notify the following of the Final Plan Application and provide a copy of the Plan and application as requested:

- A. Municipal Engineer.
- B. Christiana Fire Company
- C. Water / Wastewater Authority
- D. Lancaster Countywide Communications

**4.3.6 Planning Commission Action.**

In general, the Planning Commission will schedule the Final Plan application for discussion at the first Planning Commission meeting that is at least thirty (30) days following the date of filing. In considering the Final Plan application, the Planning Commission shall:

- A. Review and evaluate the application and all reports received from applicable reviewing agencies and Municipal consultants.
- B. Determine whether the Final Plan meets the requirements and objectives of this Ordinance and other applicable ordinances.
- C. If available, review Lancaster County Planning Commission Comments.
- D. Send meeting minutes or a written report recommending approval or disapproval of the Final Plan and the reasons therefore, citing the provisions of the statute or ordinance relied upon, to the following:
  - 1. Landowner or his agent.
  - 2. Applicant.
  - 3. Firm that prepared the Plan.
  - 4. Governing Body.

5. Lancaster County Planning Commission.

**4.3.7 Governing Body Action.**

The Governing Body shall review the Final Plan and render its decision at a Public Meeting following receipt of the Planning Commission's report within ninety (90) days following the first regular meeting of the Planning Commission after the date the application is filed and no later than the statutory review period prescribed in Section 508 of Act 247, as amended. In considering the Final Plan application, the Governing Body shall:

- A. Review and evaluate the application and all reports received from applicable reviewing agencies and consultants for compliance with all Municipal ordinances.
- B. Review comments from the Lancaster County Planning Commission and Municipal Planning Commission
- C. Communicate the decision to the Applicant and other reviewing agencies as required in Section 4.3.8.

**4.3.8 Notification of Governing Body Action.**

**A. Written Notification.**

Within fifteen (15) days of the meeting at which the Final Plan application is acted upon by the Governing Body, written notice of the Governing Body's action shall be sent to the following individuals:

- 1. Landowner or his agent.
- 2. Applicant.
- 3. Firm that prepared the Plan.
- 4. Lancaster County Planning Commission.

**B. Disapproval of Application.**

If the Final Plan application is disapproved, the Governing Body will notify the above individuals, in writing, of the defects in the application and will identify the requirements that have not been met, citing the provisions of the statute or ordinance relied upon, and/or where the Final Plan fails to meet the terms and conditions of the approved Preliminary Plan.

**C. Failure of Governing Body to Act.**

Failure of the Governing Body to render a decision and communicate it to the Applicant within the time and manner required shall be deemed an approval of the application in terms as presented unless the Applicant has agreed in writing to an extension of time or change in prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change will have a like effect.

**4.3.9 Compliance with Governing Body Action.**

If the Governing Body conditions its Final Plan approval upon receipt of additional information, changes and/or notifications, such data shall be submitted and/or alterations noted on two (2) copies of the Plan to be submitted to the Municipality for approval by the Governing Body within fourteen (14) days of the meeting at which the Final Plan application is reviewed by the Governing Body.

Failure to reject the conditions in writing by the Applicant within 30 days after written notification by the filing of an appeal shall constitute an acceptance of the conditions by the Applicant.

#### **4.3.10 Plan Certification.**

After the Final Plan has been approved by the Governing Body and the required changes, if any, are made, the Applicant shall prepare two (2) mylar copies and two (2) paper copies of the approved version of the Final Plan. One (1) paper copy of the Plan shall be kept in the municipal files and one (1) paper copy of the Plan shall be kept in the Lancaster County Planning Commission's files. Both mylar copies of the Plan shall be certified in accordance with the provisions of Section 4.3.13.

#### **4.3.11 Planning Commission and Governing Body Signatures Required.**

Both mylar copies and one (1) paper copy of the approved version of the Final Plan shall be presented to the Planning Commission and/or the Governing Body for signature.

#### **4.3.12 Lancaster County Planning Commission Signature Required.**

After obtaining the required Municipal signatures, both mylar copies and one (1) paper copy of the approved version of the Final Plan shall be presented to the Lancaster County Planning Commission for signature.

#### **4.3.13 Recordation.**

##### **A. Recording of Final Plan.**

Upon approval and certification of a Final Plan, the Applicant shall record the Plan in the office of the Lancaster County Recorder of Deeds. No Final Plan for any Subdivision and/or Land Development may be recorded unless it bears the signature of an authorized representative of the municipality denoting approval of the Plan and the signature of two individuals authorized to sign for the Lancaster County Planning Commission per Section 513 of Act 247, as amended. Unless all site improvements have been constructed and completed in accordance with Section 4.2.10 above, the Final Plan shall not be released for recording until the Applicant has provided an improvement construction guarantee in accordance with Section 6.3 hereof.

##### **B. Time Period of Approval.**

The Developer shall within 90 days of such final approval or 90 days after the date of delivery of an approved Plat signed by the municipality, following completion of conditions imposed for such approval, whichever is later, record such Plat in the office of the recorder of Deeds per Section 513 of Act 247, as amended.

In the event the Plat is not recorded as stated above, the governing bodies' action is null and void unless the Governing Body has granted a waiver by extending the effective time period of the approval.

**C. Recording Number Required.**

A recording number and a complete set of Plans with all signatures, stamps and seals must be provided to the Municipality before any permits are issued.

**D. Reporting to GIS.**

Two (2) compact discs in CAD or GIS format of the approved final plan including parcel boundaries, roads, water, sewer, utility, and building locations shall be provided to Lancaster County and Municipal office at the time of Plan recording.

**4.3.14 Prior Conveyance of Lots Prohibited.**

The Final Plan shall be filed with the Lancaster County Recorder of Deeds before proceeding with the conveyance of Lots. Lots may be placed under agreement of sale prior to Plan recording but not conveyed.

**4.3.15 Dedication by Recording the Final Plan.**

After approval of the Final Plan by the Governing Body, the act of recording the Final Plan shall have the effect of an irrevocable offer to dedicate all Streets and other areas designated for public use, unless reserved by the Landowner as provided in Section 4.3.16. However, the approval of the Governing Body shall not impose any duty upon the Commonwealth, County, or Municipality concerning acceptance, maintenance or Improvement of any such dedicated areas or portion of same until proper authorities of the Commonwealth, County, or Municipality actually accept same by ordinance or resolution, or by entry, use or Improvement.

**4.3.16 Notice of Reservation from Public Dedication.**

The Landowner shall place a notation on the Final Plan when there is no offer of Dedication to the public of certain designated areas, in which event the title to such areas shall remain with the owner, and the Commonwealth, County and local authorities shall assume no right to accept ownership or Right-of-Way.

**4.4 PRELIMINARY/FINAL PLAN.**

**4.4.1 Purpose.**

Historically, Subdivision and Land Development Plans have been submitted and processed in steps, i.e. Preliminary Plan followed by Final Plan. This Municipality believes that certain Plans should be processed on an expedited basis without going through all of the traditional steps. An Applicant who elects to take advantage of the Sketch Plan process, will, at the Applicant's option, have the right to proceed to a Preliminary/Final Plan and forego the Preliminary Plan phase/processing requirements. An Applicant who obtains conditional use approval of its project

shall also have the right, at the Applicant's option, to proceed to a Preliminary/Final Plan and forego the Preliminary Plan phase/processing requirements.

#### **4.4.2 Plan Requirements.**

All Preliminary/Final Plans shall be prepared in conformance with any other applicable requirements of law. Only the Plan sheets relating to the Final Plan are recorded. The entire set of Plans is not recorded. Plans shall only be permitted when all of the following criteria are satisfied:

- A.** Plan must be titled Preliminary/Final.
- B.** Plans must be prepared per Section 5.4.

#### **4.4.3 Submission.**

Official submission of the Preliminary/Final Plan application to the Municipality shall consist of:

**A. Preliminary/Final Plan.**

Two (2) copies of the Preliminary/Final Plan.

**B. Supplemental Data.**

Two (2) copies of all reports, notifications and certifications that are not provided on the Preliminary/Final Plan, including Stormwater management Plans and calculations.

**C. Application Form.**

One (1) application form completely and correctly executed, with all information legible, and bearing all required signatures.

**D. Filing Fee.**

A filing fee (in accordance with the Municipality's current fee schedule) consisting of a check or money order drawn to the Municipal Treasurer.

**E. Application Completeness Review.**

All required Plans and documents and the required filing fee shall accompany a Preliminary/Final Plan application. The Municipality shall have seven (7) days from the date of submission to check the Plans and documents to determine if, on their face, they are in proper form and contain all the information required by this Ordinance.

**F. Lancaster County Planning Commission Review.**

A filing fee, one (1) Application form completely and correctly executed, one (1) copy of all reports, and one (1) full set of plans shall be submitted to the Lancaster County Planning Commission.

#### **4.4.4 Notification.**

The Municipality shall refer the Application to the Municipal Planning Commission for the first review of the Applicant, and shall notify the following of the Preliminary Plan application and provide a copy of the Plan and application as requested:

- A.** Christiana Fire Company
- B.** Municipal Engineer
- C.** Water / Wastewater Authority
- D.** Lancaster Countywide Communications

#### **4.4.5 Planning Commission Action.**

In general, the Planning Commission will schedule the Preliminary/Final Plan application for action at the first Planning Commission meeting that is at least thirty (30) days following the date of filing. In considering the Preliminary/Final Plan application, the Planning Commission shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies and Municipal consultants.
- B.** Determine whether the Preliminary/Final Plan meets the requirements and objectives of this Ordinance and other applicable ordinances and planning documents.
- C.** If available, review Lancaster County Planning Commission comments.
- D.** Send meeting minutes or a written report recommending approval or disapproval of the Combined Preliminary/Final Plan and the reasons therefore; citing the provisions of the statute or ordinance relied upon, to the following:
  - 1.** Landowner or his agent.
  - 2.** Applicant.
  - 3.** Firm that prepared the Plan.
  - 4.** Governing Body.
  - 5.** Lancaster County Planning Commission.

#### **4.4.6 Governing Body Action.**

The Governing Body shall review the Preliminary/Final Plan and render its decision at a Public Meeting following receipt of the Planning Commission's report within ninety (90) days following the first regular meeting of the Planning Commission after the date the application is filed and no later than the statutory review period prescribed in Section 508 of Act 247, as amended. In considering the Preliminary/Final Plan application, the Governing Body shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies for compliance to all Municipal ordinances.
- B.** Review comments from the Lancaster County Planning Commission and Municipal Planning Commission.
- C.** Communicate the decision to the Applicant and other reviewing agencies as required in Section 4.4.7.

#### **4.4.7 Notification of Governing Body Action.**

##### **A. Written Notification.**

Within fifteen (15) days of the meeting at which the Preliminary/Final Plan application is acted upon by the Governing Body, written notice of the Governing Body's action shall be sent to the following:

1. Landowner or his agent.
2. Applicant.
3. Firm that prepared the Plan.
4. Lancaster County Planning Commission.

##### **B. Disapproval of Application.**

If the Preliminary/Final Plan application is disapproved, the Governing Body will notify the above individuals, in writing, of the defects in the application and will identify the requirements that have not been met; citing the provisions of the statute or ordinance relied upon.

##### **C. Failure of Governing Body to Act.**

Failure of the Governing Body to render a decision and communicate it to the Applicant within the time and manner required shall be deemed an approval of the application in terms as presented unless the Applicant has agreed in writing to an extension of time or change in prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change will have a like effect.

#### **4.4.8 Compliance with Governing Body Action.**

If the Governing Body conditions its Preliminary/Final Plan approval upon receipt of additional information, changes and/or notifications, such data shall be submitted and/or alterations noted on two (2) copies of the Plan to be submitted to the Municipality for approval by the Governing Body within fourteen (14) days of the meeting at which the Preliminary/Final Plan application is reviewed by the Governing Body.

Failure to reject the conditions in writing by the Applicant within 30 days after written notification by the filing of an appeal shall constitute an acceptance of the conditions by the Applicant.

#### **4.4.9 Plan Certification.**

After the Preliminary/Final Plan has been approved by the Governing Body and the required changes, if any, are made, the Applicant shall prepare two (2) mylar copies and two (2) paper copies of the approved version of the Preliminary/Final Plan. One (1) paper copy of the Plan shall be kept in the Governing Body's files and one (1) paper copy of the Plan shall be kept in the Lancaster County Planning Commission's files. Both mylar copies of the Plan shall be certified in accordance with the provisions of Section 4.4.12.

#### **4.4.10 Planning Commission and Governing Body Signatures Required.**

Both mylar copies and one (1) paper copy of the approved version of the Preliminary/Final Plan shall be presented to the Planning Commission and, then, to the Governing Body for signature.

#### **4.4.11 Lancaster County Planning Commission Signature Required.**

After obtaining the required Municipal signatures, both mylar copies and one (1) paper copy of the approved version of the Preliminary/Final Plan shall be presented to the Lancaster County Planning Commission for signature.

#### **4.4.12 Recordation.**

##### **A. Recording of Final Plan.**

Upon approval and certification of a Preliminary/Final Plan, the Applicant shall record the Plan in the office of the Lancaster County Recorder of Deeds. No Preliminary/Final Plan for any Subdivision and/or Land Development may be recorded unless it bears the signature of an authorized representative of the municipality denoting approval of the Plan by the Governing Body and the signature of two individuals authorized to sign for the Lancaster County Planning Commission per Section 513 of Act 247, as amended. No Preliminary/Final Plan shall be released for recording until the Applicant has complied with the requirements for posting an improvement construction guarantee in accordance with Section 6.3 hereof.

##### **B. Time Period of Approval.**

The Developer shall within 90 days of such final approval or 90 days after the date of delivery of an approved Plat signed by the Governing Body, following completion of conditions imposed for such approval, whichever is later, record such Plat in the office of the recorder of Deeds per Section 513 of Act 247, as amended.

In the event the Plat is not recorded as stated above, the governing bodies' action is null and void unless the Governing Body has granted a waiver by extending the effective time period of the approval.

##### **C. Recording Number Required.**

A recording number and a complete set of Plans with all signatures, stamps and seals must be provided to the Municipality before any permits are issued.

##### **D. Reporting to GIS.**

Two (2) compact discs in CAD or GIS format of the approved final plan including parcel boundaries, roads, water, sewer, utility, and building locations shall be provided to Lancaster County and Municipal office at the time of Plan recording.

**4.4.13 Prior Conveyance of Lots Prohibited.**

The Preliminary/Final Plan shall be filed with the Lancaster County Recorder of Deeds before proceeding with the conveyance of Lots. Lots may be placed under agreement of sale prior to Plan recording but not conveyed.

**4.4.14 Dedication by Recording the Preliminary/Final Plan.**

After approval of the Preliminary/Final Plan by the Governing Body, the act of recording the Preliminary/Final Plan shall have the effect of an irrevocable offer to dedicate all Streets and other areas designated for public use, unless reserved by the Landowner as provided in Section 4.4.15. However, the approval of the Governing Body shall not impose any duty upon the Commonwealth, County, or Municipality concerning acceptance, maintenance or Improvement of any such dedicated areas or portion of same until proper authorities of the Commonwealth, County, or Municipality actually accept same by ordinance or resolution, or by entry, use or Improvement.

**4.4.15 Notice of Reservation from Public Dedication.**

The Landowner shall place a notation on the Preliminary/Final Plan when there is no offer of Dedication to the public of certain designated areas, in which event the title to such areas shall remain with the owner, and the Commonwealth, County and local authorities shall assume no right to accept ownership or Right-of-Way.

**4.5 CENTERLINE SEPARATION PLAN / LOT CONSOLIDATION PLAN / REVISED SUBDIVISION PLAN / LOT ADD-ON PLAN**

The following Plans shall be processed as a single submission and handled as a Final Plan: Centerline Separation Plans, Lot Consolidation Plans, Lot Add-On Plans, and Revised Subdivision Plans.

**4.5.1 Plan Types.**

**A. Centerline Separation Plan.**

The division of an existing Tract along the centerline of an existing road to create two (2) Lots whose common boundary is said centerline if it is in conformance with the criteria specified in Section 5.4.

**B. Lot Consolidation Plan.**

The consolidation of two or more existing Tracts to create one (1) Lot with revised Lot Lines if it is in conformance with the criteria specified in Section 5.4.

**C. Revised Subdivision Plan.**

Any replatting of recorded Plans due to survey corrections or revision due to survey corrections of approved Final Plans which have not yet been recorded can be made if it is in conformance with the criteria specified in Section 5.4.

**D. Lot Add-On Plan.**

The proposal to alter the location of Lot Lines between existing Lots of separate ownership or under the same ownership with separate Deeds for the sole purpose of increasing Lot size if it is in conformance with the criteria specified in Section 5.4.

**4.5.2 Plan Criteria.**

Plans shall only be permitted when all of the following criteria are satisfied:

- A.** The resultant Lots meet all requirements of the applicable zoning district.
- B.** The resultant Lots shall retain adequate access to accommodate potential development in accordance with the current zoning district regulations.
- C.** Drainage Easements or rights-of way are not altered.
- D.** Access to the affected Parcels is not altered or modified.
- E.** Street alignments are not changed.
- F.** The resultant Lots meet all previously approved sewage module requirements, including where applicable, minimum lot size.

**4.5.3 Plan Requirements.**

Where the above conditions are satisfactorily proven to exist, a Plan shall be prepared in conformance with the provisions of Section 5.4 and any other applicable requirements of law.

**4.5.4 Submission.**

Official submission of the Plan application to the Municipality shall consist of:

- A. Plan.**  
Two (2) copies of the Plan sets.
- B. Application Form.**  
One (1) application form completely and correctly executed, with all information legible, and bearing all required signatures.
- C. Filing Fee.**  
A filing fee (in accordance with the Municipality's current fee schedule) consisting of a check or money order drawn to the Municipal Treasurer.
- D. Written Review from the Municipal Zoning Officer.**  
A written review from the Municipal Zoning Officer shall accompany the Plan application.

#### **4.5.5 Planning Commission Action.**

In general, the Planning Commission will schedule the Plan application for action at the first Planning Commission meeting that is at least thirty (30) days following the date of filing. In considering the Plan application, the Planning Commission shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies (including LCPC action) and consultants. Determine whether the Plan and reports meet the requirements and objectives of this Ordinance and other applicable ordinances.
- B.** Send meeting minutes or a written report recommending approval or disapproval of the Plan and the reasons therefore, citing the provisions of the statute or ordinance relied upon, to the following:
  - 1.** Landowner or his agent.
  - 2.** Applicant.
  - 3.** Firm that prepared the Plan.
  - 4.** Governing Body.
  - 5.** Lancaster County Planning Commission.

#### **4.5.6 Governing Body Action.**

The Governing Body shall review the Plan application and render its decision at a Public Meeting following receipt of the Planning Commission's report within ninety (90) days following the first regular meeting of the Planning Commission after the date the application is filed and no later than the statutory review period prescribed in Section 508 of Act 247, as amended. In considering the Plan application, the Governing Body shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies (including LCPC action). Determine whether the Plan and reports meet the requirements and objectives of this Ordinance and other applicable ordinances.
- B.** Communicate the decision to the Applicant and other reviewing agencies as required in Section 4.5.7.

#### **4.5.7 Notification of Governing Body Action.**

##### **A. Written Notification.**

Within fifteen (15) days of the meeting at which the Final Plan Application is acted upon by the Governing Body, written notice of the Governing Body's action shall be sent to the following:

- 1.** Landowner or his agent.
- 2.** Applicant.
- 3.** Firm that prepared the Plan.
- 4.** Lancaster County Planning Commission.

**B. Disapproval of Application.**

If the Plan application is disapproved, the Governing Body will notify the above individuals, in writing, of the defects in the application and will identify the requirements that have not been met; citing the provisions of the statute or ordinance relied upon.

**C. Failure of Governing Body to Act.**

Failure of the Governing Body to render a decision and communicate it to the Applicant within the time and manner required shall be deemed an approval of the application in terms as presented unless the Applicant has agreed in writing to an extension of time or change in prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change will have a like effect.

**4.5.8 Compliance with Governing Body Action.**

If the Governing Body conditions its Plan approval upon receipt of additional information, changes and/or notifications, such data shall be submitted and/or alterations noted on two (2) copies of the Plan to be submitted to the Municipality for approval by the Governing Body within fourteen (14) days of the meeting at which the Plan application is reviewed by the Governing Body.

Failure to reject the conditions in writing by the Applicant within 30 days after written notification by the filing of an appeal shall constitute an acceptance of the conditions by the Applicant.

**4.5.9 Plan Certification.**

After the Plan has been approved by the Governing Body and the required changes, if any, are made, the Applicant shall prepare two (2) mylar copies and two (2) paper copies of the approved version of the Plan. One (1) paper copy of the Plan shall be kept in the Governing Body's files and one (1) paper copy of the Plan shall be kept in the Lancaster County Planning Commission's files. Both mylar copies of the Plan shall be certified in accordance with the provisions of Section 4.5.12.

**4.5.10 Planning Commission and Governing Body Signatures Required.**

Both mylar copies and one (1) paper copy of the approved version of the Plan shall be presented to the Planning Commission and, then, to the Governing Body for signature.

**4.5.11 Lancaster County Planning Commission Signature Required.**

After obtaining the required Municipal signatures, both mylar copies and one (1) paper copy of the approved version of the Plan shall be presented to the Lancaster County Planning Commission for signature.

**4.5.12 Recordation of Plan and Deed.**

**A. Recording of the Plan.**

Upon approval and certification of a Plan, the Applicant shall record the Plan in the office of the Lancaster County Recorder of Deeds. No Plan may be recorded unless it bears the signature of an authorized representative of the municipality denoting approval of the Plan by the Governing Body and the signature of two individuals authorized to sign for the Lancaster County Planning Commission per Section 513 of the Act 247, as amended. In the event that the Plan requires the installation of Subdivision/Land Development improvements, then the Final Plan shall not be released for recording until the Applicant has complied with an improvements construction guarantee requirements of Section 6.3 hereof.

**B. Deeds.**

A copy of the Deeds to be recorded for the Subject Tract or receiving and conveying Tracts shall be submitted prior to recording of the Plan.

Recordation of such Plan does not serve to join the receiving Tract with the acreage to be conveyed. To reflect the descriptions as provided on the recorded Plan, Deeds must be recorded for the receiving and conveying Tracts.

**C. Time Period of Approval.**

The Developer shall within 90 days of such final approval or 90 days after the date of delivery of an approved Plat signed by the Governing Body, following completion of conditions imposed for such approval, whichever is later, record such Plat in the office of the recorder of Deeds per Section 513 of the Act 247, as amended.

In the event the Plat is not recorded as stated above, the governing body's action is null and void unless the Governing Body granted a waiver by extending the effective time period of the approval.

**D. Recording Number Required.**

A recording number and a complete set of Plans with all signatures, stamps and seals must be provided to the Municipality before any permits are issued.

**E. Reporting to GIS.**

Two (2) compact discs in CAD or GIS format of the approved final plan including parcel boundaries, roads, water, sewer, utility, and building locations shall be provided to Lancaster County and Municipal office at the time of Plan recording.

**4.5.13 Future Development.**

Any development of the Lots created through this process must follow standard Plan processing procedures as specified in this Article.

## **4.6 MINOR URBAN PLAN**

### **4.6.1 Plan Purpose.**

- A.** Subdivision of one Lot into two Lots for single family residential development in any zoning district or,
- B.** Construction of a second residential dwelling unit on a Subject Tract when not utilizing an existing structure.

### **4.6.2 Plan Criteria.**

Plans shall only be permitted when all of the following criteria are satisfied:

- A.** The proposed Lots are designed in accordance with the provisions of the applicable zoning district.
- B.** All Lots shall front on a public or Private Street and shall provide for vehicular access which does not interfere with the normal movement of traffic.
- C.** No new point discharge of Runoff will result from the proposal.

### **4.6.3 Plan Requirements.**

- A.** The Applicant shall meet the requirements of the Christiana Borough Stormwater Management Ordinance.
- B.** Where the above conditions are satisfactorily proven to exist, a Plan shall be prepared in conformance with the provisions of Section 5.5 and any other applicable requirements of law.

### **4.6.4 Submission.**

Official submission of the Plan application to the Municipality shall consist of:

- A. Plan.**  
Two (2) copies of the Plan sets.
- B. Application Form.**  
One (1) application form completely and correctly executed, with all information legible, and bearing all required signatures.
- C. Filing Fee.**  
A filing fee (in accordance with the Municipality's current fee schedule) consisting of a check or money order drawn to the Municipal Treasurer.
- D. Written Review from the Municipal Zoning Officer.**

A written review from the Municipal Zoning Officer shall accompany the Plan application.

#### **4.6.5 Planning Commission Action.**

In general, the Planning Commission will schedule the Plan application for action at the first Planning Commission meeting that is at least thirty (30) days following the date of filing. In considering the Plan application, the Planning Commission shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies and consultants. Determine whether the Plan and reports meet the requirements and objectives of this Ordinance and other applicable ordinances.
- B.** Send meeting minutes or a written report recommending approval or disapproval of the Plan and the reasons therefore, citing the provisions of the statute or ordinance relied upon, to the following:
  - 1.** Landowner or his agent.
  - 2.** Applicant.
  - 3.** Firm that prepared the Plan.
  - 4.** Governing Body.
  - 5.** Lancaster County Planning Commission.

#### **4.6.6 Governing Body Action.**

The Governing Body shall review the Plan application and render its decision at a Public Meeting following receipt of the Planning Commission's report within ninety (90) days following the first regular meeting of the Planning Commission after the date the application is filed and no later than the statutory review period prescribed in Section 508 of Act 247, as amended. In considering the Plan application, the Governing Body shall:

- A.** Review and evaluate the application and all reports received from applicable reviewing agencies. Determine whether the Plan and reports meet the requirements and objectives of this Ordinance and other applicable ordinances.
- B.** Communicate the decision to the Applicant and other reviewing agencies as required in Section 4.6.7.

#### **4.6.7 Notification of Governing Body Action.**

##### **A. Written Notification.**

Within fifteen (15) days of the meeting at which the Final Plan Application is acted upon by the Governing Body, written notice of the Governing Body's action shall be sent to the following:

- 1.** Landowner or his agent.
- 2.** Applicant.
- 3.** Firm that prepared the Plan.
- 4.** Lancaster County Planning Commission.

**B. Disapproval of Application.**

If the Plan application is disapproved, the Governing Body will notify the above individuals, in writing, of the defects in the application and will identify the requirements that have not been met; citing the provisions of the statute or ordinance relied upon.

**C. Failure of Governing Body to Act.**

Failure of the Governing Body to render a decision and communicate it to the Applicant within the time and manner required shall be deemed an approval of the application in terms as presented unless the Applicant has agreed in writing to an extension of time or change in prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change will have a like effect.

**4.6.8 Compliance with Governing Body Action.**

If the Governing Body conditions its Plan approval upon receipt of additional information, changes and/or notifications, such data shall be submitted and/or alterations noted on two (2) copies of the Plan to be submitted to the Municipality for approval by the Governing Body within fourteen (14) days of the meeting at which the Plan application is reviewed by the Governing Body.

Failure to reject the conditions in writing by the Applicant within 30 days after written notification shall constitute an acceptance of the conditions by the Applicant.

**4.6.9 Plan Certification.**

After the Plan has been approved by the Governing Body and the required changes, if any, are made, the Applicant shall prepare two (2) mylar copies and two (2) paper copies of the approved version of the Plan. One (1) paper copy of the Plan shall be kept in the Governing Body's files and one (1) paper copy of the Plan shall be kept in the Lancaster County Planning Commission's files. Both mylar copies of the Plan shall be certified in accordance with the provisions of Section 4.6.12.

**4.6.10 Planning Commission and Governing Body Signatures Required.**

Both mylar copies and one (1) paper copy of the approved version of the Plan shall be presented to the Planning Commission and, then, to the Governing Body for signature.

**4.6.11 Lancaster County Planning Commission Signature Required.**

After obtaining the required Municipal signatures, both mylar copies and one (1) paper copy of the approved version of the Plan shall be presented to the Lancaster County Planning Commission for signature.

**4.6.12 Recordation of Plan and Deed.**

**A. Recording of the Plan.**

Upon approval and certification of a Plan, the Applicant shall record the Plan in the office of the Lancaster County Recorder of Deeds. No Plan may be recorded unless it bears the signature of an authorized representative of the Governing Body denoting approval of the Plan by the Governing Body and the signature of two individuals authorized to sign for the Lancaster County Planning Commission per Section 513 of the Act 247, as amended. In the event that the Plan requires the installation of Subdivision/Land Development improvements, then the Final Plan shall not be released for recording until the Applicant has complied with the improvements construction guarantee requirements of Section 6.3 hereof.

**B. Deeds.**

A copy of the Deeds to be recorded for the Subject Tract or receiving and conveying Tracts shall be submitted prior to recording of the Plan.

Recordation of such Plan does not serve to join the receiving Tract with the acreage to be conveyed. To reflect the descriptions as provided on the recorded Plan, Deeds must be recorded for the receiving and conveying Tracts.

**C. Time Period of Approval.**

The Developer shall within 90 days of such final approval or 90 days after the date of delivery of an approved Plat signed by the Governing Body, following completion of conditions imposed for such approval, whichever is later, record such Plat in the office of the recorder of Deeds per Section 513 of the Act 247, as amended.

In the event the Plat is not recorded as stated above, the governing body's action is null and void unless the Governing Body granted a waiver by extending the effective time period of the approval.

**D. Recording Number Required.**

A recording number and a complete set of Plans with all signatures, stamps and seals must be provided to the Municipality before any permits are issued.

**E. Reporting to GIS.**

compact discs in CAD or GIS format of the approved final plan including parcel boundaries, roads, water, sewer, utility, and building locations shall be provided to Lancaster County and Municipal office at the time of Plan recording.

## **ARTICLE 5**

### **INFORMATION TO BE INCLUDED ON OR WITH PLANS**

#### **5.0 GENERAL**

All Plans shall be prepared by an Engineer, a Surveyor or a Landscape Architect. The Plans shall show, be accompanied by, and be prepared in accordance, with this Article and shall provide sufficient design information to demonstrate conformance with the requirements of Article 8, Article 9, and Article 10.

#### **5.1 SKETCH PLAN**

##### **5.1.1 Drafting Standards.**

###### **A. Scale.**

The Plan shall be clearly and legibly drawn at a standard scale of 20 to 200 feet to the inch.

###### **B. Sheets.**

If the Plan is prepared in two (2) or more drawing sheets, a key map showing the location of the sheets and a match line shall be placed on each sheet. If more than one (1) sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the Plan (e.g., Sheet 1 of 5).

###### **C. Presentation.**

Plans shall be presented in a clear, legible, coherent, and organized manner.

##### **5.1.2 Plan Information.**

###### **A. Location and Identification.**

1. The name and address of the owner(s) of the Tract (or an authorized agent), the Developer/subdivider and the firm that prepared the Plan.
2. The file or project number assigned by the firm that prepared the Plan, the Plan date, and the date(s) of all Plan revisions.
3. A north arrow and a graphic scale.
4. A location map, drawn to a scale of a minimum of one inch equals two thousand feet (1"=2,000') relating the Subdivision to at least two (2) intersections of road centerlines. The approximate distance to the intersection of the centerlines of the nearest improved Street intersection shall be identified.
5. If the Tract of land is located within 200 feet of a Municipal or zoning district boundary line(s), the location of such boundary shall be shown and labeled accordingly.

6. The source of title (including the Deed, Lot, and Plan of record number) to the Subject Tract.
7. The (tax) Parcel identification number(s) for the Subject Tract.
8. If applicable, a Plan note indicating the subject property is enrolled in the Clean and Green preferential assessment program.
9. In the case of a Plan for which the Subject Tract has an Environmental Covenant, the plan shall include a plan note indicating the recording information of the Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act no. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA).

**B. Existing Features.**

1. Existing contours. Lancaster County Geographic Information System (GIS) Topography may be accepted.
2. The following items when located within the Subject Tract:
  - (a) The name and approximate location and approximate dimensions of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets, public utilities, Stormwater Management Facilities, telecommunications, electric, gas, and oil transmission lines. The approximate location of railroads, Buildings, environmental and topographic features, including, but not limited to, flood plains, Wetlands, quarry Sites, woodlands, habitats for threatened and endangered species, solid waste disposal areas, Historic Features, cemetery or burial sites, archeological sites, or areas with highly erosive soils.
3. When available, the following items when located within two hundred (200) feet of the Subject Tract as inventoried in the Lancaster County GIS:
  - (a) The name and approximate location and approximate dimensions of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets, public utilities, Stormwater Management Facilities, telecommunications, electric, gas, and oil transmission lines. The approximate location of railroads, Buildings, Floodplains, and Wetlands.
4. In the case of a Plan for which the Subject Tract has an Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA), the plan shall include the boundary limits of any contamination remaining on site. The application shall include a copy the Environmental Covenant agreement and any required engineering and institutional controls.

**C. Additional Information.**

1. The total approximate acreage of the entire existing Tract.
2. The zoning district and Lot size and/or density requirements of the applicable zoning regulations.
3. The approximate layout of Lots, with approximate dimensions.
4. The total number of Lots, units of occupancy, density and proposed land use (if multiple land uses are proposed, the location of each land use shall be indicated).
5. The approximate layout of Streets, including Cartway and Right-of-Way widths (Appendix G for reference).
6. The approximate location and configuration of proposed Buildings, parking compounds, Streets, Access Drives, Driveways, and general Stormwater facility locations.
7. Building Setback Lines.
8. A note on the Plan indicating the types of sewer or water facilities to be provided.
9. Identification of any Modifications intended to be requested.
10. A copy of any applicable zoning decisions.

**5.2 PRELIMINARY PLAN**

**5.2.1 Drafting Standards.**

**A. Scale.**

The Plan shall be clearly and legibly drawn at a standard scale of 20 to 100 feet to the inch.

**B. Dimensions and Bearings.**

The Subject Tract boundary dimensions shall be in feet and decimals; bearings shall be in degrees, minutes and seconds. The description shall read in a clockwise direction.

**C. Survey Closure.**

The survey shall not have an error of closure greater than one (1) foot in ten thousand (10,000) feet.

**D. Sheets.**

If the Plan is prepared in two (2) or more sheets, a key map showing the location of the Phases shall be placed on each sheet. If more than one (1) sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the Plan (e.g., Sheet 1 of 5).

**E. Presentation.**

Plans shall be presented in a clear, legible, coherent and organized manner.

**5.2.2 Plan Information.**

**A. Location and Identification.**

1. The proposed project name.
2. The name and address of the owner(s) of the Tract (or an authorized agent), the Developer/subdivider and the firm that prepared the Plan.
3. The file or project number assigned by the firm that prepared the Plan, the Plan date, and the date(s) of all Plan revisions.
4. A north arrow, a graphic scale and a written scale.
5. A location map, drawn to a scale of a minimum of one inch equals two thousand feet (1"=2,000') relating the Subdivision to at least two (2) intersections of road centerlines. The approximate distance to the intersection of the centerlines of the nearest improved Street intersection shall be identified.
6. If the Tract of land is located within 200 feet of a Municipal or zoning district boundary line(s), the location of such boundary shall be shown and labeled accordingly.
7. The entire existing Tract boundary with bearings and distances. (If a Landowner is to retain a single Lot with a Lot Area in excess of ten (10) acres, the boundary of that Lot may be identified as a Deed plotting and may be drawn at any legible scale; if the remaining Lot has a Lot Area of ten (10) or less acres, it must be described to the accuracy requirements of this Ordinance.)
8. The source of title (including the Deed, Lot and Plan of record number) to the Subject Tract.
9. The (tax) Parcel identification number(s) for the Subject Tract.
10. In the case of a Plan for which the subject property is enrolled in the Clean and Green preferential assessment program, the inclusion of the following Plan note:

“NOTICE: According to County records, the subject property may be subject to the Pennsylvania Farmland and Forest Land Assessment Act of 1974, (a.k.a. the Clean and Green Act), Act 319 of 1974, P.L. 973; 72 P.S. 5490.1, as amended,

and as further amended by Act 156 of 1998, as amended. These Acts provide for preferential property tax assessment and treatment. It is the property owner's responsibility to be aware of the laws, rules and regulations applicable to his or her property, including the provision that: (a) preferential property tax assessment and treatment will remain in effect continuously until the land owner changes the agricultural use from the approved category, or if a transfer, split-off or separation of the subject land occurs; (b) if a change in use occurs, or if a conveyance, transfer, separation, split-off or Subdivision of the subject land occurs, the property owner will be responsible for notifying the County Assessor within 30-days; (c ) the payment of roll-back tax, plus interest, for the period of enrollment, or a period not to exceed 7-years, whichever is less, may be required; (d) if the property owner fails to notify the County Assessor within the 30-day period, prior to the land conveyance, the property owner may be subject to a \$100.00 civil penalty; (e) if the property owner fails to pay the roll-back tax, a Municipal lien could be placed on the property under existing delinquent tax law.”

11. In the case of a Plan for which the Subject Tract has an Environmental Covenant, the plan shall include a plan note indicating the recording information of the Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act no. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA).

**B. Existing Features.**

1. The names of all immediately adjacent Landowners and the names and Plan book record numbers of all previously recorded Plans for adjacent projects.
2. The location of the benchmark and a notation indicating the datum used.
3. Existing contours at a minimum vertical interval of two (2) feet for land with slope of fifteen percent (15%) or less and at a minimum vertical interval of five (5) feet for more steeply sloping land. Contours plotted from the United States Geodetic Survey will not be accepted, and Lancaster County Geographic Information System (GIS) Topography will not be accepted in areas where Improvements are proposed but should be used beginning 50 feet outside the Improvement boundary.
4. The following items when located within the Subject Tract:
  - (a) The location, name and dimensions of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets.
  - (b) The location and size of the following features and related Rights-of-Way or Easements: Buildings, public utilities, on-lot utilities, on-lot water supplies, on-lot sewage disposal systems and related recharge areas, and Stormwater Management Facilities.

- (c) The location of existing Rights-of-Way for telecommunications, electric, gas and oil transmission lines, and railroads.
- (d) The size, capacity and condition of the existing Stormwater management system and any other facility that may be used to convey storm flows within and from the Subject Tract.
- (e) The Preliminary Plan shall indicate any proposed disturbance, encroachment or alteration to such features including; flood plains, Wetlands, quarry sites, woodlands, Significant Trees, habitats for threatened and endangered species, solid waste disposal areas, superfund contaminations, Historic Features, cemetery or burial sites, archeological sites, and areas with highly erosive soils.
- (f) In the case of a Plan for which the Subject Tract has an Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA), the plan shall include if applicable the specific boundary limits of any contamination remaining on site. The application shall include a copy of the Environmental Covenant agreement and any required engineering and institutional controls.

5. The following items when located within two hundred (200) feet of the Subject Tract:

- (a) The location and name of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets.
- (b) As available, the location of Buildings, public utilities, on-lot utilities, on-lot water supplies, on-lot sewage disposal systems and related recharge areas, and Stormwater Management Facilities including the location and size of related Easements.
- (c) The location of existing Rights-of-Way for telecommunications, electric, gas and oil transmission lines, and railroads.
- (d) As available, the size, capacity, and condition of the existing Stormwater management system and any other facility that may be used to convey storm flows from the Subject Tract.
- (e) The location of woodlands, habitats for endangered and threatened species, and highly erosive soils.

**C. Additional Information.**

- 1. The total acreage of the entire existing Tract.
- 2. Identification and disposition of existing Buildings and Historic Features.

3. The location and configuration of proposed Buildings, parking compounds, Streets, Access Drives, Driveways, Landscaping and all other significant facilities (Appendix G).
4. Building Setback Lines, with distances from the Street centerline or Street Right-of-Way line, whichever requirement is applicable under the zoning regulations.
5. Existing and proposed Easements.
6. A typical Street cross-section for each proposed Street and typical cross-section for any existing Street that will be improved as part of the application. Each cross-section shall include the entire Right-of-Way width.
7. A note on the Plan indicating the types of sewer or water facilities to be provided.
8. Identification of any Modifications granted by the Governing Body, if applicable.
9. The zoning district and Lot size and/or density requirements of the applicable zoning regulations.
10. The Street centerline profile for each proposed Street shown on the Preliminary Plan.
11. The location and material of existing Lot Line Markers along the perimeter of the entire existing Tract.
12. The layout of Lots, with approximate dimensions.
13. The total number of Lots, units of occupancy, Net Density, Gross Density, and proposed land use (if multiple land uses are proposed, the location of each land use shall be indicated).
14. The layout of Streets, including Cartway and Right-of-Way widths, and the proposed Street names.
15. Stormwater management Plans and data designed in accordance with the municipal Stormwater ordinance.
16. In the case of a Plan which requires access to a highway under the jurisdiction of PennDOT (Pennsylvania Department of Transportation), the inclusion of the following Plan note:  
  

“A Highway Occupancy Permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the "State Highway Law," before Driveway access to a State highway is permitted. Access to the State highway shall only be as authorized by a Highway Occupancy Permit, and the Governing Body's approval of this Plan in no way implies that such permit can be acquired.”
17. In the case for the phased installation of Improvements:

- (a) A schedule shall be filed delineating all proposed sections as well as deadlines within which applications for Final Plan approval of each section are intended to be filed.
- (b) Each section in any 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 unless the Governing Body specifically approves a lesser percentage for one or more of the sections.
- (c) Sections of the development shall be sequenced in such a manner that each section (together with the previously approved and completed section(s)) shall be physically built to be in full compliance with the ordinance and not be dependent on the construction completed at future Phases. Including, but not limited to Stormwater Management Facilities, Streets, and utilities.
- (d) Except for staged construction of Streets intended to be extended in subsequent Phases, all Improvements for each section shall be installed in their permanent configuration. The final wearing course shall be carried in an Improvement guarantee until it is finally installed and inspected.
- (e) It is not necessary for construction in one section to be completed for the next section to be submitted.
- (f) All subsequent phased Final Plans shall be submitted within five years of the date of Governing Body action on the Preliminary Plan unless otherwise agreed upon by the Applicant and Municipality. The Developer shall take the responsibility to provide the Governing Body with reasonable notice of delays in the filing of Final Plans.
- (g) The Applicant shall annually update the Governing Body regarding the schedule on or before the anniversary date of the Preliminary Plan approval.

**D. Certificates, Notifications and Reports.**

1. Certificate, signature and seal of the Surveyor to the effect that the survey is correct, and certificate, signature and seal of the Surveyor, Engineer or Landscape Architect that prepared the Plan that all other information shown on the Plan is accurate.
2. Provide a note to be placed on the Plan indicating that all zoning approvals, including zoning variances, special exceptions or conditional uses, have been obtained, if applicable, and the conditions imposed.
3. Any Improvement that encroaches upon an electric transmission line, telecommunications line, gas pipeline, petroleum or petroleum products transmission line, fiber optics, public sewer, public water, etc. located within the Tract, the application shall be accompanied by a letter from the owner or lease of

such Right-of-Way stating any conditions on the use of the land and the minimum Building setback and/or Right-of-Way lines.

4. Where the Subdivision or Land Development proposal will generate fifty (50) or more additional Trips to or from the Site during the development's anticipated Peak Hour, or the Governing Body indicates a need for one, a traffic impact study as required by Article 7.1 shall be submitted with the Preliminary Plan.
5. Where the land included in the subject application has an agricultural, woodland, or other natural resource Easement located within the Tract, the application shall be accompanied by a letter from the party holding the Easement stating any conditions on the use of the land.
6. Where areas are reserved for Future Access Strip usage, provide a Plan note indicating that Future Access Strip reservations are intended to be used in the future.

### **5.2.3 Construction from Preliminary Plan.**

- A. An appropriately executed Memorandum of Understanding (Appendix D).
- B. Posting of all appropriately executed Financial Securities.
- C. Written notices of approval by outside agencies, if applicable:
  1. Notification from the Pennsylvania Department of Transportation (PennDOT) that approval of the Highway Occupancy Permit (HOP) has been granted.
  2. Notification from LCCD (Lancaster County Conservation District) that an acceptable Erosion and Sedimentation Control Plan/NPDES Plan has been submitted and approved by that agency:
  3. Notification from DEP (Department of Environmental Protection) that either approval of the Sewer Facility Plan Revision (or Plan Revision Module for Land Development) or Supplement has been granted or that such approval is not required.

## **5.3 FINAL PLAN and PRELIMINARY/FINAL PLAN**

### **5.3.1 Drafting Standards.**

The same drafting standards shall be required for a Final Plan as specified for a Preliminary Plan in Section 5.2.1.

### **5.3.2 Plan Information.**

#### **A. Location and Identification.**

The same location and identification standards shall be required for a Final Plan as specified for a Preliminary Plan in Section 5.2.2.A.

**B. Existing Features.**

1. The names of all immediately adjacent Landowners and the names and Plan book record numbers of all previously recorded Plans for adjacent projects.
2. The location of the benchmark and a notation indicating the datum used. Existing contours at a minimum vertical interval of two (2) feet for land with slope of fifteen percent (15%) or less and at a minimum vertical interval of five (5) feet for more steeply sloping land. Contours plotted from the United States Geodetic Survey will not be accepted, and Lancaster County Geographic Information System (GIS) Topography will not be accepted in areas where Improvements are proposed but should be used beginning 50 feet outside the Improvement boundary.
3. The following items when located within the Subject Tract:
  - (a) The location, name and dimensions of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets.
  - (b) The location and size of the following features and related Rights-of-Way or Easements: Buildings, public utilities, on-lot utilities, on-lot water supplies, on-lot sewage disposal systems and related recharge areas, and Stormwater Management Facilities. This information may be provided on separate sheets and need not be recorded with the Final Plan.
  - (c) The location of existing Rights-of-Way for telecommunications, electric, gas and oil transmission lines, and railroads.
  - (d) The size, capacity and condition of the existing Storm Water management system and any other facility that may be used to convey storm flows from the Subject Tract.
  - (e) The Final Plan shall indicate any proposed disturbance, encroachment or alteration to such features including; flood plains, Wetlands, quarry sites, woodlands, Significant Trees, habitats for threatened and endangered species, solid waste disposal areas, superfund contaminations, Historic Features, cemetery or burial sites, archeological sites, and areas with highly erosive soils.
  - (f) In the case of a Plan for which the Subject Tract has an Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA), the plan shall include if applicable the specific boundary limits of any contamination remaining on site. The application shall include a copy of the Environmental Covenant agreement and any required engineering and institutional controls.
4. The following items when located within two hundred (200) feet of the Subject Tract:

- (a) The location and name of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets.
- (b) As available, the location of Buildings, public utilities, on-lot utilities, on-lot water supplies, on-lot sewage disposal systems and related recharge areas, and Stormwater Management Facilities including the location and size of related Easements.
- (c) The location of existing Rights-of-Way for telecommunications, electric, gas and oil transmission lines, and railroads.
- (d) As available, the size, capacity, and condition of the existing Stormwater management system and any other facility that may be used to convey storm flows from the Subject Tract.
- (e) As available, the location of woodlands, habitats for threatened and endangered species, and highly erosive soils.

**C. Additional Information.**

- 1. The total acreage of the entire existing Tract.
- 2. Identification and disposition of existing Buildings and Historic Features.
- 3. The location and configuration of proposed Buildings, parking compounds, Streets, Access Drives, Driveways, Landscaping, and all other significant facilities (Appendix G for reference).
- 4. Building Setback Lines, with distances from the Street centerline or Street Right-of-Way line, whichever requirement is applicable under the zoning regulations.
- 5. Existing and proposed Easements.
- 6. A typical Street cross-section for each proposed Street and a typical cross-section for any existing Street that will be improved as part of the application. Each cross-section shall include the entire Right-of-Way width.
- 7. A note on the Plan indicating the types of sewer or water facilities to be provided.
- 8. Identification of any Modifications granted by the Governing Body, if applicable.
- 9. The zoning district, applicable zoning regulations, Net and Gross Density, the total number of Lots, units of occupancy, and proposed land use (if multiple land uses are proposed, the location of each land use shall be indicated).
- 10. A complete description of the centerline and the Right-of-Way line for all new Streets. This description shall include distances and bearings with curve segments comprised of radius, tangent, arc, and chord.

- 11.** The location and material of all proposed and existing permanent Monuments and Lot Line Markers, including a note that all proposed Monuments and Lot Line Markers are set or indicating when and by whom they will be set.
- 12.** Lot Lines, with accurate bearings and distances, and Lot Areas for all Parcels. Curve segments shall be comprised of arc, chord, bearing and distance. Along existing Street Rights-of-Way, the description may utilize the existing Deed lines or road centerlines; along all proposed Street Rights-of-Way, the description shall be prepared to the Right-of-Way lines.
- 13.** The final vertical and horizontal alignment for each proposed Street and Access Drive. All profiles shall show at least the existing (natural) profile along the centerline, proposed grade at the centerline, and the length of all proposed vertical curves. This information may be provided on separate sheets and is not subject to recording with the Final Plan.
- 14.** A grading Plan, which shall include finished land contours and grades, directions of water movement, type of soils, location of water bars or silt fences and ground Floor Elevations. This information may be provided on separate sheets and is not subject to recording with the Final Plan.
- 15.** Identification of any lands to be dedicated or reserved for public, semi-public or community use.
- 16.** The final Street names as approved by Lancaster County-Wide Communications.
- 17.** In the case for the phased installation of Improvements:
  - (a)** A schedule shall be filed delineating all proposed sections as well as dates within which applications for Final Plan approval of each section are intended to be filed.
  - (b)** Each section in any Subdivision or Land Development, except for the last section, shall contain a minimum of twenty-five percent (25%) of the total number of units unless the Governing Body specifically approves a lesser percentage for one or more of the sections.
  - (c)** Sections of the development shall be sequenced in such a manner that each section (together with the previously approved and completed section(s)) shall be physically built to be in full compliance with the ordinance and not be dependent on the construction completed at future Phases. For example, but not limited to, Stormwater Management Facilities.
  - (d)** Except for staged construction of Streets intended to be extended in subsequent Phases, all Improvements for each section shall be installed to the extent where they provide their intended services. The final wearing course shall be carried in an Improvement guarantee until it is finally installed and inspected.

- (e) It is not necessary for construction in one section to be completed before the next section to be submitted or constructed.
- (f) In the case of a preliminary plat calling for the installation of improvements beyond the five-year period, a schedule shall be filed by the landowner with the preliminary plat delineating all proposed sections as well as deadlines within which applications 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 plat approval until final plat 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.

**D. Certificates, Notifications and Reports.**

1. Certificate, signature and seal of the Surveyor to the effect that the survey is correct, and certificate, signature and seal of the Surveyor, Engineer or Landscape Architect that prepared the Plan that all other information shown on the Plan is accurate.
2. A statement, duly acknowledged before an officer authorized to take acknowledgment of Deeds and signed by the Landowner, to the effect that the Subdivision or Land Development shown on the Plan is the act and the Deed of the owner, that all those signing are all the owners of the property shown on the survey and Plan, and that they desire the same to be recorded as such. This statement shall be signed and dated on or after the last change or revision to said Plan.
3. Certificate for approval by the Governing Body.
4. Certificate of notification to be signed by the Lancaster County Planning Commission.
5. Certificate to accommodate the Lancaster County Recorder of Deeds information.
6. A note to be placed on the Plan indicating that all zoning approvals, including zoning variances, special exceptions or conditional uses, have been obtained, if applicable, and the conditions imposed.
7. Written notice from Lancaster County-Wide Communications stating that the proposed Street names are acceptable.
8. Certificate of Dedication of Streets and other public property, if applicable.
9. A note to be placed on the Plan indicating any area that is not to be offered for Dedication, if applicable.
10. In the case of a Plan which requires access to a highway under the jurisdiction of the Pennsylvania Department of Transportation, the inclusion of the following Plan note:

“A Highway Occupancy Permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the "State Highway Law," before Driveway access to a State highway is permitted. Access to the State highway shall only be as authorized by a Highway Occupancy Permit, and the Governing Body's approval of this Plan in no way implies that such permit can be acquired.”

11. Any Improvement that encroaches upon an electric transmission line, telecommunications line, gas pipeline, petroleum or petroleum products transmission line, fiber optics, public sewer, public water, etc. located within the Tract, the application shall be accompanied by a letter from the owner or lessee of such Right-of-Way stating any conditions on the use of the land, the minimum building setback and/or Right-of-Way lines, and the centerline of such line.
12. Where the land included in the subject application has agricultural, woodland, or other natural resource Easement located within the Tract, the application shall be accompanied by a copy of the agreement from the party holding the Easement stating any conditions on the use of the land.
13. Where areas are reserved for Future Access Strip usage, provide a Plan note indicating that Future Access Strip reservations are intended to be used in the future.
14. When connection to an existing water and/or sanitary sewer system is proposed, written notification from the authority providing sanitary sewer and/or water service indicating that sufficient capacity to service the proposed development has been reserved shall be provided (in accordance with current authority standards).

### **5.3.3 As Condition of Recording a Final Plan:**

- A. An appropriately executed Memorandum of Understanding (Appendix D and D-1).
- B. Posting of all appropriately executed Financial Securities (Section 6.3).
- C. Written notices of approval by outside agencies, if applicable:
  1. When applicable, notification from the Department of Environmental Protection that either approval of the Sewer Facility Plan Revision (or Plan Revision Module for Land Development) or Supplement has been granted or that such approval is not required.
  2. When required, notification from the Lancaster County Conservation District that an acceptable Erosion and Sedimentation Control Plan/NPDES Plan has been submitted and approved by that agency:
  3. When applicable, notification from the Pennsylvania Department of Transportation (PennDOT) that approval of the Highway Occupancy Permit (HOP) has been granted.

- D. A controlling agreement when an application proposes to establish a Street which is not offered for Dedication to the public use.

## **5.4 CENTERLINE SEPARATION PLANS & LOT ADD-ON PLANS & LOT CONSOLIDATION PLANS & REVISED SUBDIVISION PLANS**

### **5.4.1 General.**

Plans shall be prepared by a registered Surveyor and shall be subject to the requirements of this Section.

### **5.4.2 Drafting Standards.**

#### **A. Scale and Sheet Size.**

The Plan shall be clearly and legibly drawn at a standard scale of 20 to 100 feet to the inch.

#### **B. Dimensions.**

Dimensions shall be in degrees, minutes and seconds with an error of closure no greater than one (1) foot in ten thousand (10,000) feet.

### **5.4.3 Plan Information.**

The following information shall be provided on the sheet to be recorded:

#### **A. Location and Identification.**

1. The project name.
2. The names and address of the owner(s) of the Tracts and all adjacent Landowners affected by the proposed conveyance.
3. The name and address of the firm that prepared the Plan, the file or project number assigned by the firm, the Plan date, and the date(s) of all Plan revisions.
4. A north arrow, a graphic scale and a written scale.
5. A location map, at a scale not less than one inch equals two thousand feet (1"=2,000'), with sufficient information to locate the specific property involved. All existing roads in the vicinity of the Subject Tract shall be identified.
6. If the Tract of land is located in the vicinity of a Municipal or zoning district boundary line(s), the location of such boundary shall be shown and labeled.
7. The source of title (including the Deed, Lot and Plan of record number) to both the receiving and conveying Tracts.

8. In the case of a Plan for which the subject property is enrolled in the Clean and Green preferential assessment program, the inclusion of the following Plan note:

“NOTICE: According to County records, the subject property may be subject to the Pennsylvania Farmland and Forest Land Assessment Act of 1974, (a.k.a. the Clean and Green Act), Act 319 of 1974, P.L. 973; 72 P.S. 5490.1, as amended, and as further amended by Act 156 of 1998, as amended. These Acts provide for preferential property tax assessment and treatment. It is the property owner’s responsibility to be aware of the laws, rules and regulations applicable to his or her property, including the provision that: (a) preferential property tax assessment and treatment will remain in effect continuously until the land owner changes the agricultural use from the approved category, or if a transfer, split-off or separation of the subject land occurs; (b) if a change in use occurs, or if a conveyance, transfer, separation, split-off or Subdivision of the subject land occurs, the property owner will be responsible for notifying the County Assessor within 30-days; (c ) the payment of roll-back tax, plus interest, for the period of enrollment, or a period not to exceed 7-years, whichever is less, may be required; (d) if the property owner fails to notify the County Assessor within the 30-day period, prior to the land conveyance, the property owner may be subject to a \$100.00 civil penalty; (e) if the property owner fails to pay the roll-back tax, a Municipal lien could be placed on the property under existing delinquent tax law.”

9. Tie Bars indicating Parcels to be joined-in-common.

10. In the case of a Plan for which the Subject Tract has an Environmental Covenant, the plan shall include a plan note indicating the recording information of the Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act no. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA).

**B. Existing Features.**

1. The names of all immediately adjacent Landowners and the names and Plan book record numbers of all previously recorded Plans for projects adjacent to either the receiving or conveying Tract.
2. The location, name and dimensions of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets on or adjacent to both the receiving and conveying Tracts.
3. The location of the following features and any related Rights-of-Way on both the receiving and conveying Tracts: Buildings, utilities, on-lot water supplies, on-lot sewage disposal systems and related recharge areas, Stormwater Management Facilities, telecommunications, electric, gas and oil transmission lines, and railroads.
4. In the case of a Plan for which the Subject Tract has an Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA), the plan shall include if applicable the specific boundary limits of any contamination remaining on site.

The application shall include a copy of the Environmental Covenant agreement and any required engineering and institutional controls.

**C. Additional Information.**

1. The total acreage, total number of Lots, density of development, present zoning classification and minimum Lot Area requirements.
2. An accurate description of the Parcel to be conveyed. If the remainder of the conveying Tract has a Lot Area of ten (10) acres or less, it must also be described to the accuracy requirements of this Ordinance. If the remaining acreage is in excess of ten (10) acres, its boundary and the boundary of the receiving Tract shall be described by Deed plottings drawn at a legible scale.
3. Location and material of all permanent Monuments and Lot Line Markers, including a note indicating when they will be set.
4. Identification of any Modifications granted by the Governing Body, if applicable.
5. The location of sight triangle Easements and safe stopping distance at all Street and Driveway intersections in accordance with the latest edition of the Pennsylvania Department of Transportation Design Manual.

**D. Certificates and Notifications.**

1. A statement, duly acknowledged before an officer authorized to take acknowledgment of Deeds and signed by the owner of the receiving Tract, to the effect that the conveyance as shown on the Plan is in accordance with the intent of the Landowner, that all those signing are all the owners of the property shown on the survey and Plan, and that they desire the same to be recorded as such. This statement shall be signed and dated on or after the last change or revision to said Plan.
2. A statement, duly acknowledged before an officer authorized to take acknowledgment of Deeds and signed by the owner of the conveying Tract, to the effect that the conveyance as shown on the Plan is in accordance with the intent of the Landowner, that all those signing are all of the owners of the property shown on the Plan, and that they desire the same to be recorded as such. This statement shall be signed and dated on or after the last change or revision to said Plan.
3. Certificate, signature and seal of the Surveyor to the effect that the survey is correct and that all Plan information is accurate.
4. Certificate for approval by the Governing Body.
5. Certificate of notification to be signed by the Lancaster County Planning Commission.
6. Certificate to accommodate the Lancaster County Recorder of Deeds information.

## **5.5 MINOR PLAN**

### **5.5.1 Drafting Standards.**

The same drafting standards shall be required for a Minor Plan as specified for a Preliminary Plan in Section 5.2.1.

### **5.5.2 Plan Information.**

#### **A. Location and Identification.**

The same location and identification standards shall be required for a Minor Plan as specified for a Preliminary Plan in Section 5.2.2.A.

#### **B. Existing Features.**

1. A Deed plotting of the Subject Tract at a scale not less than 1" = 400 feet which accurately identifies the configuration and acreage, as well as the location of all Structures, Floodplain, Drainage Easements, points of ingress and egress, Easements, and sewer and water facilities.
2. The names of all immediately adjacent Landowners and the names and Plan book record numbers of all previously recorded Plans for adjacent projects.
3. The location of the benchmark and a notation indicating the datum used. Existing contours at a minimum vertical interval of two (2) feet for land with slope of fifteen percent (15%) or less and at a minimum vertical interval of five (5) feet for more steeply sloping land. Contours plotted from the United States Geodetic Survey will not be accepted, and Lancaster County Geographic Information System (GIS) Topography will not be accepted in areas where Improvements are proposed but should be used beginning 50 feet outside the Improvement boundary.
4. The following items when located within the Subject Tract:
  - (a) The location, name and dimensions of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets.
  - (b) The location and size of the following features and related Rights-of-Way or Easements: Buildings, public utilities, on-lot utilities, on-lot water supplies, on-lot sewage disposal systems and related recharge areas, and Stormwater Management Facilities. This information may be provided on separate sheets and need not be recorded with the Final Plan.
  - (c) The location of existing Rights-of-Way for telecommunications, electric, gas and oil transmission lines, and railroads.
  - (d) The size, capacity and condition of the existing Stormwater management system and any other facility that may be used to convey storm flows from the Subject Tract.

- (e) The Minor Plan shall indicate any proposed disturbance, encroachment or alteration to such features including; flood plains, Wetlands, quarry sites, woodlands, Significant Trees, habitats for threatened and endangered species, solid waste disposal areas, superfund contaminations, Historic Features, cemetery or burial sites, archeological sites, and areas with highly erosive soils.
  - (f) In the case of a Plan for which the Subject Tract has an Environmental Covenant executed pursuant to the Pennsylvania Uniform Environmental Covenants Act, Act No. 68 of 2007, 27 Pa. C.S. §§ 6501-6517 (UECA), the plan shall include, if applicable, the specific boundary limits of any contamination remaining on site. The application shall include a copy of the Environmental Covenant agreement and any required engineering and institutional controls.
5. The following items when located within two hundred (200) feet of the Subject Tract:
- (a) The location and name of existing Rights-of-Way or Easements relating to Streets, Cartways, Access Drives, Driveways or Service Streets.
  - (b) As available, the location of Buildings, public utilities, on-lot utilities, on-lot water supplies, on-lot sewage disposal systems and related recharge areas, and Stormwater Management Facilities including the location and size of related Easements.
  - (c) The location of existing Rights-of-Way for telecommunications, electric, gas and oil transmission lines, and railroads.
  - (d) As available, the size, capacity, and condition of the existing Stormwater management system and any other facility that may be used to convey storm flows from the Subject Tract.
  - (e) As available, the location of woodlands, habitats for threatened and endangered species, and highly erosive soils.

**C. Additional Information.**

- 1. The total acreage of the entire existing Tract.
- 2. Identification and disposition of existing Buildings and Historic Features.
- 3. The location and configuration of proposed Buildings, parking compounds, Streets, Access Drives, Driveways, Landscaping, and all other significant facilities.
- 4. Building Setback Lines, with distances from the Street centerline or Street Right-of-Way line, whichever requirement is applicable under the zoning regulations.
- 5. Existing and proposed Easements.

6. A note on the Plan indicating the types of sewer or water facilities to be provided.
7. Identification of any Modifications granted by the Governing Body, if applicable.
8. The zoning district, applicable zoning regulations, Net and Gross Density, the total number of Lots, units of occupancy, and proposed land use (if multiple land uses are proposed, the location of each land use shall be indicated).
9. The location and material of all proposed and existing permanent Monuments and Lot Line Markers, including a note that all proposed Monuments and Lot Line Markers are set or indicating when and by whom they will be set.
10. Lot Lines, with accurate bearings and distances, and Lot Areas for all Parcels. Curve segments shall be comprised of arc, chord, bearing and distance. Along existing Street Rights-of-Way, the description may utilize the existing Deed lines or road centerlines; along all proposed Street Rights-of-Way, the description shall be prepared to the Right-of-Way lines.
11. On and within 200 feet of the Lots proposed for development, identify the location of all proposed Structures, existing Floodplain, Drainage Easements, points of ingress and egress, Easements, and sewer and water facilities.
12. The capacity and condition of all Stormwater Management Facilities located on, and within, two hundred (200') feet of the Lots proposed to be developed must be identified. Any adverse impact to such facilities resulting from increased flows from the Site must be addressed in conformance with the provisions of Municipal Stormwater management regulations.
13. Identification of any lands to be dedicated or reserved for public, semi-public or community use.

**D. Certificates, Notifications and Reports.**

1. Certificate, signature and seal of the Surveyor to the effect that the survey is correct, and certificate, signature and seal of the Surveyor, Engineer or Landscape Architect that prepared the Plan that all other information shown on the Plan is accurate.
2. A statement, duly acknowledged before an officer authorized to take acknowledgment of Deeds and signed by the Landowner, to the effect that the Subdivision or Land Development shown on the Plan is the act and the Deed of the owner, that all those signing are all the owners of the property shown on the survey and Plan, and that they desire the same to be recorded as such. This statement shall be signed and dated on or after the last change or revision to said Plan.
3. Certificate for approval by the Governing Body.
4. Certificate of notification to be signed by the Lancaster County Planning Commission.

5. Certificate to accommodate the Lancaster County Recorder of Deeds information.
6. A note to be placed on the Plan indicating that all zoning approvals, including zoning variances, special exceptions or conditional uses, have been obtained, if applicable, and the conditions imposed.
7. Written notice from Lancaster County-Wide Communications stating that the proposed Street names are acceptable (See Appendix E).
8. Certificate of Dedication of Streets and other public property, if applicable.
9. A note to be placed on the Plan indicating any area that is not to be offered for Dedication, if applicable.
10. In the case of a Plan which requires access to a highway under the jurisdiction of the Pennsylvania Department of Transportation, the inclusion of the following Plan note:  
  

“A Highway Occupancy Permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the "State Highway Law," before Driveway access to a State highway is permitted. Access to the State highway shall only be as authorized by a Highway Occupancy Permit, and the Governing Body's approval of this Plan in no way implies that such permit can be acquired.”
11. Any Improvement that encroach upon an electric transmission line, telecommunications line, gas pipeline, petroleum or petroleum products transmission line, fiber optics, public sewer, public water, etc. located within the Tract, the application shall be accompanied by a letter from the owner or lessee of such Right-of-Way stating any conditions on the use of the land, the minimum Building setback and/or Right-of-Way lines, and the centerline of such line.
12. Where the land included in the subject application has agricultural woodland or other natural resource Easement located within the Tract, the application shall be accompanied by a copy of the agreement from the party holding the Easement stating any conditions on the use of the land.
13. Where areas are reserved for Future Access Strip usage, provide a Plan note indicating that Future Access Strip reservations are intended to be used in the future.
14. When connection to an existing water and/or sanitary sewer system is proposed, written notification from the authority providing sanitary sewer and/or water service indicating that sufficient capacity to service the proposed development has been reserved shall be provided (in accordance with current authority standards).

### **5.5.3 Condition of Recording a Minor Subdivision Plan:**

- A.** An appropriately executed Memorandum of Understanding (Appendix D) and, if applicable, financial security (Appendix D-1) in accordance with Section 6.3.
- B.** Written notices of approval by outside agencies, if applicable:
  - 1.** When applicable, notification from the Department of Environmental Protection that either approval of the Sewer Facility Plan Revision (or Plan Revision Module for Land Development) or Supplement has been granted or that such approval is not required.
  - 2.** When required, notification from the Lancaster County Conservation District that an acceptable Erosion and Sedimentation Control Plan/NPDES Plan has been submitted and approved by that agency:

**ARTICLE 6**  
**ASSURANCE FOR COMPLETION**  
**AND MAINTENANCE OF IMPROVEMENTS**

**6.1 IMPROVEMENTS REQUIRED**

Equivalent MPC, 18<sup>th</sup> addition, Sections 509(a) and 509(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 sub-division 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 to pursuant to Act 247 Section 509(i), 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, Stormwater detention and/or Retention Basins and other related Stormwater Management 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.”

If water mains 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.

**6.2 PLAN IMPROVEMENTS**

**6.2.1 Recorded Plan Approval.**

Equivalent MPC, 18<sup>th</sup> addition, Sections 509(b)

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 Plat contingent upon the Developer obtaining a satisfactory financial security. The final Plat 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.

**6.2.2 Review Fees.**

Equivalent MPC, 18<sup>th</sup> addition, Sections 503(1)

Review fees may include reasonable and necessary charges by the Municipality's professional consultants for review and report thereon to the Municipality. Such review fees shall be based upon a schedule established by ordinance or resolution. Such review fees shall be reasonable and in accordance with the ordinary and customary charges for similar service in the community, but in no event shall the fees exceed the rate or cost charged by the professional consultant for comparable services to the Municipality for services which are not reimbursed or otherwise imposed on Applicants. Fees charged to the Municipality relating to any appeal of a decision on an application shall not be considered review fees and may not be charged to an Applicant.

**6.2.3 Protection of Final Phases.**

Equivalent MPC, 18<sup>th</sup> addition, Section 509(i)

In the case where development is projected over a period of years, the Governing Body or the planning agency may authorize submission of final Plats by section or stages of development subject to such requirements or guarantees as to Improvements in future sections or stages of development as it finds essential for the protection of any finally approved section of the development.

**6.3 IMPROVEMENT CONSTRUCTION GUARANTEE**

**6.3.1 Form of Financial Security.**

Equivalent MPC, 18<sup>th</sup> addition, Sections 509(c), 509(d), and 509(e)

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.

**6.3.2 Amount of Guarantee.**

**A. Amount of Financial Security Required.**

Equivalent MPC, 18<sup>th</sup> addition, Section 509(f)

The amount of financial security to be posted for the completion of the required Improvements shall be equal to 110% of the cost of completion estimated as of 90 days following the date scheduled for completion by the Developer. Annually, the 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 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.

**B. Estimate of the Cost of Completion.**

Equivalent MPC, 18<sup>th</sup> addition, Section 509(g)

The amount of financial security required shall be based upon an estimate of the cost of completion of the required Improvements, submitted by an Applicant or Developer and prepared by a professional Engineer licensed as such in this Commonwealth 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. If the Applicant or Developer 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 this Commonwealth and chosen mutually by the Municipality and the Applicant or Developer. The estimate certified by the third Engineer shall be presumed fair and reasonable and shall be the final estimate. In the event that a third Engineer is so chosen, fees for the services of said Engineer shall be paid equally by the Municipality and the Applicant or Developer.

**C. Additional Time for Completion.**

Equivalent MPC, 18<sup>th</sup> addition, Section 509(h)

If the party posting the financial security requires more than one 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 10% for each one-year period beyond the first anniversary date from posting of financial security or to an amount not exceeding 110% of the cost of completing the required Improvements as reestablished on or about the expiration of the preceding one-year period by using the above bidding procedure.

**6.4 INSPECTION OF IMPROVEMENTS**

The Developer shall contact the inspecting Engineer to coordinate the construction observation schedule, notification procedures, and other related Improvement guarantee administration topics and to determine the need for an on-Site, pre-construction meeting. The Developer shall contact the inspecting Engineer prior to the construction of Site Improvements.

**6.4.1. Inspection of Improvements.**

Equivalent MPC, 18<sup>th</sup> addition, Sections 510(a) and 510(g)(1)

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 non approval or rejection.

The Governing Body shall submit to the Applicant an itemized bill showing the work performed in connection with the inspection of Improvements performed, identifying the person performing the services and the time and date spent for each task. In the event the applicant disputes the amount of any such expense in connection with the inspection of Improvements, the applicant shall, no later than 30 days after the date of transmittal of a bill for inspection services, notify the Municipality and the Municipality's professional consultant that such inspection expenses are disputed as unreasonable or unnecessary and shall explain the basis of their objections to the fees charged, in which case the Municipality shall not delay or disapprove a request for release of financial security, a subdivision or land development application or any approval or permit related to development due to the applicant's dispute of inspection expenses. Failure of the applicant to dispute a bill within 30 days shall be a waiver of the applicant's right to arbitration of that bill under this section.

**6.4.2. Acceptance of Improvements.**

Equivalent MPC, 18<sup>th</sup> addition, Sections 510(b) and 510(c)

The Municipal Governing Body shall notify the Developer, within 15 days of receipt of the Engineer's report, in writing by certified or registered mail of the action of said Municipal Governing Body with relation thereto.

If the Municipal 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 Developer shall be released from all liability, pursuant to its performance guaranty bond or other security agreement.

**6.4.3. Municipality Does Not Accept Improvements.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(d)

If any portion of the said Improvements shall not be approved or shall be rejected by the Municipal Governing Body, the Developer shall proceed to complete the same and, upon completion, the same procedure of notification, as outlined herein, shall be followed.

**6.4.4. Duplication of Inspections.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(g)

The Municipality may prescribe that the Applicant shall reimburse the Municipality for the reasonable and necessary expense incurred in connection with the inspection of Improvements. The Applicant shall not be required to reimburse the Governing Body for any inspection which is duplicative of inspections conducted by other governmental agencies or public utilities. The burden of proving that any inspection is duplicative shall be upon the objecting Applicant. Such reimbursement shall be based upon a schedule established by ordinance or resolution. Such expense shall be reasonable and in accordance with the ordinary and customary fees charged by the Municipality's professional consultant for work performed for similar services in the community, but in no event shall the fees exceed the rate or cost charged by the professional

consultant to the Municipality for comparable services when fees are not reimbursed or otherwise imposed on Applicants.

#### **6.4.5 Inspection Expenses Disputed.**

**A. Disputed Engineer Expenses.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(1)

In the event the Applicant disputes the amount of any such expense in connection with the inspection of Improvements, the Applicant shall, no later than 30 days after the date of transmittal of a bill for inspection services, notify the Municipality and the Municipality's professional consultant that such inspection expenses are disputed as unreasonable or unnecessary and shall explain the basis of their objections to the fees charged, in which case the Municipality shall not delay or disapprove a request for release of financial security, a Subdivision or Land Development application or any approval or permit related to development due to the Applicant's dispute of inspection expenses. Failure of the Applicant to dispute a bill within 30 days shall be a waiver of the Applicant's right to arbitration of that bill under this section.

**B. Appointment of Third-Party Professional Engineer by Mutual Agreement.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(g)(2)

If, the professional consultant and the Applicant cannot agree on the amount of expenses which are reasonable and necessary, then the Applicant shall have the right, within 45 days of the transmittal of the final bill or supplement to the final bill to the Applicant, to request the appointment of another professional consultant to serve as an arbitrator. The Applicant and professional consultant whose fees are being challenged shall by mutual agreement, appoint another professional consultant to review any bills the Applicant has disputed and which remain unresolved and make a determination as to the amount thereof which is reasonable and necessary. The arbitrator shall be of the same profession as the professional consultant whose fees are being challenged.

**C. Determination of Third-Party Professional Engineer.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(g)(3)

The arbitrator so appointed shall hear such evidence and review such documentation as the arbitrator in his or her sole opinion deems necessary and shall render a decision no later than 50 days after the date of appointment. Based on the decision of the arbitrator, the Applicant or the professional consultant whose fees were challenged shall be required to pay any amounts necessary to implement the decision within 60 days. In the event the Municipality has paid the professional consultant an amount in excess of the amount determined to be reasonable and necessary, the professional consultant shall within 60 days reimburse the excess payment

**D. Appointment of Third-Party Professional Engineer by Court.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(g)(4)

In the event that the Municipality's professional consultant and Applicant cannot agree upon the arbitrator to be appointed within 20 days of the request for appointment of an arbitrator, 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 arbitrator, who, in that case, shall be neither the Municipality's professional consultant nor any professional consultant who has been retained by, or performed services for, the Municipality or the Applicant within the preceding five years.

**E. Payment of Fee for Third-Party Professional Engineer.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(g)(5)

The fee of the arbitrator shall be paid by the Applicant if the review fee charged is sustained by the arbitrator, otherwise it shall be divided equally between the parties. If the disputed fees are found to be excessive by more than \$5,000, the arbitrator shall have the discretion to assess the arbitration fee in whole or in part against either the Applicant or the professional consultant. The Governing Body and the consultant whose fees are the subject of the dispute shall be parties to the proceeding.

**6.5 RELEASE OF FUNDS**

**6.5.1 Partial Release of Funds.**

Equivalent MPC, 18<sup>th</sup> addition, Section 509(j)

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, 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 45 days 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 Plat. 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 45-day period, the Governing Body shall be deemed to have approved the release of funds as requested. The 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.

**6.5.2. Final Release.**

Equivalent MPC, 18<sup>th</sup> addition, Section 510(g)(1.1)

Subsequent to the final release of financial security for completion of Improvements for a Subdivision or Land Development, or any phase thereof, the professional consultant shall submit to the Governing Body a bill for inspection services, specifically designated as a final bill. The final bill shall include inspection fees incurred through the release of financial security.

**6.5.3 Remedies to Effect Completion of Improvements.**

Equivalent MPC, 18<sup>th</sup> addition, Section 511)

In the event that any Improvements which may be required have not been installed as provided in the Subdivision and Land Development ordinance or in accord with the approved final Plat the Governing Body of the Municipality is hereby granted the power to enforce any corporate bond, or other security by appropriate legal and equitable remedies. If proceeds of such bond, or other

security are insufficient to pay the cost of installing or making repairs or corrections to all the Improvements covered by said security, the Governing Body of the Municipality may, at its option, install part of such Improvements in all or part of the Subdivision or Land Development and may institute appropriate legal or equitable action to recover the moneys necessary to complete the remainder of the Improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the Developer, or both, shall be used solely for the installation of the Improvements covered by such security, and not for any other Municipal purpose.

#### **6.6 IMPROVEMENT GUARANTEE**

Equivalent MPC, 18<sup>th</sup> addition, Section 509(m)

If financial security has been provided in lieu of the completion of Improvements required as a condition for the final approval of a Plat 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 Plat upon actual completion of the Improvements depicted upon the approved final Plat. Moreover, if said financial security has been provided, occupancy permits for any Building or Buildings to be erected shall not be withheld following: the Improvement of the Streets providing access to and from existing public roads to such Building or Buildings to a mud-free or otherwise permanently passable condition, as well as the completion of all other Improvements as depicted upon the approved Plat, 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. Any ordinance or statute inconsistent herewith is hereby expressly repealed.

#### **6.7 MAINTENANCE GUARANTEE**

Equivalent MPC, 18<sup>th</sup> addition, Section 509(k)

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 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 Plat for a term not to exceed 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 15% of the actual cost of installation of said Improvements.

**ARTICLE 7**  
**SUPPLEMENTAL REQUIREMENTS, TESTS, & STUDIES**

**7.1 TRAFFIC IMPACT STUDY**

**7.1.1 Study Required.**

**A. Abbreviated Traffic Impact Study.**

Whenever a proposed project will generate fifty to ninety nine (50-99) new vehicle Trips in the peak direction (inbound or outbound) during the Site peak traffic hour, the Applicant shall perform an abbreviated traffic impact study. Based on this study, certain Improvements may be identified as necessary to provide safe and efficient access to the development. The abbreviated traffic impact study shall include:

1. A Capacity analysis report prepared under the supervision of a qualified and experienced transportation Engineer.
2. The study area for the Capacity analysis report shall only include all proposed intersections.

**B. Comprehensive Traffic Impact Study.**

Whenever a proposed project will generate one hundred (100) or more new vehicle Trips in the peak direction (inbound or outbound) during the Site peak traffic hour, the Applicant shall perform a comprehensive traffic impact study. Based on this study, certain Improvements may be identified as necessary to provide safe and efficient access to the development.

Transportation demand management measures such as staggered start and end work times, telecommuting, utilization of transit, greenway or trail linkages, park and ride Lots, etc. may be used to reduce Trip generation for the proposed development. If such measures will reduce the new vehicle Trips in the peak direction during the peak traffic hour to less than one hundred (100), than an abbreviated traffic impact study may be performed in lieu of a comprehensive study. When such Trip reduction measures are used to justify performance of an abbreviated study as permitted by this section, a Developer and successors shall be bound by a recorded agreement to implement such measures. The terms and form of agreement shall be as mutually agreed upon by the Municipality and the Developers.

**C. In addition, a comprehensive traffic impact study shall be prepared at the discretion of the Municipality whenever either of the following conditions exists within the impact study area:**

1. Current traffic problems exist in the local area, such as a high crash location, confusing intersection, or a congested intersection that directly affects access to the development.
2. The ability of the existing roadway system to handle increased traffic or the feasibility of improving the roadway system to handle increased traffic is limited.

## **7.1.2 Traffic Impact Study Requirements**

### **A. 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. The intersections shall be mutually agreed upon by the Municipality and the transportation Engineer preparing the study. The Lancaster County Planning Commission shall be called upon to resolve any disputes between the Municipality and the transportation Engineer.

### **B. Preparation by Transportation Engineer Required.**

Traffic impact studies shall be prepared by or under the supervision of qualified and experienced transportation Engineers with specific training in traffic and transportation engineering and at least two (2) years of experience related to preparing traffic studies for existing or proposed developments.

### **C. Horizon Year.**

The traffic forecasts shall be prepared for the anticipated opening year of the development, assuming full build out and occupancy. This year shall be referred to as the "Horizon Year."

### **D. Non-Site Traffic Estimates.**

Estimates of Non-Site Traffic shall be made, and will consist of through motorized and non-motorized traffic and motorized and non-motorized 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.

### **E. Trip Generation Rates Required.**

The traffic impact study shall include a table showing the land use categories and quantities, 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 rates 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.

### **F. Consideration of Pass-By Trips.**

If pass-by Trips or Shared Trips are a major consideration for the land use in question, studies should be referenced and interviews should be conducted and documented at similar land uses.

**G. Rate Sums.**

Any significant difference between the sums of single-use rates and proposed mixed-use estimates must be justified and explained in the study.

**H. 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.

**I. 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 maximum convenient travel time to the Site, or delineating area boundaries based on locations of competing developments.

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.

**J. Estimates of Trip Distribution Required.**

Trip distribution can be estimated using any one of the following three methods:

1. Analogy.
2. Trip distribution model.
3. Surrogate data.

Whichever method is used, Trip distribution must be estimated and analyzed for the Horizon Year. A mixed-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 distributions.

**K. 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 (1) Access Driveway, logical routing and possible 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 procedure should be used:

1. Determine the percentage of pass-by Trips in the total Trips generated.
2. Estimate a Trip distribution for the pass-by Trips.
3. Perform two separate Trip assignments, based on the new and pass-by Trip distributions.
4. 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.

**L. Total Traffic Impacts.**

Motorized and non-motorized traffic estimates for any Site with current traffic activity must reflect not only new traffic associated with the Site's Redevelopment, 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.

**M. Capacity Analysis.**

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 as determined by the Municipality. These may include such segments as weaving sections, ramps, internal Site roadways, parking facility access points, and reservoirs for vehicles queuing on- and Off-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 operational analyses in the Highway Capacity Manual should be used for analyzing existing conditions, traffic impacts, access requirements, or other future conditions for which traffic, geometric, and control parameters can be established.

**N. Required Levels-of-Service.**

The recommendations of the traffic impact study shall provide safe and efficient movement of traffic to and from and within and past the proposed development, while minimizing the impact to non-Site Trips. The current levels-of-service must be maintained if they are Levels C or D, not allowed to deteriorate to worse than Level C if they are currently Levels A or B, and improved to Level D if they are Levels E or F.

**O. Documentation Required.**

A traffic impact study report shall be prepared to document the purpose, procedures, findings, conclusions, and recommendations of the study.

1. The documentation for a traffic impact study shall include, at a minimum:
  - (a) Study purpose and objectives.
  - (b) Description of the Site and study area.
  - (c) Existing roadway conditions in the area of the development.
  - (d) Recorded or approved development(s) within the traffic impact study area.
  - (e) Trip generation, Trip distribution, and modal split.
  - (f) Projected future motorized and non-motorized traffic volumes.
  - (g) An assessment of the change in roadway operating conditions resulting from the development traffic.
  - (h) Recommendations for Site access and transportation Improvements needed to maintain and/or improve motorized and non-motorized traffic flow to, from, within, and past the Site at an acceptable and safe Level-of-Service.
  - (i) Transit location, availability of bike routes, connection to a park and/or trail system.
2. The analysis shall be presented in a straight forward and logical sequence. It shall lead the reader step-by-step through the various stages of the process and resulting conclusions and recommendations.
3. 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. The recommendations shall also identify who will be responsible for making the Improvements.

4. Data shall be presented in tables, graphs, maps, and diagrams wherever possible for clarity and ease of review.
5. To facilitate examination by the Municipality, an executive summary of one or two pages shall be provided, concisely summarizing the purpose, conclusions, and recommendations.
6. The study 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.

### **7.1.3 Improvements.**

#### **A. Responsibility for Improvements.**

The Applicant shall be responsible for the Improvements required to provide safe and convenient ingress and egress to the development Site.

#### **B. Coordination with Municipal Requirements.**

The Applicant shall be responsible for other Improvements related to the results of the traffic impact study as may be agreed to with the Municipality or which are required by the Municipal impact fee ordinance to be installed or paid for by the Applicant consistent with provisions of the Pennsylvania Municipalities Planning Code.

## **7.2 HISTORIC AND CULTURAL RESOURCES**

### **7.2.1 Archaeological Investigations**

Specific state and federal guidelines and procedures for review procedures as well as pertinent legislation may be obtained by contacting the Bureau for Historic Preservation (BHP) and Pennsylvania Historical and Museum Commission (PHMC). Specific state and federal guidelines and procedures are outlined in detail in [A Summary of Major Relevant Federal and State Legislation and Regulations](#) Appendix A, and [Procedures for Compliance with Federal and Commonwealth Preservation Law](#) Appendix H. PHMC administers both the state and federal regulations.

Projects affecting or potentially affecting historical and archaeological properties are subject to review by the Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation under the provisions of both Section 106 of the National Historic Preservation Act of 1966 and Section 10 of the 1978 Pennsylvania Historic Preservation Act. No project shall be developed on a Site identified by the PHMC as containing or likely to contain features of archaeological or historic significance until procedures for compliance with Federal and State regulations have been realized and the review process has been completed.

All Subdivisions and/or Land Development Plans which meet the above mentioned requirements shall provide a letter of determination and/or report from PHMC, BHP addressing the following:

#### **A. BHP Letter of Determination.**

The BHP letter of determination.

**B. Additional Required Action.**

The BHP letter may recommend one or more of the following activities:

1. Phase I Survey
2. Phase II Survey
3. Phase III (Mitigation)

**7.2.2 Preservation of Historic Features.**

- A.** Subdivisions and Land Developments shall be designed to preserve, adaptively reuse, or otherwise provide for the Historic Features of Christiana Borough.
1. Historic Features that are retained within the project area shall be situated on a Lot of sufficient size to retain its integrity of setting.
  2. After the Lot Area of the Historic Feature is determined, the remaining number of buildable Lots that would be allowed on the Subject Tract may each be reduced in area, if necessary, to accommodate the same number of buildable Lots on the Subject Tract, the maximum reduction shall not exceed 10% of the minimum lot size in the underlying zone.
- B.** Modifications or exterior alterations to Historic Features or Sites, or new construction in the immediate vicinity of Historic Features shall be consistent with “The Secretary of the Interior's Standards for Rehabilitation of Historic Properties”, as published by the National Park Service. New construction should be visually compatible with the character of Historic Features in the vicinity in terms or size, scale, mass, shape, proportion, materials and textures, rhythm and patterns, orientation and location, cornice and floor to floor heights, arrangement and size of windows on the facade, etc. See Appendix F.
- C.** A landscape Plan shall be provided that provides Buffering, using vegetative materials, walls or fencing as appropriate, between new construction and Historic Features to help mitigate adverse visual or auditory impacts and to help the Historic Feature retain its integrity of setting.

**7.2.3 Demolition Restricted.**

- A.** Prior to the demolition or removal from its original foundation the application shall be reviewed by the Christiana Borough Historic Commission and approved by the Governing Body. The Applicant must provide the Christiana Borough Historic Commission and the Governing Body with an evaluation of the historic and/or architectural significance of the Building. In addition, the Applicant must provide credible evidence in response to each of the following specific criteria:
1. That is not feasible to continue the current use.

2. That other uses permitted within the underlying zoning district, either as permitted uses, special exception uses, or conditional uses, have been denied or are not feasible due to constraints on the Building or Structure.
  3. That adaptive use opportunities do not exist due to constraints related to the Building, Structure, or property.
  4. That the Building, its permitted uses, and adaptive use potential does not provide a reasonable rate of return, based on a reasonable initial investment.
  5. That the Applicant has not contributed to the existing conditions, either through neglect or prior renovation, conversion, alteration, or similar physical action.
  6. That the demolition, relocation, or removal will not adversely affect the character of the neighborhood or community.
  7. That a proposed new Building(s), Structure(s), or use of the property will not adversely affect the character of the neighborhood or community.
  8. That the Building is structurally unsound.
  9. The denial of demolition would result in unreasonable economic hardship to the owner. The required forms to prove economic hardship are available at the Borough Office. (See Appendix I)
  10. Sale of the building or structure is impossible or impractical.
  11. Denial of demolition will deprive the property as a whole of all beneficial use. As a part of the review process, the Zoning Officer, Christiana Borough Historical Commission, Christiana Borough Planning Commission, or Borough Council, may request additional information be provided.
- B.** If the application for a permit for demolition, relocation, or removal is approved, said permit shall not be issued by the Municipality until the following additional requirements have been satisfied.
1. The recording of an approved Subdivision or Land Development Plan for the Lot where the demolition, removal, or relocation is proposed;
  2. Issuance of any necessary zoning approvals; and
  3. Approval of the Land Development Plan by the Governing Body.
- C.** Applicants whose applications for demolition, removal, or relocation are approved may be subject to conditions that include but may not be limited to the following. (The Applicant will be informed at the conclusion of the review process regarding any conditions that must be satisfied. Refusal to comply with the conditions will be deemed a violation.)
1. A complete set of exterior and interior photographs of the Building or proposed for all demolition, removal, or relocation which includes all exterior Elevations, interior spaces, and all significant architectural features.

2. A historic Structure report which may include any or all of the following;
  - (a) Physical Description, including a Site Plan with north arrow, showing all Buildings on the Parcel, nearby roads, landmarks, Streams, etc., a written description of the general area, a written description of the Lot or Parcel with relationships of Buildings one to another, and a written description of each Building with exterior and interior pictures.
  - (b) Historic Narrative telling the story of the property, including a bibliography.
  - (c) Chain of Title, including documentation of the source of the information such as the Deed or will book, volume, page number, etc.
  - (d) Photo Documentation, including general photos of property showing relationships of Buildings and detailed photos (interior and exterior) of all Buildings.
  - (e) Measured Drawings, labeled and cross-referenced to photographs of the same detail.
  - (f) Appendices, including copies of Deeds and wills, maps, and other supporting materials
3. A Plan for the salvage of architectural features and/or Building materials.

#### **7.2.4 Retention of Local Names.**

Applicants are encouraged to perpetuate historic names or geographic references that are traditionally associated with the area, in which a project is located, rather than proposing project names that are not consistent with Christiana Borough or Lancaster County traditions or culture.

### **7.3 PARKS AND OPEN SPACE**

#### **7.3.1 Dedication.**

All Plans for residential Subdivision of land or residential Land Developments shall provide for the Dedication of land for park and open space uses, and/or, upon agreement by the Applicant, the construction of recreation facilities, the payment of fees in lieu thereof, the private reservation of land, or any combination thereof. All Dedications of land for park and open space purposes shall be consistent with standards contained within the officially adopted park and recreation Plan or parks and recreation chapter of the Municipal Comprehensive Plan, if such chapter meets the intent and criteria of the Pennsylvania Municipalities Planning Code, and is officially adopted by the Governing Body.

### **7.3.2 General Requirements.**

When the Municipality has an officially adopted park and recreation Plan or qualifying Municipal Comprehensive Plan, Applicants shall designate areas of residential Subdivisions or residential Land Developments for parks, playgrounds, or other public open space and recreational uses in accordance with the provisions of such Plans. The Applicant shall make an irrevocable offer of Dedication for such land to the Municipality, as required by the Governing Body. Title to such land shall be good and marketable, free of liens or other defects, and acceptable to the Municipal Attorney. The Governing Body may, upon agreement of the Applicant, authorize the transfer of the land to a homeowner's association or to a non-profit corporation whose purpose is the conservation or preservation of land.

### **7.3.3 Amount of Land to be Dedicated.**

- A.** The amount of park and open space land to be dedicated shall be equal to, and in conformance with, standards adopted by the Governing Body as expressed in the officially adopted park and recreation Plan or qualifying Municipal Comprehensive Plan.
- B.** If the applicable Plan specifically designates a future park site within the acreage of the Tract proposed for development, all Subdivision Plans shall be designed in conformance with such designation in that all land required to be dedicated shall correspond to the location of the future park site.
  - 1.** Should the amount of land required to be dedicated exceeds the acreage of the future park site as designated within the applicable Plan, the development proposal shall provide for such additional area to be located in a manner that best serves future residents of the proposed development.
  - 2.** Should the amount of land required to be dedicated falls short of the acreage of the future park site as designated within the applicable Plan or if the proposed development involves only a portion of the development rights afforded to the Tract, the Applicant shall reserve that portion of the future park site which will best serve the immediate development. In addition, a Sketch Plan shall be prepared to depict how full build-out of the Site will be accomplished in a manner that respects the location of the future park site and ensures its accessibility to all future dwellings on the Tract. As an alternative to such piecemeal Dedication, the Municipality may opt to purchase that portion of the future park site. In which case, the future Dedication of land associated with the development of the Tract would proceed in accordance with the provisions of Section 7.3.9.

### **7.3.4 Fee in Lieu of Dedication.**

The Applicant may, with the consent and approval of the Governing Body, elect to pay a fee to the Municipality in lieu of the park and open space Dedication and so note on the plans.

- A.** The amount of any fee to be paid in lieu of Dedication of land shall be equal to the average fair market value of the land (based on the unimproved land value) otherwise required by this Section or shall be in accordance with any existing, municipally adopted flat fee-in-lieu schedule which establishes a fixed price per Lot, unit, or acre. If no formula is provided in any other Municipal planning documents, the formula to be used in computing the fee based upon fair market value shall be:

$N \times (\text{average FMV of one acre}) = \text{fee.}$

Where: N = the number of acres required to be dedicated for park and open space purposed, calculated in accordance with Section 7.3.3, and FMV = fair market value based on the unimproved land value.

- B.** The Applicant shall provide the Governing Body with all information necessary to determine the fair market value of the land, including, but not limited to, the following:
1. If the Applicant is the equitable owner, or purchased the land in fee simple less than two (2) years prior to the Preliminary or Final Plan submission, a copy of the agreement of sale or real estate transfer tax affidavit of value.
  2. If the Applicant is the equitable owner, or purchased the land in fee simple more than two (2) years prior to the Preliminary or Final Plan submission, an opinion of value of the property by a state certified appraiser acceptable to the Governing Body.

Any Applicant aggrieved by the fee established shall have the right to secure a second opinion of value of the property by a state certified appraiser acceptable to the Governing Body. The two (2) estimated values shall be averaged, with the result being the amount upon which the fee will be based.

- C.** Such fee shall be payable to the Governing Body prior to the recording of each final phase of the Plan and shall be in an amount equal to the percentage of the total number of dwelling units in the phase.

### **7.3.5 Parkland Acquisition Fund.**

All fees paid by the Developer in lieu of Dedication of park and open space land shall be paid to the Municipality and upon its receipt shall be deposited in a separate interest-bearing account. Fees deposited to this account shall be administered as required by the Pennsylvania Municipalities Planning Code.

### **7.3.6 General Design Criteria.**

Except as provided in Section 7.3.7 and Section 7.3.8, the type of areas to be dedicated for park and open space land within a Subdivision or Land Development Plan shall principally involve neighborhood parks which are defined as "those parks providing primarily active outdoor recreational opportunities located within one-half (1/2) mile radius from a majority of the residences to be served thereby". Exceptions to this will be when Dedications are made to a community park which serves the Subdivision and is located within a two (2) mile radius of the majority of the residences to be served, or a County park which serves residences located within a ten (10) mile radius.

The land set aside for park and open space uses shall meet the following design criteria:

- A.** The park and open space land shall be reasonably located so as to serve all of the residents of the Subdivision or Land Development.

- B.** The park and open space land shall be accessible from a Street either directly or by pedestrian connection or shall adjoin and become a part of an already existing public park or open space area that is accessible from a Street. Where access to the park is by public road, the width of the Frontage shall be a minimum length deemed necessary by the Municipality for access, visibility of the Site, and public safety.
- C.** No more than twenty-five percent (25%) of the park and open space land shall contain Detention Basins or other Stormwater Management Facilities, or be located within a Floodplain or Wetland unless such area is part of a linear trail or green way along an existing Watercourse. In all cases, land containing Detention Basin or other Stormwater Management Facilities, Floodplains, or Wetlands, must be suitable for public recreation use without compromising the function of these areas.
- D.** The park and open space land shall be compact and Contiguous unless the land is located adjacent to and combined with existing park and open space land, or specific topographic features require a different configuration. An example of such topographic features would be the provision of linear public open space along a scenic creek.
- E.** When public park and open space land exists adjacent to the Tract to be subdivided or developed, the park and open space land shall be located to adjoin and enlarge the presently existing park and open space land.
- F.** The park and open space land shall be accessible to utilities such as sewer, water, and power that are provided within the Subdivision, and if so, the Developer shall extend such utilities to the park and open space land.
- G.** If the Developer is planning to construct facilities for recreation on the dedicated property as an amenity for the development, such facilities shall be constructed in accordance with current standards established by the National Recreation and Park Association. Where applicable, facilities constructed shall also comply with the accessibility guidelines of the Americans with Disabilities Act of 1990. Playground equipment constructed or placed on parkland shall be in compliance with guidelines from the Consumer Products Safety Commission.

### **7.3.7 Existing Trails.**

When a Subdivision or Land Development is traversed by or abuts an existing public trail, customarily used by pedestrians, equestrians, and/or other customary non-motorized users, the Applicant shall make provision for the continued recreational use of the trail, subject to alterations of the course of the trail within the boundaries of the development under the following conditions:

- A.** The points at which the trail enters and exits the Tract shall remain unchanged.
- B.** The proposed alteration exhibits quality trail design according to the generally accepted principles of landscape architecture.
- C.** The proposed alteration does not run coincidentally with the paved road intended for use by motorized vehicles.

The land set aside for the continuation of such existing trail shall be counted towards the amount of park and open space land.

### **7.3.8 Trails and Linear Parks.**

The trail or linear park shall conform to any applicable Municipal master park and open space Plan, any County-wide trail and recreation master Plan, and appropriate Municipal and County Comprehensive Plans. The Governing Body may require, as a condition of Final Plan approval, the Dedication and Improvement of trails and linear parks, which may be credited toward the park and open space land requirement. Trails and linear parks developed and dedicated for public use may be credited toward the park and open space land requirement.

### **7.3.9 Municipal Fund Reimbursement.**

The Municipality may from time-to-time decide to purchase land for parks in or near the area of actual or potential development. If the Municipality does purchase park and open space land within a distance of one-half (1/2) mile, subsequent park and open space land Dedications within that area may, upon agreement with the Applicant, be in cash only and shall be calculated on a percentage basis to reimburse the Municipality's actual cost of acquisition and/or cost of development of such land for park and open space purposes. The cash amount shall be equal to the sum of the average price per acre of such land plus the actual costs of adjacent Streets and on-Site utilities (or an estimate of such actual costs provided by the Municipal Engineer) divided by the number of Lots or dwelling units in the development.

### **7.3.10 Additional Recreation Reservations.**

The provisions of this Section are minimum standards and shall not be construed as prohibiting a Developer, with the approval of the Governing Body, from dedicating or reserving other land for recreation purposes in addition to the requirements of this Ordinance.

### **7.3.11 Private Reservation of Land.**

Notwithstanding anything contained in the above Sections, the Applicant may, with the consent and approval of the Governing Body, elect to fulfill the open space requirements through the private reservation of a recreation area.

- A.** Any project that proposes the private reservation of land shall be accompanied by an agreement, which is acceptable to the Municipal Attorney, and which shall be recorded prior to or concurrent with the Preliminary Plan approval. Such agreement shall stipulate:
  - 1.** That maintenance of the designated open space is the responsibility of the Applicant, a homeowners' association, a Condominium unit owners' association, or other recognized conservation organization.
  - 2.** The availability of such private open space to non-residents of the development.
  - 3.** The method by which the private reservation may be offered for public Dedication.
  - 4.** That the land cannot be developed for anything other than open space purposes.
  - 5.** That the land cannot be sold or disposed of by the association except to another organization formed to own and maintain said open space and without first offering to dedicate the land and Improvements to the Municipality.

- B.** If such lands are to become common elements of a homeowners' or Condominium unit owners' association of any type, then such association's organizational by-laws must conform to the requirements of applicable state law.

#### **7.3.12 Construction of Recreation Facilities.**

Notwithstanding anything contained in the above Sections, the Applicant may, with the consent and approval of the Governing Body, elect to fulfill the open space requirements through the construction of recreational facilities. All approved recreation facilities constructed in lieu of land Dedication shall be included within the cost estimate for the Improvement guarantee.

### **7.4 HYDROGEOLOGIC REPORT**

When there is a reasonable probability that a project will affect or be affected by carbonate geologic hazards, the Governing Body shall require submission of a hydrogeologic report. In reaching a determination of whether a project will affect or be affected by carbonate geologic hazards, the Governing Body shall consider the presence or absence of carbonate features in the vicinity of the project, the testimony of qualified expert witnesses, and such other reasonable information as may be available.

When a hydrogeologic report is required, an aquifer study (see Section 7.5) shall also be required.

All hydrogeologic reports shall be prepared at the Applicant's expense by a licensed Geologist qualified in such matters. Each hydrogeologic report shall contain:

- A.** A map showing all sinkholes, depressions, lineaments, faults, outcrops, springs, drainage entering the ground, water table, soil mottling and ghost lakes, and all features that may relate to the quality and availability of groundwater within two hundred (200) feet in all directions from the Subject Tract.
- B.** A map outlining all private wells within a radius of two hundred (200) feet of the Subject Tract and all public water supplies, associated pipes, hydrants, and future service areas within two hundred (200) feet in all directions of the Subject Tract provided such information is available from public sources or documents.
- C.** A listing of all referenced data, published and otherwise.
- D.** A topographic Site map with the Site clearly outlined.
- E.** A map indicating the location and design of all on-Site wastewater disposal systems and secondary systems.
- F.** A description of anticipated water quality impacts to areas located downgradient and areas located along the geologic strike.
- G.** A description of on Site mitigation measures that could be applied to minimize impacts of the project or to correct existing problems.

### **7.5 AQUIFER STUDY**

Lots which would be served by individual wells or community water systems, when prior to the Subdivision of land into Lots or Land Development, an aquifer study may be required in areas or in proximity to areas of known groundwater contamination or problems, in areas of known inadequate yields of potable supplies, or a hydrogeologic report was completed on Site, an aquifer study shall be performed.

**A. Areas of Known Ground Water Problems.**

Areas of known ground water problems shall include:

1. Areas underlain by serpentinitic or schistostic geologic formations or formations otherwise known to have low yields.
2. Areas in proximity two hundred (200) feet of sinkholes, ghost lakes, or drainage entering the ground.
3. Areas with Environmental Covenants related to known groundwater contamination including sites that have been voluntarily cleaned up under the Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2). For approved cleanup Sites, this test will verify the Site meets the approved standard.
4. Other areas with documented water quantity or quality problems, including pollutants in excess of federal safe drinking water standards.

**B. Aquifer Study Standards and Procedures.**

No person shall develop land within an area of known groundwater quantity problems without administering and passing on said land the aquifer test required by this Section:

**1. Water Quantity Report.**

**(a) Water Quantity Test Standard.**

1. The proposed individual well shall produce not less than 400 gallons of water in a 2 hour period, at least once each day.
  - (i) If the sustained yield of the individual well or individual well system is not capable of meeting the standard, sufficient storage shall be required through borehole capacity and/or a storage tank. Borehole storage shall be measured from the pump level to the top of the static water column.
2. The individual well shall yield a minimum of 1 gallon per minute.
  - (i) For wells with yields of 4 gallons per minute or less, a minimum of 400 gallons of storage capacity shall be provided. Borehole storage shall be measured from the pump level to the top of the static water column.

- (ii) Multiple wells may be dug on the Lot and the combined yield of the well system shall meet the minimum of 1 gallon per minute.

(b) Test Supervision and Evaluation.

The test shall be conducted under the supervision of a qualified Geologist licensed by the Commonwealth of Pennsylvania or professional Engineer, using testing procedures hereinafter set forth. The Geologist or Engineer shall be responsible for notifying the Governing Body five (5) working days prior to the start of the test. He or she will also summarize the test, and its significance and make recommendations as to the suitability of the well or wells for the intended uses. The final report shall include an opinion as to whether the proposed use of the well will have an impact upon other existing wells in the immediate surrounding area. The supervising person shall provide the Governing Body with a copy of all field notes and test results.

(c) Test Method.

An test shall be conducted for a minimum of twelve (12) hours at a constant rate of pumping. The pumped well shall be the one proposed for the specific Subdivision or Land Development for which the test is conducted. Two (2) observation wells that have hydraulic continuity with the pumped well are required. The preferred method of analysis of the aquifer test data is the non-equilibrium formula, although other methods are available and may be used. These include various methods of analysis of either the drawdown or recovery data.

(d) Collection of Data.

Data shall be collected in conjunction with the aquifer test as follows:

1. Prior to the test:

- (i) Collection of geologic data of the area to be tested including well logs, if available.
- (ii) History of water level fluctuations in the area when available.
- (iii) The location, relative Elevations and static water levels in the pumped well and the observation well or wells.
- (iv) The expected discharge of the pumped well.

2. During the test: A standard aquifer test field data sheet will be required for a pumped well and each observation well. The data sheet shall include columns for listing:

- (i) Date.

- (ii) Clock time.
- (iii) Elapsed time since pumping started/stopped (in minutes and seconds).
- (iv) Depth to water below land surface.
- (v) Drawdown or recovery (in feet and 10ths).
- (vi) Observed discharge at specified intervals.

3. Following the test: In accordance with recognized principles of well hydraulics, graphs shall be prepared to show time drawdown and time recovery for the pumped well and the observation wells. A distance drawdown graph will be required for anticipated rates of pumping. Computation of the coefficients of transmissibility and storage as well as the rate of pumping, time and drawdown are required as well as other data that may be considered necessary to satisfy the test objectives.

## 2. **Water Quality Report.**

The water quality test shall be conducted concurrently with any water quantity test. Such tests shall be conducted by a certified laboratory.

Test Standard.

- (a) All water samples to be tested must be drawn by a trained PA DEP-certified laboratory employee, a well driller contractor, or pump installation contractor.
- (b) For single use on-Lot wells, the quality of the water tested shall meet the local and/or state regulations as it presently exists or may hereafter be amended, or be capable of treatment to attain said standard of quality for the following potential contaminants: total coliform, fecal coliform, E.coli, nitrate-nitrogen, nitrite-nitrogen, total nitrogen, lead, and chlorine.
- (c) For community on-Lot wells, the quality of the water tested shall meet the National Primary Drinking Water Regulations as set forth in the National Safe Drinking Water Regulations (NSDW) of the Environmental Protection Agency (EPA) as it presently exists or may hereafter be amended, or be capable of treatment to attain said standard of quality.

## ARTICLE 8

### VISION STATEMENT AND DESIGN STANDARDS FOR URBAN GROWTH AREAS

To establish and maintain compact, mixed use communities that serve as activity centers for the surrounding area. To focus and accommodate future development primarily within Urban Growth Areas. To ensure the provision of a full range of public facilities, services, and infrastructure (water service, sewer service, transportation, and communications) and allow the coordinated expansion of such facilities within Urban Growth Areas. To strengthen the role of the boroughs and Lancaster City as the focal points of their respective regions.

To attract new manufacturing, commercial, and professional businesses that provide quality jobs. To support community-based business development in Urban neighborhoods. To create a sustainable economy that connects people with job opportunities.

To improve the transportation system to service employers and employees. Provide adequate, affordable specialized transit services. To develop aesthetically pleasing, interconnected transportation systems that encourage walking, biking, and public transit, and discourage high-speed traffic which will protect and improve the quality of our air.

To encourage the preservation, adaptation, re-use, and protection of the integrity of historic Buildings and Structures, archaeological sites, and other cultural resources. To design new Buildings to complement the architectural character of the surrounding neighborhood.

To allow for a range of housing types at a range of densities on land sufficient to accommodate current and projected regional fair share housing needs. To increase housing choice, affordability, diversity in housing types and tenure (rental and ownership options).

To improve the character and form of New Development in order to enhance the quality of life for current and new residents. To establish cohesive, safe neighborhoods, and a clean, healthy physical environment. To design new communities to accommodate citizens from a wide range of economic levels, occupations, age groups, backgrounds, and interests. To increase the proportion, density, and intensity of development within Urban Growth Areas.

To preserve, protect, enhance, and restore the Native Plant and animal diversity and functioning natural systems. To develop a permanently preserved open space system that provides a diversity of publicly accessible open space resources in the form of greenways, and parks. To protect, conserve, and improve surface and groundwater resources.

#### **8.1 GENERAL**

##### **8.1.1 Minimum Standards and Requirements.**

The standards and requirements contained in this Article shall apply as minimum design standards for Urban Subdivisions and/or Land Developments, as defined in Section 2.2.

If Land Development information indicates that existing improvements on the Subject Tract do not meet the requirements of this Section, then existing improvements on the Subject Tract must be designed and proposed to meet the requirements of this Ordinance. When the Land Development will utilize or be integrated into existing infrastructure, the existing infrastructure on the Subject Tract shall be improved to the standards of this Ordinance.

### **8.1.2 Compliance with Municipal Ordinances Required.**

All plans shall be designed in compliance with the municipal zoning ordinance and all other applicable ordinances, regulations, plans, studies, and local requirements.

### **8.1.3 Zoning Approvals Required Prior to Plan Submission.**

When a plan proposal requires the grant of a special exception, conditional use or variance from the municipal zoning ordinance, the applicant shall obtain such special exception, conditional use or variance approval from the governing body and/or zoning hearing board, as applicable, prior to the submission of the applicable plan. The plan shall be designed and developed in accordance with any conditions that have been imposed upon the grant of such special exception, conditional use or variance by the governing body and/or zoning hearing board, as applicable.

## **8.2 STREETS, ACCESS DRIVES, AND DRIVEWAYS**

- A.** Each Street shall be designed to meet the design requirements by use of Appendix G and Appendix H.
- B.** Consideration should be given to where snow placement easements will be situated on the site.

### **8.2.1 General Arrangement.**

The following criteria shall be considered in the design of Streets in all Urban Subdivisions and/or Land Developments.

- A.** The alignment of Streets shall conform to the circulation plan of the municipal Comprehensive Plan, to Official Maps, and to such municipal, County and State road and highway plans as have been duly adopted.
- B.** For Streets not shown on the circulation plan or Official Map, the arrangement shall take into account existing Topography and other Site constraints when providing for the appropriate extension of existing Streets.
- C.** Local Streets shall be arranged so as to discourage excessive speeds when their function is to remain local.
- D.** Streets shall be designed with drainage grates that are safe for crossing by bicycles or horse-drawn vehicles.
- E.** Curvilinear Streets and Cul-de-sacs should be utilized only where Topography and natural features dictate them on the Site, and where their use will be consistent with adjoining development patterns. Curvilinear Streets shall not be used immediately adjacent to an existing grid Street system without providing a transition that continues and protects the grid. Cul-de-sacs shall not be used where it is possible to provide grid

pattern Streets that provide better access for emergency vehicles, fewer restrictions for snow removal and improved pedestrian access. New project Street systems, platted adjacent to an existing Street system, shall not be merely looped back on Local Streets, but shall connect with or be designed to connect with, in the future, Streets of a higher class. Consideration shall be given to the dispersal of traffic from commercial and employment centers, and to the ultimate functioning of the Street system and regional transportation network.

- F.** Streets shall be laid out to provide convenient and safe access to the property. Where appropriate, the governing body may require additional Cartway improvements and/or Right-of-Way width along existing Street Frontages to accommodate the anticipated traffic increases and to facilitate vehicular turning movements to and from individual Lots.
- G.** Street lengths shall be minimized as to promote the most efficient Street layout while still protecting the natural, cultural, and historical environment.
- H.** The use of permeable pavement is encouraged on sidewalks, plazas, Driveways, parking Lots, and low-traffic roads. Permeable pavement shall not be located on industrial Sites, fueling stations, Sites with expansive soils or high depth to bedrock, areas draining to the permeable pavement greater than 5 acres, areas with the water table less than two feet below the bottom of the pavement base, and less than 100 feet from drinking wells.

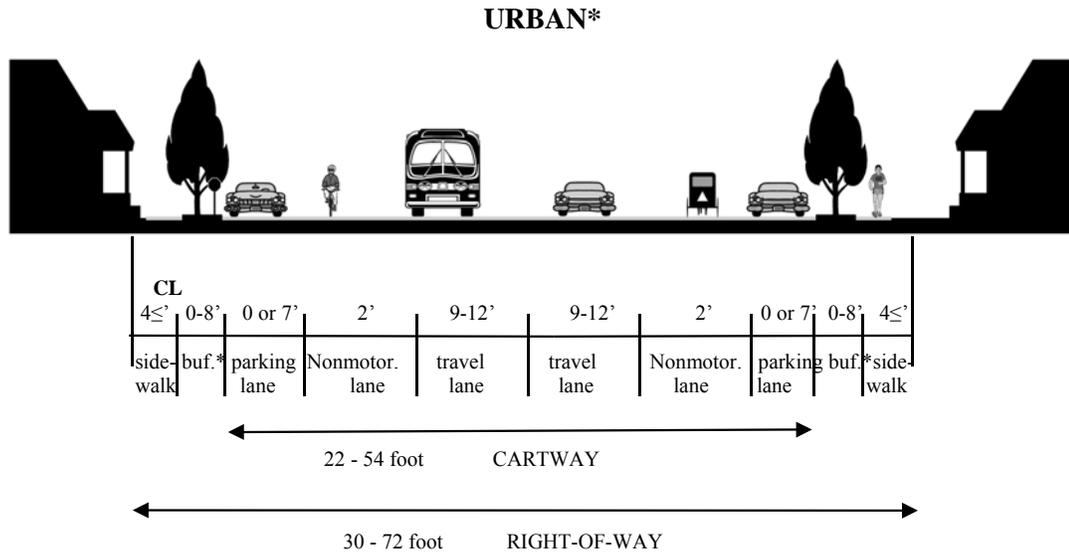
### **8.2.2 Street Hierarchy.**

- A.** All proposed Streets shall be classified according to the Street hierarchy of the existing transportation network with design tailored to function and Average Daily Traffic (ADT).
- B.** The Street hierarchy system shall be defined by the municipal Comprehensive Plan, Official Map, or other municipal planning documents.
- C.** The Applicant shall demonstrate to the governing body's satisfaction that the distribution of traffic to the proposed Street system will not exceed the ADT thresholds for any proposed Street type for a design period of ten (10) years from the proposed date of completion of the road.
- D.** Private Streets may be used provided the governing body determines that no public benefit will be served by Dedication. Applications that propose a Private Street shall be accompanied by a recorded declaration or an agreement which shall be recorded with the Lancaster County Recorder of Deeds as part of the Final Plan. This agreement shall establish the conditions under which the Street will be constructed and maintained in accordance with the design approved on the Final Plan, and shall stipulate:
  - 1.** Ownership interest in the Private Street.
  - 2.** No limitations on users unless identified in the private agreement.
  - 3.** A statement indicating that civil court, not the governing body, is responsible for mitigating differences relating to the agreement.
  - 4.** The method of assessing maintenance and repair cost.

5. Private Streets shall not be offered for Dedication as a public Street unless they are restored to municipal design standards for Streets. The offer for Dedication of the Street shall be made only for the Street as a whole.

**8.2.3 Determination of Required Street Design Standards.**

Newly created Right-of-Way and Cartway width for each interior Street classification and frontage Streets in developments creating interior streets when identified by the municipal long range plan as requiring such standards shall be determined by the proposed use, projected ADT and the intensity of development permitted and existing along each Street. Each Cartway width shall be based on the travel lane, on-Street parking, multi-modal lanes, and gutter width.



\* Buffer areas and shoulders are encouraged but not required.

**A. Travel Lanes.**

1. Travel lane width requirements shall vary according to the average daily Trips (ADT)\*.

Miles Per Hour	Under 400 ADT	401 to 1500 ADT	1501 to 2000 ADT	Over 2000 ADT
15	9 ft. travel lane	10 ft. travel lane	10 ft. travel lane	11 ft. travel lane
20	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
25	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
30	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
35	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
40	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
45	10 ft. travel lane	11 ft. travel lane	11 ft. travel lane	12 ft. travel lane
50	10 ft. travel lane	11 ft. travel lane	11 ft. travel lane	12 ft. travel lane
55	11 ft. travel lane	11 ft. travel lane	12 ft. travel lane	12 ft. travel lane

\* derived from AASHTO as amended

**B. Non-Motorized Travel Lanes.**

1. For a posted speed limit of twenty-five (25) miles per hour, two (2) foot Non-motorized lanes shall be provided.
2. Grates shall be safe for crossing by bicycle and horse-drawn vehicle.

**C. Curbs, Gutters, and Swales**

1. Curbing shall be required to meet any of the following:
  - (a) Stormwater management.
  - (b) Road stabilization.
  - (c) Ten (10) feet on each side of drainage inlets.
  - (d) At intersections.
  - (e) At corners.
  - (f) At tight radii.
2. Drainage Swales in place of curbing may be used when all of the following can be shown or as deemed appropriate by Christiana Borough:
  - (a) Soil and/or Topography make the use of drainage Swales preferable.
  - (b) It is in the best interest of the community to preserve its existing character by using drainage Swales instead of curbs.
  - (c) Curbing would negatively impact a cohesive Stormwater management best management design (Best Management Practices).
3. Flexibility regarding curb type shall be permitted as long as the curb type accommodates the system of drainage proposed.
4. Curbing shall be designed to provide a ramp cut at each intersection, at the principal entrances to Buildings which front on parking lots, and at all crosswalks.

**D. Buffer Area.**

Signage and Street trees shall generally be located within the Buffer area of the Right-of-Way. Buffer areas shall be planted with grass, ground cover, or treated with other suitable Pervious Material. See Section 8.10.2 for Street tree standards. When Buffer Areas are provided, they shall be a minimum of 4 feet wide with 8 feet preferred when planted with trees. Buffer areas may be eliminated when a wider Pedestrian Way is provided.

**E. Rights-of-way.**

1. Centerline of the Right-of-Way may not always be the centerline of the travel

lanes.

2. Where the Right-of-Way width of the new Street is different than the existing Street, a transition area shall be provided, the design of which is subject to governing body approval.
3. The Right-of-Way width shall be designed to meet the design requirements by use of Appendix G. Right-of-Way widths may change for each Street, based on the anticipated future development.

**F. Vertical Street Alignments.**

1. Vertical curves shall be used in changes in grade exceeding one percent (1%).
2. Alignment:
  - (a) Vertical Street and Access Drive alignments shall be measured along the centerline.
  - (b) Minimum Rate of Vertical Curvature K shall be as specified below:

<b>Initial Speed (mph)</b>	<b>Curvature, K<sup>1</sup> (ft/%) Crest</b>	<b>Curvature, K<sup>1</sup> (ft/%) Sag</b>
15	3	10
20	7	17
25	12	26
30	19	37
35	29	49
40	44	64
45	61	79
50	84	96
55	114	115

<sup>1</sup> Rate of vertical curvature, K = length of curve (L) per percent algebraic difference (A) in the intersection grades (K=L/A)

3. Grade:
  - (a) Where the approaching grade is seven (7%) percent or greater, a leveling area shall be provided within seventy-five (75) feet of a four-way Street intersection on the Street of lesser classification, or Access Drives, or the terminating Street at a three-way intersection.
  - (b) Such leveling area(s) shall have a maximum grade of four percent (4%) for a minimum length of forty (40) feet measured from the intersection of the centerlines.

**G. Horizontal Street Alignments.**

1. Horizontal curves shall be used at all angle changes in excess of two (2) degrees.

2. The design of horizontal curves shall be based on an appropriate relationship between design speed and curvature and on their joint relationships with Superelevation (roadway banking). (The longer the radius of a curve, the higher the speed through that curve).
3. Single, long radius curves shall be used rather than a series of curves with varying radii and/or a series of short curves separated by short, straight segments.
4. Access Drives intersections shall be designed to Local Street horizontal alignment standards.
5. Determination of minimum horizontal centerline radius\*

<b>Initial Speed (mph)</b>	<b>Centerline Radius<sup>1</sup> (feet) No Superelevation</b>	<b>Centerline Radius<sup>1</sup> (feet) 4% Superelevation (e max)</b>
15	50	42
20	107	86
25	198	154
30	333	250
35	510	371
40	762	533
45	1039	711
50		926
55		1190

\* derived from AASHTO formula  $R_{min} = V^2 / 15 * (0.01e + f_{max})$

<sup>1</sup> Curve radius shall be measured to the centerline of Cartways and Access Drives.

6. Superelevation in certain conditions may be amended when using AASHTO Exhibit 3-16 as updated.

## **H. Street Intersections.**

1. Cul-de-sac/ Minor Local/ Major Local Streets

A minimum separation of no less than 150 feet between centerlines shall be provided.

2. Collector Streets

(a) Minor Collectors a minimum separation distance of 275 feet between centerlines shall be provided.

(b) Major Collectors a minimum separation distance of 300 feet between centerlines shall be provided.

3. Arterial Streets

A minimum separation distance of 600 feet between centerlines shall be provided.

4. Right angle intersections shall be used. No Street intersection Modification shall be granted at an angle of less than sixty (60) degrees.
5. The Cartway edge at Street intersections shall be rounded by a tangential arc with a minimum radius of five (5) feet and a maximum radius of twenty five (25) feet. The Right-of-Way radii at intersections shall be substantially concentric with the edge of the Cartway. Curb return radii of 10 -15 feet should be used where high pedestrian volumes are present or the volume of turning vehicles is low. Larger radii should be used when parking or non-motorized lanes are not provided.
6. Where warranted by a traffic impact study, the governing body may require additional traffic lanes or additional Right-of-Way to facilitate vehicular turning movements at existing or proposed Street intersections within Subdivision or Land Development Plans.

**I. Sight Distance at Intersections.**

1. Proper Sight Distance shall be provided at all new Streets, Access Drives, and all Driveway intersections in accordance with the latest edition of the Pennsylvania Department of Transportation Design Manual - Part 2, Highway Design (Publication 13), and Section 2.18.F as amended. Sufficient design and plan information shall be submitted with the plan application proving that this minimum standard will be achieved. Such design information shall be sealed by a professional registered in Pennsylvania to perform such design work.
  - (a) Access Drive Sight Distance based on 10 foot off of edge of Cartway, an eye height of 3.5 feet to an object at 3.5 foot height.
  - (b) Street Sight Distance based on 15 foot off of edge of Cartway, an eye height of 3.5 feet to an object at 3.5 foot height.
2. All intersections shall be provided with appropriate stop control devices on the lesser classification Street or Access Drive. No sight triangle Easements are required when stop control devices are used.
3. When stop control devices are not provided on the lesser Street classification or Access Drive, sight triangle Easements shall be provided. Sight triangle Easements shall include the area on each Street corner that is bounded by the line which connects the sight or "connecting" points located on each of the Right-of-Way lines of the intersecting Street. The planting of trees, other plantings, signs, and Structures exceeding thirty (30) inches in height that would obstruct the clear sight across the area of the Easements shall be prohibited.
  - (a) Arterial Streets shall have a Clear Sight Triangle side of 150 feet.
  - (b) Collector Streets shall have a Clear Sight Triangle side of 100 feet.

- (c) Local roads, Cul-de-sacs, and Alleys shall have a Clear Sight Triangle side of 75 feet.

**J. Cross Sectional Specifications.**

All new Street paving must conform to the following cross sectional specifications (all courses are compacted thicknesses) unless superseded by a road ordinance or zoning ordinance.

- 1. The use of recycled materials is strongly encouraged.
- 2. Street paving relative strength (design structural number) shall meet 3.0 for all Local roads, 3.5 for roads Arterial and Collector roads, and 2.5 if all paving from top of stone to top of the Street is completed in one operation and the wearing course is not laid at a later time. The design structural number depicts the required strength of the proposed pavement will need to provide. The structural number must be converted to individual layer thicknesses of the pavement.

- (a) Structural coefficients for common flexible pavement materials\*;

Pavement Component	Structural Coefficient	Pavement Component	Structural Coefficient
<u>Surface Course:</u>		Crushed Aggregate (CABC)	0.14
Superpave 9.5 mm, 12.5 mm, 19 mm, 25 mm, (wearing and binder courses)	0.44	Crushed Aggregate, Type DG (CABCDG)	0.18
ID-2, ID-3 (wearing and binder courses)	0.44	Aggregate – Bituminous (ABBC)	0.30
FB-1, FB-2 (wearing and binder courses)	0.20	Aggregate – Cement (ACBC)	0.40
FJ-1, FJ-1C, FJ-4 (wearing courses)	0.35	Aggregate – Lime – Pozzolan (ALPBC)	0.40
<u>Base Course:</u>		<u>Subbase:</u>	
Plain Cement Concrete (PCBC)	0.50	Open Graded Subbase	0.11
Lean Cement Concrete (LCBC)	0.40	No. 2A Subbase	0.11
Superpave 25 mm, 37.5 mm, base course	0.40	Asphalt Treated Permeable Base Course (ATPBC)	0.20
Bituminous Concrete (BCBC)	0.40	Cement Treated Permeable Base Course (CTPBC)	0.20

\* Per current PennDOT standards, Pavement Policy Manual, Publication 242.

- (b) Example of Local paving is as follows;
  - i. Four (4) inch 2A stone subbase, three (3) inch BCBC (bituminous concrete base course), two (2) inch binder course, and one and one half (1 ½) inch wearing course.

- (c) Example of Arterial and Collector paving is as follows;
  - i. Four (4) inch 2A stone subbase, five (5) inch BCBC, two (2) inch binder course, and one and one half (1 ½) inch wearing course or;

- ii. Eight (8) inch 3A stone subbase, two (2) inch 2A top dressing, three (3) inch BCBC, two (2) inch binder course, and one and one half (1½) inch wearing course.

#### **8.2.4 Pedestrian Way.**

##### **A. Trails.**

1. Trail width shall be a minimum of four (4) feet.
2. Easements ten (10) feet wide are required for trails. Provide a plan note indicating such Easement must be five (5) foot on either side of the centerline of the trail as constructed.
3. Encroachments into the trail shall not result in less than a 4 foot wide minimum clearance width from any obstacles.
4. Marked crosswalks shall be provided within the vehicular travel ways intersecting with trails.

##### **B. Sidewalks.**

1. Paved sidewalks shall be provided on both sides of a new Street.
2. Sidewalk widths shall be a minimum of four (4) feet.
3. Where possible, sidewalks should be sloped towards adjacent pervious surfaces, not adjacent Impervious Surfaces.
4. Encroachments into the sidewalk shall not result in less than a 4 foot wide minimum clearance width from any obstacles.
5. Sidewalks shall not exceed a cross slope of two percent (2%).
6. Ramp cuts shall be located at all sidewalks intersecting with vehicular travel ways.
7. Marked crosswalks shall be provided within the vehicular travel ways intersecting with sidewalks.

#### **8.2.5 Lot Access.**

- A. The governing body may require an Applicant to provide Reverse Frontage Lots on the Collector and/or Arterial roads and reduce the number of access points through access management for the development.
- B. The governing body may require the Applicant to provide ingress and egress to a particular Lot or Tract through the remainder of a property or other properties over which the Applicant has control by the following;
  1. A temporary Cul-de-sac designed for access to any adjoining property or for

phased development.

2. Provision of access to existing nonconforming Lots which have no Frontage on a public or Private Street.
- C. A Highway Occupancy Permit is required for each access point onto a State road or highway.
- D. All Lots shall front on a public or a private Right-of-Way.
- E. Prior to the use and occupancy of a Lot, each Lot or dwelling unit shall be provided with a Street number assigned by the governing body and approved by the Lancaster County-Wide Communications. The Street number shall be visible from the Street. Where a Lot contains multiple Building or dwelling units, each Building and dwelling unit shall be identified so that emergency services can easily identify the location of every Building and dwelling unit in a time of emergency.

#### **8.2.6 Street Provisions for Future Developments.**

- A. Where appropriate, Right-of-Ways shall be reserved for Future Access Strip usage in conjunction with the zoning classification of adjacent Tracts to allow for future development. Areas reserved for Future Access Strip usage will not be required to be improved; however, these areas shall be reserved for Street improvements to be provided by the Developer of the adjacent Tract. Appropriate plan notes shall be included to note Future Access Strip expansion.
- B. Wherever there exists a dedicated or platted area reserved for Future Access Strip usage along the boundary of a Tract being developed, the proposed Street must be extended over the area dedicated or platted for Future Access Strip usage. The Street shall be designed in conformance with the design requirements of the proposed Street subject to the existing Right-of-Way.
- C. The extension of existing Streets that are presently constructed with a Cartway different from the standards of this Ordinance shall be provided with a transition area, the design of which is subject to governing body approval.

#### **8.2.7 Driveways.**

All Driveways shall, at a minimum, be designed in accordance with the following:

- A. Driveways must be designed in conformance with the Sight Distance specified in Section 8.2.8.C.
- B. Driveway access to a Street shall not be located less than twenty five (25) feet from the edge of the Cartway of the intersecting Street.
- C. Driveway access to Lots shall be provided to the Street of lesser classification.
- D. To maintain good access management in the Street network, when a Driveway intersects with a Collector or Arterial Street, joint, shared use, or Reverse Frontage Driveways should be encouraged when such design would increase traffic safety by decreasing the potential for vehicular conflicts.

- E.** Driveways shall be paved within the intersecting Street Right-of-Way.
- F.** Leveling areas shall be provided a minimum of 10 feet from the edge of Street Cartway with a maximum slope of 10%.
- G.** Shared or joint Driveways must meet the follow standards:
  - 1.** Driveways shall be used only for four (4) or fewer dwelling units.
  - 2.** To decrease the potential for vehicular conflicts, Driveways may be located either partially, centered on, or entirely on one property.
  - 3.** An Easement agreement shall be provided and recorded that indicates the rights of ownership, access, and maintenance. The Municipality is not responsible to settle conflict issues with joint or shared Driveways.

### **8.2.8 Access Drives.**

Access Drives shall be designed to meet the following requirements:

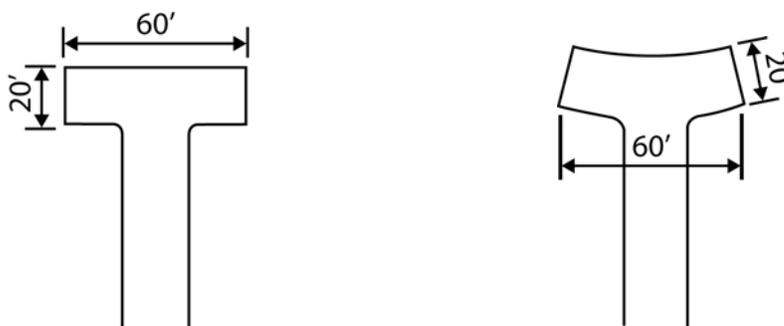
- A.** Any property that utilizes an Access Drive shall have Frontage along a public or private Right-of-Way.
- B.** The plan shall note that the Access Drive does not qualify for Dedication to the Municipality and that the Landowner assumes all responsibility for its maintenance.
- C.** Access Drives shall be designed for their intended function. All travel lanes shall be a minimum of eight (8) feet wide; however, sufficient design information must be submitted to indicate that the number of travel lanes and width proposed have been designed to accommodate the anticipated traffic to and from the development.
- D.** Parking shall be permitted when sufficient Cartway width is proposed. See Section 8.3, Parking Facilities.
- E.** Access Drives shall maintain a centerline separation distance of one hundred and twenty-five (125) feet from all other Access Drives and Streets. Access Drive intersections with other Access Drives within the Site shall not be subject to such restrictions.
- F.** Proper Sight Distance shall be provided at Access Drive intersections with existing public and Private Streets according to this ordinance.

### **8.2.9 Single Access / Cul-de-sac Streets.**

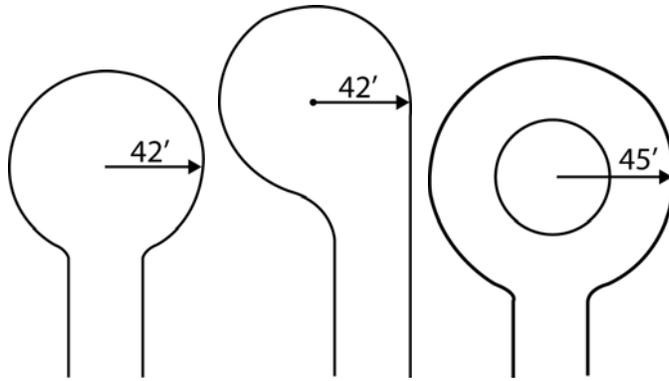
- A.** To the greatest extent possible, through Streets shall be provided. The feasibility of a through Street will be based on the physical features of the Tract proposed for development and/or Adjoining Lots, the potential for extension of the Street to adjoining lands based on existing development patterns, restrictions imposed by other government regulations and other recorded documentation, and the ability of the design to meet all other requirements of this Ordinance. When single access / Cul-de-sac Streets are proposed, the application shall be accompanied by a written analysis of the merits of the

design and the reasons that a through Street would not be desirable.

- B.** The length of a Cul-de-sac Street shall be measured from the centerline intersection with the through Street to the center point of the turnaround.
- C.** All Cul-de-sac Streets shall have a minimum length of two hundred and fifty (250) feet. Temporary Cul-de-sac Streets shall not have a minimum length.
- D.** Permanent Cul-de-sac Streets shall be designed to serve a maximum of two hundred and fifty (250) ADT for residential development and a maximum of five hundred (500) ADT for non-residential development.
  - 1.** Permanent Cul-de-sacs may be extended beyond above referenced ADT for the following justification provided; 1) the Cul-de-sac is a boulevard construction or 2) the adjacent land is 100% built-up.
- E.** Any temporary Cul-de-sac Street designed for access to an adjoining property or for authorized phased development and which is greater than one Lot deep shall be provided with a temporary all-weather turnaround. The use of such turnaround shall be guaranteed to the public until such time as the Street is extended. Sidewalks along temporary Cul-de-sacs must be continued at the same time that the Street is continued.
- F.** Cul-de-sacs shall have a circular, "T" shaped or "hammerhead" shaped turnarounds. Turnarounds shall be constructed completely within the Right-of-Way.
  - 1.** T shaped or hammerheads may be used if the Cul-de-sac serves less than 10 dwelling units. Dimensions of a T shaped or hammerhead are sixty (60) feet by twenty (20) feet.



- G.** Restoration to the temporary Cul-de-sac paved areas and sidewalk system within the Right-of-Way shall be the responsibility of the Developer.
- H.** Permanent Cul-de-sacs with a circular turnaround shall be paved, have a minimum radius of forty two (42) feet without a center island and forty five (45) with a center island.



### 8.2.10 Street Names.

- A. Continuations of existing Streets shall be known by the same name.
- B. Written notice that the proposed new Street names are acceptable from the Lancaster County-Wide Communications (fax number: 717 664-1126 as amended) shall be submitted.
- C. At least two (2) Street name signs shall be placed at each four-way Street intersection and one (1) at each "T" intersection.
- D. Signs shall be free of visual obstruction. The design of Street name signs should be consistent, of a style appropriate to the Municipality, of a uniform size and color, and erected in accordance with municipal standards.
- E. Private Streets shall be provided with Street name signs in conformance with this section. The plan shall note that it is the responsibility of the Developer to install the Street name signs for Private Streets.

### 8.2.11 Traffic Signs.

- A. Design and placement of traffic signs shall follow the requirements of the Municipality and PennDOT.
- B. Signs shall be free of visual obstruction.

### 8.2.12 Dwelling Unit Identification

Street numbers for all dwelling units shall be visible from the approved Street Frontage.

### 8.2.13 Underground Wiring.

- A. All electric, telephone, television, and other communication facilities distribution lines servicing New Developments should be provided by underground wiring within Easements or dedicated public rights-of-way, installed in accordance with the prevailing standards and practices of the utility or other companies providing such services.
- B. Lots which abut existing Easements or public rights-of-way where overhead electric or

telephone distribution supply lines and service connections have heretofore been installed may be supplied with electric and telephone service from those overhead lines, but the service connections from the utilities' overhead lines shall be installed underground.

- C. Where overhead lines are permitted as the exception, the placement and alignment of poles shall be designed to lessen the visual impact of overhead lines. Trees shall be planted in open areas and at key locations to minimize the view of the poles and the alignments.

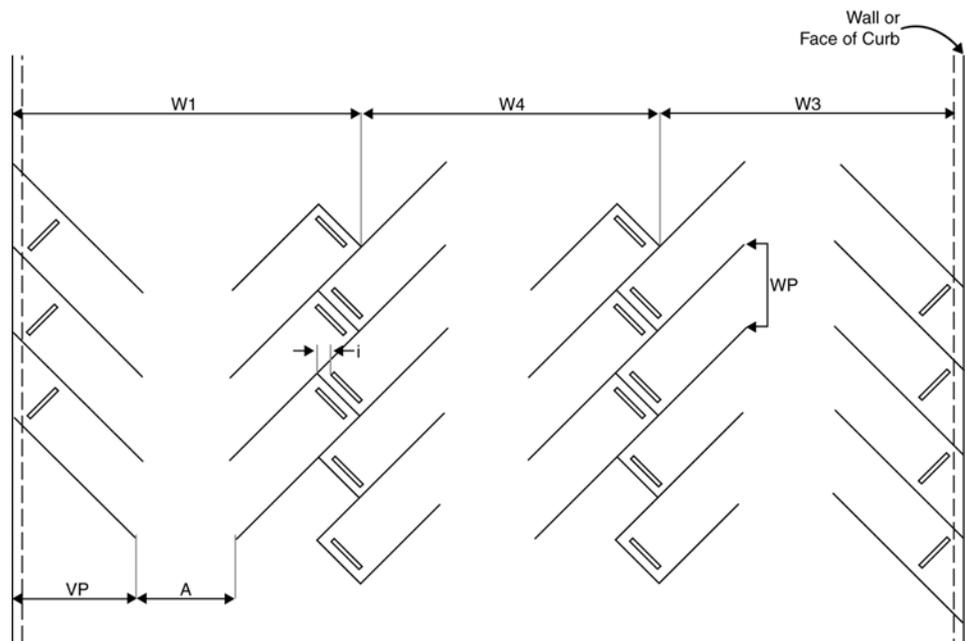
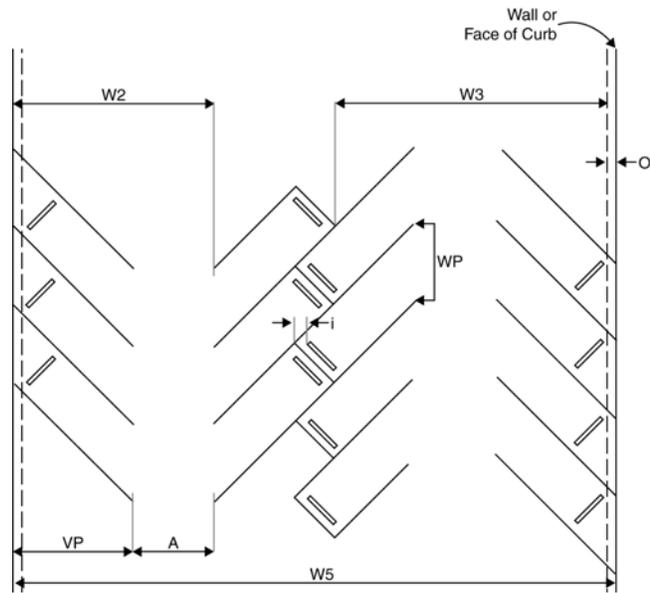
**8.3 PARKING FACILITIES**

**8.3.1 Motorized Vehicle Parking Facilities.**

- A. Motorized vehicle parking facilities shall be designed to meet the following requirements:
  1. Parallel parking shall be a minimum width of 7 feet and a minimum length of 23 feet.
  2. Perpendicular parking shall be a minimum width of 8'6", a minimum length of 18 feet, and have a minimum aisle width of 20 feet. The parking lot must have a minimum total width of 60 feet from side to side.
  3. Parking space length and width can be increased from minimum sizes where appropriate in accordance with location, use, and turn-over rate.
  4. Encroachments such as columns and light poles may encroach into a module by 1 foot and affect up to 30% of the parking spaces.
  5. Parking lots<sup>4</sup> shall be designed to meet the following requirements:

Angle	Vehicle Projection Minimum	Aisle Min.	Base Module <sup>1</sup>	Single Loaded	Wall to Interlock	Interlock to Interlock	Curb to Curb	Overhang	Interlock <sup>2</sup> Reduction	Stall Width Projection <sup>2</sup> Minimum
	<b>VP</b>	<b>A</b>	<b>W1</b>	<b>W2</b>	<b>W3</b>	<b>W4</b>	<b>W5</b>	<b>o</b>	<b>i</b>	<b>WP</b>
45°	17'8"	12'8"	48'0"	30'4"	45'0"	42'0"	44'6"	1'9"	3'0"	12'0"
50 °	18'3"	13'3"	49'9"	31'6"	47'0"	44'3"	45'11"	1'11"	2'9"	11'1"
55 °	18'8"	13'8"	51'0"	32'4"	48'7"	46'2"	46'10"	2'1"	2'5"	10'5"
60 °	19'0"	14'6"	52'6"	33'6"	50'4"	48'2"	48'2"	2'2"	2'2"	9'10"
65 °	19'2"	15'5"	53'9"	34'7"	51'11"	50'1"	50'1"	2'3"	1'10"	9'5"
70 °	19'3"	16'6"	55'0"	35'9"	53'7"	52'2"	52'2"	2'4"	1'5"	9'1"
75 °	19'1"	17'10"	56'0"	36'11"	54'11"	53'10"	53'10"	2'5"	1'1"	8'10"
90 °	18'0"	20'0"	60'0" <sup>3</sup>	42'0"	60'0"	60'0"	60'0"	2'6"	0'0"	8'6"

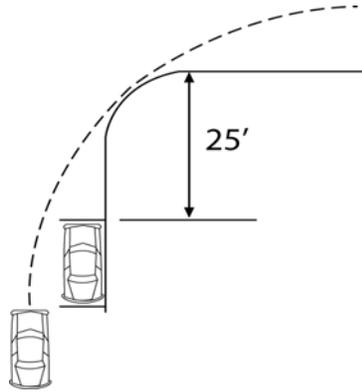
<sup>1</sup>Module is defined as the combined dimension of two parked vehicles and the aisle between them.  
<sup>2</sup>Calculated for 8'6" stall.  
<sup>3</sup>Base width may not be waived.  
<sup>4</sup>Parking dimensions for based on design vehicles of 6'7" x 17'0".



**B. General Parking Standards.**

1. Angled parking may be pull in or reverse (back-in).
2. Parking spaces for the physically handicapped shall meet the Americans with Disabilities Act (ADA). Handicapped parking shall be provided for all non-residential developments and multi-family Structures and shall be located closest to the accessible Building entrance(s).

3. On-Street parking shall be provided on at least one side of all Access Drives and proposed Streets with speeds equal to or less than 30 mph.
4. On-Street parking shall not be located within twenty five (25) feet of a Cartway intersection in order to provide safe Sight Distance and adequate turning radius for large vehicles.



5. Off-Street parking areas shall be oriented to, and within a reasonable walking distance of, the Buildings they are designed for and consistent with adjacent neighborhoods.
6. Parked vehicles adjacent to sidewalks shall not overhang or extend over the sidewalk in a manner that restricts pedestrian circulation. Where such overhang is not restricted by a wheel stop or other device, sidewalks shall have a four (4) foot minimum clearance width from any obstacles.
7. Not less than a two (2) foot radius of curvature shall be permitted for horizontal curves in parking areas.
8. All dead end parking lots shall be designed to provide sufficient back-up area for all end stalls.
9. Painted lines, arrows, and dividers shall be provided and maintained to control parking, and when necessary to direct vehicular circulation.
10. The typical cross section of any parking compound shall be prepared to meet the following minimum standards:

(a) Non Permeable

Crushed aggregate based course with a minimum thickness of six (6) inches, as specified in the Pennsylvania Department of Transportation Specifications, Form 408, and its latest revisions, or other Pennsylvania Department of Transportation approved equivalent. Pavement shall consist of a minimum of one and one-half (1-1/2) inches of binder courses and one (1) inch wearing surface. Material shall be equal or superior to Pennsylvania Department of Transportation Specifications for Bituminous Surface Course ID-2 and shall be applied in accordance with the Pennsylvania Department of Transportation Specifications,

Form 408, and its latest revisions, or other Pennsylvania Department of Transportation approved equivalent.

**(b) Permeable Pavement**

Permeable pavement is encouraged but not required. Permeable pavement shall not be located on heavy industrial Sites, fueling stations, Sites with expansive soils or shallow depth to bedrock, areas draining to the permeable pavement greater than 5 acres, areas with the water table less than two feet below the bottom of the pavement base, and less than 100 feet from drinking wells. Permeable pavement includes paving units, porous asphalt pavement, or porous concrete (using single-sized aggregate and low water content); uniformly graded stone aggregate with void space; filter fabric lining the subsurface beds; and uncompacted (or hand compacted) subgrade. Permeable pavement shall consider the infiltration rate of the soil subgrade under the base. Constant supervision during construction is encouraged as sediment must be kept from the aggregate base.

11. Shared parking is encouraged. The number of parking spaces may be reduced if shown that the uses are compatible with regard to parking needs. (See Shared Parking Second Edition, by Urban Land Institute)

**C. Parking Standards.**

1. Parking areas shall be suitably landscaped to minimize noise, Glare and other nuisance characteristics as well as to enhance the environment and ecology of the Site and surrounding area. Parking garages and roof parking shall be exempt from this requirement.
2. Pedestrian scale lighting shall be provided per Section 8.11.
3. On-Street parking on any side of the Structure may be counted toward the percentage of parking required.
4. Sidewalks/pedestrian Easements shall be provided for pedestrian circulation. All development shall incorporate a sidewalk between the Building and the Street.
5. Landscaping should be required and located in unusable parking or circulation areas with proper clearance from parked vehicles and sidewalks. Planter areas and tree wells should be installed in accordance with the parking lot dimension to avoid adverse impacts on parking functions due to improper location and/or design.

**D. Parking Structures.**

1. Lighting and reflective materials / flat paint should be used inside the parking Structure and within all pedestrian areas to increase the feeling of safety. Glossy or semi-gloss paint is discouraged.

	<b>Minimum-Maximum Horizontal<sup>2</sup> (Footcandles)</b>	<b>Minimum/Maximum Horizontal Uniformity<sup>3</sup></b>	<b>Minimum-Maximum Vertical<sup>4</sup> (Footcandles)</b>
Basic <sup>1</sup>	1-5	10:1 – 5:1	0.5-5
Ramps <sup>5</sup>			
Day	2-5	10:1 – 5:1	1-5
Night	1-5	10:1 – 5:1	0.5-5
Entrance/Exit Areas <sup>6</sup>			
Day <sup>7</sup>	50		25
Night	1-5	10:1 – 5:1	0.5-5
Stairways	2-5		1-5

Table based on the Illuminating Engineering Society (IET)

<sup>1</sup>For typical conditions.

<sup>2</sup> Minimum “maintained” Footcandles measured on the parking surface, without any shadowing effect from parked vehicles or columns. This may require 3-5 Footcandle average

<sup>3</sup> The highest horizontal Illuminance area, divided by the lowest horizontal Illuminance point or area should not be greater than the ratio shown.

<sup>4</sup> Measured facing the drive aisle at 5 feet above the parking surface at the point of the lowest horizontal Illuminance.<sup>5</sup> Applies only to clearway ramps (with no adjacent parking) but not sloping floor designs.

<sup>6</sup> A high Illuminance level for the first 65 feet inside the Structure is needed to effect a transition from bright daylight to a lower interior level.

<sup>7</sup>Daylight may be considered in the design calculations.

2. Parking lot lighting shall address Glare control, light pollution (unnecessary light), Light Trespass (bright visible sources or light spilling into neighboring properties), and reduction of shadows.
  - (a) Provision for energy conservation to mitigate over-lighting is encouraged. A maximum lighting power density of 0.3 watts per square foot is encouraged.
3. Provision of signage at exits of the parking Structures shall be required.
4. Open-Structure wall areas for natural ventilation or mechanical ventilation shall be encouraged.
5. Interaction between vehicles and pedestrians should be provided in a safe manner.
6. Traffic flow by vehicles entering the parking garage shall be mitigated by either on Site or external deceleration lanes based on the traffic impact study if required.

**8.3.2 Non-Motorized Vehicle Parking Facilities.**

Non-motorized vehicle parking facilities shall be provided in accordance with the following regulations when non-motorized vehicle use could occur:

**A. Bicycle Parking Facilities.**

Bicycle parking facilities for non-residential land uses may be provided in accordance with the following regulations:

1. Each bicycle space shall be equipped with a device to which a bicycle frame and one (1) wheel can be attached using a chain or cable. There shall be adequate separation between adjacent devices to allow bicycles to be attached or removed without moving other bicycles. The devices shall also be suitable for use by bicycles not equipped with kickstands, and the appearance of the device shall be generally consistent with nearby Urban design features.
2. Bicycle parking spaces shall be convenient to the Structure for which they are provided. They shall be visible from at least one (1) entrance to the Structure.

**B. Horse and Buggy Parking.**

Horse and buggy parking facilities for non-residential land uses may be provided in accordance with the following regulations:

1. Each horse and buggy parking area shall be equipped with a device to which the horse can be hitched. A hitching rail is acceptable.
2. Adequate signage shall be provided to direct horse and buggy circulation.

**8.4 BLOCKS AND LOTS**

**8.4.1 Blocks.**

- A. All Blocks that include residential dwellings shall have a maximum length of 1/4 mile or one thousand three hundred and twenty (1,320) feet.
- B. The design of any Block longer than one thousand three hundred and twenty (1,320) feet shall give special consideration to the requirements of fire protection, pedestrian circulation, and utility service. The governing body may require Easements as necessary for these purposes.

**8.4.2 Lot Configuration.**

The configuration of Blocks and Lots shall be based upon the minimum and maximum Lot Area requirements, salient natural features, existing improvements, proposed improvements, and the adjacent development pattern. Lot configurations should provide for flexibility in Building locations, while providing safe vehicular and pedestrian circulation. When possible, Lots with areas that are two (2) or more times the minimum requirements should be designed with configurations that allow for additional Subdivision.

**8.4.3 Specific Lot Configuration Requirements.**

**A. Relationship to Municipal Boundaries.**

In order to avoid jurisdictional problems, Lot Lines shall, wherever feasible, follow

municipal boundaries rather than cross them.

**B. Frontage.**

All Lots must front on a public or Private Street.

**C. Provisions for Future Subdivision.**

Lots resulting from a proposed Subdivision that will be large enough to be further subdivided should be configured to facilitate such future Subdivision. Adequate Street Right-of-Way shall be provided as necessary. The governing body shall require a Sketch Plan of such large Lots that indicates the potential future Subdivision is generally in conformance with the design standards of this Ordinance and the applicable zoning provisions.

**D. Lot Access.**

Lots shall not result in unsafe Driveway locations on public Streets.

**E. Flag Lots.**

Flag Lots represent a viable design alternative under the following standards. In such cases, evidence shall be submitted to the governing body that documents the circumstances and demonstrates that the platting of Flag Lots shall not restrict the development potential and pattern of development of the Tract and adjacent lands.

1. Adjacent Flagpoles shall be encouraged to share Driveway access points. More than four (4) adjacent Flag Lots shall be oriented to a common public or Private Street Right-of-Way, not Driveways.
2. Flag Lots are encouraged when Infill situations exist to achieve maximum densities.
3. Flag Lots shall not be proposed in order to avoid construction of Streets. Flag Lots proposed to create Lots for home Sites where there is no potential for the construction of a public or Private Street must demonstrate that there is no potential to construct a Street due to: (a) severe topographic or other environmental constraints that limit the design of a Street; or (b) other factors inherent in the Site which make the construction of a public or Private Street impractical.
4. The width of a Flagpole should be determined by the function of the Driveway, number of Lots served, setbacks, grading, and utility requirements.

**F. Double / Reverse Frontage Lots.**

1. Residential Double Frontage Lots are only permitted when a reduction of Driveway intersections along a Street with a high volume of vehicular movements is desired or the maintenance of the integrity of a corridor is desired.
2. Reverse Frontage Lots may be permitted when rear Alleys are proposed to provide vehicular access to Lots.

3. All double and Reverse Frontage Lots shall include an identification of the Frontage for use as a Street access.
4. All Reverse Frontage Lots shall have within the Yard(s) that is/are adjacent to any Street Right-of-Way, other than the Street of vehicular access, an Easement running the entire width of the proposed Lot, across which there shall be no vehicular access.

## **8.5 EASEMENTS**

### **8.5.1 General.**

All Easements including by way of example and not limitation; sanitary sewer facilities, Stormwater Management Facilities, public or private utilities, access and/or pedestrian access shall meet the standards found in this Section.

### **8.5.2 Design Guidelines.**

- A. To the fullest extent possible, Easements shall be centered on property lines.
- B. Nothing shall be placed, planted, set, or put within the area of an Easement that would adversely affect the function of the Easement.
- C. Indicate on the plans all proposed and existing Easements of record and indicate their location and width. All Structures located within the Easement shall be indicated. Note the recording information on the plan of record.
- D. To the fullest extent possible, utilities and pedestrian paths should be centered within an Easement. However, due to unexpected on-Lot conditions, utility and pedestrian locations may be flexible within the Easement.
- E. All utility companies are encouraged to use common Easements. Utility Easements shall be based on the width required by the utility authorities but shall have a minimum width of ten (10) feet. Utility Easements shall be located within the Street Right-of-Way or within the Building Setback Line.
- F. Where pedestrian access is provided outside of a Street Right-of-Way, pedestrian Easements shall have a minimum width of ten (10) feet.
- G. The Applicant shall reserve Easements where Stormwater or surface water management facilities exist or are proposed when located within the boundaries of the Subject Tract. The Applicant proposing to alter existing Stormwater Management facilities on adjacent and/or downstream properties shall obtain a temporary construction Easement and/or a permanent Easement and maintenance responsibilities shall be established, to the extent feasible.

When the proposed Stormwater management system will utilize or be integrated into an existing Stormwater collection or conveyance system, the existing facilities shall be improved to the standards of this Ordinance. The applicant shall determine the impacts of any proposed improvements of the existing system to downstream properties. If the

improvements will cause adverse impacts on downstream properties, the applicant shall mitigate such impacts.

## **8.6 SURVEY MONUMENTS AND MARKERS**

### **8.6.1 Monuments Shown on Final Plan.**

The location of all existing and proposed Monuments, Lot Line Markers, property corners, and drill holes shall be shown on the Final Plan. Those that are proposed shall be labeled as such. Drilled holes in curbing shall be referenced mathematically to a point on the Right-of-Way line.

### **8.6.2 New Monuments.**

Three Monuments shall be spaced around the proposed project with precise bearings and distances labeled which reference those Monuments to known property corners.

- A.** Two such Monuments shall be consecutive corners along Street rights-of-way and the third may be placed either on the boundary or internal to the Site.
- B.** Longitude and latitude coordinates of the Monuments shall be shown on the recorded plan.
- C.** If GPS technology is used, it shall be rectified and calibrated to the State Plane Coordinate System, North American Datum (NAD) 1983.
  - 1.** Monuments must be readily accessible and clear of overhead obstructions.
- D.** A computer readable point file including property lines, corners, rights-of-way, and Easements for the Site shall be submitted to the Municipality prior to plan recordation.

### **8.6.3 Monument Materials.**

Monuments shall be of concrete or stone, with a flat top having a minimum width or diameter of four (4) inches and a minimum length of thirty (30) inches. Concrete Monuments shall be marked with a three-quarter (3/4) inch copper, brass dowel, or drill hole; stone or precast Monuments shall be marked on the top with a drill hole.

### **8.6.4 Existing and Proposed Property Line and Right-of-Way Markers.**

Markers shall be set at all points where Lot Lines intersect curves, at all angles in property lines, at the intersection of all other property lines, and at the Street Right-of-Way.

### **8.6.5 Marker (Pin) Materials.**

- A.** Markers shall consist of iron pipes or steel bars at least thirty (30) inches long and not less than five-eighth (5/8) of an inch in diameter.
- B.** Drill holes shall be drilled in concrete curbs (with or without PK nails or discs) having a minimum diameter of one-quarter (1/4) inch. The depth of the holes shall be such that a PK nail or disc, if used, can be set in as close to the surface of the curb as possible. Minimum depth without the use of PK nail or disc shall be one-half (1/2) inch. In the

absence of PK nails or discs, chisel or saw marks shall be used to facilitate and identify the drill hole locations.

#### **8.6.6 Certification of Monuments and Markers.**

- A.** All Monuments, markers, and drilled holes shall be placed by a registered professional land Surveyor so that the scored marked point, or center of the drilled hole shall coincide with the point of intersection of the lines being Monumented or marked.
- B.** Provide a note on the plan indicating when the Monuments and markers are to be set.

### **8.7 SEWAGE FACILITY REQUIREMENTS**

#### **8.7.1 Sanitary Wastewater Disposal.**

The Applicant shall provide the type of Sewage Facility consistent with current plans, including but not limited to the municipal Comprehensive Plan and Act 537 plan as well as existing physical, geographical and geological conditions.

- A.** The following types of sanitary Sewage Facilities are listed in order of desirability:
  - 1.** Public Sewage System.
  - 2.** Private Community Sewage System.
- B.** The governing body may require installation of a capped system within the road Right-of-Way. If required, the Municipality or authority shall inspect the capped system and accept Dedication.
- C.** The applicant shall provide evidence of approval from the Pennsylvania Department of Environmental Protection prior to Plan recording.
- D.** When connection to an existing Public Sewage System or Private Community Sewage System is proposed, the application shall include a statement from the authority or organization providing such service that sufficient capacity to service the proposed development is available. Such notice shall be dated within twelve (12) months of the plan application. Extender agreements shall be provided prior to Dedication.
- E.** Approval by the authority or Municipality of the Sewage Facilities shall be received and submitted to the Municipality prior to Final Plan recording.

### **8.8 WATER SUPPLY**

#### **8.8.1 Intent.**

The Applicant shall provide the type of community water supply system consistent with current plans, including but not limited to the municipal Comprehensive Plan as well as existing physical, geographical and geological conditions.

#### **8.8.2 Design Guidelines.**

- A.** The following types of water supply systems are listed in order of desirability:

1. Publicly owned community water supply systems.
  2. Privately owned community water supply systems.
  3. Individual well when a community water supply system is not accessible.
- B.** Applicants shall submit to the governing body documentation in the form of a copy of a Certificate of Public Convenience from the Pennsylvania Public Utility Commission and/or private water utility authority that the project is located in an area served by a public utility and a statement that the utility has the capacity to serve the project at this time; or a cooperative agreement or an agreement to serve the project from a bonafide cooperative association of Lot owners or from a municipal corporation, authority, or utility.
- C.** Fire hydrants shall be provided whenever the water supply system contains sufficient capability or is planned to have such capability within two (2) years from the date of Final Plan approval.
1. The location and kind of fire hydrant shall meet the specifications of the local municipal regulation.
  2. Fire hydrant location(s) shall be submitted prior to Final Plan approval.
- D.** When a new private water supply system is proposed for development, a copy of the approval of such system by the appropriate agency or utility company that provides the service shall be submitted with the Final Plan. Suitable agreements shall be established for the ownership and maintenance of such a distribution system.
- E.** Prior to installation of any new privately owned community water supply system in areas or in proximity to areas of known groundwater contamination or inadequate yields of potable supplies, aquifer and water quality tests shall be performed pursuant to Sections 7.4 and 7.5.

## **8.9 HAZARDS ASSOCIATED WITH CARBONATE ROCKS**

### **A. Hydrogeologic Report Required.**

When, in the opinion of the governing body, there is a probable likelihood that a project will affect or be affected by carbonate geologic hazards the governing body shall require submission of a hydrogeologic report pursuant to Section 7.4.

### **B. Specifications for Sanitary Sewer Systems.**

All Subdivisions and Land Developments with individual subsurface disposal systems (on-Lot systems) proposed shall provide an aquifer test. Development that in the opinion of the governing body that poses significant risks in stimulating the formation of sinkholes or in causing hydrologic connection of contaminated surface water with subsurface aquifers shall provide an aquifer test.

### **C. Stormwater Management Facilities.**

1. The design of all Stormwater Management facilities over the following features shall include an evaluation of measures to minimize adverse effects and shall be constructed to minimize those effects.
  - (a) Sinkholes.
  - (b) Closed depressions.
  - (c) Lineaments in carbonate areas.
  - (d) Fracture traces.
  - (e) Caverns.
  - (f) Ghost lakes.
  - (g) Disappearing Streams.

## 8.10 LANDSCAPING

### 8.10.1 Native and Invasive Planting.

- A. Native Plant materials should be incorporated in all designs. The use of Native Plant material can help improve water quality, provide additional and improved wildlife habitat, and typically adapt to local conditions which then require less maintenance. Native Plants *must* be used near greenways, suburban forested areas, Wetlands, and riparian areas.
- B. Except as noted above, Non-Native Plants may be included in place of a Native Plant if it is not considered invasive and the plant does not introduce pests or diseases. A Non-Native Plant may be incorporated into designs when they prove to be better suited for the Urban soil, environment, or spatial constraints, Urban stress mitigation, and integration into the surrounding ecosystem.
- C. The following is a list of invasive plants which may not be used in any Urban planting schedule:
  1. **Trees.**

Tree-of-heaven (*Ailanthus altissima*), Norway maple (\**Acer platanoides*), Sycamore maple (*Acer pseudoplatanus*), Empress tree (*Paulownia tomentosa*), Callery pear (\**Pyrus calleryana*), Siberian elm (*Ulmus pumila*)
  2. **Shrubs.**

Japanese barberry (\**Berberis thunbergii*), European barberry (*Berberis vulgaris*), Russian Olive (*Elaeagnus angustifolia*), Autumn olive (*Elaeagnus umbellata*), Winged Euonymus (\**Euonymus alatus*), Border privet (*Ligustrum obtusifolium*), Common Privet (*Ligustrum vulgare*), Tartarian honeysuckle (*Lonicera tartarica*), Standish honeysuckle (*Lonicera standishii*), Morrow's honeysuckle (*Lonicera morrowii*), Amur honeysuckle (*Lonicera maackii*), Bell's honeysuckle (*Lonicera morrowii* x *tatarica*), Common buckthorn (*Rhamnus catharticus*), Glossy buckthorn (*Rhamnus frangula*), Wineberry (*Rubus phoenicolasius*), Multiflora rose (*Rosa multiflora*), Japanese spiraea (\**Spiraea japonica*), Guelder rose (\**Viburnum opulus* var. *opulus*)
  3. **Grasses.**

Cheatgrass (*Bromus tectorum*), Japanese stilt grass (*Microstegium vimineum*), Maiden grass (*\*Miscanthus sinensis*), Common reed (*Phragmites australis*), Reed canary grass (*Phalaris arundinacea*), Johnson grass (*Sorghum halepense*), and Shattercane (*Sorghum bicolor* ssp. *drummondii*)

**4. Flowers.**

Garlic mustard (*Alliaria petiolata*), Goutweed (*Aegopodium podagraria*), Bull thistle (*Cirsium vulgare*), Canada thistle (*Cirsium arvense*), Musk thistle (*Carduus nutans*), Jimsonweed (*Datura stramonium*), Goatsrue (*Galega officinalis*), Giant hogweed (*Heracleum mantegazzianum*, Dame's rocket (*Hesperis matronalis*), Purple Loosestrife (*Lythrum salicaria*, *L. virgatum*), Eurasian water-milfoil (*Myriophyllum spicatum*), Star-of-Bethlehem (*Ornithogallum nutans*, *umbellatum*), Japanese knotweed (*Polygonum (Falopia) cuspidatum/ Polgonum sachalinense*), Wild parsnip (*Pastinaca sativa*), Beefsteak plant (*Perilla frutescens*), Lesser celandine (*Ranunculus ficaria*), Water chestnut (*Trapa natans*)

**5. Vines.**

Fiveleaf akebia (*Akebia quinata*), Porcelain-berry (*Ampelopsis brevipedunculata*), Oriental bittersweet (*Celastrus orbiculatus*), Japanese honeysuckle (*Lonicera japonica*), Kudzu (*Pueraria lobata*), Mile-a-minute vine (*Polygonum perfoliatum*)

\* Species with cultivars that are known to be non-invasive may be acceptable within a planting plan.

**8.10.2 Street Trees / Screening / Vegetative Buffering.**

- A.** Any existing vegetation that is in appropriate locations, of an acceptable species and quality may be used to fulfill Landscaping or Buffering requirements.
- B.** In order to aid surveillance and minimize the potential for crime, planting shall also be sited, massed, and scaled to maintain visibility of doors and first floor windows from the Street and from within the development to the greatest extent possible. Planting patterns shall not obstruct sight lines or create isolated areas, especially near pedestrian walking paths.
- C.** Off Street parking and storage of vehicles in Front Yards of commercial, industrial, and institutional Lots shall be screened at least 50% from the public Right-of-Way by vegetative Screening or fencing between 3 and 4 foot in height.
- D.** Trash disposal areas, such as dumpster or compactor sites, shall be effectively screened so as not to be visible from off Site adjacent parking areas, roadways, or adjacent residential properties. Such areas shall be screened with a combination of architectural masonry (or fencing) and/or Landscaping with a height of at least six (6) feet.
- E.** Urban open space areas should also include but not be limited to at least three (3) of the following:
  - 1.** Seasonal planting areas
  - 2.** Large deciduous trees
  - 3.** Seating

4. Pedestrian scale lighting
  5. Gazebos or other decorative shelters
  6. Play Structures for children
  7. Natural environment areas
  8. Recreational amenities
  9. Trails
  10. Or any other items agreed upon by the governing body.
- F.** All planting shall be performed in conformance with good nursery and landscape practice. Plant materials shall conform to the standards recommended by the American Association of Nurseryman, Inc., in the American Standard of Nursery Stock, ANZIZ60, current edition, as amended.
1. Provide a landscape plan note indicating that the top of the main order root (first large set of roots that divide from the trunk) shall be planted no lower than one or two inches into the soil.
  2. Planting designs are encouraged to share planting space for optimal root growth whenever possible. Continuous planting areas vs. isolated planting boxes are encouraged.
  3. No staking and wiring of trees shall be allowed without a maintenance note for the staking and wiring to be removed within one year of planting.
  4. All Street trees shall be provided by the Applicant in accordance with the following standards:
    - (a) The trees shall be nursery grown in a climate similar to that of the locality of the project. Varieties of trees within the Right-of-Way shall be subject to the approval of the authority that accepts ownership of the Street.
    - (b) All trees shall have a normal habit of growth and shall be sound, healthy, and vigorous; they shall be free from disease, insects, insect eggs, and larvae.
    - (c) The trunk caliper, measured at a height of six (6) inches above finish grade shall be a minimum of two (2) inches.
    - (d) Tree planting depth shall bear the same relationship to the finished grade as the top of the root ball or original grade of origin.
- G.** All required landscape plants shall be maintained and guaranteed for a length of eighteen (18) months from the date of planting. No more than one-third (1/3) of the tree or shrub shall be damaged or dead without replacement. Replacement plants shall conform to all requirements of this section and shall be maintained after replanting for an additional eighteen (18) months.
- H.** The plant's growth shall not interfere with the Street Cartway, sidewalk, signage, Easements, Clear Sight Triangles, or utility line. Within the Clear Sight Triangle, typical branching shall not be within ten (10) feet of ground level after ten (10) years of growth.

- I.** No one species shall comprise more than thirty-three percent (33%) of the entire number of Street trees in a particular development.
- J.** Existing Significant Trees and natural features, such as drainage corridors, shall be preserved to the maximum extent practicable and incorporated into Site plans and Site design as major amenities.
  - 1.** If a Significant Tree is designated to be preserved but is removed or substantially damaged during the clearing, grading, or construction, the Applicant or Developer may be required by the Municipality to replace the removed or damaged tree.
- K.** Street trees shall be provided in all Land Developments which include new Streets.
  - 1.** Street trees shall not be located farther than forty (40) feet away from the new Street Right-of-Way.
  - 2.** The number of Street trees shall be based on 2 Street trees required for every 100 linear foot of new Street measured from the centerline.
  - 3.** The spacing of trees shall be based on the size of the tree canopy at maturity with trees spaced no closer than 30 feet on center if the tree canopy is less than 30 foot spread at maturity, spaced 30-60 feet on center if the tree canopy is 30 to 50 feet spread at maturity, and Street trees spaced 50-100 feet on center if the tree canopy is over 50 feet spread at maturity. When a less formal arrangement is desired, where more massing is appropriate, or improvements such as benches are located grouping of Street trees is encouraged.
  - 4.** Street trees shall be one of the following species. Other tree species may be used provided acceptable information is submitted to indicate that the species are hardy trees or fits the sites ecosystem.

Common Name	Botanical Name	Height/Spread	Drought Tolerances	Soil Type	Soil Acidity/ Aerosol Salt Tolerance	Soil Saturation Preference	Root Pattern	Canopy Structure/ Growth Rate
Red Maple	Acer rubrum	75/35	Moderate	Clay; loam;	Acidic/ Low tolerance	Extended flooding to well drained	Large surface roots	Upright oval canopy/ fast growing
Sugar Maple	Acer saccharum	70/40	Sensitive to reflected heat and drought	Sand; loam. Not compacted	Acidic; alkaline/ Not tolerant	Well drained	Often shallow	Dense Oval/ Mod-slow growing
River birch	Betula nigra	40-50/ 25-35	Moderate	Clay; loam	Acidic	Extended flooding to well drained	Not a problem	Narrow-pyramidal crown/ Fast growing when moist
Common Hackberry	Celtis occidentalis	45-80/ 40-50	Highly tolerant	Clay; loam	Tolerant of highly alkaline to moderate acidic	Extended flooding to well drained	Large surface roots	Round/Prune to prevent weak branch crotches

Common Name	Botanical Name	Height/Spread	Drought Tolerances	Soil Type	Soil Acidity/Aerosol Salt Tolerance	Soil Saturation Preference	Root Pattern	Canopy Structure/Growth Rate
American Yellowwood	Cladrastis kentuckea	30-50/40-50	Moderate	Clay; sand; loam	Alkaline; acidic	Occasional wet to well-drained	Surface roots when wet	Round/ Moderate/ Prune structure
American beech	Fagus grandifolia	50-75/40-60	Moderate to low	Sand; loam	Acidic/Low Tolerance	Needs well-drained	Surface roots/ Needs space	Very dense oval/ Moderate
White ash	Fraxinus americana	50-80/40-60	Moderate	Sand; loam	Alkaline; acidic / Highly tolerant	Extended flooding to well-drained	Large surface roots/ Needs space	Oval/ Fast growing
Green Ash	Fraxinus pennsylvanica	60-70/45-50	Highly tolerant	Sand; loam; clay	Alkaline; acidic / Moderately tolerant	Extended flooding to well-drained	Large surface roots develop when confined	Upright/ Fast; Prune structure to develop trunk
Thornless Honeylocust	Gleditsia triacanthos inermis	50-70/35-50	Highly tolerant	Clay; sand; loam	Alkaline; acidic/ highly tolerant	Occasional wet to well-drained	Can grow surface roots	Open oblong
Sweetgum	Liquidambar styraciflua	60-75/35-50	Moderate to little	Clay; sand; loam	Acidic / Moderately tolerant	Extended flooding to well-drained	Surface roots when moist	Pyramidal/ Extreme sensitivity to construction
Tuliptree	Liriodendron tulipifera	80-100/30-50	Moderate	Sand; loam	Acidic / No tolerance	Well-drained to occasional wet	Not a problem; Needs space	Oval / Moderate growth
Blackgum/ Sourgum	Nyssa sylvatica	65-75/25-35	Highly tolerant	Clay; loam	Acidic/ Moderately tolerant	Extended flooding to well-drained	Not a problem; deep roots	Pyramidal/ Slow growth
American Hophornbeam	Ostrya virginiana	25-50/25	Tolerant once established	Sand; loam	Poor salt tolerance pH adaptable	Prefers moist when young	Not a problem	Rounded
Sycamore	Platanus occidentalis	75-90/50-70	Highly tolerant	Clay; loam; should not dry out	Alkaline; acidic /Moderately tolerant	Extended flooding to well-drained	Can grow surface roots	Dense pyramidal/ Fast growing
White Oak	Quercus alba	60-100/60-80	Moderate to low	Sand; loam; should not dry out	Acidic / Highly tolerant	Occasional wet to well-drained	Not a problem	Pyramidal/ Slow growing
Shingle Oak	Quercus imbricaria	40-60/40-60	Tolerant intermittent drought	Rich; deep; well drained	Alkaline soils up to 7.5 pH	Moist	Not a problem	Rounded/ Transplants well
Chestnut Oak	Quercus montana	50-60/40-60	Highly tolerant	Sand; loam	Acidic/ unknown salt tolerance	Well-drained	Root flare when older	Round/ Moderate growth
Red Oak	Quercus rubra	60-70/50-60	Highly tolerant	Sand; loam	Acidic/ Highly tolerant	Well-drained	Can for large surface roots	Dense; round/Fast growth; Train into one leader
Swamp White Oak	Quercus bicolor	50-70/50-70	Moderate	Clay; sand; loam	Acidic/ Moderate tolerance	Extended flooding to well-drained	Not a problem	Round/ Moderate growth; long lived
Basswood/ American Linden	Tilia americana	50-80/35-50	Moderate	Sand; loam	Acidic; alkaline/ Low tolerance	Well-drained	Not a problem; Needs space	Dense; Pyramidal / Moderate

#### **8.10.4 Ground Cover.**

Ground cover shall be provided on all areas of the project to prevent soil erosion. All areas which are not covered by paving, stone, or other solid material shall be protected with a suitable ground cover, consisting of spreading plants including sods and grasses less than eighteen (18) inches in height.

#### **8.10.5 Existing Wooded Areas.**

No more than twenty percent (20%) of existing woodlands located in Environmentally Sensitive Areas shall be destroyed or altered. No more than fifty percent (50%) of woodlands which are not located in Environmentally Sensitive Areas shall be destroyed or altered. If the Applicant can prove that Invasive Species are within either of these areas, then the percent of woodlands to be removed may be increased to eradicate Invasive Species. (See 8.10.1C)

#### **8.10.6 Tree Protection Zone.**

- A.** Prior to construction, the Tree Protection Zone shall be delineated at the Dripline of the tree canopy. All trees scheduled to remain shall be marked; however, where groups of trees exist, only the trees on the edge need to be marked. A forty-eight (48) inch high snow fence or forty-eight (48) inch high construction fence mounted on steel posts located eight (8) feet on center shall be placed along the boundary of the Tree Protection Zone.
- B.** No construction, storage of material, temporary parking, pollution of soil, or regrading shall occur within the Tree Protection Zone. When there is a group of trees, the Tree Protection Zone shall be based on the location of the outer trees.

### **8.11 LIGHTING**

#### **8.11.1 Purpose.**

The standards established in this section set forth criteria for:

- A.** Providing lighting in outdoor public places where public health, safety, and welfare are potential concerns.
- B.** Controlling Glare from non-vehicular light sources that impair safe travel.
- C.** Protecting neighbors and the night sky from nuisance Glare and stray light from poorly aimed, placed, applied, maintained, or shielded light sources.

#### **8.11.2 Applicability.**

Outdoor lighting shall be required for safety and in areas of public assembly and travel, including, but not limited to: Streets, multi-family dwelling units, commercial, industrial, recreation areas, and institutional uses. The Municipality may require lighting to be incorporated for other uses or locations, as they deem necessary. The Glare control requirements herein contained apply to lighting in all above mentioned uses as well as sign, architectural, Landscaping, and residential lighting.

### 8.11.3 Illumination Levels.

Lighting shall have intensities and uniformity ratios in accordance with the current recommended practices of the Illuminating Engineering Society of North America (IESNA) as contained in the IESNA Lighting Handbook. Future amendments to said recommended practices shall become a part of this Ordinance without further action of the Municipality. Examples of intensities for typical outdoor applications, as extracted from the 8th Edition of the Lighting Handbook, are presented below:

Use	Task	Maintained Footcandles <sup>1</sup>	Uniformity Ratio <sup>2</sup> (Max.:Min.)
<b>Streets</b>	Local Residential	0.4 Min.	6:1
	Local Commercial	0.9 Min.	6:1
<b>Parking: Multi-Family Residential</b>	Low Vehicular/Pedestrian Activity	0.2 Min.	4:1
	Medium Vehicular/Pedestrian Activity	0.6 Min	4:1
<b>Parking: Industrial, Commercial, Institutional and Municipal</b>	High Activity (e.g., regional Shopping centers/fast food facilities, major athletic /civic /cultural events)	0.9 Min.	4:1
	Medium Activity (e.g., community shopping centers, office parks, hospitals, commuter lots, cultural /civic/recreational events)	0.6 Min.	4:1
	Low activity (e.g., neighborhood shopping, industrial employee parking, schools, church parking, farm businesses, farm operations)	0.2 Min.	4:1
<b>Walkways and Bikeways</b>		0.5 Min.	5:1
<b>Building Entrances and Signs</b>		4.0 Avg.	-

1. Illumination levels are maintained horizontal Footcandles on the task, e.g., pavement or area surface.

2. Uniformity ratio is a measure of the dispersion of light on an area. The ratio is measured as maximum light level to minimum light level. Example: 4:1 for the given area, the maximum level of illumination should be no less than 4 times the minimum level of illumination (0.2 x 4 = 0.8 maximum light level)

### 8.11.4 Lighting Fixture Design.

- A.** Dedicated fixtures shall be of a type and design appropriate to the lighting application and aesthetically acceptable to the Municipality.
- B.** For lighting horizontal tasks such as roadways, sidewalks, entrances, and parking areas, fixtures shall meet IESNA Fully Shielded criteria (no light output emitted above ninety (90) degrees at any lateral angle around the fixture). Individual fixtures whose aggregate lamp output does not exceed one thousand eight hundred (1,800) lumens (typical

household outdoor lighting) are exempt from this requirement.

- C. The use of floodlighting, spotlighting, wall-mounted fixtures, decorative globes and spheres, and other fixtures not meeting IESNA full-cutoff criteria shall be permitted only with the approval of the Municipality, based upon applicability in retaining the Urban character of the Municipality and achieving acceptable Glare control.
- D. Fixtures shall be equipped with, or be modified to, incorporate light directing and/or shielding devices such as shields, visors, skirts, or hoods to redirect offending light distribution and/or reduce direct or reflected Glare. Glare control shall be achieved primarily through the use of such means as cutoff fixtures, shields and baffles, and appropriate application of fixture mounting height, wattage, aiming angle and fixture placement.

#### **8.11.5 Control of Nuisance and Disabling Glare.**

- A. All outdoor lighting shall be aimed, located, designed, fitted, and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely travel.
- B. Unless for safety, security, or all-night operations, lighting shall be controlled by automatic switching devices to permit extinguishing between eleven (11) p.m. and dawn.
- C. Lighting proposed for use after eleven (11) p.m., or after the normal hours of operation, shall be reduced by an average of seventy-five percent (75%) from that time until dawn, unless supporting a specific purpose.
- D. Vegetation screens shall not be employed to serve as the primary means for controlling Glare.
- E. The intensity of illumination projected onto an existing residential use from an existing property boundary shall not exceed 0.6 vertical Footcandle, measured at the existing property line at a height of 5 feet;

#### **8.11.6 Installation.**

- A. Electrical feeds to lighting standards shall be run underground, not overhead.
- B. Pole mounted fixtures shall not be mounted in excess of 25 feet high.
- C. Lighting standards in parking areas shall be placed outside paved areas or on concrete pedestals at least thirty (30) inches high above the pavement, or by other approved protective means.

#### **8.11.7 Post-Installation Inspection.**

The Municipality reserves the right to conduct a post installation nighttime inspection to verify compliance with the requirements of this Ordinance and, if appropriate, to require remedial action at no expense to the Municipality.

#### **8.11.8 Street Lighting Dedication.**

- A.** The Municipality must accept Dedication of Street lighting facilities located within the Right-of-Way of a Street dedicated to the Municipality.
- B.** Until such time as the Street lighting is dedicated, the Developer of the Tract (who has escrowed the Street lighting) will be responsible for any and all costs associated with each Streetlight. Such costs shall include, but not be limited to: administration, placement, and maintenance. Electrical charges shall be the responsibility of the Municipality at the issuance of the first Building occupancy permit within the development.
- C.** Streetlights not dedicated to the Municipality will remain the responsibility of the Developer or appropriate private entity including all costs and responsibilities for the lighting in perpetuity.

**ARTICLE 9**  
**VISION STATEMENT AND DESIGN STANDARDS FOR**  
**INFILL AND REDEVELOPMENT AREAS**

The purpose of the Infill and Redevelopment standards is to promote revitalization, direct reinvestment, and sustain the economic vitality while being sensitive to design context and individual neighborhood character. Therefore, the design standards incorporate flexibility into traditionally regulated areas and promote a unified Streetscape to strengthen the visual and physical character of existing neighborhoods. The intent is to retain and promote the existing businesses and to facilitate New Development that contributes to, and upgrades, older, established communities. As increased development interest in older Urban areas begins, it is essential that both new projects and Redevelopment contribute, be respectful, and be sensitive to the distinctive neighborhood character.

The intent of Article 9 is to provide clear, quantitative review standards that are easy to administer and offer certainty to Developers and citizens alike while maintaining a degree of design flexibility to allow and encourage creative Site and Building designs and encourage alternative design solutions that result in a better, distinctive product.

**9.1 GENERAL**

**9.1.1 Minimum Standards and Requirements.**

Use of a Sketch Plan per Article 4.1 and Appendix H (Street ROW Matrix) is strongly encouraged to be used in conjunction with Article 9.

**A.** Infill development using Article 9 shall include all of the following criteria:

Lots and Parcels which are adjacent to developed land on perimeter boundaries.

**B.** Redevelopment projects using Article 9 shall include all of the following criteria:

Remodeling, reusing, or replacement of existing Structures on a previously development Lot or Parcel.

**9.1.2 Compliance with Municipal Ordinances Required.**

All plans shall be designed in compliance with the municipal zoning ordinance and all other applicable ordinances, plans, studies, and local requirements.

**9.1.3 Zoning Approvals Required Prior to Plan Submission.**

When a plan proposal requires the grant of a special exception, conditional use or variance from the municipal zoning ordinance, the Applicant shall obtain such special exception, conditional use or variance approval from the governing body and/or zoning hearing board, as applicable, prior to the submission of the Preliminary Plan. The plan shall be designed and developed in accordance with any conditions that have been imposed upon the grant of such special exception, conditional use or variance by the governing body and/or zoning hearing board, as applicable.

## **9.2 SITE LAYOUT/DEVELOPMENT PATTERN**

### **9.2.1 Intent.**

Building design for Infill and Redevelopment projects shall be compatible with adjacent development where appropriate. The layout of Principal Buildings, Accessory Structures, and parking areas along a Street is an example of a repeated Site pattern that creates a cohesive visual identity and attractive pedestrian Street scene for an area. Creating a strongly defined Street edge will improve the pattern of development. A sense of visual unity is created within a neighborhood when similar Building features are repeated.

Building orientation strongly influences a development Site's focus of activity. A Building oriented at least in part to an adjoining public Street can create a strong presence in the public realm, and can contribute significantly to a pedestrian-friendly built environment. Building design that creates or adds to the visual interest of a Streetscape and a pedestrian scale is an essential element of Infill and Redevelopment projects. Building height, scale, and massing can be used to emphasize important corners, designate points of entry, and promote compatibility with surrounding uses. Planting shall be sited, massed, and scaled to maintain visibility of doors and first floor windows from the Street and from within the development.

### **9.2.2 General Arrangement.**

- A.** Buildings and open space shall be compatible with, or complement the established proportion and Building mass of adjacent developments. Maintain a pedestrian scale and character when appropriate.
- B.** In order to maintain or create a sense of place and "arrival", all developments at the intersection of two Arterial and/or Collector Streets shall comply with the following Site layout and Building orientation standards:
  - 1.** Parking areas and drive-through facilities shall not be located within a 150 foot radius measured from the intersection of the centerline of the two Streets.
  - 2.** Development located within a 150 foot radius from the intersection of the centerline of the two Streets shall include one or more of the following focal point features which shall be visible from the intersecting Streets;
    - (a)** A distinctive architectural or Building design that does not represent standard franchise architecture;
    - (b)** Fountains or other water feature;
    - (c)** Public plazas or other open space; or
    - (d)** Significant landscape feature.
- C.** Entry facades shall orient towards the primary Street or active pedestrian zone within the site to create an inviting image, consistent front, and Street edge definition.
- D.** To the maximum extent practicable, the orientation of new Lots created shall repeat the predominant relationship of Buildings to Buildings and Buildings to Street along the same and facing Block faces.

### 9.2.3 Lot Access.

- A.** Connections to compatible adjacent land uses should be provided to the maximum extent feasible.
  - 1.** Common or shared service and delivery access to compatible land uses should be provided between adjacent Parcels and/or Buildings.
  - 2.** Projects should not become an isolated island in the surrounding community. Instead, to reduce vehicle congestion and offer greater connectivity between adjacent land uses, the following standards shall apply except where prohibited for overriding public safety or other traffic related considerations:
    - (a)** The internal Street system shall connect to the perimeter public Street system to provide multiple direct connections to, and between local destinations.
    - (b)** The internal Street system shall connect to the perimeter public Street system to provide community connections to knit separate development together rather than forming barriers between them.
- B.** In order to maximize the efficiency of the Street network, major traffic generators should be located so that their primary access is from a thoroughfare or commercial access roads.
  - 1.** If a land use is proposed at a location or density that will have a significant effect on current traffic patterns, a traffic impact study shall be required to ensure that the Street network can accommodate the anticipated traffic demands and to define required Street improvements.
  - 2.** The number of entrances should be minimized to the extent possible in order to reduce conflicting points and facilitate traffic flow. The specific location of primary vehicle entrances is dependent on the following factors:
    - (a)** The location of existing or planned median breaks;
    - (b)** Separation distances between the entrance and major intersections, minor intersections, and adjacent entrances;
    - (c)** The need to provide shared access to adjacent Parcels of land;
    - (d)** The need to align with previously approved or constructed access points on the opposite side of the Street;
    - (e)** The minimum number of entrances needed to move traffic onto and off the Site safely and efficiently; and
    - (f)** The need to provide multiple direct connections to, and between, local destinations such as parks, schools, and shopping.

- C.** Specific design or geometrics of development Streets and Access Drives shall meet the intent of these design guidelines. (See Section 9.3)
- 1.** Configuration and design shall be appropriate, given the size of the development and the Capacity of the Street.
  - 2.** Geometrics shall be dependent on a variety of factors including traffic volume, speed, and distribution. The resulting design should provide an efficient ingress and egress to the development and the following design issues should be addressed in each case:
    - (a)** The number of in-bound and out-bound lanes;
    - (b)** Lane width;
    - (c)** Throat length (i.e. the distance between the Street and the first point at which cross traffic or left turns are permitted);
    - (d)** Curb radii;
    - (e)** The need or desirability of a raised median;
    - (f)** The need for a deceleration lane; and
    - (g)** Accommodation for pedestrian and non-motorized crossings.
- D.** A clear system of Driveways / Access Drives / Streets shall be established to carry the highest volumes of traffic within the Site. (See Section 9.3)
- 1.** Internal Driveways / Access Drives / Streets shall contain no perpendicular parking spaces that directly access them.
  - 2.** Truck loading and circulation facilities shall be appropriately designed and provided for. To the greatest extent possible, these areas should be separate from customer parking and pedestrian areas.
  - 3.** As the size of the development and the volume of the trucks increase, internal circulation patterns should reflect an increased separation between non-truck and truck traffic.

**9.2.4 Lot Frontage.**

All Lots must front on a public Street or a Private Street.

**9.2.5 Provisions for Future Subdivision.**

Lots resulting from a proposed Subdivision that will be large enough to be further subdivided shall be configured to facilitate such future Subdivision. Adequate Street Right-of-Way shall be provided as necessary.

**9.2.6 Flag Lots.**

Flag Lots represent a viable design alternative under the following standards. In such cases, evidence shall be submitted to the governing body that documents the circumstances and demonstrates that the platting of Flag Lots shall not restrict the development potential and pattern of development of the Tract and adjacent lands.

- A. Adjacent Flagpoles shall be encouraged to share a common access point.
- B. Up to four (4) adjacent Lots are encouraged to be oriented to a shared Driveway. More than four (4) adjacent Lots shall be oriented to a Street Right-of-Way.
- C. Flag Lots are encouraged when Infill situations exist to achieve maximum densities.
- D. Flag Lots proposed to create Lots for home Sites where there is no potential for the construction of a public or Private Street must demonstrate that there is no potential to construct a Street due to: (a) severe topographic or other environmental constraints that limit the design of a Street; or (b) other factors inherent in the Site which make the construction of a public or Private Street impractical.
- E. The width of a Flagpole should be determined by the function of the Driveway, number of Lots served, setbacks, grading, and utility requirements.

#### **9.2.7 Double / Reverse Frontage Lots.**

- A. Residential Double Frontage Lots are only permitted when a reduction of Driveway intersections along a Street with a high volume of vehicular movements is desired or the maintenance of the integrity of a corridor is desired.
- B. Reverse Frontage Lots may be permitted when rear Alleys are proposed to provide vehicular access to Lots.
- C. All double and Reverse Frontage Lots shall include an identification of the Frontage for use as a Street access.
- D. All Reverse Frontage Lots shall have within the Yard(s) that is/are adjacent to any Street Right-of-Way, other than the Street of vehicular access, an Easement running the entire width of the proposed Lot, across which there shall be no vehicular access.

### **9.3 STREETS, ACCESS DRIVES AND DRIVEWAYS**

- A. Each Street shall be designed to meet the design requirements by use of Appendix G and Appendix H.
- B. Consideration should be given to where snow placement easements will be situated on the site.

#### **9.3.1 Intent.**

Ensure that new Streets are compatible with established Street pattern and support the expansion of the overall Street system. This may be accomplished by evaluating Future Access Strip connections prior to submitting plans.

Maintaining established Street patterns within communities helps to retain a visual continuity and unity to an area. Projects shall repeat established patterns of vehicle circulation, when feasible, and shall provide safe, convenient, and efficient vehicular access both within a development and to the surrounding communities. Circulation patterns shall be designed to limit points of access from major thoroughfares and minimize the impacts of non-residential traffic on adjacent residential properties. Joint use with adjacent Landowners is encouraged and access Easements to adjoining properties should be explored. Internal vehicle circulation shall provide a clear visual path to provide safe, convenient, and efficient vehicular access within and between developments.

### **9.3.2 General Arrangement.**

The following criteria shall be considered in the design of new Streets in all Infill/Redevelopment Land Developments.

- A.** The alignment of Streets shall conform to the circulation plan of the municipal Comprehensive Plan, to Official Maps, and to such municipal, County and State road and highway plans as have been duly adopted.
- B.** For Streets not shown on the circulation plan or Official Map, the arrangement shall take into account existing Topography and other Site constraints when providing for the appropriate extension of existing Streets.
- C.** Local Streets shall be arranged so as to discourage excessive speeds when their function is to remain local.
- D.** Curvilinear Streets and Cul-de-sacs should be utilized only where Topography and natural features dictate them on the Site, and where their use will be consistent with adjoining development patterns. Curvilinear Streets shall not be used immediately adjacent to an existing grid Street system without providing a transition that continues and protects the grid. New Street systems shall take into consideration the dispersal of traffic and to the ultimate functioning of the existing Street system and regional transportation network.
- E.** Streets shall be laid out to provide convenient and safe access to the property. Where appropriate, the governing body may require additional Cartway improvements and/or Right-of-Way width along existing Street Frontages to accommodate the anticipated traffic increases and to facilitate vehicular turning movements to and from individual Lots.
- F.** Where a development abuts an existing or proposed Arterial and Collector Street, the governing body may require access management techniques such as the use of marginal access Streets, Reverse Frontage Lots, or other such treatment that will provide protection for Abutting properties, reduce the number of intersections with the Arterial Street, and separate the local and through traffic.
- G.** The use of permeable pavement is encouraged on sidewalks, plazas, Driveways, parking lots, and low-traffic roads. Permeable pavement shall not be located on industrial Sites, fueling stations, Sites with expansive soils or high depth to bedrock, areas draining to the permeable pavement greater than 5 acres, areas with the water table less than two feet below the bottom of the pavement base, and less than 100 feet from drinking wells.
- H.** Streets shall be designed with drainage grates that are safe for crossing by bicycles and/or

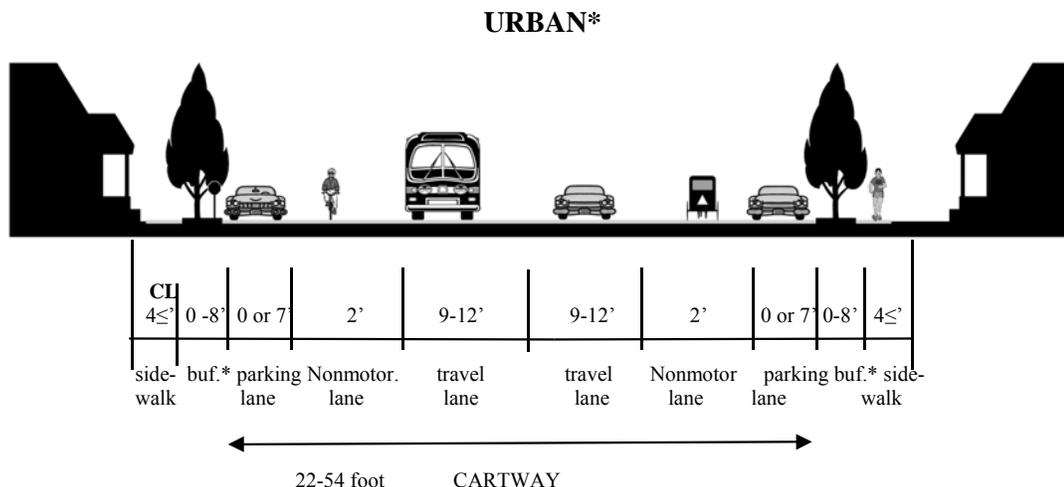
horse-drawn vehicles.

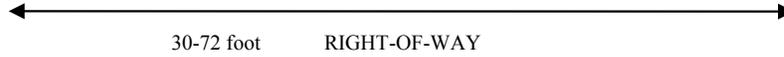
**9.3.3 Street Hierarchy.**

- A.** Each proposed Street shall be classified and designed to meet the standards for one of the Street types by use of Appendix G. This classification should be according to the Street hierarchy of the existing transportation network
- B.** Private Streets may be used provided the governing body determines that no public benefit will be served by Dedication. Applications that propose a Private Street shall be accompanied by a recorded declaration or an agreement which shall be recorded with the Lancaster County Recorder of Deeds as part of the Final Plan. This agreement shall establish the conditions under which the Street will be constructed and maintained in accordance with the design approved on the Final Plan, and shall stipulate:
  - 1. Ownership interest in the Private Street.
  - 2. No limitations on users unless identified in the private agreement.
  - 3. A statement indicating that civil court, not the governing body, is responsible for mitigating differences relating to the agreement.
  - 4. The method of assessing maintenance and repair cost.
  - 5. Private Streets shall not be offered for Dedication as a public Street unless they are restored to municipal design standards for Streets. The offer for Dedication of the Street shall be made only for the Street as a whole.

**9.3.4 Determination of Required New Street Design Standards.**

Each Street shall be designed to meet the design requirements by use of Appendix G and Appendix H. Newly created Right-of-Way and Cartway width for each interior Street classification shall be determined by the proposed use, projected ADT and the intensity of development permitted and existing along each Street. Each Cartway width shall be based on the travel lane, on-Street parking, multi-modal lanes, and gutter width.





\* Buffer areas and shoulders are encouraged but not required.

**A. Travel Lanes.**

1. Travel lane width requirements shall vary according to the average daily Trips (ADT).

Miles Per Hour	Under 400 ADT	401 to 1500 ADT	1501 to 2000 ADT	Over 2000 ADT
15	9 ft. travel lane	10 ft. travel lane	10 ft. travel lane	11 ft. travel lane
20	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
25	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
30	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
35	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
40	9 ft. travel lane	10 ft. travel lane	11 ft. travel lane	12 ft. travel lane
45	10 ft. travel lane	11 ft. travel lane	11 ft. travel lane	12 ft. travel lane
50	10 ft. travel lane	11 ft. travel lane	11 ft. travel lane	12 ft. travel lane
55	11 ft. travel lane	11 ft. travel lane	12 ft. travel lane	12 ft. travel lane

\* derived from AASHTO as amended

**B. Non-Motorized Travel Lanes.**

1. Non-motorized travel lanes shall be provided for all Collector and Arterial Streets.
2. For a posted speed limit of twenty-five (25) miles per hour, two (2) foot Non-motorized lanes shall be provided.
3. Grates shall be bicycle safe.

**C. Curbs, Gutters, and Swales**

1. Flexibility regarding curbing (type and necessity to provide) shall be permitted as long as the existing Stormwater management system can accommodate design flows from the proposed drainage system.
2. Design of curbs, gutters, and Swales should take the following into consideration:
  - (a) Stormwater management.
  - (b) Road and inlet stabilization.
  - (c) Soil and/or Topography.
  - (d) Cohesive best management design (BMP).
  - (e) Pedestrian/handicap safety.

**D. Buffer Areas.**

When Buffer areas are provided, signage and Street trees shall generally be located within the Buffer area of the Right-of-Way. Buffer areas should be planted with grass, ground cover, or treated with other suitable Pervious Material. See Section 9.9 for Street tree standards. When Buffer areas are provided, Buffer areas should be a minimum of 4 feet wide with 8 feet preferred when planted with trees.

**E. Rights-of-way.**

1. Centerline of the Right-of-Way may not always be the centerline of the travel lanes.
2. Where the Right-of-Way width of the new Street is different than the existing Street, a transition area shall be provided, the design of which is subject to governing body approval.
3. The Right-of-Way width shall be designed to meet the design requirements by use of Appendix G. Right-of-Way widths may change for each Street, based on the anticipated future development.

**F. Vertical Street Alignments.**

Vertical curves shall be used in changes in grade exceeding one percent (1%).

1. Alignment:
  - (a) Vertical Street and Access Drive alignments shall be measured along the centerline.
  - (b) Minimum Rate of Vertical Curvature K shall be as specified below:

Initial Speed (mph)	Curvature, $K^1$ (ft/ %) Crest	Curvature, $K^1$ (ft/%) Sag
15	3	10
20	7	17
25	12	26
30	19	37
35	29	49
40	44	64
45	61	79
50	84	96
55	114	115

<sup>1</sup> Rate of vertical curvature,  $K = \text{length of curve (L) per percent algebraic difference (A) in the intersection grades (K=L/A)}$

2. Leveling areas shall have a maximum grade of four percent (4%) for a minimum length of forty (40) feet measured from the intersection of the centerlines. A Modification to increase the percent of grade may be warranted due to Site constraints.

**G. Horizontal Street Alignments.**

1. Horizontal curves shall be used at all angle changes in excess of two (2) degrees.
2. The design of horizontal curves shall be based on an appropriate relationship between design speed and curvature and on their joint relationships with Superelevation (roadway banking). (The longer the radius of a curve, the higher the speed through that curve).
3. Single, long radius curves shall be used rather than a series of curves with varying radii and/or a series of short curves separated by short, straight segments.
4. Access Drives intersections shall be designed to Local Street horizontal alignment standards.
5. Determination of minimum horizontal centerline radius\*

Initial Speed (mph)	Centerline Radius <sup>1</sup> (feet)	Centerline Radius <sup>1</sup> (feet)
	No Superelevation	4% Superelevation (e max)
15	50	42
20	107	86
25	198	154
30	333	250
35	510	371
40	762	533
45	1039	711
50		926
55		1190

\* derived from AASHTO formula  $R_{min} = V^2 / 15 * (0.01e + f_{max})$

<sup>1</sup> Curve radius shall be measured to the centerline of Cartways and Access Drives.

6. Superelevation in certain conditions may be amended when using AASHTO Exhibit 3-16 as updated.

No Street intersection shall be granted at an angle of less than sixty (60) degrees.

## H. Sight Distance at Intersections.

1. Proper Sight Distance shall be provided at all new Streets, Access Drives, and all Driveway intersections in accordance with the latest edition of the Pennsylvania Department of Transportation Design Manual - Part 2, Highway Design (Publication 13), and Section 2.18.F as amended. Sufficient design and plan information shall be submitted with the plan application proving that this minimum standard will be achieved. Such design information shall be sealed by a professional registered in Pennsylvania to perform such design work.
  - (a) Access Drive Sight Distance based on 10 foot off of edge of Cartway, an eye height of 3.5 feet to an object at 3.5 foot height.
  - (b) Street Sight Distance based on 15 foot off of edge of Cartway, an eye height of 3.5 feet to an object at 3.5 foot height.

2. All intersections shall be provided with appropriate stop control devices on the lesser classification Street or Access Drive. No sight triangle Easements are required when stop control devices are used.
3. Sight triangle Easements shall include the area on each Street corner that is bounded by the line which connects the sight or "connecting" points located on each of the Right-of-Way lines of the intersecting Street. The planting of trees, other plantings, signs, and Structures exceeding thirty (30) inches in height that would obstruct the clear sight across the area of the Easements shall be prohibited.
  - (a) Arterial Streets shall have a Clear Sight Triangle side of 150 feet.
  - (b) Collector Streets shall have a Clear Sight Triangle side of 100 feet.
  - (c) Local roads, Cul-de-sacs, and Alleys shall have a Clear Sight Triangle side of 75 feet.

**I. New Street Improvements.**

All Street paving must conform to the following specifications unless superseded by a road ordinance or zoning ordinance. All new Streets shall be designed the following cross-sectional specifications (all courses are compacted thicknesses)

1. The use of recycled materials is strongly encouraged.
2. Street paving relative strength (design structural number) shall meet 3.0 for all Local roads, 3.5 for roads Arterial and Collector roads, and 2.5 if all paving from top of stone to top of the Street is completed in one operation and the wearing course is not laid at a later time. The design structural number depicts the required strength of the proposed pavement will need to provide. The structural number must be converted to individual layer thicknesses of the pavement.
  - (a) Structural coefficients for common flexible pavement materials\*;

Pavement Component	Structural Coefficient	Pavement Component	Structural Coefficient
<u>Surface Course:</u>		Crushed Aggregate (CABC)	0.14
Superpave 9.5 mm, 12.5 mm, 19 mm, 25 mm, (wearing and binder courses)	0.44	Crushed Aggregate, Type DG (CABCDG)	0.18
ID-2, ID-3 (wearing and binder courses)	0.44	Aggregate – Bituminous (ABBC)	0.30
FB-1, FB-2 (wearing and binder courses)	0.20	Aggregate – Cement (ACBC)	0.40
FJ-1, FJ-1C, FJ-4 (wearing courses)	0.35	Aggregate – Lime – Pozzolan (ALPBC)	0.40
<u>Base Course:</u>		<u>Subbase:</u>	
Plain Cement Concrete (PCBC)	0.50	Open Graded Subbase	0.11
Lean Cement Concrete (LCBC)	0.40	No. 2A Subbase	0.11
Superpave 25 mm, 37.5 mm, base course	0.40	Asphalt Treated Permeable Base Course (ATPBC)	0.20
Bituminous Concrete (BCBC)	0.40	Cement Treated Permeable	0.20

		Base Course (CTPBC)	
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\* Per current PennDOT standards, Pavement Policy Manual, Publication 242.

(b) Example of Local paving is as follows;

- i. Four (4) inch 2A stone subbase, three (3) inch BCBC (bituminous concrete base course), two (2) inch binder course, and one and one half (1 ½) inch wearing course.

(c) Example of Arterial and Collector paving is as follows;

- i. Four (4) inch 2A stone subbase, five (5) inch BCBC, two (2) inch binder course, and one and one half (1 ½) inch wearing course or;
- ii. Eight (8) inch 3A stone subbase, two (2) inch 2A top dressing, three (3) inch BCBC, two (2) inch binder course, and one and one half (1½) inch wearing course.

### 9.3.5 Access Drives.

Access Drives shall be designed to meet the following requirements:

- A. Any property that utilizes an Access Drive shall have Frontage along a public or private Right-of-Way.
- B. The plan shall note that the Access Drive does not qualify for Dedication to the Municipality and that the Landowner assumes all responsibility for its maintenance.
- C. Access Drives shall be designed for their intended function. All travel lanes shall be a minimum of eight (8) feet wide; however, sufficient design information must be submitted to indicate that the number of travel lanes and width proposed has been designed to accommodate the anticipated traffic to and from the development.
- D. Parking shall be permitted when sufficient Cartway width is proposed. See Section 8.3, Parking Facilities.
- E. Access Drives shall maintain a centerline separation distance of one hundred and twenty-five (125) feet from all other Access Drives and Streets. Access Drive intersections with other Access Drives within the Site shall not be subject to such restrictions.
- F. Proper Sight Distance shall be provided at Access Drive intersections with existing public and Private Streets according to this ordinance.

### 9.3.6 Driveways.

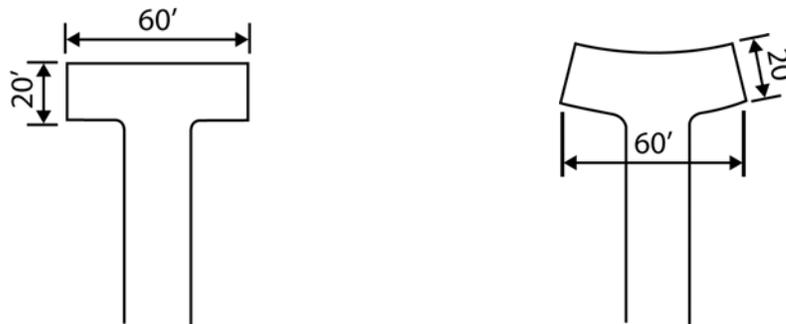
Shared or joint Driveways must meet the follow standards:

- A. Driveways shall be used only for four (4) or fewer dwelling units.
- B. To decrease the potential for vehicular conflicts, Driveways may be located either partially, centered on, or entirely on one property.

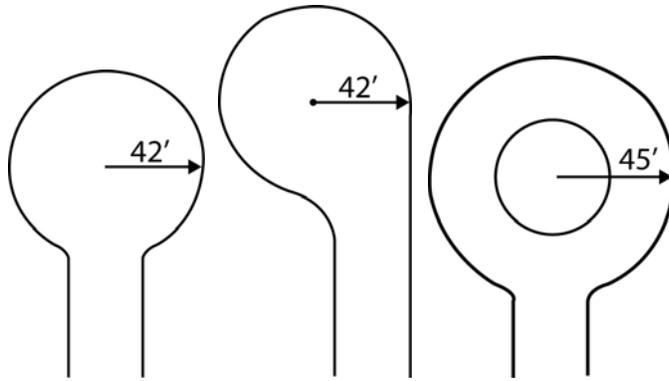
- C. An Easement agreement shall be provided and recorded that indicates the rights of ownership, access, and maintenance. The Municipality is not responsible to settle conflict issues with joint or shared Driveways.
- D. Driveways shall be paved with pervious or impervious surfaces

**9.3.7 Single Access / Cul-de-sac Streets**

- A. To the greatest extent possible, through Streets shall be provided. The feasibility of a through Street will be based on the physical features of the Tract proposed for development and/or Adjoining Lots, the potential for extension of the Street to adjoining lands based on existing development patterns, restrictions imposed by other government regulations and other recorded documentation, and the ability of the design to meet all other requirements of this Ordinance. When single access / Cul-de-sac Streets are proposed, the application shall be accompanied by a written analysis of the merits of the design and the reasons that a through Street would not be desirable.
- B. Cul-de-sacs shall have a circular, "T" shaped or "hammerhead" shaped turnarounds. Turnarounds shall be constructed completely within the Right-of-Way.
  - 1. T shaped or hammerheads may be used if the Cul-de-sac serves less than 10 dwelling units. Dimensions of a T shaped or hammerhead are sixty (60) feet by twenty (20) feet.



- C. When connecting to an existing temporary Cul-de-sac, removal of the Cul-de-sac paved areas and restoration of the sidewalk system within the Right-of-Way shall be the responsibility of the connecting Developer.
- D. Permanent Cul-de-sacs with a circular turnaround shall be paved, have a minimum radius of forty two (42) feet without a center island and forty five (45) with a center island.



**9.3.8 Street Names.**

- A. Continuation of existing Streets shall be known by the same name.
- B. Written notice that the proposed new Street names are acceptable from the Lancaster County-Wide Communications (fax number: 717 664-1126 as amended) shall be submitted.
- C. At least two (2) Street name signs shall be placed at each four-way Street intersection and one (1) at each "T" intersection.
- D. Signs shall be free of visual obstruction. The design of Street name signs should be consistent, of a style appropriate to the Municipality, of a uniform size and color, and erected in accordance with municipal standards.
- E. Private Streets shall be provided with Street name signs in conformance with this section. The plan shall note that it is the responsibility of the Developer to install the Street name signs for Private Streets.

**9.4 TRAFFIC SIGNS.**

- A. Design and placement of traffic signs shall follow the requirements of the Municipality and PennDOT.
- B. Signs shall be free of visual obstruction.

**9.5 DWELLING UNIT IDENTIFICATION.**

Street numbers for all dwelling units shall be visible from the approved Street Frontage.

**9.6 PARKING FACILITIES**

**9.6.1 Intent.**

Given the potential for Infill and Redevelopment projects to develop on more constrained Sites, providing options for shared parking, both on and off-Street is important. While development should have adequate parking for users, they should also seek to minimize impervious paving that

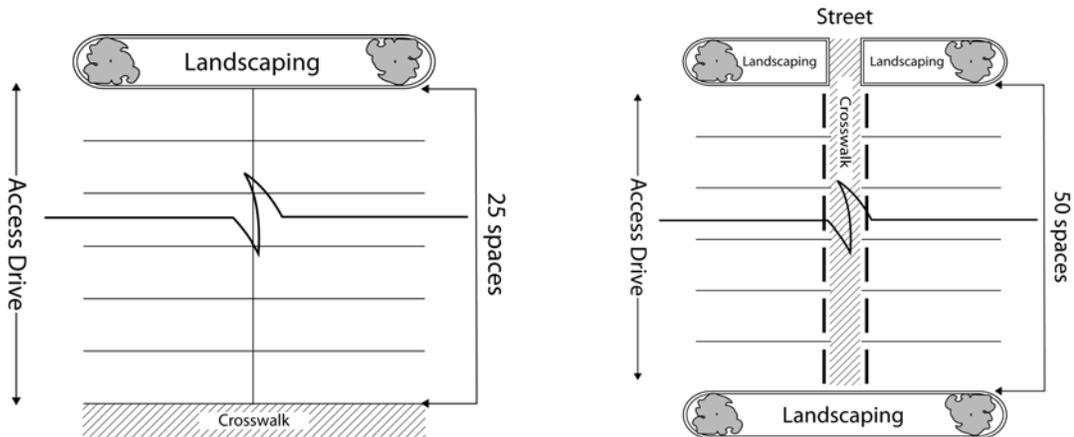
detract from environmental issues and a pedestrian environment and may limit appropriate development density.

The intent of these standards is to minimize the visual impact of parking lots, parking Structures, and garages from the public Street while providing convenient internal automobile and pedestrian access. Parking lot Landscaping shall be used to minimize the expansive appearance of parking lots, provide shaded areas, and mitigate acoustic and visual impact of motor vehicles. Landscaping should contribute to the sense of place and aid surveillance and minimize the potential for crime. Planting patterns shall not obstruct sight lines or create isolated areas, especially near pedestrian walking paths. Specific landscape requirements will vary slightly depending upon the size and configuration of the parking areas on a Site.

Shared parking is encouraged. The number of parking spaces may be reduced if shown that the uses are compatible with regard to parking needs. (See Shared Parking Second Edition, by Urban Land Institute)

### 9.6.2 Parking Lot Standards.

- A. Parking lots containing more than fifty (50) spaces shall be broken down into sections, not to exceed fifty (50) spaces, separated from other sections by landscaped dividing strips, berms, Access Drives, public Streets, pedestrian walkways, Buildings, and similar elements. Parking garages and roof parking shall be exempt from this requirement.



- B. Parking lots shall be oriented to Buildings to allow pedestrian movement down and not across rows (typically with parking drive aisles perpendicular to customer entrances).
  - 1. Pedestrian access shall be provided within and between parking sections.

### 9.6.3 Parking Lot Landscaping.

Perimeter Landscaping standards shall apply to perimeters of a parking area adjacent to either public rights-of-way and/or adjacent properties. Parking garages and roof parking shall be exempt from this requirement. Perimeter parking lot Landscaping requirements may be satisfied by required Street edging Landscaping and required landscaped Buffers where the locational requirements for the Buffer or Street edge Landscaping overlap with these perimeter Landscaping requirements. Perimeter of all parking areas shall be screened by any of the following methods except as set forth above:

- A. A berm three (3) feet high with a maximum slope of 3:1; or
- B. A variety of Landscaping planted so as to not obstruct sight lines; or
- C. A low, decorative wall or fence three (3) feet high. Height limitations shall not preclude the construction of a higher structural retaining wall necessitated by grade or Topography of a Site; or
- D. A combination of these methods.

**9.6.4 Design Guidelines.**

- A. ADA parking spaces shall be provided according to federal standards.
  - 1. Accessible parking shall be located to avoid the need for users to cross drive aisles.
- B. A minimum of thirty percent (30%) of the off-Street surface parking spaces provided for all users contained in the development’s primary Building(s) shall be located other than between the front façade of the primary Building and the primary Abutting Street (e.g. to the rear or side of the primary Building(s)). Alternative provisions may be considered when the non-residential development abuts and existing residential neighborhood.
- C. To the maximum extent practicable, garage entries, carports, parking areas, and parking Structures shall be internalized in Building groupings or oriented away from public Street Frontage.
- D. Preferred access to below grade parking shall be either from the side or rear of Buildings.
- E. On-Street parking spaces may be counted towards the minimum requirements for parking provided that the on-Street spaces are located on an adjacent or internal Street that allows on-Street parking. On-Street parking spaces being counted towards credit must be identified on plans at the time of submittal.

**9.6.5 Motorized Vehicle Parking Facilities.**

**A. Size Standards.**

- 1. Parallel parking shall be a minimum width of 7 feet and a minimum length of 23 feet.
- 2. Perpendicular parking shall be a minimum width of 8’6”, a minimum length of 18 feet, and have a minimum aisle width of 20 feet. The parking lot must have a minimum total width of 60 feet from side to side.
- 3. Parking space length and width can be increased from minimum sizes where appropriate in accordance with location, use, and turn-over rate.
- 4. Encroachments such as columns and light poles may encroach into a module by 1 foot and affect up to 30% of the parking spaces.

## 5. Parking Standards<sup>4</sup>:

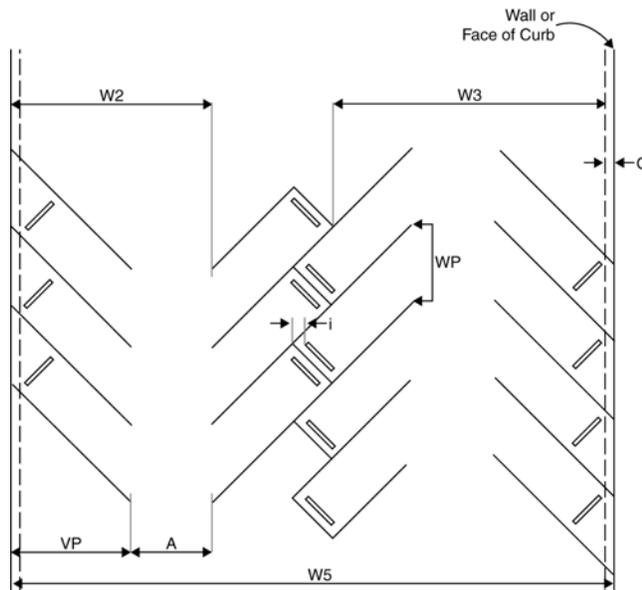
Angle	Vehicle Projection Minimum	Aisle Min.	Base Module <sup>1</sup>	Single Loaded	Wall to Interlock	Interlock to Interlock	Curb to Curb	Overhang	Interlock <sup>2</sup> Reduction	Stall Width Projection <sup>2</sup> Minimum
	<b>VP</b>	<b>A</b>	<b>W1</b>	<b>W2</b>	<b>W3</b>	<b>W4</b>	<b>W5</b>	<b>o</b>	<b>i</b>	<b>WP</b>
45°	17'8"	12'8"	48'0"	30'4"	45'0"	42'0"	44'6"	1'9"	3'0"	12'0"
50°	18'3"	13'3"	49'9"	31'6"	47'0"	44'3"	45'11"	1'11"	2'9"	11'1"
55°	18'8"	13'8"	51'0"	32'4"	48'7"	46'2"	46'10"	2'1"	2'5"	10'5"
60°	19'0"	14'6"	52'6"	33'6"	50'4"	48'2"	48'2"	2'2"	2'2"	9'10"
65°	19'2"	15'5"	53'9"	34'7"	51'11"	50'1"	50'1"	2'3"	1'10"	9'5"
70°	19'3"	16'6"	55'0"	35'9"	53'7"	52'2"	52'2"	2'4"	1'5"	9'1"
75°	19'1"	17'10"	56'0"	36'11"	54'11"	53'10"	53'10"	2'5"	1'1"	8'10"
90°	18'0"	20'0"	60'0" <sup>3</sup>	42'0"	60'0"	60'0"	60'0"	2'6"	0'0"	8'6"

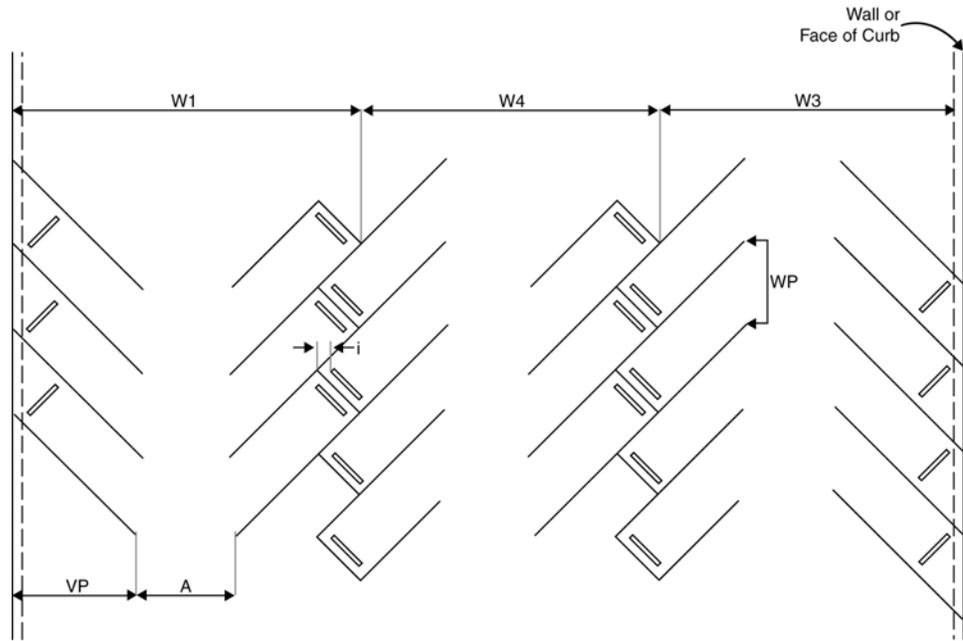
<sup>1</sup> Module is defined as the combined dimension of two parked vehicles and the aisle between them.

<sup>2</sup> Calculated for 8'6" stall.

<sup>3</sup> Base width may not be waived.

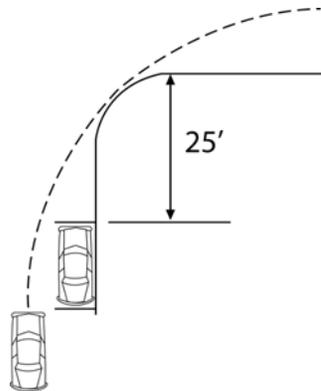
<sup>4</sup> Parking dimensions for based on design vehicles of 6'7" x 17'0".





**B. General Standards.**

1. Angled parking may be pull in or reverse (back-in).
2. Parking spaces for the physically handicapped shall meet the Americans with Disabilities Act (ADA). Handicapped parking shall be provided for all non-residential developments and multi-family Structures and shall be located closest to the accessible Building entrance(s).
3. On-Street parking on at least one side of the street is encouraged on Access Drives and proposed Streets with speeds equal to or less than 30 mph.
4. Where provided, On-Street parking shall not be located within twenty five (25) feet of a Cartway intersection in order to provide safe Sight Distance and adequate turning radius for large vehicles.



5. Off-Street parking areas shall be oriented to, and within a reasonable walking distance of, the Buildings they are designed for and consistent with adjacent

neighborhoods.

6. Parked vehicles adjacent to sidewalks shall not overhang or extend over the sidewalk in a manner that restricts pedestrian circulation. Where such overhang is not restricted by a wheel stop or other device, sidewalks shall have a three (3) foot minimum clearance width from any obstacles.
7. Not less than a two (2) foot radius of curvature shall be permitted for horizontal curves in parking areas.
8. All dead end parking lots shall be designed to provide sufficient back-up area for all end stalls.
9. Painted lines, arrows, and dividers shall be provided and maintained to control parking, and when necessary to direct vehicular circulation.
10. The typical cross section of any parking compound shall be prepared to meet the following minimum standards:

**(a)** Non Permeable

Crushed aggregate based course with a minimum thickness of six (6) inches, as specified in the Pennsylvania Department of Transportation Specifications, Form 408, and its latest revisions, or other Pennsylvania Department of Transportation approved equivalent. Pavement shall consist of a minimum of one and one-half (1-1/2) inches of binder courses and one (1) inch wearing surface. Material shall be equal or superior to Pennsylvania Department of Transportation Specifications for Bituminous Surface Course ID-2 and shall be applied in accordance with the Pennsylvania Department of Transportation Specifications, Form 408, and its latest revisions, or other Pennsylvania Department of Transportation approved equivalent.

**(b)** Permeable Pavement

Permeable pavement is encouraged but not required. Permeable pavement shall not be located on heavy industrial Sites, fueling stations, Sites with expansive soils or shallow depth to bedrock, areas draining to the permeable pavement greater than 5 acres, areas with the water table less than two feet below the bottom of the pavement base, and less than 100 feet from drinking wells. Permeable pavement includes paving units, porous asphalt pavement, or porous concrete (using single-sized aggregate and low water content); uniformly graded stone aggregate with void space; filter fabric lining the subsurface beds; and uncompacted (or hand compacted) subgrade. Permeable pavement shall consider the infiltration rate of the soil subgrade under the base. Constant supervision during construction is encouraged as sediment must be kept from the aggregate base.

11. Shared parking is encouraged. The number of parking spaces may be reduced if shown that the uses of the facility are compatible with regard to parking needs. (See Shared Parking Second Edition, by Urban Land Institute)

**C. Parking Structures**

1. Lighting and reflective materials / flat paint should be used inside the parking Structure and within all pedestrian areas to increase the feeling of safety. Glossy or semi-gloss paint is discouraged.

	<b>Minimum-Maximum Horizontal<sup>2</sup> (Footcandles)</b>	<b>Minimum/Maximum Horizontal Uniformity<sup>3</sup></b>	<b>Minimum-Maximum Vertical<sup>4</sup> (Footcandles)</b>
Basic <sup>1</sup>	1-5	10:1 – 5:1	0.5-5
Ramps <sup>5</sup>			
Day	2-5	10:1 – 5:1	1-5
Night	1-5	10:1 – 5:1	0.5-5
Entrance/Exit Areas <sup>6</sup>			
Day <sup>7</sup>	50		25
Night	1-5	10:1 – 5:1	0.5-5
Stairways	2-5		1-5

Table based on the Illuminating Engineering Society (IET)

<sup>1</sup>For typical conditions.

<sup>2</sup> Minimum “maintained” Footcandles measured on the parking surface, without any shadowing effect from parked vehicles or columns. This may require 3-5 Footcandle average

<sup>3</sup> The highest horizontal Illuminance area, divided by the lowest horizontal Illuminance point or area should not be greater than the ratio shown.

<sup>4</sup> Measured facing the drive aisle at 5 feet above the parking surface at the point of the lowest horizontal Illuminance.

<sup>5</sup> Applies only to clearway ramps (with no adjacent parking) but not sloping floor designs.

<sup>6</sup> A high Illuminance level for the first 65 feet inside the Structure is needed to effect a transition from bright daylight to a lower interior level.

<sup>7</sup> Daylight may be considered in the design calculations.

2. Lighting design shall address Glare, light pollution (unnecessary light), Light Trespass (bright visible sources or light spilling into neighboring properties), and reduction of shadows.
3. Provision of signage at exits of the parking Structures shall be required.
4. Open-Structure wall areas for natural ventilation or mechanical ventilation shall be encouraged.
5. Interaction between vehicles and pedestrians should be provided in a safe manner.
6. Traffic flow by vehicles entering the parking garage shall be mitigated by either on Site or external deceleration lanes based on the traffic impact study if required.

**9.6.6 Non-Motorized Vehicle Parking Facilities.**

Non-motorized vehicle parking facilities should be provided in accordance with the following regulations:

**A. Bicycle Parking Facilities.**

Bicycle parking facilities for non-residential land uses may be provided in accordance with the following regulations:

1. Each bicycle space shall be equipped with a device to which a bicycle frame and one (1) wheel can be attached using a chain or cable. There shall be adequate separation between adjacent devices to allow bicycles to be attached or removed without moving other bicycles. The devices shall also be suitable for use by bicycles not equipped with kickstands, and the appearance of the device shall be generally consistent with nearby Urban design features.
2. Bicycle parking spaces shall be convenient to the Structure for which they are provided. They shall be visible from at least one (1) entrance to the Structure.
3. For every 50 vehicular spaces required, 3 bicycle parking spaces shall be provided, not to exceed a total of 9 required bicycle parking spaces.

**B. Horse and Buggy Parking.**

Horse and buggy parking facilities for non-residential land uses may be provided in accordance with the following regulations:

1. Each horse and buggy parking area shall be equipped with a device to which the horse can be hitched. A hitching rail is acceptable.
2. Adequate signage shall be provided to direct horse and buggy circulation.
3. At least one horse and buggy parking facility should include a covered shelter/shed protected from the north and west (winter) winds.
4. Horse and buggy parking areas shall be located as to minimize conflicts with motorized vehicles.

**9.7 PEDESTRIAN ACCESS AND CIRCULATION**

**9.7.1 Intent.**

By creating a safe, continuous network of walkways within, and between developments, and completing partially constructed sidewalk patterns within communities, pedestrians feel more inclined to safely walk, visit, or shop. Walkways should provide an inviting and convenient option for pedestrian movement within a community and promote direct pedestrian access to neighboring residential, non-residential, and public uses.

**9.7.2 Design Guidelines.**

**A. Trails.**

1. Trail width shall be a minimum of four (4) feet.
2. Easements ten (10) feet wide are required for trails. Provide a plan note indicating such Easement must be five (5) foot on either side of the centerline of the trail as constructed.
3. Encroachments into the trail shall not result in less than a 4 foot wide minimum clearance width from any obstacles.
4. Marked crosswalks shall be provided within the vehicular travel ways intersecting with trails.

**B. Sidewalks.**

1. Paved sidewalks shall be provided on both sides of a new Street within Urban Growth Areas.
2. Sidewalk widths shall be a minimum of four (4) feet.
3. Where possible, sidewalks should be sloped towards adjacent pervious surfaces, not adjacent Impervious Surfaces.
4. Encroachments into the sidewalk shall not result in less than a 4 foot wide minimum clearance width from any obstacles.
5. Sidewalks shall not exceed a cross slope of two percent (2%).
6. Ramp cuts shall be located at all sidewalks intersecting with vehicular travel ways.
7. Marked crosswalks shall be provided within the vehicular travel ways intersecting with sidewalks.

**9.8 PRESERVATION OF NATURAL, HISTORIC, AND CULTURAL FEATURES**

**9.8.1 Intent.**

Mature trees, Topography, natural drainage ways, and historic sites are a few of the elements that contribute to the distinct character of our Municipality. To protect these features and resources that enhance the local character, Infill and Redevelopment projects shall work with the context and integrity of this environment by preserving natural, historical, and cultural features to the maximum extent possible.

**9.8.2 Design Guidelines.**

Infill and Redevelopment projects should integrate existing natural features, required open space, existing historic Structures, and cultural resources located on the Site into the overall design and layout of the development.

- A.** A Site analysis shall be submitted using all applicable reports, plans, and maps to determine whether significant natural or other features exist on a Site that should be protected, with priority being given to the following areas (which are not listed in order of priority or significance):

1. Floodplains, surface drainage Swales, bodies of water;
  2. Wetlands;
  3. Existing Significant Trees;
  4. Historical, cultural, or archeological sites or areas recognized by the Municipality, state, or federal governments as significant;
  5. Prominent Topography; and
  6. Steep Slopes
- B.** The proposed Building and impervious footprint(s) shall be clearly identified on each plan to identify potential impacts to existing trees, other natural features, historic Structures, and cultural resources.

## **9.9 LANDSCAPING**

### **9.9.1 Intent.**

Landscaping plants intercept rainfall, reduce Stormwater Runoff, prevent erosion, and reduce the need for detention. Landscape plants also provide shade and reduce the temperature created by additional Impervious Surfaces. Plants release moisture back into the environment, improve air quality, and remove contamination from the soil and water by absorbing excess nutrients, filter sediments, and break down pollutants. Planting Native Plants helps provide habitat, food, and protection for native species and ecosystems. Planting native species generally increases the chance for long term survivability of the plant because they are naturally adapted to local conditions. Planting Non-Native species and cultivars could be incorporated in designs when they provide a superior plant for spatial constraints and Urban stress mitigation found in local Site conditions. Existing Significant Trees which help contribute to the sense of place should be preserved to the maximum extent practical.

### **9.9.2 Design Guidelines.**

- A.** For Infill/Redevelopment within Urban areas, the Applicant must comply with Section 8.10.

## **9.10 LIGHTING**

### **9.10.1 Intent.**

Lighting must be scaled and laid out in a pattern that promotes safe vehicular and non pedestrian access to and within a development while minimizing impacts on adjacent properties. Lighting in outdoor public places helps improve public safety and welfare. The control of Glare from non-vehicular light sources can improve impaired safe travel. Controlling Glare also helps protect neighbors and the night sky from nuisance Glare and stray light from poorly aimed, placed, applied, maintained, or shielded light sources.

### **9.10.2 Design Guidelines.**

- A. Lighting shall have intensities and uniformity ratios in accordance with the current recommended practices of the Illuminating Engineering Society of North America (IESNA) as contained in the IESNA Lighting Handbook. Future amendments to said recommended practices shall become a part of this Ordinance without further action of the Municipality. Examples of intensities for typical outdoor applications, as extracted from the 8th Edition of the Lighting Handbook, are presented below:

Use	Task	Maintained Footcandles <sup>1</sup>	Uniformity Ratio <sup>2</sup> (Max.:Min.)
<b>Streets</b>	Local Residential	0.4 Min.	6:1
	Local Commercial	0.9 Min.	6:1
<b>Parking: Multi-Family Residential</b>	Low Vehicular/Pedestrian Activity	0.2 Min.	4:1
	Medium Vehicular/Pedestrian Activity	0.6 Min.	4:1
<b>Parking: Industrial, Commercial, Institutional and Municipal</b>	High Activity (e.g., regional Shopping centers/fast food facilities, major athletic /civic /cultural events)	0.9 Min.	4:1
	Medium Activity (e.g., community shopping centers, office parks, hospitals, commuter lots, cultural /civic/recreational events)	0.6 Min.	4:1
	Low activity (e.g., neighborhood shopping, industrial employee parking, schools, church parking, farm businesses, farm operations)	0.2 Min.	4:1
<b>Walkways and Bikeways</b>		0.5 Min.	5:1
<b>Building Entrances and Signs</b>		4.0 Avg.	-

1. Illumination levels are maintained horizontal Footcandles on the task, e.g., pavement or area surface.

2. Uniformity ratio is a measure of the dispersion of light on an area. The ratio is measured as maximum light level to minimum light level. Example: 4:1 for the given area, the maximum level of illumination should be no less than 4 times the minimum level of illumination (0.2 x 4 = 0.8 maximum light level)

- B. Dedicated lighting fixtures shall be of a type and design appropriate to the lighting application and aesthetically acceptable to the Municipality. Dedicated and non dedicated lighting fixtures shall meet the following standards:

1. For lighting horizontal tasks such as roadways, sidewalks, entrance, and parking areas, fixtures shall meet IESNA Fully Shielded criteria (no light output emitted above ninety (90) degrees at any lateral angle around the fixture). Individual fixtures whose aggregate lamp output does not exceed one thousand eight hundred (1,800) lumens (typical household outdoor lighting) are exempt from this requirement.
2. Fixtures shall be equipped with, or be modified to, incorporate light directing and/or shielding devices such as shields, visors, skirts, or hoods to redirect offending light distribution and/or reduce direct or reflected Glare. Glare control shall be achieved primarily through the use of such means as cutoff fixtures, shields and baffles, and appropriate application of fixture mounting height, wattage, aiming angle and fixture placement.
3. The use of floodlighting, spotlighting, wall-mounted fixtures, decorative globes and spheres, and other fixtures not meeting IESNA full-cutoff criteria shall be

permitted only with the approval of the Municipality, based upon applicability in retaining the character of the Municipality and achieving acceptable Glare control.

- C. All outdoor lighting shall be aimed, located, designed, fitted, and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safely travel.
- D. Unless for safety, security, or all-night operations, lighting shall be controlled by automatic switching devices to permit extinguishing between eleven (11) p.m. and dawn.
  - 1. Lighting proposed for use after eleven (11) p.m., or after the normal hours of operation, shall be reduced by an average of seventy-five percent (75%) from that time until dawn, unless supporting a specific purpose.
- E. Vegetation screens shall not be employed to serve as the primary means for controlling Glare.
- F. The intensity of illumination projected onto an existing residential use from an existing property boundary shall not exceed 0.6 Footcandles, measured at the existing property line at a height of 5 feet.
- G. Pole mounted fixtures shall not be mounted in excess of 25 feet high.
- H. Lighting standards in parking areas shall be placed outside paved areas or on concrete pedestals at least thirty (30) inches high above the pavement, or by other approved protective means.
- I. The Municipality reserves the right to conduct a post installation nighttime inspection to verify compliance with the requirements of this Ordinance and, if appropriate, to require remedial action at no expense to the Municipality.
- J. The Municipality must accept Dedication of Street lighting facilities located within the Right-of-Way of a Street to be dedicated to the Municipality.
  - 1. Until such time as the Street lighting is dedicated, the Developer of the Tract (who has escrowed the Street lighting) will be responsible for any and all costs associated with each Streetlight. Such costs shall include, but not be limited to: administration, placement, and maintenance. Electrical charges shall be the responsibility of the Municipality at the issuance of the first Building occupancy permit within the development.
  - 2. Streetlights not dedicated to the Municipality will remain the responsibility of the Developer or appropriate private entity including all costs and responsibilities for the lighting in perpetuity.

## **9.11 EASEMENTS**

### **9.11.1 General.**

All Easements including by way of example and not limitation, sanitary sewer facilities, Stormwater Management Facilities, public or private utilities, access and/or pedestrian access shall meet the standards found in this Section.

### **9.11.2 Design Guidelines.**

- A.** To the fullest extent possible, Easements shall be centered on property lines.
- B.** Nothing shall be placed, planted, set, or put within the area of an Easement that would adversely affect the function of the Easement.
- C.** Indicate on the plans all proposed and existing Easements of record and indicate their location and width. All Structures located within the Easement shall be indicated. Note the recording information on the plan of record.
- D.** To the fullest extent practical, utilities and pedestrian paths should be centered within an Easement. However, due to unexpected on-Lot conditions, utility and pedestrian locations may be flexible within the Easement.
- E.** All utility companies are encouraged to use common Easements. Utility Easements shall be based on the width required by the utility authorities but shall have a minimum width of ten (10) feet. Utility Easements shall be located within the Street Right-of-Way or within the Building Setback Line.
- F.** Where pedestrian access is provided outside of a Street Right-of-Way, pedestrian Easements shall have a minimum width of ten (10) feet.
- G.** The Applicant shall reserve Easements where Stormwater or surface water management facilities exist or are proposed when located within the boundaries of the Subject Tract. The Applicant proposing to alter existing Stormwater Management facilities on adjacent and/or downstream properties shall obtain a temporary construction Easement or a permanent Easement and maintenance responsibilities shall be established, to the extent feasible.

When the proposed Stormwater management system will utilize or be integrated into an existing stormwater collection or conveyance system, the existing facilities shall be improved to the standards of this Ordinance. The applicant shall determine the impacts of any proposed improvements of the existing system to downstream properties. If the improvements will cause adverse impacts on downstream properties, the applicant shall mitigate such impacts.

## **9.12 SURVEY MONUMENTS AND MARKERS**

### **9.12.1 Monuments Shown on Final Plan.**

The location of all existing and proposed Monuments, Lot Line Markers, property corners, and drill holes shall be shown on the Final Plan. Those that are proposed shall be labeled as such. Drilled holes in curbing shall be referenced mathematically to a point on the Right-of-Way line.

### **9.12.2 New Monuments.**

Three Monuments shall be spaced around the proposed project with precise bearings and distances labeled which reference those Monuments to known property corners.

- A. Two such Monuments shall be consecutive corners along Street rights-of-way and the third may be placed either on the boundary or internal to the Site.
- B. Longitude and latitude coordinates of the Monuments shall be shown on the recorded plan.
- C. If GPS technology is used, it shall be rectified and calibrated to the State Plane Coordinate System, North American Datum (NAD) 1983.
  - 1. Monuments must be readily accessible and clear of overhead obstructions.
- D. A computer readable point file including property lines, corners, rights-of-way, and Easements for the Site shall be submitted to the Municipality prior to plan recordation.

#### **9.12.3 Monument Materials.**

Monuments shall be of concrete or stone, with a flat top having a minimum width or diameter of four (4) inches and a minimum length of thirty (30) inches. Concrete Monuments shall be marked with a three-quarter (3/4) inch copper, brass dowel, or drill hole; stone or precast Monuments shall be marked on the top with a drill hole.

#### **9.12.4 Existing and Proposed Property Line and Right-of-Way Markers.**

Markers shall be set at all points where Lot Lines intersect curves, at all angles in property lines, at the intersection of all other property lines, and at the Street Right-of-Way.

#### **9.12.5 Marker (Pin) Materials.**

- A. Markers shall consist of iron pipes or steel bars at least thirty (30) inches long and not less than five-eighth (5/8) of an inch in diameter.
- B. Drill holes shall be drilled in concrete curbs (with or without PK nails or discs) having a minimum diameter of one-quarter (1/4) inch. The depth of the holes shall be such that a PK nail or disc, if used, can be set in as close to the surface of the curb as possible. Minimum depth without the use of PK nail or disc shall be one-half (1/2) inch. In the absence of PK nails or discs, chisel or saw marks shall be used to facilitate and identify the drill hole locations.

#### **9.12.6 Certification of Monuments and Markers.**

- A. All Monuments, markers, and drilled holes shall be placed by a registered professional land Surveyor so that the scored marked point, or center of the drilled hole shall coincide with the point of intersection of the lines being Monumented or marked.
- B. Provide a note on the plan indicating when the Monuments and markers are to be set.

## **9.13 SANITARY SEWAGE DISPOSAL**

### **9.13.1 Sanitary Sewage Disposal.**

For Infill or Redevelopment development within an Urban Growth Area, the Applicant shall refer to Section 8.7 for Sewage Facility Requirements.

## **9.14 WATER SUPPLY**

### **9.14.1 Water Supply.**

For Infill or Redevelopment development within an Urban Growth Area, the Applicant shall refer to Section 8.8 for water supply requirements.

## **9.15 HAZARDS ASSOCIATED WITH CARBONATE ROCKS**

### **9.15.1 Intent.**

Hazards associated with carbonate rocks should be mitigated whenever possible.

### **9.15.2 Design Guidelines.**

- A.** When, in the opinion of the governing body, there is a probable likelihood that a project will affect or be affected by carbonate geologic hazards the governing body shall require submission of a hydrogeologic report pursuant to Section 7.8.
- B.** All Subdivisions and Land Developments with individual subsurface disposal systems (on-Lot systems) proposed shall provide an aquifer test. Development that in the opinion of the governing body that poses significant risks in stimulating the formation of sinkholes or in causing hydrologic connection of contaminated surface water with subsurface aquifers shall provide an aquifer test.
- C.** The design of all Stormwater Management facilities over the following features shall include an evaluation of measures to minimize adverse effects and shall be constructed to minimize those effects.
  - 1.** Sinkholes.
  - 2.** Closed depressions.
  - 3.** Lineaments in carbonate areas.
  - 4.** Fracture traces.
  - 5.** Caverns.
  - 6.** Ghost lakes.
  - 7.** Disappearing Streams.

**ARTICLE 10**

**10.1 RESERVED FOR FUTURE USE**

**ARTICLE 11**  
**CONSERVATION SUBDIVISIONS**

**11.1            RESERVED FOR FUTURE USE**

## **ARTICLE 12 MOBILE HOME PARKS**

### **12.1 GENERAL STANDARDS**

In accordance with the provision of the Pennsylvania Municipalities Planning Code, Act 247, Article V, Section 501, as amended, mobile home parks and sites for the placement of manufactured housing are governed as subdivisions or land developments, and are subject to the procedures and standards of this Ordinance.

**APPENDIX A**  
**CERTIFICATIONS**

<b>LANDOWNER</b>
------------------

A statement duly acknowledged before an officer authorized to take acknowledgement of Deeds and signed by all Landowners. This statement shall be signed and dated on or after the last change or revision to said plan.

**A. Individual - Certification of Ownership, Acknowledgement of the Plan, and Offer of Dedication.**

Commonwealth of Pennsylvania  
County of Lancaster

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned officer, personally appeared \_\_\_\_\_ who being duly sworn according to law, deposes and says that he is the \_\_\_\_\_ of the property shown on this plan, that he acknowledges the same to be his act and plan, that he desires the same to be recorded, and that all Streets and other property identified as proposed public property (excepting those areas labeled “not for dedication” are hereby dedicated to the public use.

\_\_\_\_\_  
Signature of Landowner

\_\_\_\_\_  
Signature and Seal of Notary Public or Other Officer Authorized to Acknowledge Deeds

My Commission Expires \_\_\_\_\_, 20\_\_\_\_\_

**B. Co-Partnership - Certification of Ownership, Acknowledgement of the Plan, and Offer of Dedication.**

Commonwealth of Pennsylvania  
County of Lancaster

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_, before me, the undersigned officer, personally appeared \_\_\_\_\_, being of the firm of \_\_\_\_\_ who being duly sworn according to law, deposes and says that the co partnership is the \_\_\_\_\_ of the property shown on this plan, that the plan thereof was made at its direction, that it acknowledges the same to be his act and plan and desires the same to be recorded, and that all Streets and other property identified as proposed public property (excepting those areas labeled “not for dedication”) are hereby dedicated to the public use.

\_\_\_\_\_  
Signature of the Individual

\_\_\_\_\_  
Signature and Seal of Notary Public or Other Officer Authorized to Acknowledge Deeds

My Commission Expires \_\_\_\_\_, 20 \_\_\_\_\_

**C. Corporate - Certification of Ownership, Acknowledgement of the Plan, and Offer of Dedication.**

Commonwealth of Pennsylvania  
County of Lancaster

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_, before me, the undersigned officer, personally appeared \_\_\_\_\_, being \_\_\_\_\_ of \_\_\_\_\_ (Name of Corporation), who being duly sworn according to law, deposes and says that the corporation is the \_\_\_\_\_ of the property shown on this plan, that he is authorized to execute said plan on behalf of the corporation, that the plan is the act and Deed of the corporation, further acknowledges, that all Streets and other property identified as proposed public property (excepting those areas labeled “not for dedication”) are hereby dedicated to the public use.

\_\_\_\_\_  
Signature of the Individual

\_\_\_\_\_  
Corporate Seal

\_\_\_\_\_  
Signature and Seal of Notary Public or Other Officer Authorized to Acknowledge Deeds.

My Commission Expires \_\_\_\_\_, 20 \_\_\_\_\_

**SURVEYOR, ENGINEER AND/OR LANDSCAPE ARCHITECT STATEMENT OF ACCURACY**

**A. Survey Certification of Accuracy.**

I hereby certify that, to the best of my knowledge, the survey and plan shown and described hereon is true and correct to the accuracy required by the Borough of Christiana Subdivision and Land Development Ordinance and/or Stormwater Management Ordinance.

\_\_\_\_\_, 20\_\_\_\_  
\_\_\_\_\_

---

**B. Stormwater Management Plan Certificate.**

I hereby certify that, to the best of my knowledge, the stormwater management facilities shown and described hereon are designed in conformance with the Borough of Christiana Subdivision and Land Development Ordinance and/or Stormwater Management Ordinance.

\_\_\_\_\_, 20\_\_\_\_  
\_\_\_\_\_

---

**C. General Plan/Report Data.**

I hereby certify that, to the best of my knowledge, the \_\_\_\_\_ (title of plan/report data) shown and described hereon is true and correct to the accuracy required by Pennsylvania State Law and the Borough of Christiana Subdivision and Land Development ordinance and /or Stormwater Management Ordinance.

\_\_\_\_\_, 20\_\_\_\_  
\_\_\_\_\_

**MUNICIPAL APPROVAL**

**A. Borough of Christiana Preliminary Plan Approval Certification**

At a meeting on \_\_\_\_\_, 20\_\_\_\_, the Borough of Christiana Council granted PRELIMINARY PLAN APPROVAL of this project, including the complete set of plans marked Sheet(s) \_\_\_\_\_ through \_\_\_\_\_ which form a part of the application dated \_\_\_\_\_, last revised \_\_\_\_\_ . This plan may not be recorded in the office of the Lancaster County Recorder of Deeds, nor may any construction be initiated but when combined with the other necessary approvals and permits, grants of authority to install on the Public Improvements required as part of the plan.

\_\_\_\_\_  
Governing Body Signature

\_\_\_\_\_  
Governing Body Signature

**B. Borough of Christiana Final Plan Approval Certification**

At a meeting on \_\_\_\_\_, 20\_\_\_\_, the Borough of Christiana Council approved this project, and all conditions have been met. This approval includes the complete set of plans and information that are filed with the Municipality in File No. \_\_\_\_\_, based upon its conformity with the standards of the Christiana Borough Subdivision and Land Development Ordinance and Stormwater Management Ordinance.

\_\_\_\_\_  
Governing Body Signature

\_\_\_\_\_  
Governing Body Signature

**C. Borough of Christiana Planning Commission Review Certification**

At a meeting on \_\_\_\_\_, 20\_\_\_\_, the Borough of Christiana Planning Commission reviewed this plan.

\_\_\_\_\_  
Planning Commission Signature

\_\_\_\_\_  
Planning Commission Signature

**D. Borough of Christiana Engineer Review Certificate**

Reviewed by the Borough of Christiana Engineer.

\_\_\_\_\_  
Municipal Engineer  
Subdivision and Land Development Ordinance  
Appendices

\_\_\_\_\_  
Date  
170 Borough of Christiana, Pennsylvania  
April 21, 2015

**LANCASTER COUNTY**

**A. Lancaster County Planning Commission Review Certificate**

The Lancaster County Planning Commission, as required by the Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended, reviewed this plan on \_\_\_\_\_, 20\_\_\_\_, and copy of the review is on file at the office of the Planning Commission in LCPC File No. \_\_\_\_\_. This certification does not indicate approval or disapproval of the plan by the Lancaster County Planning Commission, and the Commission does not represent nor guarantee that this plan complies with the various ordinances, rules, regulations, or laws of the local Municipality, the Commonwealth, or the Federal Government.

\_\_\_\_\_  
Chairman Designee signature

\_\_\_\_\_  
Vice Chairman Designee signature

**B. Lancaster County Recorder of Deeds Certificate**

Recorded in the office for Recording of Deeds, in and for Lancaster County, Pennsylvania, in Subdivision Plan Book \_\_\_\_\_, Volume \_\_\_\_\_, Page \_\_\_\_\_. Witness my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_ A.D. 20\_\_\_\_\_.

\_\_\_\_\_  
Recorder

**C. Lancaster County Planning Commission Waiver Certificate**

For plans reviewed under Article V Section 502(b) and memorandum of Understanding between the Borough of Christiana dated \_\_\_\_\_

This Plan, bearing LCPC File No. \_\_\_\_\_, accepted by the Lancaster County Planning Commission this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Chairman Designee signature

\_\_\_\_\_  
Vice Chairman Designee signature



8. Zoning District: \_\_\_\_\_  
 Is a Zoning Variance, Special Exception, and/or Conditional Use Approval Necessary? Y / N  
 If yes, please specify: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
9. Net Acreage of Parent Tract(s): \_\_\_\_\_  
 Gross Acreage of Parent Tract(s): \_\_\_\_\_  
 Square Feet of Ground Floor Area: \_\_\_\_\_
10. Type of Water Supply Proposed:  
 \_\_\_\_\_ Public Owned Community \_\_\_\_\_ Privately Owned Community  
 \_\_\_\_\_ Private On-Lot Well
11. Type of Sanitary Sewage Disposal Proposed:  
 \_\_\_\_\_ Public \_\_\_\_\_ Private Community  
 \_\_\_\_\_ Community On-Lot \_\_\_\_\_ Individual On-Lot
12. Sewage Facilities Plan Revision or Supplement Number \_\_\_\_\_  
 Date Submitted \_\_\_\_\_ 20, \_\_\_\_\_
13. Lineal Feet of New Street: \_\_\_\_\_  
 Identify all Street(s) Not Proposed for Dedication: \_\_\_\_\_  
 \_\_\_\_\_
14. Acreage Proposed for Park or Other Public Use: \_\_\_\_\_

The undersigned hereby represents that, to the best of his knowledge and belief, all information listed above is true, correct, and complete.

\_\_\_\_\_, 20\_\_\_\_\_  
 Signature of Landowner or Applicant Date

\_\_\_\_\_, 20\_\_\_\_\_  
 Signature of Landowner or Applicant Date

-----

We do hereby request the Lancaster County Planning Commission review the enclosed Subdivision or land Development Plan in accordance with the Pennsylvania Municipalities Planning Code, Act 247, of 1968, as amended, Article V, Section 502.

\_\_\_\_\_  
 Signature Title Date

-----

**For LCPC Use Only:**

LCPC File No. \_\_\_\_\_

Date of Receipt: \_\_\_\_\_, 20\_\_\_\_\_  
 \_\_\_\_\_

Lancaster County Planning Commission Meeting Date: \_\_\_\_\_

## APPENDIX C

### APPLICATION FOR CONSIDERATION OF A MODIFICATION

For Municipal Use Only:

File No. \_\_\_\_\_

Date of Receipt / Filing: \_\_\_\_\_

Planning Commission Meeting Date: \_\_\_\_\_

Governing Body Meeting Date: \_\_\_\_\_

-----  
The undersigned hereby applies for approval of a Modification / waiver, submitted herewith and described below:

1. Plan Name: \_\_\_\_\_  
Plan No.: \_\_\_\_\_ Plan Date: \_\_\_\_\_

2. Project Location: \_\_\_\_\_  
\_\_\_\_\_

3. Name of Property Owners (s):

Address: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Source of Title: \_\_\_\_\_ Account No.: \_\_\_\_\_

Second Property Owners (s): \_\_\_\_\_

Address: \_\_\_\_\_ Phone No.: \_\_\_\_\_

Source of Title: \_\_\_\_\_ Account No.: \_\_\_\_\_

4. Specific Section of the Subdivision and Land Development Ordinance for which a Modification is requested: \_\_\_\_\_

The Proposed Alternative to the Requirement: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Justification for the Modification / Waiver: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The undersigned hereby represents that, to the best of their knowledge and belief, all information listed above is true, correct, and complete.

\_\_\_\_\_, 20\_\_\_\_\_  
Signature Date

## APPENDIX D

### MEMORANDUM OF UNDERSTANDING

<b>INSTALLATION OF PUBLIC IMPROVEMENTS IN CONJUNCTION WITH PRELIMINARY PLAN APPROVAL</b>
--

This Memorandum of Understanding is entered into by and between the following parties: Borough of Christiana, hereinafter called "Borough" and \_\_\_\_\_, hereinafter called "Developer".

#### RECITALS:

WHEREAS, Developer has submitted to the Borough a plan and application for Subdivision or Land Development Plan located in \_\_\_\_\_ which is known and designed as \_\_\_\_\_.

WHEREAS, Borough and Developer desire to set forth their understanding concerning the Developer's agreement and responsibility to install the Public Improvements and pay the costs involved in processing, inspecting, and reviewing Developer's Subdivision and Land Development Plan.

NOW, THEREFORE, intending to be legally bound hereby, Borough and Developer agree as follows:

1. The Developer, at their own cost and expense, shall proceed to perform and complete only those Public Improvements required by the Developer's Subdivision and Land Development Plan, subject to the approval of the plan and specifications by the Borough.
2. The Developer, prior to the commencement of work, shall provide in writing to the Borough a notice of intent to commence construction and to provide an anticipated construction commencement date.
3. The Borough, or its designee, and the Developer shall agree upon a notification procedure and a schedule of field inspections to be made during construction and upon completion of all Public Improvements.
4. Upon completion of the Public Improvements, the Developer shall give notice to the Borough, in writing, to inspect the Public Improvements. The Borough shall inspect the Public Improvements within ten (10) days and shall approve same if they are completed in accordance with the Subdivision or Land Development Plan and acceptable engineering practices. If the Borough disapproves, they shall notify the Developer promptly.
5. Developer agrees to reimburse the Borough for professional engineering consultant services, and Lancaster County Planning Commission services necessitated by the review and approval of the developer's plans and necessitated by the review and inspection of all required Public Improvements (both at the plan and installation stages) at the prevailing rate, plus associated itemized expenses, where applicable. It is agreed that professional engineering consultant services, and Lancaster County Planning Commission services

shall be payable by developer within forty-five (45) days after the date of invoice and prior to final approval of developer's Subdivision or Land Development Plan.

- 6. Where applicable, developer agrees to reimburse the Borough for solicitor services necessitated by the review and approval of the developer's plan, and necessitated by the review of all required financial security and other agreements. It is agreed the solicitor's services shall be payable within forty-five (45) days after the date of invoice and prior to final approval of developer's Subdivision or Land Development Plan.
- 7. Notwithstanding the foregoing, developer reserves the right to contest the amount and/or reasonableness of the fees pursuant to the provisions of the MPC.

IN WITNESS WHEREOF, the parties hence caused this Memorandum of Understanding to be executed, dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

BOROUGH OF CHRISTIANA GOVERING BODY

\_\_\_\_\_  
\_\_\_\_\_

(Notary Seal) DEVELOPER

\_\_\_\_\_

## APPENDIX D-1

### MEMORANDUM OF UNDERSTANDING AND FINANCIAL SECURITY

<b>INSTALLATION OF PUBLIC IMPROVEMENTS IN CONJUNCTION WITH FINAL PLAN APPROVAL</b>
--

This Memorandum of Understanding is entered into by and between the following parties: Borough of Christiana, hereinafter called "Borough" and \_\_\_\_\_, hereinafter called "Developer".

#### RECITALS:

WHEREAS, Developer has submitted to the Borough a plan and application for a Subdivision or Land Development Plan located in \_\_\_\_\_ which is known and designated as \_\_\_\_\_.

WHEREAS, Borough has required and Developer has agreed that Public Improvements shall be completed by the Developer, as provided in Article 6 of the Borough of Christiana Subdivision and Land Development Ordinance of 20\_\_\_\_, as amended.

WHEREAS, Borough and Developer desire to set forth their understanding concerning the Developer's agreement and responsibility to install the Public Improvements and pay the costs involved in processing, inspecting, and reviewing Developer's Subdivision or Land Development Plan.

NOW, THEREFORE, intending to be legally bound hereby, Borough and Developer agree as follows:

1. The Developer, at their own cost and expense, shall proceed to perform and complete only those Public Improvements required by the Developer's Subdivision or Land Development Plan, subject to the approval of the plans and specifications by the Borough.
2. The Borough, or its designee, and the Developer shall agree upon a notification procedure and a schedule of field inspections to be made during construction and upon completion of all Public Improvements.
3. Upon completion of the Public Improvements, the Developer shall give notice to the Borough, in writing, to inspect the Public Improvements. The Borough shall inspect the Public Improvements within ten (10) days and shall approve same if they are completed in accordance with the Subdivision or Land Development Plan and acceptable engineering practices. If the Borough disapproves, they shall notify the Developer promptly.
4. Developer agrees to reimburse the Borough for professional engineering consultant services, and Lancaster County Planning Commission services necessitated by the review and approval of the developer's plans and necessitated by the review and inspection of all required Public Improvements (both at the plan and installation stages) at the prevailing

rate, plus associated itemized expenses, where applicable. Developer agrees to reimburse the Borough for engineering, professional consultant services, and Lancaster County Planning Commission services associated with the As-Built Plan review. It is agreed that professional engineering consultant services, and Lancaster County Planning Commission services shall be payable by developer within forty-five (45) days after the date of invoice and prior to final approval of developer's Subdivision or Land Development Plan.

- 5. Where applicable, developer agrees to reimburse the Borough for solicitor services necessitated by the review and approval of the developer's plan and necessitated by the review of all required financial security and other agreements. It is agreed the solicitor's services shall be payable within forty-five (45) days after the date of invoice and prior to final approval of developer's Subdivision or Land Development Plan.
- 6. Notwithstanding the foregoing, developer reserves the right to contest the amount and/or reasonableness of the fees pursuant to the provisions of the MPC.

IN WITNESS WHEREOF, the parties hence caused this Memorandum of Understanding to be executed, dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

BOROUGH OF CHRISTIANA GOVERING BODY

\_\_\_\_\_  
\_\_\_\_\_

(Notary Seal) DEVELOPER

\_\_\_\_\_

## FINANCIAL SECURITY

This Financial Security is entered into by and between the following parties: Borough of Christiana hereinafter called "Borough" and \_\_\_\_\_, hereinafter called "Developer".

### RECITALS:

WHEREAS, Developer has submitted to the Borough a Plan and application for a Subdivision and Land Development Plan located on \_\_\_\_\_ which is known and designated as \_\_\_\_\_.

WHEREAS, Borough and Developer desire to set forth their understanding concerning the Developer's agreement and responsibility to install the Public Improvements, provide a financial security, and pay the costs involved in inspecting and approving Developer's Subdivision or Land Development Plan.

NOW, THEREFORE, intended to be legally bound hereby, Borough and Developer agree as follows:

1. The Developer, at their own cost and expense, shall proceed to perform and complete all Public Improvements required by the Developer's Subdivision or Land Developer Plan, subject to the approval of the Plans and specifications by the Borough.
2. To assure completion of the Public Improvements required as a condition for the final approval of the Developer's Subdivision and Land Development Plan, the Developer shall provide for deposit with the Borough, financial security (consistent with Article 6 of the Borough of Christiana Subdivision and Land Development Ordinance of 20\_\_\_\_, as amended, in the amount sufficient to cover the costs of all Public Improvements, including, but not limited to, Streets, Street signs, sidewalks, curbs, Landscaping, storm drainage for Dedication or which affect adjacent properties or Streets, sanitary sewer facilities for Dedication, water supply facilities for Dedication, fire hydrants, Lot Line Markers, survey Monuments, and other related facilities. Such security shall provide for, and secure the completion of the Public Improvements within one (1) year of the date fixed in the Subdivision or development Plan. The amount of financial security shall be equal to one hundred ten percent (110%) of the cost of the required Public Improvements for which financial security is posted. The cost of the Public Improvements shall be established by submission to the Borough of an estimate prepared by the Developer's Engineer, subject to review, comment, and approval by the Borough or its designees.
3. The Borough, or its designee, and the Developer shall agree upon a notification procedure and a schedule of field inspections to be made during construction and upon completion of all Public Improvements.
4. Upon completion of the Public Improvements, the Developer shall give notice to the Borough or its designee, in writing, to inspect the Public Improvements. The Borough or its designee shall inspect the Public Improvements within ten (10) days and shall approve same if they are completed in accordance with the Subdivision or Land Development Plan and acceptable engineering practices. If the Borough or its designee disapproves, they shall notify the Developer promptly.

5. Developer agrees to reimburse the Borough for professional engineering consultant services, necessitated by the review and approval of the developer's Plans and necessitated by the review and inspection of all required Public Improvements at the prevailing rate, plus associated itemized expenses, where applicable. It is agreed that engineering, professional consultant services shall be payable by Developer within ten (10) days after the date of invoice and prior to final approval of developer's Subdivision or Land Development Plan.
  
6. Where applicable, Developer agrees to reimburse the Borough for solicitor services necessitated by the review and approval of the developer's Plan(s), and necessitated by the review of all required financial security and other agreements. It is agreed the solicitor's services shall be payable within ten (10) days after the date of invoice and prior to final approval of Developer's Subdivision or Land Development Plan.

IN WITNESS WHEREOF, the parties hence caused this Financial Security to be executed, dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

BOROUGH OF CHRISTIANA GOVERNING BODY

\_\_\_\_\_  
 \_\_\_\_\_

(Notary Seal) DEVELOPER

\_\_\_\_\_

**APPENDIX E**

**NOTICE OF APPROVAL OF NEW STREET NAME(S)**

Municipality name: Christiana Borough

Municipality address: \_\_\_\_\_

Date: \_\_\_\_\_

File No.: \_\_\_\_\_ (To be Completed by Applicant)

Plan Name: \_\_\_\_\_ (To be Completed by Applicant)

Lancaster County-Wide Communications has reviewed and approved the following new Street names:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(Applicant to provide on this form a list of all proposed new Street names prior to submitting this form for approval. This form must bear the authorized signature from Lancaster County-Wide Communications.)

\_\_\_\_\_  
Authorized Signature from Lancaster County-Wide Communications

## APPENDIX F

### GENERAL DESIGN GUIDELINES WITH HISTORIC FEATURES

- A. *Size, Scale and Proportion.***  
New construction should reflect the dominant proportions, size and scale of Buildings comprising the Streetscape. The height and width of the front façade should relate to the average height and width of historic Buildings. New Buildings should be designed within ten percent of the average height of adjacent historic Buildings.
- B. *Massing and Shape.***  
Building shape, massing, and roof shape of new construction should reflect that found in surrounding Buildings.
- C. *Materials and Textures.***  
Building materials, textures and treatments should be compatible with surrounding Buildings. Where traditional materials, such as brick, stone, and wood are common in the immediate neighborhood, use of these materials on front facades and secondary facades for corner properties is recommended.
- D. *Rhythm and Patterns.***  
Design elements of principal facades should reflect the neighborhood patterns. Examples include prevalent vertical or horizontal orientation of elements. Large Buildings can be divided into bays to reflect neighborhood rhythms.
- E. *Cornice and Floor-to-Floor Heights.***  
Design elements of principal facades should reflect the cornice and floor-to-floor heights, spacing between windows and doors and between windows and cornices or rooflines, or should incorporate detailing to suggest the same. The design should also reflect the dimensions of the façade's base and cornice.
- F. *Windows and Doors.***  
The use of window and door openings of size and design typical to the neighborhood is recommended.
- G. *Streetscapes, Orientation and Location.***  
New construction should reflect prevailing setbacks, orientation and physical elements, which define Streetscapes.

## APPENDIX G

### CHECKLIST FOR STREET & ACCESS DRIVE DESIGN

STREET NAME: \_\_\_\_\_ PROJECT NAME: \_\_\_\_\_  
 STATION NUMBER: \_\_\_\_\_ DATE: \_\_\_\_\_ SHEET: \_\_\_\_\_ / \_\_\_\_\_

- |  |  |   |
|--|--|---|
| 1. Classification:<br><ul style="list-style-type: none"> <li>• Urban</li> </ul>  | 3. Ownership: (circle one)<br><ul style="list-style-type: none"> <li>• Public / Dedicated</li> <li>• Private</li> </ul>      | 5. Street Function: (circle one)<br><ul style="list-style-type: none"> <li>• Alley</li> <li>• Local</li> <li>• Collector</li> <li>• Arterial</li> </ul> |
| 2. Project Type: (circle one)<br><ul style="list-style-type: none"> <li>• Residential</li> <li>• Mixed Use</li> <li>• Commercial / Industrial</li> </ul> | 4. Principal Design Vehicle: (circle one)<br><ul style="list-style-type: none"> <li>• Automotive</li> <li>• Truck</li> </ul> |   |

6. Attached Design Criteria Matrix Verifies the Following:
- Volume of Average Daily Trips: \_\_\_\_\_
  - Design Speed: \_\_\_\_\_
  - Vertical Attributes:
    - Maximum Slope: \_\_\_\_\_ %
    - Minimum Slope: \_\_\_\_\_ %
    - “K” Value for Crest Curves: \_\_\_\_\_
    - “K” Value for Sag Curves: \_\_\_\_\_
  - Level of Service (LOS) at Intersections:
    - New Intersection: LOS C or better
    - New Intersection with Existing Street: LOS D or better
  - Horizontal Attributes: \_\_\_\_\_
    - Minimum Safe Stopping Sight Distance: \_\_\_\_\_
    - Minimum Sight Distance at Intersections: \_\_\_\_\_
    - Minimum Centerline Curve Radius: \_\_\_\_\_
      - Curb Radii
        - Local - Local: 10'-15'
        - Local – Collector: 15'-20'
        - Collector – Collector: 15'-25'

	One Side/Both Sides	X	Width	=	Total Width
○ Thru Lanes: _____		x	_____	=	_____
○ Turn lane: _____		x	_____	=	_____
○ On-Street Parking: _____		x	_____	=	_____
○ Non-motorized Lane: _____		x	_____	=	_____
○ Gutter (Stormwater): _____		x	_____	=	_____
○ Shoulder: _____		x	_____	=	_____
○ Curb: _____		x	_____	=	_____
○ Swale: _____		x	_____	=	_____
○ Sidewalk: _____		x	_____	=	_____
○ Grass / Tree Strip: _____		x	_____	=	_____
○ Boulevard Island: _____		x	_____	=	_____

**Total Right-of-Way Width = \_\_\_\_\_**

7. Special Considerations: (traffic signals, Streetscape and lighting requirements, crosswalk treatments, etc.)  
 \_\_\_\_\_

8. Agreed by Developer meeting attendee(s): \_\_\_\_\_

9. Agreed by Christiana Borough meeting attendee(s): \_\_\_\_\_