

# **PENN TOWNSHIP**

**260 Lewis Road  
West Grove, PA 19390**

**Telephone: 610.869.9620 Fax: 610.869.9194**

## **SUBDIVISION AND LAND DEVELOPMENT ORDINANCE OF April, 1976**

**As amended through September 15, 1993**

**As amended through January 15, 1997**

**As amended through July 26, 2000**

**As amended through October 6, 2004**

**As amended through October 3, 2007**

**As amended through April 7, 2010**

**Penn Township  
Chester County  
Pennsylvania**

**Please note that Penn Township has adopted International  
Building Code 2006 and International Fire Code 2006**

**\*\* Penn Township Subdivision and Land Development Ordinance \*\***

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## **ARTICLE I – PREAMBLE**

### **Section 100. Title**

This Ordinance shall be known and may be cited as "The Subdivision and Land Development Ordinance of the Township of Penn 2000".

### **Section 101. Purpose**

The purpose of this Ordinance shall be to provide uniform standards to guide the subdivision, resubdivision, and development of land of the Township of Penn in order to promote the public health, safety and general welfare of the residents and inhabitants of the Township of Penn, and to fulfill the objectives of this Ordinance.

### **Section 102. Objectives**

This ordinance has been prepared and shall be administered to fulfill the objectives identified in the Township Comprehensive Plan (2003) and the Township Open Space, Recreation and Environmental Resource Plan (1993) and the following:

- 102.1 Ensure that new development is compatible in scale, bulk, location, and density with existing land uses in the Township
- 102.2 Preserve and protect natural resources and open space in the Township through appropriate land use standards.
- 102.3 Promote a safe and efficient automobile and pedestrian circulation patterns.
- 102.4 Promote adequate, safe and sound housing for present and future residents of the Township.

### **Section 103. Authority**

In accordance with the provisions of the Pennsylvania Municipalities Planning Code (MPC), Act 247 as amended, the Penn Township Board of Supervisors has the power to regulate subdivision and land development within the Township by enacting a subdivision

and land development ordinance. This ordinance shall require that all subdivision and land development plans of land situated within Penn Township shall be submitted for approval to the Township Supervisors. All powers granted herein to the Township Supervisors shall be exercised in accordance with the provisions of the subdivision and land development ordinance.

#### **Section 104. Interpretation**

The provisions of this Ordinance shall be held to be minimum requirements to meet the above stated purposes and objectives. Where the provisions of this Ordinance impose greater restrictions than those of any statute, other ordinance, or regulation, the provisions of this Ordinance shall prevail. Where the provisions of any statute, or other ordinance or regulation impose greater restrictions than those of this Ordinance, the provisions of such statute, ordinance, or regulation shall prevail.

#### **Section 105. Validity and Severability**

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

#### **Section 106. Relationship to Township Plans and Land Use Controls**

The Provisions of this Ordinance have been prepared to promote the development of the Township in accordance with the provisions of the Comprehensive Plan ( 2000); the Open Space, Recreation and Environmental Resource Plan (1993); and the Zoning Ordinance (1968 as amended).

#### **Section 107. Applicability**

- 107.1 After the effective date of this Ordinance, no subdivision or land development or any lot, sewer, water main, or other improvements in connection therewith shall be laid out, constructed, opened, or dedicated for public use or travel or for the common use of occupants of buildings abutting thereon, except in accordance with the provisions of this Ordinance.
- 107.2 The provisions of this Ordinance shall not apply to a subdivision recorded prior to the effective date of this Ordinance unless that plan is to be changed. The provisions of this Ordinance shall apply to and control all other subdivisions and land developments within the Township.

- 107.3 Any replatting or resubdivision of land, including a change of a recorded plan, shall be considered a new subdivision and shall comply with the provisions of this Ordinance.
- 107.4 The provisions of this Ordinance shall apply to all practices, uses, and procedures permitted or conducted pursuant to the Penn Township Zoning Ordinance.

**Section 108. Effective Date**

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

## ARTICLE II – PROCEDURES

### Section 200. General Application Submission and Review Requirements

200.1 All subdivision and land development plans shall comply with the provisions of this Article, Article 7, and all other provisions of this Ordinance. The Township regulates the subdivision and/or development of land within the Township

The owner of any land, the owner's agent, tenant or any person submitting such a plan with the owner's permission shall be jointly and/or severally responsible for the payment of reasonable fees and costs incurred by the Township in the fulfillment of its obligations required by this Ordinance.

200.2 All applications for subdivision or land development shall be classified as either Major or Minor as determined by the Board, according to the following:

A. Minor Subdivision Applications shall include a subdivision where:

1. All proposed lots have frontage on and direct vehicular access to an existing improved Township or State road; and
2. A maximum of three lots on parcels are being created; and
3. The lots being subdivided are designed for single family detached dwellings; and
4. No street, either public or private, nor any improvement (including the extension off a public water or sewer main), which is intended to be dedicated to the Township, is to be constructed.

B. All application not considered Minor according to section 200.2A, shall be considered Major Subdivision or Land Development Applications.

200.3 The Application for Development shall identify all legal owners of the real property proposed for Land Development and/or subdivision, In the event the owners are not the developers, as defined by this Ordinance and/or the PA Municipalities Planning Code, the owner(s) must approve and identify the approved agent, tenant or other person submitting an application for development for their property. The owner(s) must include a copy of their current deed identifying the current owners, the names and address of any agent, tenant or other person submitting an application for development for their property.

200.4 All legal owners and any agent, tenant or any other person submitting an Application for Development with the landowner's permission, shall sign all applications for Development, as defined by the PA Municipalities Planning Code.



- 200.5 Every application for development shall include a Professional Plan Review and Escrow Agreement, signed by the landowner(s) and any agent, tenant or any other person submitting an application for development. The Board of Supervisors may by Resolution create, revise and/or amend the form and content of the application, Professional Plan Review and Escrow Agreement and/or any other agreement required by this ordinance.
- 200.6 The owners of any land, the owner's agent, tenant or any other person submitting an application for development with the owner's permission shall be jointly and/or separately responsible for the payment of all review fees required for the Township to determine compliance with the provision of this Ordinance. Review fees may include reasonable and necessary charges by the Township's professional consultants for the review and report to the Township. The Professional Plan Review and Escrow Agreement will require the owners and developers to provide and maintain an escrow account from which the Township may pay those charges provided to the Township by its professional consultants. The Professional Plan Review and Escrow Agreement will also include a continuing obligation to monitor the balance of the Escrow Account, and provide such additional amounts as the Township determines necessary to satisfy those charges submitted by those professional consultants until the Board approves or denies the application. The Board of Supervisors will provide an itemized bill showing the work performed, identifying the person performing the services and the time and date spent for each task. Nothing contained herein shall limit the applicant and owner's right to review and contest the charges as permitted by the PA Municipalities Planning Code. A contest by any landowner or developer of the above described review fees shall not relieve the landowner and developer's obligation to maintain a continuing escrow balance securing any additional professional consultant review fees incurred prior to and/or subsequent to any contest by a landowner or developer. The rights to contest and/or dispute professional review fees shall determine the relative rights and/or obligation of that itemized bill disputed by the landowner/developer, and does not relieve the obligation to provide security for the payment of professional consultant review fees as permitted by the PA Municipalities Planning Code.
- 200.7 The Board of Supervisors may deny any application and plan should the legal owner, the owner's agent, tenant, and/or developer fail to pay all fees and maintain sufficient funds to timely satisfy all review fees. No building permits shall be issued until all professional consultant review fees and/or costs are paid.
- 200.8 The legal owner, the owner's agent, tenant and/or the developer shall pay all review fees, as described above, regardless of the date, approval and/or denial of any application of any plan. In the event the owner, the owner's agent, tenant and/or the developer fails to pay such reasonable fees, the owner and developer will reimburse the Township for costs and expenses, including but not limited to reasonable attorney fees, incurred in the collection of any unpaid review fees.
- 200.9 The legal owner, the owner's agent, tenant and the developer shall comply with this

procedure for each submission of a sketch, preliminary and/or final application and plan.

200.10 The Board of Supervisors may by resolution at a public meeting create, revise and or amend any form required in this article, including but not limited to the application escrow agreement and/or fee schedule.

## **Section 201. Plan Application Process**

### **201.1 Major Application Process**

All subdivisions and land development applications classified as Major, shall apply for and secure approval of the following:

- A. Sketch Plan (optional)
- B. Preliminary Plan, and
- C. Final Plan

### **201.2 Minor Application Process.**

Those subdivision and land development applications classified as Minor according to Section 200.2.A. shall apply for and secure approval of the following:

- A. Sketch Plan (optional), and
- B. Final Plan

## **Section 202. Sketch Plan**

### **202.1 Purpose**

The Township suggests that a Sketch Plan be submitted for both Major and Minor Subdivision and Land Development Application to facilitate the review of the Final Plan, and when applicable, the Preliminary Plan. The submission of a Sketch Plan application is suggested in order to provide an opportunity for unofficial and informal discussion between the applicant and the Planning Commission of the following issues:

- A. The Environmental conditions of the tract;
- B. The Cultural resources that may be present on the tract;
- C. Possible uses for the tract;
- D. Layout and design options;
- E. Water and sewer needs for the proposed use;
- F. Possible future uses for the whole tract; and
- G. Possible storm water management options for the tract.

202.2 Guidelines for the suggested components of a Sketch Plan can be found in Section 300.

### 202.3 Submission.

The applicant is encouraged to submit five black-on- white or blue-on-white prints on paper of the Sketch Plan and the required filing fee to the Township Secretary. The Township Secretary shall distribute the copies as follows:

- A. One copy to the Secretary of the Planning Commission
- B. One copy to the County Planning Commission
- C. One copy retained for the permanent files of the Board
- D. One copy to the Township Engineer
- E. One copy to the Township Zoning Officer

202.4 At one or more regularly scheduled meetings, the Planning Commission shall review the Sketch Plan to discuss the application with the applicant in accordance with the purpose identified in Section 202.1

202.5 The Planning Commission may suggest modifications to the Plan which it deems necessary to secure conformance to the regulations of this Ordinance or which it believes are in the public interest; however failure of the Planning Commission to submit comments in writing shall not be deemed to be an approval of any application or to vest any right in the applicant.

202.6 After the final meeting at which the Sketch Plan is reviewed by the planning commission, the Planning Commission Secretary shall send to the following people written notice of the Planning Commission's review:

- A. The Board
- B. The applicant or his agent,
- C. The Township Secretary
- D. The Township Engineer, and
- E. The Township Zoning Officer.

202.7 The landowner and any agent, tenant or other person submitting a sketch plan shall pay for all professional consultant review fees incurred in the review of the plan.

## **Section 203. Preliminary Plan**

### 203.1 Submission.

As required for Major Subdivision and Land Development Applications, Preliminary Plans and required data for all proposed subdivisions and land developments shall be submitted by the applicant or his agent to the Township secretary.

203.2 Official submission of a Preliminary Plan shall include

- A. Submission of five (5) completed Application for review of Preliminary Plan (Form 2).

- B. Submission of eight (8) blue-on-white or black-on-white prints on paper of the Preliminary Plan.
- C. Six (6) copies of the Sanitary Waste Planning Module required by the Chester County Health Department at the time the Plan is submitted, with all supplemental data.
- D. Six (6) copies of all other information and plans which are required by Section 301.
- E. Electronic versions of all submitted documents (PDF Format)
- F. Payment of the filing fee and deposit of escrow for plan review cost.
- G. The Township reserves the right to request additional copies of submission requirements as needed.

203.3 The Receipt Date of the Preliminary Plan shall be the date of the next regularly scheduled meeting of the Planning Commission following the date the application is deemed complete provided that should the next regular meeting occur more than 30 days following the filing of the application, the receipt date shall be the 30<sup>th</sup> day following the day the application has been deemed complete.

#### 203.4 Distribution.

The **Township Secretary** shall distribute submitted information as follows:

A. The Township Planning Commission:

- 1. One copy of the Preliminary Plan
- 2. One copy of the Sanitary Waste Planning Module.
- 3. One copy of Application for Review of Preliminary Plan.
- 4. One copy of all other required information and plans.

B. The Township Engineer

- 1. Two copies of the Preliminary Plan
- 2. One copy of the Sanitary Waste Planning Module.
- 3. One copy of Application for Review of Preliminary Plan.
- 4. One copy of all other required information and plans.

C. The Township Zoning Officer:

- 1. One copy of the Preliminary Plan
- 2. One copy of the Sanitary Waste Planning Module.
- 3. One copy of Application for Review of Preliminary Plan.

D. The Township Sanitary Sewer Engineer:

- 1. One copy of the Preliminary Plan
- 2. One copy of the Sanitary Waste Planning Module.
- 3. One copy of Application for Review of Preliminary Plan.

E. The Chester County Planning Commission

1. One copy of the Preliminary Plan
2. One copy of the Sanitary Waste Planning Module.
3. One copy of Application for Review of Preliminary Plan.
4. One copy of all other required information and plans.

F. The Chester County Health Department

1. Two copies of the Preliminary Plan
2. Two copies of the Sanitary Waste Planning Module.
3. Two copies of Application for Review of Preliminary Plan.

G. To be retained by the Township Secretary.

1. Three copies of the Preliminary Plan
2. Two copies of the Sanitary Waste Planning Module.
3. One copy of Application for Review of Preliminary Plan.
4. Two copies of all other required information and plans.

The **applicant** shall be responsible to distribute all information pertaining to the project as follows. The Township must be copied on all transmittals related to these submissions.

H. The Chester County Soil and Water Conservation District:

1. Two copies of the Preliminary Plan
2. Two copies of all other required information and plans.

I. The Pennsylvania Department of Transportation, whenever the property being developed abuts a State Route:

1. Two copies of the Preliminary Plan
2. Two copies of all other required information and plans.

J The Governing Body of any adjacent municipality:

1. One copy of the Preliminary Plan
2. One copy of all other required information and plans.

203.5 Review by the Planning Commission.

When a Preliminary Plan has been received for review, the Planning Commission shall review the Plan at one or more regularly scheduled or special meetings to determine its

conformance the standards contained in this Ordinance and shall recommend such changes and modifications as it shall deem necessary to assure compliance with this Ordinance. The Planning commission's failure to provide a recommendation to the Board of Supervisors shall not affect the Board's right to issue a decision within 90 days from the date of the application as determined herein.

- A. The Township Engineer and the Township Zoning Officer shall review each Preliminary plan to determine whether the Plan meets the requirements of this Ordinance and the Township Zoning Ordinance.
- B. If the Plan does not meet the requirements of this Ordinance or the Township Zoning Ordinance (including any relief or condition granted or imposed by the Board of Supervisors and/or Zoning Hearing Board) or violates any deed restrictions, the Township Zoning Officer and/or the Township Engineer shall notify the applicant.
- C. When reviewing a Plan at a regularly scheduled or special meeting, the Planning Commission should consider, in addition to its own comments, written reports regarding the subdivision in question from the following:
  - 1. The Township Engineer
  - 2. The Township Zoning Officer
  - 3. The Chester County Planning Commission
  - 4. The Chester County Health Department
  - 5. The Pennsylvania Department of Transportation
  - 6. The Chester County Soil and Water Conservation District
  - 7. Other regulatory agencies
  - 8. Adjacent Municipalities.
- D. It is the applicant's responsibility to supply the Planning Commission with copies of all correspondence from any outside agency associated with the review of a Preliminary Plan.
- E. After the final meeting at which the Planning Commission reviews the Preliminary Plan, the Planning Commission shall notify the following of the recommendation being made regarding the Preliminary Plan Application:
  - 1. The Township Secretary
  - 2. The Township Engineer
  - 3. The Township Zoning Officer
  - 4. The Township Board of Supervisors
  - 5. The Township Solicitor
  - 6. The applicant or his agent.
- F. If the review of the Planning Commission is not favorable, the Planning Commission shall recommend that the Plan not be approved and state the reasons for such action.

- G. If the Preliminary Plan is recommended to be approved subject to conditions, those conditions shall be noted. The Planning Commission shall identify each relevant Section in the Ordinance on which the condition is based. If the Preliminary Plan is recommended to be approved as submitted, that fact shall be noted.
- H. The applicant may submit a Preliminary Plan in phases, each phase covering a reasonable portion of the entire proposed subdivision or land development as shown on the approved Preliminary Plan, if permission is granted by the Board of Supervisors. The Board of Supervisors shall approve the method of dividing the tract into phases and may require security for each phase to assure the proper installation of all improvements. The applicant shall increase the security in such amounts as the Township shall require annually. The Board of Supervisors shall require application and review fees for each phase in accordance with Section 700.

#### 203.6 Review by Board of Supervisors

The Plan shall be reviewed at one or more regularly scheduled or special meetings of the Board of Supervisors.

- A. The Board shall review the written reports of the Planning Commission, the Chester County Health Department, the Township Engineer, the Township Zoning Officer, Conditional Use and/or Zoning Hearing Board Decisions, and all other reports which may have been received from County and State agencies, provided each entity provides a timely written report to the Board. The Board shall either approve or disapprove the Plan.
- B. No official Action shall be taken by the Board with respect to a Preliminary Plan until the Township has received the written report of the County Planning Commission or until expiration of 30 days from the date the plan was forwarded to the County Planning Commission.
- C. Before acting on a Preliminary Plan, the Board may arrange for a public hearing on the Plan, giving public notice as defined by Act 247 as Amended.
- D. The Board of Supervisors shall issue its decision in writing and shall communicate it to the applicant personally or mail to the applicant at his or her last known address not later than 15 days following the decision.
- E. The Township Planning Commission is the body which first reviews any application. The Board of Supervisors may consider the recommendations from the Planning Commission, but may issue a decision on any plan independently of action or inaction of the Planning Commission. All application for preliminary approval of a plan shall be acted upon by the Board of Supervisors and communicated to the applicant within 90 days following the date of the regular

meeting of the Planning Commission next following the date the application is filed, provided that should the next regular meeting of the Planning Commission occur more than 30 days following the filing of the application, said ninety-day period shall be measured from the 30<sup>th</sup> day following the day the application is filed.

- F. The Board of Supervisors may request the modification of any plan or land development plan and specify conditions, changes, modifications or additions thereto which it deems reasonably necessary, and may make its decision to grant preliminary plan approval subject and conditioned upon such conditions, changes, modifications or additions. Whenever the approval of a preliminary plan subject to conditions, changes, modifications or additions, the written action by the Board of Supervisors shall (a) specify each condition, change, modification or addition, citing the appropriate ordinance provision, where relevant, and (b) require the applicant's written agreement to the conditions, changes, modifications. In the event the Township does not receive the applicant's written agreement within thirty (30) days from the date of the Board's Decision on the application as described in Section 205, the plan is deemed denied as of the date of the Decision of the Board of Supervisors.
- G. When the application and/or development plan is not approved in terms as filed, the decision shall describe the requirements which have not been met and shall, cite to the provisions of statute, ordinance or regulation relied upon.
- H. Approval of a Preliminary Plan does not authorize the recording of a Subdivision of Land Development Plan, nor the construction, sale, lease or transfer of lots or dwelling units.

## **Section 204. Final Plan**

### **204.1 Submission.**

- A. Within 12 Months after approval of the Preliminary Plan, a final plan and all necessary supplementary data shall be submitted to the Township, and the time shall commence according to section 203.6.D.
- B. Official Submission of a Final Plan shall include:
  - 1. Submission of five (5) complete Application for review of Final Plan (Form 3).
  - 2. Submission of eight (8) blue-on-white or black-on-white prints on paper of the Final Plan.
  - 3. Six (6) copies of all other supplementary data and plans as outlined in Sections 302.4 through 302.6
  - 4. Electronic versions of all submitted documents (PDF Format)
  - 5. Payment of the filing fee and deposit of escrow for plan review cost.
  - 6. The Township reserves the right to request additional copies of submission requirements as needed.



- C. The Receipt Date of the Final Plan shall be the date of the next regularly scheduled meeting of the Planning Commission following the date the application is deemed complete provided that should the next regular meeting occur more than 30 days following the filing of the application, the receipt date shall be the 30<sup>th</sup> day following the day the application has been deemed complete.
- D. The Final Plan shall conform to the approved Preliminary Plan, but shall incorporate all modifications required by the Board in their approval of the Preliminary Plan. Failure to comply with these shall constitute grounds for the Township to refuse to approve the Final Plan.

#### 204.2 Distribution

The Township Secretary shall distribute submitted information as follows:

- A. The Township Planning Commission:
  - 1. One copy of Application for Review of Final Plan
  - 2. One copy of the Final Plan.
  - 3. One copy of all supplementary data and plans.
- B. The Township Engineer:
  - 1. One copy of Application for Review of Final Plan
  - 2. Two copies of the Final Plan.
  - 3. One copy of all supplementary data and plans.
- C. The Township Zoning Officer:
  - 1. One copy of Application for Review of Final Plan
  - 2. One copy of the Final Plan.
- D. The Township Sanitary Sewer Engineer:
  - 1. One copy of Application for Review of Final Plan
  - 2. One copy of the Final Plan.
- E. The Chester County Planning Commission:
  - 1. One copy of Application for Review of Final Plan
  - 2. One copy of the Final Plan.
  - 3. One copy of all supplementary data and plans.
- F. The Chester County Health Department:
  - 1. Two copies of Application for Review of Final Plan

2. Two copies of the Final Plan.
3. Two copies of all supplementary data and plans.

G. To be retained by the Township Secretary:

1. One copy of Application for Review of Final Plan
2. Three copies of the Final Plan.
3. Two copies of all supplementary data and plans.

The **Applicant** shall be responsible to distribute all information pertaining to the project as follows:

H. The Chester County Soil and Water Conservation District:

1. Two copies of the Preliminary Plan.
2. Two copies of all other required information and plans.

I. The Pennsylvania Department of Transportation, whenever the property being developed abuts a State Route:

1. Two copies of the Preliminary Plan.
2. Two copies of required information and plans.

J. The Governing Body of any Adjacent Municipality

1. One copy of the Final Plan

#### 204.3 Review by the Planning Commission.

When a Final Plan has been received for review in accordance with Section 204.1, the Planning Commission shall review the Plan at one or more regularly scheduled or special meetings and submit a recommendation to the Board of Supervisors.

- A. The Township Engineer and the Township Zoning Officer shall review each Final Plan to determine whether the Plan meets the requirements of this Ordinance and the Township Zoning Ordinance, and to identify any deed restrictions.
- B. If the Plan does not meet the requirements of this Ordinance or the Township Zoning Ordinance or violates any deed restrictions, the Township Zoning Officer and/or the Township Engineer shall notify the applicant
- C. The Chester County Health Department shall review all plans for the adequacy in drinking water and of the proposed method of sewage disposal.

- D. When reviewing a Plan at a regularly scheduled or special meeting, the Planning Commission should consider, in addition to its own comments, written reports regarding the subdivision in question from the following
1. The Township Engineer
  2. The Township Zoning Officer
  3. The Chester County Planning Commission
  4. The Chester County Health Department
  5. The Pennsylvania Department of Transportation
  6. The Chester County Soil and Water Conservation District
  7. Other regulatory agencies
  8. Adjacent Municipalities
- E. It is the applicant's responsibility to supply the Planning Commission with copies of all correspondence from any outside agency associated with the review and approval of a Final Plan.
- F. After the final meeting at which the Planning Commission reviews the Final Plan, the Planning Commission Secretary shall notify the following in writing of the recommendation being made by the Planning Commission regarding the Final Plan:
1. The Board of Supervisors
  2. The Township Secretary
  3. The Township Engineer
  4. The Township Zoning Officer
  5. The Township Solicitor
  6. The Applicant or His Agent
- G. If the review of the Planning Commission is not favorable, the Planning Commission shall recommend that the Plan not be approved and state the reasons for such action
- H. If the Final Plan is recommended to be approved subject to conditions, those conditions shall be noted. The Planning Commission shall identify each relevant Section in the Ordinance on which the condition is based. If the Final Plan is recommended to be approved as submitted, that fact shall be noted.
- I. The applicant may submit a Final Plan in phases, each phase covering a reasonable portion of the entire proposed subdivision or land development as shown on the approved Preliminary Plan, if permission is granted by the Board of Supervisors. The Board of Supervisors shall approve the method of dividing the tract into phases and may require security for each phase to assure the proper installation of all improvements. The applicant shall increase the security in such amounts as the Township shall require annually. The Board of Supervisors shall require application and review fees for each phase in accordance with Section 700.

#### 204.4 Review by the Board of Supervisors

The Plan shall be reviewed at one of more regularly scheduled or special meetings of the Board of Supervisors.

- A. The Board shall review the Final Plan and any written reports regarding the Plan from the Planning Commission, the Township Engineer, the Chester County Health Department, the Township Zoning Officer, and where applicable, State or County agencies.
- B. Before acting on a Final Plan, the Board may arrange for a public hearing on a plan, giving public notice as defined by Act 247 as amended.
- C. The Board of Supervisors shall issue its decision in writing and shall communicate it to the applicant personally or mail to the applicant at his or her last known address no later than 15 days following the decision.
- D. The Board shall take on of the following actions on any subdivision or land development application submitted to the Township.
  1. The action may be favorable, giving approval to the Final Plan. The Board of Supervisors may request the modification of any plan or land development plan and specify conditions, changes, modifications or additions thereto which it deems reasonably necessary, and may make its decision to grant final plan approval subject and conditioned upon such conditions, changes, modifications or additions. Whenever the approval of a final plan subject to conditions, changes, modifications or additions, the written action by the Board of Supervisors shall (a) specify each condition, change, modification or addition, citing the appropriate ordinance provision, where relevant, and (b) require the applicant's written agreement to the conditions, changes, modifications. In the event the Township does not receive the applicant's written agreement within thirty (30) days from the date of the Board's Decision on the application as described in Section 205, the plan is deemed denied as of the date of the Decision of the Board of Supervisors.
  2. The action may be unfavorable, giving disapproval to the Plan. If the Board disapproves of said plan, the findings and reasons upon which the Board's action is based shall be included in its written decision issued to the applicant according to Section 204.4C., and also stated in the minutes of the Board of Supervisors. Any modifications in the Plan required as prerequisites to approval of the Final Plan shall be stated.

- E. The Board shall render its decision and communicate it to the applicant not later than 90 days following the date of the regular meeting of the Penn Township Planning Commission next following the date the application is filed, provided that should the next regular meeting occur more than 30 days following the filing of the application, the 90 day period shall be measured from the 30<sup>th</sup> day following the day the application is filed.
- F. A Final Plan shall not be endorsed by the Board and/or released for recording until the requirements of Section 206, Recording or Final Plan, have been met. In the event the applicant has not paid all permitted professional consultant review fees, the approval may include a condition requiring payment prior to the issuance of any building permits.
- G. The Board, finding that the applicant is in violation of any Ordinance, statute or regulation applicable to the applicant, shall have sufficient grounds for an unfavorable action on any Final Plan submitted by the applicant.
- H. The Board of supervisors may approve a Final Plan in phases, with each phase covering a reasonable portion of the entire proposed subdivision or land development so long as the applicant provides adequate financial security as determined by the Board of Supervisors for each phase to assure the proper installation of all improvements. Applicant shall increase the security in such amounts as the Township shall require annually.
- I. The Board of supervisors shall require connection of those properties within a public sewer service area as delineated in the Penn Township Sewage Facilities Base Plan Update Revision 2008 to the Penn Township public sewage system pursuant to the provisions of the Purchase of Capacity and Making Connections Ordinance, the Tapping Fee Ordinance and other pertinent governing rules, regulations, resolutions, policies and practices of Penn Township. The Board of supervisors may not adopt a Resolution for Plan Revision nor forward any Sewage Facilities Planning Module to the Department of Environmental Protection for processing until the applicant/owner has satisfied all of the requirements contained in these Ordinances and other pertinent governing rules, regulations, resolutions, policies and practices of Penn Township. In addition, final approval will not be granted until the applicant/owner has paid the tapping fee and all other fees and costs associated with allocation of sewage capacity as identified in either or both these Ordinances
- J. The Board of Supervisors may deny final approval in the event the applicant/owner has not satisfied the requisite provisions of the Purchase of Capacity and Making Connections Ordinance, the Tapping Fee Ordinance and other pertinent governing rules, regulations, resolutions, policies and practices of Penn Township.

## **Section 205. Approval of Plats**

- 205.1 All applications for subdivision and land development, whether preliminary or final, shall be acted upon by the Board no later than ninety (90) days following the date the

application was officially received by the Township according to Section 203.3 and Section 204.1.C, unless the applicant provides a written extension to this deadline.

205.2 Failure of the Board to render a decision or communicate the decision to the applicant within the manner required herein shall be deemed an approval of the application in terms as presented unless the applicant has agreed to an extension of time or change in the prescribed manner of presentation of communication of the decision, in which case, failure to meet the extended time or change in manner of presentation of communication shall have the like effect

205.3 Changes in the ordinance shall affect plats as follows:

- A. No change or amendment to the zoning, subdivision, or any other ordinance or provision shall affect the Township's decision regarding any application, whether preliminary or final that was duly filed prior to such change.
- B. When an application, whether preliminary or final, has been approved without conditions, or approved by the applicant's acceptance of conditions, the applicant shall have five years to commence and substantially complete the approved plan in accordance with the terms of approval. The five-year period shall start on the date of preliminary approval. In the case that preliminary approval is not required; the five-year period shall start on the date of the final approval.
- C. When it is anticipated that completion of improvements associated with a plat will exceed the five-year period, the applicant shall prepare a schedule detailing the deadlines within which application for final approval for each section of the plat are intended to be filed. The schedule shall be included with the preliminary plat plan, or when one is not required, with the final plat. Said schedule shall be updated annually before the anniversary of the preliminary plat approval until such time as final approval is granted. The Township may require such security as it deems necessary to assure the completion of future improvements.
- D. A section in a residential subdivision or land development shall be considered substantially complete according to section 205.3.C provided it contains a minimum of twenty-five (25) percent of the total number of dwelling units.
- E. Failure of the applicant to adhere to the schedule of submission of final plat application for the various sections shall subject any such section to any and all changes in zoning, subdivision land development, or any other governing ordinance enacted by the Township.

205.4 In the event the applicant has not paid all professional consultant review fees and costs incurred by the Township as permitted by MPC, the approval may include a condition requiring payment prior to the issuance of any building permits.

## **Section 206. Recording of Final Plan**

206.1 The Board of Supervisors shall furnish the developer with a signed copy of a resolution indicating approval of the Final Plan contingent upon obtaining satisfactory financial security, and in the event the plan includes connection to the Township sewage system, compliance with all Ordinances concerning the connection to that system and imposition of fees as outlined in the Penn Township Purchase of Capacity and Making Connections Ordinance and Tapping Fees Ordinance. The final plat or record plan shall not be signed nor recorded until the satisfactory financial security is executed and applicant has complied with the Purchase of Capacity and Making Connections and Tapping Fees Ordinances as adopted by Penn Township. Applicant must pay for and/or provide financial security as outlined in the Purchase of Capacity and Making Connections and Tapping Fees Ordinances. 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 the Board of supervisors grants a written extension.

206.2 Improvements Guarantee.

- A. Within 60 days after a Final Plan is approved by the Board and before a major plan application may be endorsed or recorded and before the issuance of any building permits, the applicant shall deliver to the Board an improvements guarantee in the form of a corporate bond or other security approved by the Township Solicitor in an amount sufficient, as determined in accordance with section 206.2, to cover the cost of all improvement required by this Ordinance, their engineering and their inspection. The board may approve other means of guaranteeing the improvements.
- B. The improvements guarantee shall guarantee the construction and installation, within one-year from the deliverance of the guarantee, of those improvements for which the Board has approved a Final Plan. The Board may, at their discretion, extend the one-year period. The extension is contingent upon the applicant providing such additional security as the Board deems necessary.
- C. The improvements guarantee shall be required for all public or private improvements required by this Ordinance including but not limited to roads, sewer lines, water lines, storm water facilities, and erosion and sediment control facilities.

206.3 Amount of Improvements Guarantee

- A. The Improvement guarantee shall equal 110% of the cost of completing the improvements together with those estimated professional consulting fees necessary to review the performance of the installation of the improvements and/or enforcement of the improvement guarantee and installation agreement.
- B. The Township may make an annual adjustment to the improvement guarantee, determined by comparing the cost of completed improvements to the estimated cost of improvements and estimating the cost of completing the remaining improvements. The annual adjustment shall insure the improvement guarantee

equals 110% of the cost to complete all improvements as of 90 days following the original date scheduled for completion or a revised date for completion.

- C. The amount of the improvement guarantee shall be based on a cost estimate submitted by the applicant or developer, prepared and certified by a Pennsylvania licensed professional engineer.
- D. The Township, upon the recommendation of the Township Engineer, may refuse to accept the estimate of the applicant or developer.
- E. If the township and applicant or developer cannot agree on an estimate, then another professional engineer, mutually selected by the Township and applicant, shall prepare and certify another estimate. This estimate shall be the final estimate and shall be presumed fair and reasonable. The cost of the final engineer shall be paid equally by the Township and the applicant or developer.
- F. Where development is projected over a period of years, the Board may authorize submission of final plats in sections or stages subject to requirements or guarantees for improvements in future section or stages it finds essential for protecting the completion of improvements.

#### 206.4 Release of Improvements Guarantee

- A. As the work of installing the required improvements proceeds, the party posting the financial security may request the Board 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 request shall be in writing addressed to the Board, and the Board shall have 45 days from receipt of the request within which to allow the Township Engineer to certify, in writing, to the Board that such portion of the work upon 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 Township Engineer fairly representing the value of the improvements completed or, if the Board fails to act within the 45 day period, the Board shall have deemed to have approved the release of funds as requested the Board 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.
- B. When the developer has completed all of the necessary and appropriate improvements, the developer shall notify the Board, in writing by certified or registered mail, of the completion of the aforesaid improvements and shall send a copy thereof to the Township Engineer. The Board shall, within 10 days after receipt of such notice, direct and authorize the Township Engineer to inspect all of the aforesaid improvements. The Township Engineer shall thereupon file a report in writing with the Board and shall promptly mail a copy of the same to the developer by certified or registered mail.



- C. The report shall be made and mailed within 30 days after receipt by the Township Engineer or the aforesaid authorization from the Board; said report shall be detailed and shall indicate approval or rejection of said improvements, either in whole or in part, and if said improvements or any portion thereof shall not be approved or shall be rejected by the Township Engineer, said report shall contain a statement of reasons for such non-approval or rejection.
- D. The Board shall notify the developer, within 15 days of receipt of the engineer's report, in writing by certified or registered mail of their action.
- E. If any portion of the said improvements shall not be approved or shall be rejected by the Board, the developer shall proceed to complete the same and upon completion, the same procedure of notification as outlined herein shall be followed

#### 206.5 Remedies to Effect Completion of Improvements.

In the event that any improvements which are required by this Ordinance, including those listed under Section 206.2C., have not been installed as provided in this Ordinance or in accord with the approved Final Plan, the Township may enforce any corporate bond or other security by appropriate legal and equitable remedies. If the 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 Township may, at its option, install part of such improvements in all or part of the subdivision or land development and may institute appropriate legal or equitable action to recover the monies necessary to complete the remainder of the improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the developer, or both, shall be used solely for the installation of the improvements covered by such security.

#### 206.6 Maintenance Guarantee.

- A. Where the Board accepts dedication of all or some of the required improvements following completion, the Board 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.
- B. The maintenance guarantee applicable to sanitary sewer disposal improvements, water systems and erosion and sediment control measures shall be for such longer period as the Township shall require, but in no event longer than 20 years after completion and construction of such improvements and after the Township inspects and approves the improvements as satisfactorily constructed and

installed. The amount of the guarantee applicable to sanitary sewage disposal and water supply systems shall be adequate to cover the continued operation and maintenance of the sanitary sewage and water supply systems for a period of 10 years after the Township inspects and approves the improvements as satisfactorily constructed and installed. The guarantee shall cover all expenses which may be incurred as a result of the operation of the facilities, including the cost of labor, and the cost of materials and chemicals, the cost of electricity, fuel oil, and other utility costs, the cost of normal maintenance and parts, and any other costs necessary for the proper operation of the facilities,. The guarantee shall make an allowance for an annual 10 percent rise in costs.

#### 206.7 Endorsement by the Board.

Upon satisfaction of all Township Ordinances and after the completion of the procedures required by this Ordinance, the Board shall place their endorsements on the Record Plan and on as many other copies of the Final Plan as may be desired or required. The Record Plan shall be signed by at least a majority of members of the Board of Supervisors and the Township seal shall be affixed to the Plan. No subdivision or land development plan may be legally recorded unless it bears Township endorsement indicated by the signatures of at least a majority of the Board and the township seal. The Township shall receive two paper prints of the Final Plan as endorsed by the Township.

The Recorded Plan shall be a clear and legible black-on-black or blue-on-blue print on linen, or other material acceptable to the Recorder of Deeds.

#### 206.8 Endorsement by the County Planning Commission.

After the Board has endorsed the plan, the applicant or his agent shall submit the Record Plan to the Chester County Planning Commission for endorsement.

No subdivision or land development plan may legally be recorded unless the Chester County Planning Commission has endorsed it.

#### 206.9 Filing with Recorder of Deeds

After endorsement by the Township and by the County Planning Commission, the applicant shall file the Record Plan with the County Recorder of Deeds within 90 days of the date of the meeting at which the Board approved the Final Plan. If the applicant fails to record the Final Plan within such period, the action of the Township shall be null and void without any further action on its part.

Within fifteen days (15) days of recording by the Chester County Office of Recorder of Deeds, the applicant shall submit two (2) copies of the recorded plan and related agreements to the Township until which time no building permits shall be issued.

- 206.10 All streets, parks or other improvements shown on the Final Plan shall be deemed to be private until such time as the same have been offered for dedication to the Township and accepted by resolution of the Board. The acceptance of any improvement shall be by a separate action of the Board. The Township Solicitor and Township Engineer shall approve deeds, legal descriptions and a Title Insurance Certificate before acceptance of any property.
- 206.11 The Board of Supervisors may create, revise and/or amend any application, agreement, schedule, or form required in this Article by resolution at a public meeting.

## ARTICLE III – PLAN REQUIREMENTS

### **Section 300. Sketch Plan Requirements**

To assist in creating effective discussion between the applicant and the Township, to facilitate the Preliminary and Final Plan Application processes, and to avoid duplication of plan preparation, the Sketch Plan should contain at least the following data, legibly drawn to scale where appropriate:

#### **300.1. Lot Layout Plan.**

- A. The scale and sheet size of the Sketch Plan should be prepared the same as required in Section 301 for Preliminary Plans.
- B. Name and address of the record owner and subdivider.
- C. Name of the proposed subdivision or land development and the date of the plan.
- D. Total tract boundaries of the property being subdivided, accurately labeled, showing bearings and distances, and a statement of the total acreage of the tract.
- E. North point and graphic and written scales.
- F. The name of the person or firm responsible for the design of the subdivision or land development.
- G. The names of owners of adjoining properties.
- H. A location map with sufficient information to enable the Township Planning Commission to locate the property being subdivided.
- I. Significant topographical and physical features (i.e., waterbodies, quarries, floodplains, tree masses, railroad tracks, existing buildings, etc.) on the tract.
- J. Proposed general street and lot layout, when apartments and/or townhouses are proposed, the general building, street, and parking layout shall be shown.
- K. In the instance that open space or recreation areas are to be included in the Plan, the location, size, and future ownership should be identified.
- L. A statement telling what methods of water supply and sewage disposal will be used.
- M. A statement telling the proposed use for each lot, parcel and building indicated on the plan.

### 300.2. Site Analysis Plan.

For major subdivision and land developments, the applicant is encouraged to submit a Site Analysis Plan and Sketch Plan submissions to enhance dialog between an applicant and the Township and to use as a tool for identifying site conditions and the appropriateness of uses and their location.

A Site Analysis Plan should accompany the Sketch Plan and shall include the following to the degree the information is available at the time the sketch plan is prepared:

- A. Applicant shall identify all the following site features, as applicable, on a single plan map, or maps, depending on the tract size and scale of drawing. The site Analysis Plan shall be labeled such and shall be placed on a sheet separate from all other required information. The Site Analysis Plan shall not substitute for the individual plan requirements of sections 301, 301.3, 301.5, 301.8, 302.3, 302.4 and 302.5 which identify site features and proposed disturbance. The Site Analysis Plan shall include the following:
  1. Degree of slope, as measured at two (2) foot contour intervals, in the following range: 0-15%, 15-25%, and greater than 25%.
  2. All area within Zone A (Area of Special Flood Hazard) on the Flood Insurance Rate Map (FIRM) dated December 17, 1982 (or latest revision thereof), issued for Penn Township by the Federal Emergency Management Agency.
  3. All alluvial soil boundaries.
  4. Water bodies and watercourses, both perennial and seasonal.
  5. Drainage basins and sub-basins.
  6. Wetlands, as inventoried by the U.S. Fish and Wildlife Service for the National Wetlands Inventory and any other known wetlands on the site.
  7. Generalized soil types as mapped in the Soil Survey of Chester and Delaware Counties including and highlighting hydric soils and high groundwater areas, as identified by the location of soils with seasonal or perennial high water table.
  8. Generalized geological characteristics, including rock formation type(s) and locations of fault zones, and fracture traces as identified for Penn Township on the Oxford and West Grove Geological Survey Quadrangle Maps prepared by the United States Department of the Interior and the Pennsylvania Topographic and Geological Survey.
  9. Existing vegetation denoted as to type, including tree masses, treelines, and hedgerows; individual freestanding trees over 8" caliper dbh; wetland vegetation;

meadow, pasture, or cropland; orchard; cultivated and ornamental garden areas; etc.

10. Existing structures and other improvements.
  11. Historic resources, including but not limited to those resources indicated on Figure 19, Historic Resources of Penn Township Comprehensive Plan, such as structures, ruins, sites, and traces.
  12. Existing paths and trails.
  13. Viewsheds, defined by the limits of visibility from public roads; landscape features which limit the extent of visibility shall be indicated, including , as example, ridgelines, treelines, hedgerows, and buildings. Vista points shall be identified where long uninterrupted views may be seen or where views focus on specific landscape features of note, such as a broad meadowland, a prominent hillside, or an historic building complex.
  14. Known hazardous sites, dumps, underground tanks, active and abandoned wells, quarries, landfills and artificial land conditions.
  15. Wildlife habitat(s), including notation of the existence of any species or habitat type found in the Pennsylvania Natural Diversity Inventory (PNDI), not limited to types of samples which have been reported to date within the geographic bounds of Penn Township.
- B. The site features as identified as per subsection 300.2.A. above, shall be shown on plan map(s) in order to determine the locational relationship of identified site features to development as proposed, including proposed structure, roads, driveways, parking areas, stormwater management facilities, recreation facilities, sewer or water lines or facilities, change to natural grade, and vegetation removal.
- C. The site Analysis Plan shall be required with the submission of preliminary and final plans, but does not need to be repeated if part of the previous plan submission.
- D. The Board of Supervisors may retain such consultants as necessary to review and certify the accuracy of the Site Analysis Plan, reasonable and necessary charges therefore to be borne by the Applicant.
- E. The Lot Layout and the Site Analysis Plan have several common attributes. As such, it is suggested that a Base Sheet be prepared with those attributes common to both the Lot Layout and the Site Analysis Plan.

### **Section 301. Preliminary Plan Requirements**

A Preliminary Plan shall be prepared and submitted to the Township for review in accordance with the regulation of this Ordinance and shall include the following:

### 301.1. Scale and Sheet Size.

The Preliminary Plan shall be clearly and legibly drawn to a scale of 1 inch equals 50 feet, with all dimensions shown in feet and hundredths of a foot, except that:

- A. If the average size of the proposed lots is one acre or larger, the plan may be drawn to a scale of 1 inch equals 100 feet.
- B. If the subdivision or land development contains more than 20 acres, the plan may be drawn to a scale of 1 inch equals 100 feet.
- C. If the subdivision or land development proposes lots with an average frontage of less than 50 feet, the plan may be drawn to a scale of 1 inch equals 20 feet.
- D. The original drawing and all submitted prints thereof shall be made on sheets either 17 inches by 22 inches, 22 inches by 34 inches, or 34 inches by 44 inches.

301.2. If the Preliminary Plan requires more than one sheet, a key diagram showing the relative location of all the sheets shall be drawn on each sheet. In addition, a match line shall be drawn on each sheet and the subdivider shall indicate along each match line what sheet is adjoining at that match line.

### 301.3. Site Analysis Plan.

A Site Analysis Plan as required in Section 300.2 shall accompany the Preliminary Plan and shall be drawn at the same scale as the Preliminary Plan.

### 301.4. Lot Layout.

The Preliminary Plan shall show:

- A. Name and address of the record owner and the subdivider.
- B. Name of the proposed subdivision or land development and the name of the Township.
- C. Total tract boundaries of the property being subdivided, showing bearings and distances, and a statement of the total acreage of the property.
- D. North point, graphic scale, written scale and date, including the month, day and year that the original drawing was completed, and in the case of revised drawings, the month, day and year that the original drawing was revised and a description of each revision including a revision level identified through the use of the alphabetized coding designating subsequent revisions.

- E. Name, address and seal of registered engineer or surveyor responsible for preparing the plan.
- F. The names of any abutting subdivisions and the book and page numbers where any abutting subdivision are recorded, and the names of the owners of any adjacent unplatted land and the book and page numbers where any adjacent unplatted land is recorded.
- G. A key map for the purpose of locating the property being subdivided showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all streets., roads and municipal boundaries within 1,000 feet of the subdivision or land development. A scale and north point shall be indicated.
- H. Zoning district lines within the property and zoning district designations and area, yard and height requirements applicable to the property.
- I. Contour lines at vertical intervals of not more than 2 feet for land with average natural slope of 4 percent or less, and at intervals of not more than 5 feet for land with average natural slope exceeding 4 percent.
- J. Location and elevation of the datum to which contour elevations refer. Datum used shall be a known, established benchmark where reasonably practicable.
- K. All existing buildings, sewer lines, water lines, fire hydrants, utility transmission lines, culverts, bridges, railroad tracks, and other significant man-made features within the proposed subdivision or land development and within 50 feet from the boundaries of the proposed subdivision or land development.
- L. All existing watercourses, tree masses, floodplain areas and other significant natural features within the proposed subdivision or land development.
- M. All existing streets and streets of record (recorded but not constructed) on or abutting the tract, including names, right-of-way widths, cartway (pavement) widths and approximate grades.
- N. All existing property lines, easements, and rights-of-way and the purposes for which the easements or rights-of-way have been established.
- O. The full plan of proposed development, including:
  - 1. For all proposed streets, their location, suggested name, right-of-way and cartway widths, a statement of any condition governing their use, and suggested type (i.e., collector). The designation of minor, collector, and arterial streets is subject to the approval of the Township.
  - 2. Location and width of all easements and rights-of-way.



3. Building setback lines along each street and the proposed placement of each apartment building, townhouse, and nonresidential building. For each apartment building and row of townhouses, the number of one, two, three and four bedroom units shall be indicated.
  4. Lot lines, with approximate dimensions, and lot numbers and a statement of the total number of lots and parcels.
  5. The location, size and intended use of all nonresidential lots and parcels.
  6. The location of all common parking areas and access drives to the parking areas, the size and number of parking stalls, width of aisles and access drives, and proposed grades of parking areas and access drives.
  7. Water mains and sanitary and/or storm sewers (and other drainage facilities), with the size and material of each indicated and any proposed connections with existing facilities.
  8. Location, size and expected use of all parks, playgrounds, and recreation areas. Areas to be dedicated to the Township shall be noted. Areas to be reserved for public use, but not to be dedicated, shall be noted and any conditions governing such areas and the arrangements to be made for the administration and maintenance of these areas shall also be noted.
  9. Provisions for pedestrian circulation throughout the tract, when provided by means other than sidewalks.
  10. The location of all permanent stormwater management facilities including but not limited to retention ponds, basins, culverts, swales, and sewers.
- P. Location of soil percolation test holes when soil percolation tests are required by Section 303.
- Q. Landscape Plan(s) where required by Section 1602 of the Penn Township Zoning Ordinance.
- R. The Lot Layout and the Site Analysis Plan have several common attributes. As such, it is suggested that a Base Sheet be prepared with those attributes common to both the Lot Layout and the Site Analysis Plan.

#### 301.5.Erosion and Sediment Control Plan.

An Erosion and Sediment Control Plan for the entire tract shall be required as part of the Preliminary Plan Application and shall comply with the following:

- A. The Erosion and Sediment Control Plan shall include a narrative description and all required calculations.

- B. The Plan shall comply with the design standards set forth in Section 403.
- C. The Plan shall identify all areas where earth and/or vegetation are to be removed.
- D. The Plan shall show the type of vegetation intended to be removed.
- E. Where phased development will occur, the general timing or phasing for disturbance shall be indicated.
- F. The Plan shall identify the devices or methods intended to control erosion such as temporary vegetation, temporary detention basins, diversion terraces, rock filter berms, or silt fences. The Township shall determine whether such methods or devices are adequate for the scale and degree of development.
- G. For any Subdivision or Land Development application that disturbs an area equal to or greater than five (5) acres, the Erosion and Sediment Control Plan shall be submitted to the Chester County Soil and Water Conservation District Office for review and issuance of a National Pollution Discharge Elimination System (NPDES) permit. The NPDES permit shall be required prior to the Final Plan approval.
- H. Erosion and Sediment Control Plans shall be developed in accordance with the Department of Environmental Resources Chapter 102 Regulations. A copy of the Erosion and Sediment Control Plans shall be available at the earthmoving site at all times during construction.
- I. Stormwater run-off from the site shall cause no increase in discharge of sediment or other solid materials.
- J. Wherever feasible, natural vegetation shall be retained and protected.

#### 301.6. Stormwater Management Plan.

A Stormwater Management Plan, prepared to inventory existing stormwater flow and the management of stormwater after development, shall be included with the Preliminary Plan application. The Stormwater Management Plan shall include the following:

- A. A Stormwater Management Plan shall include stormwater run-off calculations according to the following:
  - 1. Stormwater runoff calculations for the entire property being subdivided and all property at a higher elevation in the same watershed when fully developed.
  - 2. Stormwater calculations shall be made and drainage facilities designed in accordance with Section 415 of this Ordinance.

- B. In the design of stormwater management facilities, special consideration shall be given to avoiding stormwater run-off on to adjacent properties.
- C. The Plan shall show the proposed method and facilities for accommodating anticipated runoff as determined in accordance with Sections 414 and 415.
- D. Lots shall be laid out and graded so as to provide positive drainage away from buildings.
- E. The stormwater management plan shall identify the location of existing and proposed storm sewers, culverts, and related installations. Such facilities shall be approved by the Board and shall be provided:
  - 1. To permit unimpeded flow of natural watercourses and drainage swales.
  - 2. To insure adequate drainage of all low points along the line of streets.
  - 3. To intercept stormwater run-off along streets at intervals reasonably related to the extent and grade of the area drained.
  - 4. To provide zero increase in peak run-off flow rate.
  - 5. To provide for zero increase in the volume of run-off during a two year storm.

#### 301.7.Natural Resource Preservation Plan.

A plan for the preservation of existing natural features on the site shall be prepared and submitted as part of the Preliminary Plan Application in accordance with Section 410.

#### 301.8.Supplemental Data.

The Preliminary Plan shall be accompanied by the following supplementary data as applicable:

- A. Typical street cross-section drawing(s) for all proposed streets.
- B. Tentative profiles along the centerlines of each proposed street shown on the Preliminary Plan. Such profiles shall show natural and finished grades at one of the following sets of scales, or any combination thereof:
  - 1. One inch equals 10 feet horizontal and 1 inch equals 1 foot vertical, or
  - 2. One inch equals 20 feet horizontal and 1 inch equals 2 feet vertical, or
  - 3. One inch equals 40 feet horizontal and 1 inch equals 4 feet vertical, or
  - 4. One inch equals 50 feet horizontal and 1 inch equals 5 feet vertical.

- C. Preliminary designs of any bridges or culverts. Such designs shall meet all applicable requirements of the Pennsylvania Department of Transportation and the Pennsylvania Department of Environmental Protection.
- D. Eight completed copies of the Sanitary Waste Planning Module, whenever soil percolation tests are required by Section 303.
- E. Where a Preliminary Plan shows the proposed subdivision of only a part of the subdivider's total property, the plan shall be accompanied by a plan of the proposed street system for the remainder of the property, so that the street system in the submitted portion can be considered in relation to future connections with the unsubmitted portion. In the case of extremely large properties, the Township Planning Commission may delimit the area for which a prospective street system on adjacent property must be shown. The subdivider shall also include a statement indication proposed future land use for the unsubmitted portion of his property.

## **Section 302. Final Plan Requirements**

### **302.1. Scale and Sheet Size**

The Final Plan shall be clearly and legibly drawn to a scale of 1 inch equals 50 feet, with dimensions shown in feet or hundredths of a foot except that:

- A. If the average size of the proposed lots is one acre or larger, the plan may be drawn to a scale of 1 inch equals 100 feet.
- B. If the subdivision contains more than 20 acres, the plan may be drawn to a scale of 12 inch equals 100 feet.
- C. If the subdivision proposes lots with an average frontage of less than 50 feet, the plan may be drawn to a scale of 1 inch equals 20 feet.
- D. The original drawing and all submitted prints thereof shall be made on sheets either 17 inches by 22 inches, 22 inches by 34 inches, or 34 inches by 44 inches.

302.2. If the Final Plan requires more than one sheet, a key diagram showing the relative location of all the sheets shall be drawn on each sheet. In addition, a match line shall be drawn on each sheet and the subdivider shall indicate along each match line what sheet is adjoined at that match line.

### **302.3. Lot Layout.**

The Final Plan shall show:

- A. Name of the record owner and subdivider and the source(s) of title to the land being subdivided, as shown by the records of the County Recorder of Deeds.
- B. Name of proposed subdivision or land development and of the Township.
- C. The total tract boundary lines of the area being subdivided with accurate distances to hundredths of a foot and bearings to one-quarter of a minute. These boundaries shall be balanced and closed with an error of closure not to exceed 1 foot in 10,000 feet, provided, however, that the boundary(s) adjoining additional unplatted land of the subdivided (example between separately-submitted Final Plan sections) are not required to be based upon field survey, and may be calculated. The proposed location and elevation (if the elevation is established) of all boundary line (perimeter) monuments shall be indicated, along with a statement of the total area of the property being subdivided. The engineer or surveyor responsible for the plan shall certify as to the accuracy of the survey and the drawn plan.
- D. North point, graphic scale, written scale, and date, including the month, day and year that the original drawing of the Final Plan was completed, and in the case of revised drawings, the month, day and year that the original drawing was revised, and a description of each revision.
- E. The name, address and seal of the registered professional engineer or surveyor responsible for preparing the plan.
- F. The names of all abutting subdivisions, if any, with the book and page numbers where recorded, and the names of the owners of all adjacent unplatted land, if any, and the book and page numbers where recorded.
- G. A key map for the purpose of locating the property being subdivided, showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all streets, roads and municipal boundaries within 1,000 feet of the subdivision. In addition, a scale and north point shall be indicated.
- H. Zoning district lines within the property, and zoning district designations and area, yard and height requirements applicable to the property.
- I. The location and name (and/or number) and right-of-way and cartway width and lines of all existing roads within the property.
- J. The following data for the cartway edges (or curb lines) and right-of-way lines of all recorded (except those which are to be vacated) and/or proposed streets, and for the right-of-way lines of all existing streets within or abutting the property to be subdivided:
  - 1. The length, in feet to the second decimal point, of all straight lines and any two functions of a chord of all curved lines, and

2. The width (in feet) of the cartway, right-of-way, and, if required of the ultimate right-of-way, and (in degrees, minutes and seconds) of the delta angle of all curved lines, including curved lot lines.
- K. All lot lines shall be shown and shall be completely dimensioned in feet to the second decimal point, if straight, and if curved, with central angle in degrees, minutes and seconds and length of arc and radius. Bearings to one-quarter of a minute shall be shown for all lot lines. Each lot shall be balanced to an accuracy of 1 foot in 10,000 feet. For each lot, the total lot area in square feet or acres shall be stated.
  - L. Lot numbers, numbered consecutively, and a statement of the total number of lots and parcels.
  - M. Location, size and intended use of all nonresidential lots and parcels, including all parks, playgrounds, and recreation areas, with reference to restrictions of any type which exist or will exist as covenants in the deed for the lots and, if recorded, the book and page number of the County Deed Book.
  - N. Building setback lines along each street and the proposed placement of each apartment, townhouses and nonresidential building. For each apartment building and row of townhouses the number of one, two, three and four bedroom units shall be indicated.
  - O. Clear site triangles, as required by Section 417.9
  - P. The location of all existing and proposed monuments and markers as required by Sections 408 and 409.
  - Q. All easements and rights-of-way and any limitations on such easements or rights-of-way. Rights-of-way shall be shown and accurately identified on the plan, and easements shall either be shown or specifically described on the plan. Easements should be located in cooperation with the appropriate public utilities.
  - R. Location, size, materials and invert elevation of all sanitary sewers and location of all manholes, inlets and culverts and the location, size and material of water mains.
  - S. The location of all permanent stormwater management facilities including but not limited to retention ponds, basins, culverts, swales, and sewers.
  - T. Provisions for pedestrian circulation throughout the tract, when provided by means other than sidewalks.
  - U. The location of all common parking areas and access drives to the parking areas, the size and number of parking stalls, width of aisles and access drives, and proposed grades of parking areas and access drives.

- V. If the subdivision or land development proposes a new street intersection with a State Route, a letter from the Department of Transportation indicating approval of such intersection.
- W. A certificate of ownership, acknowledgement of plan and offer of dedication shall be lettered on the Plan, using the form specified in Appendix I, and shall be signed by the owner(s) of the property and be notarized.
- X. Certificate for approval of the plan by the Board of Supervisors.
- Y. A space in which the appropriate endorsement of the Chester County Planning Commission may be applied.
- Z. A space in which the recorder of Deeds may acknowledge receipt and recording of the plan when it is presented
- AA. Landscape Plan(s) in accordance with section 1602 of the Penn Township Zoning Ordinance.

#### 302.4 Supplemental Data.

The Final Plan shall be accompanied by the following supplementary data, where applicable:

- A. Typical street cross-section drawing(s) for all proposed streets.
- B. Profile sheets for all proposed streets within the tract. Such profiles shall show at least the following information, properly labeled:
  - 1. Existing (natural) profile along both cartway edges or the centerline of each street.
  - 2. Proposed finished grade of the centerline or proposed finished grade at the top of both curbs (or proposed finished grade at both cartway edges, if curbs are not provided).
  - 3. The length of all vertical curves.
  - 4. Existing and proposed sanitary sewer mains and manholes.
  - 5. Existing and proposed storm sewer mains, inlets, manholes and culverts.
- C. Road profiles. The profile sheets required by Section 302.4B shall be legibly drawn at one of the following sets of scales, or and combination thereof:
  - 1. One inch equals 10 feet horizontal, and 1 inch equals 1 foot vertical, or
  - 2. One inch equals 20 feet horizontal, and 1 inch equals 2 feet vertical, or

3. One inch equals 40 feet horizontal, and 1 inch equals 4 feet vertical, or
  4. One inch equals 50 feet horizontal, and 1 inch equals 5 feet vertical.
- D. All offers of dedication and all covenants governing the reservation and maintenance of undedicated open space.
  - E. Such private deed restrictions as may be imposed upon the property as a condition to sale, together with a statement of any restrictions previously imposed which may affect the title to the land being subdivided.
  - F. Whenever a subdivider proposes to establish a street which is not offered for dedication to public use, the Township may require the subdivider to submit, and also to record with the plan a copy of an agreement made with the Township on behalf of his heirs and assigns, which shall establish the conditions under which the street may later be offered for dedication.
  - G. Eight copies of the Improvements Agreement in effect at the time the submission is made.
  - H. With a proposal to change or diminish the course, current or cross section of any stream or body of water, or to construct or change any water obstruction, approval and a permit from the Water and Power Resources Board of the Pennsylvania Department of Environmental Protection. This requirement applies to all water courses having a drainage area (basin) exceeding 320 acres.
  - I. A Site Analysis Plan as required in Section 300.2 and drawn at the same scale as the Final Plan. The Site Analysis Plan shall further be accompanied by a plan for the preservation of existing natural features on the site according to section 410.
  - J. The following notice shall be included in the notes section of the Final Plan:

**NOTICE TO ALL PROPERTY OWNERS AND PROSPECTIVE PURCHASERS OF  
LAND DESCRIBED IN THIS PLAN:**

1. THIS APPROVED FINAL PLAN CONTAINS IMPORTANT INFORMATION CONCERNING THE USE AND OWNERSHIP OF THE LOTS AND/OR REAL PROPERTY DESCRIBED IN THIS PLAN.
2. EVERY PROSPECTIVE BUYER OF ANY REAL PROPERTY SHOULD REVIEW ALL PAGES CONTAINED IN THIS PLAN, AND ALL WRITTEN INFORMATION CONCERNING THE USE, DEVELOPMENT OF THE REAL PROPERTY, COVENANTS, EASEMENTS AND RESTRICTIONS WHICH MAY AFFECT PART OF AND/OR THE ENTIRE PARCEL OF REAL ESTATE SHOWN IN THIS PLAN.



3. RESTRICTIONS, PROMISES, COVENANTS, EASEMENTS AND/OR OTHER LANGUAGE CONTAINED IN THIS PLAN MY LIMIT, RESTRICT AND/OR EXCLUDE CERTAIN OWNERSHIP RIGHTS; INCLUDE ADDITIONAL OBLIGATIONS, AND/OR GRANT RIGHTS TO OTHER PERSON/ENTITIES TO A PORTION AND/OR ALL THE REAL PROPERTY DESCRIBED IN THIS PLAN.
4. THIS LANGUAGE AND INFORMATION AFFECTS AND CONTROLS THE TRANSFER (OWNERSHIP) OF ANY LOT OR REAL PROPERTY SHOWN IN THIS FINAL PLAN AS OF THE DATE OF ITS RECORDING, AND EVERY OWNER IN THE FUTURE.
5. THE TOWNSHIP'S APPROVAL OF THIS PLAN INCORPORATES ALL NOTES, CONDITIONS, RESTRICTIONS AND LANGUAGE AS CONTAINED ON THIS PLAN, AND PROVIDES THE TOWNSHIP WITH THE RIGHT TO ENFORCE ALL SUCH TERMS AND CONDITIONS.
6. THE INFORMATION CONTAINED IN THIS FINAL PLAN CONTROLS ALL USE AND OWNERSHIP OF THE REAL PROPERTY DESCRIBED IN THIS PLAN EVEN IF A DEED TO AN OWNER DOES NOT CONTAIN AND/OR EXPRESSLY REFER TO THE LANGUAGE DESCRIBED ON THIS FINAL PLAN.

- 302.5. An erosion and sediment control plan for the tract shall accompany the Final Plan, including a narrative description and all required calculations in accordance with Section 301.5.
- 302.6. A completed Plan Revision Module, as required by the Pennsylvania Department of Environmental Protection, shall accompany the Final Plan.

### **Section 303. Soil Percolation Test Requirements.**

- 303.1. Soil percolation tests shall be performed for all subdivisions in which buildings at the time of construction will not be connected to an operating public or community sanitary sewage disposal system.
- 303.2. Soil percolation tests shall be made in accordance with the procedure required by the Pennsylvania Department of Environmental Protection.
- 303.3. Eight copies of the sanitary Waste Planning Module shall be submitted with the Preliminary Plan.
- 303.4. Soil percolation tests shall be performed at or near the site of proposed on-site sanitary sewage disposal facilities. At least one test shall be performed on each lot within the subdivision.
- 303.5. The results of the soil percolation tests shall be analyzed by the Township and the Pennsylvania Department of Environmental Protection and the Final Plan lot layout shall be based on this analysis. If the analysis of the soil percolation test results reveals that the soil is unsuitable for the intended use at the lot size(s) originally proposed, the

Township may require that the lot size(s) be increased and/or lot layout modified in accordance with the test results.

## **ARTICLE IV – DESIGN STANDARDS**

### **Section 400. Application and General Standards**

- 400.1. The standards and requirements contained in this Article are intended as the minimum for the promotion of the public health, safety and general welfare, and shall be applied as such to all subdivision and land development plans under review by the Planning Commission and the Board of Supervisors.
- 400.2. Subdivision and land development plans shall give due recognition to the Official Plans of the Township or to parts of the Official Plans which have been adopted pursuant to statute.
- 400.3. The plan of the proposed subdivision or land development shall be coordinated with existing adjacent development in order to provide for harmonious development of the area as a whole, and promote efficient and uninterrupted vehicular and pedestrian circulation.
- 400.4. Lands subject to hazards to life, health, or property, such as may result from fire, flood, disease or other causes, shall not be subdivided or developed for building purposed until all such hazards have been eliminated or adequate safeguards against such hazards are provided by the subdivision plan.

### **Section 401. Development Patterns**

#### **401.1. General**

The length, width and shape of development patterns shall be determined with due regard to:

- A. Providing adequate area to accommodate lots and sites for buildings of the type proposed;
- B. Requirements for safe and convenient vehicular and pedestrian circulation;
- C. Topography and natural resources.

#### **401.2. Commercial and Industrial Development Patterns.**

Patterns in commercial and industrial areas may vary from the elements of design detailed above if required by the size, scope, and nature of the proposed use. In the case of commercial and industrial patterns, adequate provisions shall be made for off-street parking and loading areas, as well as for traffic circulation and parking for employees and customers.

## **Section 402. Community Facilities**

- 402.1. In reviewing the subdivision plans, the Planning Commission will consider the adequacy of existing or proposed community facilities to serve the additional dwellings proposed by the subdivision or land development.
- 402.2. Applicants shall provide or reserve areas for community facilities normally required in residential section, including libraries, schools, and other public buildings, parks, playgrounds, and playfields as identified by the Township Comprehensive Plan or Open Space and Environmental Resource Plan.
- 402.3. Areas provided or reserved for such community facilities should be adequate to provide for building sites, landscaping, and off-street parking as appropriate to the use proposed. Such areas should be located in a manner to best serve the public likely to use the same and to utilize, to the greatest degree, any topographical features.

## **Section 403. Erosion and Sediment Controls**

### **403.1. Purpose.**

Erosion and Sediment Control measures shall be used in order to:

- A. Limit soil erosion associated with land development activities;
- B. Manage vegetative cover; and
- C. Prevent soil and other sedimentation from entering the surface water system.

### **403.2 Applicability.**

Land shall not be developed or changed by grading, excavating, or by the removal or destruction of the natural topsoil, trees, or other vegetative cover without securing the necessary permit (s) as required by Ordinance 2000-07 pertaining to Grading, Erosion, and Sedimentation Control.

### **403.3. General Standards**

- A. A plan for erosion and sediment control shall be prepared. The plan shall meet all requirements and standards of the Pennsylvania Department of Environmental Protection, Erosion and Pollution Program Control Manual, as amended, and the Pennsylvania Clean Streams Law, Chapter 102, Erosion and Sedimentation Control Rules and Regulations, as amended.
- B. The plan for erosion and sediment control shall be approved by the Township, and when required according to Article III, the Chester County Conservation District, and the Pennsylvania Department of Environmental Protection.
- C. As a minimum, the plan shall include calculation of runoff from the site before, during and after construction. These calculations shall be used on a 24-hour, 2-

year, 10-year, 50-year, and 100-year storm using the Soil Cover Complex Method, unless the applicant can demonstrate the inappropriateness of that method. Said calculations for determining runoff for the before condition shall use the meadow condition, unless the applicant justifies that the use of another condition is more appropriate.

- D. The following guidelines shall be applied as needed in developing erosion and sediment control measures:
1. Stripping of vegetation, grading, filling, excavating or other alteration of the landscape shall be kept to a minimum and shall be done in such a way that will minimize erosion.
  2. Whenever feasible, natural vegetation shall be retained, protected, and supplemented.
  3. The disturbed area and the duration of exposure shall be kept to a practical minimum.
  4. Disturbed areas shall be stabilized as quickly as practical.
  5. Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development.
  6. The permanent vegetation and mechanical erosion control and drainage measures shall be installed as soon as practical in the development.
  7. Provisions shall be made to effectively accommodate the increased runoff caused by changed soil and surface conditions during development. Where necessary, the rate of surface water runoff shall be mechanically retarded.
  8. Until disturbed areas are stabilized, sediment in runoff water shall be trapped by the use of debris basins, sediment basins, silt traps, or similar measures.
  9. No increased runoff of water, sediment, or other debris will be permitted to leave the premises subject to the regulations of this Section.
  10. All erosion and sediment control facilities shall be periodically inspected and checked for adequacy by the Township Engineer or such other person who is designated as qualified by the Board
- E. The following guidelines shall be applied as needed in excavation and fills as part of erosion and sediment controls:
1. All lots, tracts, or parcels shall be graded to provide positive drainage away from buildings, roads and adjacent properties, without ponding.

2. Grading and cut-fill operations shall be kept to a minimum to ensure conformity with the natural topography, to minimize the erosion hazard, and to adequately handle surface runoff.
3. Natural drainage patterns shall be preserved wherever possible and desirable.
4. Adequate provisions shall be made to prevent surface water from damaging the cut face of excavations and the sloping surfaces of fills.
5. Cut and fills shall not endanger adjoining property.
6. Fill shall be placed and mechanically compacted to minimize sliding and erosion of the soil.
7. Fill material shall not encroach on natural watercourses, floodplain, wetlands or constructed channels.
8. Grading shall not be done in such a way as to divert water onto the property of another landowner without the expressed consent of the Board and the adjoining landowner.
9. During grading operations, necessary measures for dust control shall be exercised.
10. Grading equipment shall not cross live streams. If access across a live stream is required, provisions must be made for the installation of culverts or bridges after a stream crossing permit is obtained through the Department of Environmental Protection.
11. Any instance where a change in grade results in a grade exceeding twenty-five (25) percent requires review and approval by the Township Engineer pertaining to the method of retention and stabilization prior to approval by the Township.

#### **Section 404. Fire Hydrants**

Wherever a public or community water distribution system is provided, a fire protection water system shall be installed with fire hydrants located within six hundred (600) feet of all existing and proposed structures, measured by way of accessible streets.

#### **Section 405. Flood Plain Controls**

- 405.1. All land contained within flood plains shall be subject to the Flood Plain Controls listed in the Township Zoning Ordinance and to all applicable federal and state floodplain regulations.

- 405.2. The cross-sectional profile of watercourses and flood plain areas shall not be altered unless approved by the Board and the Pennsylvania Department of Environmental Protection, Bureau of Dams, Waterways, and wetlands.
- 405.3. Fill material shall not be located within flood plain areas.
- 405.4. Where any excavation or grading is proposed or where any existing trees, shrubs, or other vegetative cover is proposed to be removed, approval shall first be granted by the Board and the Pennsylvania Department of Environmental Protection.

**Section 406.        Lots and Parcels**

**406.1. General Standards.**

- A. The size, shape, and orientation of lots shall be appropriate for the type of development and use contemplated, and be in accordance with the provisions of the Township Zoning Ordinance.
- B. Insofar as practical, side lot lines shall be at right angles to straight street lines and radial to curved street lines.
- C. Where feasible, lot lines shall follow municipal boundaries, rather than cross them.
- D. Depth and width of parcels intended for nonresidential uses shall be adequate for the use proposed and sufficient to provide satisfactory space for on-site parking, loading and unloading, setbacks, landscaping as required by this Ordinance and the Township Zoning Ordinance.
- E. Where land has been dedicated for widening of existing streets, lots shall begin at such adjusted right-of-way line, and all setbacks shall be measured from such adjusted right-of-way line.

**406.2. Lot Frontage.**

All lots shall have direct access to an existing or proposed minor public street, or to a private street if it meets the requirements of this Ordinance.

**406.3. Lot Size.**

The minimum lot size, width and building setback requirements are found in the Township Zoning Ordinance. The minimum lot area requirements found in the Zoning Ordinance may be increased by the Township Planning Commission according to the results of the soil percolation tests required by Section 303 of this Ordinance.

**406.4. Driveways and Off-Street Parking.**

- A. All driveways and off-street parking shall be designed in accordance with Article XVII of the Zoning Ordinance.
- B. Each proposed dwelling unit in a subdivision or land development shall be provided with at least two (2) off-street parking spaces.
  - 1. In the case of single-family or two-family dwellings, such off-street parking spaces shall be provided behind the street right-of-way line and may be provided in an attached or separate garage, carport, or stable all-weather driveway.
  - 2. In the case of multiple-family dwellings, such off-street parking shall be provided in paved parking compounds located adjacent to or near the multiple-family dwellings. Required parking shall comply with the standards of Section 406.4.C.
- C. Commercial and industrial development shall meet the off-street parking requirements of the Township Zoning Ordinance and the following regulations;
  - 1. Parking areas shall include provisions to retain storm water on the applicant's premises in accordance with sections 414, 415, and 416.
  - 2. Travel lanes within parking areas shall be designed according to the following:
    - a. When there is a one-way flow of traffic and individual parking spaces are at an angle greater than sixty (60) degrees there shall be a minimum aisle width of twenty-two (22) feet.
    - b. When there is a one-way flow of traffic and individual parking spaces are at an angle less than sixty (60) degrees there shall be a minimum aisle width of eighteen (18) feet.
    - c. When there is a two-way flow of traffic there shall be a minimum aisle width of twenty-six (26) feet.
  - 3. Where a parking lot accommodates twenty cars or more cars, a planting area with a minimum size of 200 square feet shall be incorporated into the design of said parking lot. For each additional twenty cars, an additional planting area with a minimum size of 200 square feet shall be incorporated into the design of said parking lot.
  - 4. Parking shall meet all standards and requirements of the Americans with Disabilities Act of 1990 including but not limited to required handicapped parking spaces, access ramps, access aisles, and signage.
- D. All accessways to any public street or highway shall be setback from any intersecting street line according to Section 1700 of the Township Zoning Ordinance and the following:



1. When the proposed access is along an arterial street, the proposed access shall be setback from an intersecting street line according to the following:
    - a. Where the intersecting street line is another arterial street, the access shall be setback a minimum of 230 feet.
    - b. Where the intersecting street line is a collector street, the access shall be setback a minimum of 175 feet.
    - c. Where the intersecting street line is a local street, the access shall be setback a minimum of 50 feet.
  2. When the proposed access is along a collector street, the proposed access shall be setback from an intersecting street line according to the following:
    - a. Where the intersecting street line is another arterial street, the access shall be setback a minimum of 115 feet.
    - b. Where the intersecting street line is a collector street, the access shall be setback a minimum of 85 feet.
    - c. Where the intersecting street line is a local street, the access shall be setback a minimum of 50 feet.
- E. Subdivision shall be designed to minimize the number of driveway intersections with existing public roads. Whenever feasible, subdivision shall be provided with an internal street system on which proposed lots will front.
- F. Development shall not be provided with direct access to arterial or collector roads. Where development occurs and has frontage along an arterial or collector road and no other road, consideration shall be given to using a marginal access street.
- G. Driveways
1. Private Driveways shall be provided for all residents and other land developments requiring vehicular access. The construction of the private driveways shall be in accordance with the regulations of this section in order to provide safe access to Township and State roadways, to minimize problems of stormwater runoff, and to assure sufficient area for access to off-street parking.
  2. Driveways serving a single residence shall have a minimum paved or graveled width of ten (10) feet. Where a driveway crosses a bridge, such bridge shall be at least ten (10) feet, with pull-off areas widened to sixteen (16) feet over a forty (40) feet length at two hundred (200) feet intervals. Driveways serving all

other uses shall have a paved width of twelve (12) feet per lane of egress and ingress.

3. No more than (3) adjacent lots, buildings and houses shall be permitted to utilize a common driveway. An easement and maintenance agreement in a form satisfactory to the township shall be recorded in the Office of the Recorder of Deeds in Chester County and a copy of the recorded easement and maintenance agreement be submitted to the township and be shown on the plot plan.
4. All driveways shall have a maximum grade of four (4%) percent for a length of fifteen (15) feet from the edge of the cartway as measured along the centerline of the driveway. All driveways shall be paved to a point twenty-five (25) feet past the right-of-way line as measured along the centerline. All remaining portion shall have a maximum grade of fifteen (15%) percent. All driveway grades exceeding seven (7%) percent shall be paved.
5. All driveways and off-street parking shall be designed in accordance with Article XVII of the Zoning Ordinance of Penn Township.
6. All residential paved driveways shall be constructed of a minimum compacted depth of six (6) inches of crushed aggregate base course and a minimum compacted depth of one and one half (1 ½") inches of ID-2 Wearing Course. All non-residential paved driveways shall be constructed of a minimum compacted depth of eight (8") inches of crushed aggregate base course, a minimum compacted depth of two (2") inches of ID-2 Binder Course and a minimum compacted depth of one and one half (1 ½") inches of ID-2 Wearing Course. All construction and paving must conform to the applicable of the Pennsylvania Department of Transportation Specifications, Publication 408 including latest revisions.
7. Driveways shall be graded so that, wherever possible, surface drainage will be discharged to the owner's property. Otherwise, adequately sized pipes, inlets, or headwalls shall be installed and gutter improvements shall be made to direct surface drainage into the road drainage system and not onto the paving of the intersecting road or a neighboring property. Road drainage systems shall be upgraded to a condition satisfactory to the Township by the developer to accommodate the additional runoff created by the development. All grading shall be in substantial compliance with Ordinance 2000-7 pertaining to Grading, Erosion and Sedimentation control.
8. Where applicable, the driveway crossing of a roadside swale shall be maintained as a paved crossing matching existing swale (maximum depth of six (6") inches. A pipe may be placed under a driveway entrance only when approved by the Township. Culverts for driveways shall be designed based upon a ten (10) year frequency storm.

- 9. Driveway entrances into all non-residential, single use properties shall be no less than twenty-four feet (24') in width, shall not exceed thirty-six (36') feet in width at the street line unless provided with a median divider. Radius of curb returns no less than thirty-five (35') feet.
- H. Entrances to private driveways serving one and two-family dwellings should be rounded at a minimum radius of five (5) feet and entrances to private driveways serving multiple-family dwellings shall be rounded at a minimum radius of ten (10) feet.
- I. Private driveway entrances should not intersect streets at angles of less than sixty (60) degrees, nor more than one hundred twenty (120) degrees.
- J. The width of driveways serving on-family dwellings should not be less than ten (10) feet, nor more than twenty (20) feet at the street line, excluding the radius.
- K. Provisions shall be made at all intersections of driveways with streets to ensure adequate storm water drainage.

**Section 407.                    Manufactured Home Park Standards**

Manufactured home parks shall comply with the standards of Article VI.

**Section 408.                    Markers**

Metal markers shall be accurately placed at all lot corners prior to sale of lots.

**Section 409.                    Monuments**

- 409.1. Permanent stone or concrete monuments shall be accurately placed at the intersection of all lines forming angles in the boundary of the subdivision or land development and at changes in direction of lines in the boundary of the property.
- 409.2. All monuments shall be placed so that the center of the monument coincides exactly with the point of intersection of the lines being monumented.
- 409.3. Monuments shall be set with their top level with the finished grade of surrounding ground, except:
  - A. Monuments which are placed within lines of existing or proposed sidewalks shall be so located (preferably beneath the sidewalks) that their tops will not be affected by lateral movement of the sidewalk.
  - B. Where monuments are located beneath a sidewalk, proper access shall be provided for their use.

409.4. All streets shall be monumented on the right-of-way line, or the five (5) foot range line at the following locations:

- A. At least one (1) monument at each street intersection;
- B. At changes in direction of street lines, excluding curb arcs at intersections;
- C. At each end of each curved street line, excluding curb arcs at intersections;
- D. At intermediate points wherever topographical or other conditions make it impossible to site between two (2) otherwise required monuments;
- E. At such other places along the line of streets as may be determined by the Township to be necessary so that any street may be readily defined in the future.

**Section 410. Natural Resources**

All natural resources, such as steep slopes, large trees, rock outcroppings, wooded areas, and natural watercourses and bodies of water shall be plotted on the site Analysis Plan with the intent of preserving said resources to the greatest extent possible.

**Section 411. Sanitary Sewage Disposal**

All sanitary sewage disposal facilities shall comply with the Township Act 537, Sewage Facilities Plan, regulations of the Chester County Health Department and the Pennsylvania Department of Environmental Protection.

**Section 412. Screening**

Screening shall comply with Section 1600 of the Township Zoning Ordinance.

**Section 413. Soil Disturbance and Removal**

The following standards shall apply to all proposed land developments, uses, and other activities within the Township regarding the disturbance or removal of soil.,

- 413.1. Unless expressly permitted by the Board, no use, land development, or other activity shall be permitted to willfully and actively remove soil from the Township and transport or otherwise move said soil out of the Township.
- 413.2. Where a land development will require earth disturbance associated with the installation of improvements, structures or grading, measures shall be taken to protect the soil against erosion in accordance with section 403.
- 413.3. Whenever earth disturbance occurs, the disturbed soil shall remain on the same site unless constraints of the site create a potential harm to residents or the environment.
- 413.4. Where the installation of improvements or buildings creates a surplus of soil that is unable to be adequately used on a given site according to section 413.3, soil may be transported to another site provided said other site is within the Township. Once

relocated, measures shall be taken to protect the soil against erosion in accordance with Section 403.

## **Section 414. Stormwater Management**

### **414.1 Application and General Standards**

The purpose of comprehensive stormwater management in Penn Township is to protect the health, safety, and general welfare of Township residents by protecting, sustaining, and enhancing the surface and groundwater of the Township through comprehensive stormwater management. Through provisions of this Ordinance (Section 414 Stormwater Management), the Township in general intends to integrate stormwater management comprehensively throughout the site planning and design process, maximizing preventive non-structural practices where feasible and implementing effective mitigative (structural) practices where appropriate. Specifically, the Township intends:

- A. To maintain the pre-development water cycle balance throughout all watersheds and sub-watersheds and the natural hydrology of stream and watershed systems (especially in first-order and other especially sensitive streams), and to work to restore natural hydrologic regimes wherever possible. Such hydrologic balance includes volume and rate of runoff, volume of infiltration and groundwater recharge, stream baseflow, evapotranspiration, and other elements of the hydrologic cycle.
- B. To hold constant the pre-development volume of infiltration and groundwater recharge, avoiding lowering of the water table, adverse impacts on wells and springs and wetlands, reductions in stream baseflow and critical low flow.
- C. To hold constant the pre-development volume of infiltration and evapotranspiration, where feasible.
- D. To prevent increases in surface runoff volumes and peak runoff rates, pre-development to post development, for larger storm events, in order to avoid worsened flooding downstream in the watershed, enlarged floodplains, and creation of other flood-related health-welfare-property losses.
- E. To minimize increased frequency of bankfull flooding conditions resulting from increased stormwater runoff volumes and increased peak rates of discharge, especially for smaller and more frequent storms, and thus to minimize attendant impacts on stream channel morphology, such as stream bank erosion and channel incision, and ecological resources, such as loss of aquatic habitat.
- F. To minimize nonpoint source pollutant loadings to both ground and surface waters resulting from stormwater runoff throughout the Township.
- G. To minimize impacts on stream temperatures, including excessive warming in the summer and excessive cooling in winter.

- H. To minimize adverse impacts on aquatic biota and their habitats resulting from stormwater-linked land development impacts.
- I. To minimize aesthetic impacts of stormwater management
- J. To encourage development and re-development at already-disturbed and developed sites, rather than at undisturbed and undeveloped sites and in areas designated for growth, using comprehensive non-structural and structural stormwater management practices.
- K. To maximize the use of preventive non-structural approaches for stormwater management, including conservation design, low impact development, and other techniques, which manage stormwater as close to its source as possible, which rely on natural processes, and which respect natural drainage patterns to the maximum extent feasible.
- L. To integrate comprehensive stormwater management into the overall site design process so that stormwater is a critical part of the initial phase of site planning.
- M. Ensure effective long-term operation and maintenance of all permanent stormwater management facilities.
- N. Address certain requirements of the Municipal Separate Storm Sewer System (MS4) National Pollution Discharge Elimination System (NPDES) Phase II Stormwater Regulations.
- O. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code Chapter 93.4a to protect and maintain "existing uses" and maintain the level of water quality to support those uses in all streams, and to protect and maintain water quality in "special protection" streams.
- P. To implement an illegal discharge detection and elimination program that addresses non-stormwater discharges into the Municipality's separate storm sewer system.

These stormwater regulations are intended to make sure that flooding from smaller to larger storm events does not increase as land development continues to occur. These stormwater regulations are intended to be used in conjunction with existing floodplain regulations as established in the Penn Township Zoning Ordinance as Amended. All development activity within a Special Flood Hazard Area designated by the Federal Emergency Management Agency (FEMA) shall comply with the appropriate floodplain regulations of the Penn Township Zoning Ordinance as Amended. All development shall be designed to maintain the flood carrying capacity of the floodway such that the base flood elevations are not increased, either upstream or downstream. The natural conveyance characteristics of the site and the receiving floodplain shall be incorporated into the stormwater management practices proposed for the site.

It is important to emphasize that both these comprehensive stormwater regulations as well as the Township's floodplain regulations are limited to storm events up to the 100-year storm and/or 100-year flood. Large events have occurred in the past and may occur in the

future. Adverse impacts from stormwater and resultant flooding generated from these larger events is likely to occur. The most effective approach to managing these larger events beyond the 100-year storm is through expanded floodplain management.

#### **414.2 Statutory Authority**

Penn Township is empowered to regulate land use activities that affect stormwater runoff by the authority of the Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended by Act 170 of 1988, as further amended by Act 209 of 1990 and Act 131 of 1992, 53 P.S. Section 10101, as well as the Pennsylvania Environmental Amendment. Stormwater management is also enabled by Pennsylvania's Stormwater Management Act of 1978 (Act 167), as amended, and Penn Township as a Municipal Separate Storm Sewer System under Phase II of the National Pollution Discharge Elimination System (NPDES) Storm Water Program of the Environmental Protection Agency (EPA) is empowered to regulate stormwater by the authority of the Clean Streams Law, 35 P.S. § 691.1, et seq. and The Clean Water Act, 33 U.S.C. § 1251, et seq.

#### **414.3 Applicability**

These regulations apply to all areas of Penn Township and to:

- All activities governed by the Penn Township subdivision and Land Development Ordinance (SLDO), including construction of new buildings or additions to buildings that require a building permit.
- Construction of separate or additional impervious or semi-pervious surfaces (driveways, parking lots, additions to buildings, etc.).
- Other earth disturbance and earth moving activities, including diversion or piping of any natural or human made stream channel.
- Outdoor storage.
- Any other land disturbances, with the exception of Emergency Exemptions, Maintenance Exemptions, Gardening, Agricultural Activities, and Forest Management, as defined in the Post Construction Stormwater Management Model Ordinance, Chester County Water Resources Authority, January 4, 2005.

No land or waterway shall be used or modified, no earth shall be disturbed, stripped, or moved, and no structure or other impervious surface shall be built or extended without full compliance with the terms of this Ordinance and other applicable regulations. Additional provisions in the SLDO provide for erosion and sedimentation control.

#### **414.4 Repealer**

An ordinance inconsistent with any of the provisions of this Ordinance is hereby repealed to the extent of the inconsistency only, and only where the provisions of this Ordinance are the more restrictive.

#### **414.5 Severability**

Should any section or provision of this Ordinance be declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of any remaining provisions of this Ordinance.

#### **414.6 Compatibility with Other Regulatory Requirements**

Approvals issued/actions taken pursuant to this Ordinance do not relieve the Applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, or ordinance. To the extent that this Ordinance is more stringent in terms of the standards applied for stormwater management, the specific stormwater management standards, design criteria, and other provisions contained in this Ordinance are to be followed. Where differences exist between provisions specified in this Ordinance and those in PADEP Phase II NPDES regulations, as amended, and/or those contained in future Act 167 stormwater management planning, the more stringent requirements should be followed.

#### **414.7 Definitions**

Definitions are included in Article VIII.

#### **414.8 Standards For Permanent Stormwater Management**

The following tables establish the regulations for land disturbance for those instances identified in Tables 414-1, 414-2, and 414-3. The standards identified in the tables are a part of this Ordinance, requiring compliance, unless waived or modified in accordance with the provisions of this Ordinance and the Municipalities Planning Code. All land disturbances as listed in Table 414-1 shall comply with provisions of this Ordinance.

<p><u>Table 414-1</u> <u>Land Disturbances Required to Comply with Section 414</u></p>
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<p>1. All minor and major subdivisions and land developments where land disturbance exceeds 5,000 sq. ft.</p>
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<p>2. An impervious cover addition to an existing developed property which exceeds 5 percent of lot area or 500 sq. ft. whichever is smaller, on slopes greater than 8 percent, or which exceeds 10 percent of lot area or 1,000 sq. ft. whichever is smaller, on slopes less than 8 percent</p>
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3. A semi-impervious cover addition (such as gravel, lattice blocks) to an existing developed property which exceeds 1,000 sq ft. on slopes greater than 8 percent.

4. A temporary storage of impervious or pervious materials (rock, soil, etc.) on an existing developed property where ground contact coverage exceeds 5 percent of lot area or 4,000 sq. ft. (whichever is less), where the material is placed either on slopes exceeding 8 percent or on alluvial soils or a drainage way.

The comprehensive stormwater management program for Penn Township is based on an array of standards, as set forth below, which must be satisfied. Although the standards themselves must be satisfied, Penn Township through this Ordinance allows for and promotes flexibility in determining how these standards are achieved. Applicants for all new land developments are directed to follow the Site Planning and Design Procedure for Comprehensive Stormwater Management (Chapter 3 of the Penn Township Stormwater Manual) and are directed to complete the Checklist Summary for Comprehensive Stormwater Management contained in Chapter 3.

- A. Standard 1: Post-development and after installation of impervious cover, there shall be no increase in the total volume of stormwater runoff being discharged from the development site area for up to the 2-year frequency rainfall, pre-development to post-development, calculated using a methodology as described in this Ordinance, pre-development ground cover conditions are assumed to be "Woods – Good" or "Meadow" for all areas of the development site as specified in Section C.1 below which are not impervious. This runoff volume standard can be achieved through use of infiltration-oriented stormwater management practices, although other techniques for runoff volume control such as rain barrels, cisterns, vegetated roofs, etc. are also acceptable. First priority in stormwater management planning and satisfying this standard, as well as all standards listed in this Ordinance, should be given to use of preventive approaches as set forth in Chapter 3 of the Penn Township Stormwater Manual, which serve to reduce the total runoff volume requirement.

1. Site adjustments for Standard 1

In cases where natural site conditions, as listed below, indicate that the pre-development runoff volume is greater than that indicated in Standard 1 above, applicants may request a:

Partial Adjustment: where a portion of the Standard 1 runoff volume requirement is waived but at least 50 percent of the Standard 1 runoff volume is provided (i.e., volume control is achieved for a lesser storm such as the 1-year storm or 6-month storm).

Total Adjustment: where less than 50 percent of the Standard 1 runoff volume requirement is provided.

The need for either a partial or total adjustment must be based on demonstration by the applicant that existing soil, bedrock, water table, and/or other natural constraints are pervasive at the site, such that pre-development conditions generate substantially

increased volumes of stormwater runoff before the proposed development occurs, Furthermore, such pre-development site constraints would also make infiltration-oriented best management practices to be used for volume control extremely difficult, if not impossible, to apply at the site. Partial and Total Adjustments are discouraged by the Township and will be issued only after thorough scrutiny has been directed toward all possible stormwater management options at all possible locations at the site, as defined below.

## 2. Criteria for Partial and Total Adjustments

Standard 1 may be adjusted (Partial or Total) in those situations where site constraints indicate that greater runoff volumes and reduced infiltration occur in the pre-development condition. Such natural site constraints include factors such as presence of bedrock at or near the surface (defined as less than 2 ft. in depth) and/or presence of Seasonal High Water Table (SHWT, typically defined as at less than 2 ft.), and/or presence of "heavy" soils with extremely low permeability (generally less than 0.25 inches per hour at or close to the surface). Adjustments are to be issued in only those cases where applicant has demonstrated that one or more of these conditions exist throughout the majority of the site, as defined below. Adjustments are not to be issued simply because a building program preferred by the applicant precludes otherwise feasible site areas from being utilized for stormwater management BMPs. A related secondary consideration relates to the practicality of constructing volume control stormwater management practices within the proposed development area; although non-infiltration-orientated practices are options for use, infiltration-oriented systems are likely to be deemed most cost effective. As site size increases, all else being equal, use of infiltration-oriented practices becomes potentially more practicable and, therefore, obtaining an adjustment should become more difficult because there is potentially greater unconstrained area and ability to accommodate both the building program and infiltration-oriented stormwater management systems.

To be considered for an adjustment, applicant must submit the following:

- a. Extent of site area with SHWT (less than 2 ft): as extent of site areas with SHWT increases, pre-development runoff volume increases, and feasibility for volume/infiltration BMPs decreases, given the inability of infiltration to occur when water table is high.
- b. Extent of site area with less than 2 ft. to bedrock: as extent of site areas with shallow depth to bedrock increases, pre-development runoff volume increases, and feasibility for volume/infiltration BMPs decreases, given the inability of infiltration to occur.
- c. Extent of site area with less than 0.25 inches/hr permeability: sites with extremely "heavy" soils in situ, regardless of Soil Survey designations, indicate greater pre-development runoff volumes with lesser infiltration volumes. Soil permeability must be tested onsite. Preferred permeability rate after recommended soil testing should be 0.25 inches per hour (can be reduced to 0.10 inches per hour in those cases with low density is being proposed and large site areas are available for infiltration). Soils classified as Hydrologic Soil Group (HSG) D may be assumed to be infeasible without recommended

soil testing. Soils classified as HSG C or B (virtually all soils in Penn Township) must be verified with additional soil testing as set forth in this Chapter 1 of the Penn Township Stormwater Manual.

d. Site are constrained by foundation/use required buffers: practically speaking, buffers/setbacks must be established from

- Basement foundations (50 ft., assuming infiltration system is sub-surface)
- Onsite septic systems/drainfields (50 ft.)
- Wells (100 ft.)
- Other sensitive building program elements that could be affected by the addition of volume control infiltrated water as described below in this Ordinance.

e. Size of site: practically speaking, the larger the site, the more flexibility and opportunity for accommodating runoff volume/infiltration BMPs, all else being equal; as site size increases, requirements for adjustments grow more stringent. Size of site relates also to the extent of proposed building/impervious area. The more intense (defined both in terms of building coverage and total impervious area) the proposed building program, the more difficult accommodating the required runoff volume becomes.

If the total of infiltration-constrained areas, defined as that area which includes 1 or more of the above constraints, exceeds:

- 75 percent for sites less than 5 acres
- 80 percent for sites 5 to 10 acres
- 85 percent for sites 10 acres or greater

of the total site area and no feasible site area (defined as free of any of the above constraining features) exists downgradient from any logical site building areas, then a Partial or Total Adjustment may be issued by the Township. The applicant determines whether a Partial or Total Adjustment is requested based on the specific site and the proposed building program. Waivers should only be issued in those cases where applicant has demonstrated that site areas free of constraints are not adequate and feasible for use as volume-and infiltration-oriented stormwater BMPs.

### 3. Off-Site Mitigation

If either a Partial or Total Adjustment is issued by Penn Township, an applicant is strongly encouraged to provide Off-Site Mitigation subject to the approval of the Township, prior to project commencement. Several Off-Site Mitigation options may be approved by the Township, as below; any Off-Site Mitigation, to be approved by the Township, must satisfy runoff volume requirements set forth in Standard 1.

a. Off-Site Mitigation on privately owned lands within the same sub-basin, to be permanently eased and/or dedicated for conservation purposes.

b. Off-Site Mitigation on previously developed properties, public or private, and preferably nearby within the same sub-basin (as above), that currently lack stormwater management facilities designed and constructed in accordance with the purposes and standards of this Ordinance.

B. Standard 2: After installation of impervious cover and assuming full compliance with standard 1, the peak rate of stormwater discharges from the site for all design storms up to and including a 100-year frequency storm, post-development, shall not exceed the peak discharges from the site from the same storms, before disturbance. Design storms for peak rate control include:

- 2-year, 24-hour storm
- 5-year, 24 hour storm
- 10-year, 24 hour storm
- 25-year, 24 hour storm
- 50-year, 24 hour storm
- 100-year, 24 hour storm

If a Partial Adjustment has been issued with at least 50 percent of the volume requirement specified under Standard 1 provided, these Standard 2 provisions for peak rate also apply.

C. Standard 3: In those cases where a Total Adjustment from the Standard 1 volume requirement is issued, then additional peak rate standards set forth, so that the post-development peak rate discharges from the site

- For the 6-month to 2-year storms do not exceed 75 percent of pre-development peak rates,
- For the 2-year storms up to the 10-year storm do not exceed 80 percent of pre-development peak rates
- For all storms larger than the 10-year storm, do not exceed 85 percent of pre-development peak rates.

These additional peak requirements are assumed to be satisfied if Off-Site Mitigation consistent with the above provisions in this Ordinance is provided within the sub-basin, with the review and approval of the Township.

D. Standard 4: Significant loadings of non-point source pollutants shall not be discharged into either surface or groundwater. If the total runoff volume standard above is met as in Standards 1 (including if a Partial Adjustment for runoff volume control is approved by the township) through application of infiltration-oriented practices or through any of the other potentially applicable volume control-oriented practices, then non-point source water quality impacts are assumed to be adequately controlled, with the review and approval of the Township, except as follows: notwithstanding the fact that Standard 1 is satisfied, the Township may require additional water quality controls as specified below for any areas of post-development uncontrolled flow that might otherwise contribute non-point source loads. If Off-Site Mitigation is provided and

approved, Penn Township may after review conclude that this standard 4 water quality requirement is also achieved.

If the requirements set forth in Standard 1 above is not achieved and a Total Adjustment is issued by the Township, then an additional water quality requirement must be met in order to guarantee that adverse water quality impacts will not result from the proposed development action. Water quality-oriented Best Management Practices (BMP) designed to capture and treat stormwater generated for up to 1-inch rainfall event for all site areas being disturbed must be employed. These BMPs include, but are not limited to:

- Constructed wetlands/wetland forebays
- Retention (wet) ponds/extended detention ponds
- Filters (sand-peat, underground sand, perimeter sand filter, organic sand, pocket sand filter, gravel, others)
- Grassed/vegetated swales and channels
- Vegetated filter strips
- Other bioretention BMPs

In these cases of Total Adjustments, applicants must demonstrate that for stormwater runoff generated for up to the 1-inch rainfall event for all site areas being disturbed, two BMPs from the above list are employed to treat stormwater runoff in sequence. This dual treatment is required because research findings related to pollutant removal effectiveness has demonstrated that infiltration BMPs are substantially more effective at pollutant removal (non-soluble pollutants) than the primary non-infiltration BMPs listed above. BMP selection, design, and implementation shall be based upon appropriate reference materials such as PADEP's *Pennsylvania Stormwater Best Management Practices Manual (December 2006)*, *Design of stormwater Filtering Systems*, and other sources.

E. Special Provisions for "Hot Spot" Land Uses: For projects involving land uses considered to be high pollutant producers or "hotspots (see Table 414-2: e.g., vehicle service and maintenance facilities, vehicle salvage yards and recycling facilities, vehicle and equipment cleaning facilities, fleet storage areas for buses, trucks, etc., industrial/commercial or any hazardous waste storage areas or areas that generate such wastes, industrial sites, fast food businesses and convenience stores, any activity involving chemical mixing or loading/unloading, outdoor liquid container storage, public works storage areas, commercial container nurseries, and some high traffic retail uses characterized by frequent vehicle turnover), water quality requirements may be imposed by the Penn Township Engineer in addition to those included in Standard 4 above in order to remove potential pollutant loadings from entering either groundwater or surface water systems. These pre-treatment requirements are included in Tables 414-2 and 414-3.

**Table 414-2. Pre-Treatment Options for Stormwater Hot Spots**

<b>Stormwater Hot Spots</b>	<b>Minimum pre-Treatment Options</b>
Vehicle Maintenance and Repair Facilities	A, E, F, G
Vehicle Fueling Stations	A, D, G
"Fast Food" Establishments	B, C, D, I, K
Convenience Stores	B, C, D, I, K

Storage Areas for Public Works	A, B, D, E, F, G, H
Outdoor Storage of Liquids	G
Commercial Nursery Operations	I, J, L
Salvage Yards and Recycling Facilities*	M
Fleet storage Yards and Vehicle Cleaning Facilities*	M
Facilities that Store or Generate Regulated Substances*	M
Marinas*	M
Certain Industrial Uses (listed under NPDES)*	M
Other Uses or Activities Designated by Appropriate Authority	As Required

*\*Regulated under the NPDES Stormwater Program*

*Note: As used in this list, the term "Regulated Substances" shall mean any substances regulated under federal, state or county environmental, pollution control, hazardous substance, and drinking water laws and regulations.*

**Table 414-3. Minimum Pre-Treatment Options**

	Minimum Pre-Treatment Options
A	Oil/Water Separators
B	Sediment Traps/Catch Basin Sumps
C	Trash/Debris Collectors in Catch Basins
D	Water Quality Inserts for Inlets
E	Use of Drip Pans and/or Dry Sweep Material under Vehicles/Equipment
F	Use of Absorbent Devices to Reduce Liquid Releases
G	Spill Prevention and Response Program
H	Diversion of Stormwater away from Potential Contamination Areas
I	Vegetated Swales/Filter Strips
J	Constructed Wetlands
K	Stormwater Filters (Sand, Peat, Compost, etc.)
L	Stormwater Collection and Reuse (especially for irrigation)
M	BMPs that are a part of a Stormwater Pollution Prevention Plan (SWPPP) under a NPDES Permit

F. Additional Requirements: Under certain conditions, the Township, upon recommendation by the Township Engineer, may impose the following additional restrictions on stormwater discharges:

1. Peak discharge may be further restricted when it can be shown that a probable risk to downstream structures or unique natural areas exists or that existing severe flooding problems could be further aggravated.
2. Measures shall be imposed to protect against ground or surface water pollution where the nature of the soils or bedrock underlying a stormwater management structure constitutes substantial risk of contamination, such as might be the case in limestone formations. Special provisions to be followed in these cases will be provided by the township Engineer.

3. Where groundwater yields are very low or where a groundwater supply already is heavily used, the Township may require that the entire volume of the 2-year frequency rainfall (3.3 inches in 24 hours) be retained and infiltrated. If substantial irrigation needs are anticipated, portions of stored stormwater may be re-used for irrigation purposes.

#### G. Incentives for Environmentally Sensitive Conservation Design: Optional Stormwater Credits

As set forth in the Site Planning and Design Procedure for Comprehensive Stormwater Management, (Chapter 3 of the Penn Township Stormwater Manual), it is the intent of Penn Township to maximize use of preventive non-structural Best Management Practices (BMPs) in new land developments. These non-structural BMPs can be grouped as involving several different areas of site planning and design, all of which are specified in more detail as separate BMPs in PADEP's *Pennsylvania Stormwater Best Management Practices Manual (December 2006)*:

- Lot Configuration and Clustering in districts where clustering is permitted
- Minimum Disturbance/Minimum Maintenance
- Impervious Coverage
- Disconnection/Distribution/Decentralization
- Source Control

Most of these non-structural BMPs have not been conventionally applied by site engineers and designers as past practices; their application needs to be encouraged through reasonable and appropriate incentives (some of these non-structural BMPs are methodologically at least partially self-crediting). The methodology set forth in Chapter 2 of the Penn Township stormwater Manual includes a variety of credits which are designed to incentivize application of these non-structural BMPs and, in a broader sense, promote environmentally sensitive, conservation-oriented site planning and design. This methodology is based on Chapter 8 of PADEP's *Pennsylvania Stormwater Best Management Practices Manual (December 2006)*. Applicants are strongly encouraged to utilize this optional methodology and the stormwater credits which result, subject to the review and approval of the Township Engineer in the earliest stages of the Township approval process.

#### H. Stormwater Management Calculation Methods

Applicants must be able to demonstrate that the standards set forth in this Ordinance are being achieved. The standards in this Ordinance include total runoff volume control, as well as peak rate control and water quality control. Considerable emphasis is placed on both preventive non-structural practices as well as mitigative structural practices to be accomplished through the Site Planning and Design Procedure for Comprehensive Stormwater Management (Chapter 3 of the Penn Township Stormwater Manual).

1. In establishing the antecedent conditions for calculating runoff prior to land disturbance, the following assumptions shall apply:
  - a. Average antecedent moisture conditions;

- b. A Type II distribution storm (as defined by the USDA-NRCS pursuant to the TR-55 methodology);
  - c. "Woods – Good" shall be used as the pre-development curve number condition for those portions of the site having trees with greater than 6 inches caliper DBH or where such trees existed within 3 years of application;
  - d. "Meadow" shall be used for all other previous areas including areas of existing cultivation;
  - e. For those sites where undisturbed open space is proposed, this undisturbed open space need not be included in the runoff calculations, provided that applicants make reasonable guarantee that these areas will remain as undisturbed open space.
2. In all plans and designs for stormwater management systems and facilities submitted to the Township Engineer for approval, the Township recommends that stormwater peak discharge and runoff shall be determined through the use of the Soil Cover Complex Method as set forth in Urban Hydrology for Small Watersheds, Technical Release No. 55, with specific attention given to antecedent moisture conditions, flood routing, and peak discharge specifications included therein and in Hydrology National Engineering Handbook, Section 4, both by US Department of Agriculture, Natural Resources Conservation Service (Soil Conservation Service). Note that use of TR-55 with many of the natural system-based approaches and practices recommended by this Ordinance requires that calculations be performed on a detailed small sub-area basis. Although the Soil Cover Complex Method does have various methodological shortcomings, it is widely acknowledged as a reasonable methodology for performing stormwater runoff calculations.

The Township Engineer may permit the use of the Rational Method for calculation of runoff on land developments of 10 acres or less and for the design of storm structures. Additional stormwater calculation methodologies which may be approved by the Township Engineer are set forth in Table 414-4.

- 3. In calculating runoff after development, those areas covered by concrete lattice blocks on an appropriate base, porous pavement areas on an appropriate base, and roof areas which drain to properly designed and installed storage/groundwater infiltration beds, shall be considered adequate to infiltrate any increased runoff from a 2-year storm.
- 4. In calculating runoff after development, all those areas being disturbed in the proposed land development process are assumed to have a Hydrologic Condition of "Fair", rather than "Good". This requirement reflects impacts of existing vegetation removal and soil disturbance and compaction. If it is demonstrated that certain recommendations for non-structural BMPs, as set forth in Chapter 2 of the Penn Township Stormwater Manual, are followed, then a "Good" Condition may be assumed.
- 5. In performing calculations, and "Averaged" or "weighted curve number" approach for the total site area, pervious and impervious, is not acceptable, unless otherwise allowed for pursuant to provisions of Chapter 2 of the Penn Township Stormwater Manual. Calculations must be



performed separately for previous and impervious areas and then summed for the total runoff calculation.

#### I. Special Standards Applicable during the Land Disturbance Process

1. During the period of land disturbance, when significant sediment can be transported by runoff, this runoff shall be controlled prior to entering any proposed infiltration area.
2. Peak discharges and discharge volumes from the site shall comply with the appropriate sections above, with the following additions:
  - a. For purposes of calculating required detention storage during land disturbance, peak discharges and discharge volumes shall be calculated based upon the runoff coefficients for bare soils during the maximum period and extent of disturbance. Controls shall insure that the difference in volumes and rates of peak discharge before disturbance and during shall not exceed those peak discharges and discharge volumes noted above. It should be understood that detention storage during the period of land disturbance and prior to establishment of permanent cover may require additional facilities on a temporary basis. Such measures shall be located so as to preserve the natural soil infiltration capacities of the planned infiltration bed areas.
  - b. Wherever soils, topography, cut and fill or grading requirements, or other conditions suggest substantial erosion potential during land disturbance, the Township, as recommended by the Township Engineer, may require that the entire volume of all storms up to a 2-year storm from the disturbed areas be retained on site and that special sediment trapping facilities (such as check dams, etc.) be installed.
  - c. Sediment in runoff water shall be trapped in accordance with criteria of the Chester County Conservation District and PADEP and removed through means approved by the Township Engineer to assure proper functioning and adequate capacity in the basins or traps.
3. Procedures shall be established for protecting soils or geologic structures with water supply potential from contamination by surface water or other disruption by construction activity.

**Table 414-4 Computation Methodologies for Stormwater  
Runoff Calculations in Penn Township, Chester County PA**

METHOD	SOURCE	APPLICABILITY
TR-55 or Commercial Package Based on TR-55: Soil Cover Complex*	USDA-NRCS	Applicable for plans within the model's limitations
TR-20 or commercial Package	USDA – NRCS	When full model is desirable or

Based on TR-20		necessary
HEC-HMS	U.S. Army Corps of Engineers	When full model is desirable or necessary
PSRM	Penn State University	When full model is desirable or necessary
VT/PSUHM	Virginia Polytechnic Institute & Penn State University	When full model is desirable or necessary
Modified Rational Method or Commercial package based on this method	Emil Kuiching (1889)	For sites less than 20 acres
SWMM or commercial package based on SWMM	U.S.EPA	Most applicable in urban areas
Small Storm Hydrology Method (as included in SLAMM)	PA & Associates, or the Web site <a href="http://www.winslamm.com">www.winslamm.com</a>	Calculation of runoff volume from urban and suburban areas
Other Methods	Various	As approved by the municipal engineer

\* Deemed acceptable by the Penn Township Engineer; other methodologies are acceptable with the review and approval of the Township Engineer.

#### **414.9. SPECIFIC STORMWATER MANAGEMENT SYSTEM DESIGN REQUIREMENTS.**

##### **A. Infiltration/Recharge Facilities**

1. Infiltration devices shall be selected based on suitability of soils and site conditions. Measures may include porous pavement with underground infiltration beds, vegetated infiltration beds, swales and filter strips, trenches and other seepage structures as described in PADEP's *Pennsylvania Stormwater Best Management Practices Manual (December 2006)*, the *Pennsylvania Handbook of Best Management Practices for Developing Areas (1998)*, related references prepared by the USEPA, the Washington Metropolitan Council of Governments, the Center for Watershed Protection, the USDA-NRCS, and other guidance documents.

2. Site infiltration and soil permeability tests shall be performed for all proposed infiltration areas; these tests shall include evaluation of selected soil horizons using acceptable techniques such as test pits with permeability measurements, taken at the base elevation of the proposed infiltration system. Care must be taken to avoid compaction in the testing process. Site Infiltration and Soil Testing protocols are set forth in Chapter 1 of the Penn Township Stormwater Manual and should be reviewed and approved by the Township Engineer in advance. The soil infiltration rate of discharge from the infiltration area being used in the proposed design shall be based on these measurements. Minimum permeability of 0.25 inches per hour is customary, although under certain circumstances where substantial site area is available (i.e., low density or low intensity development), a rate as low as 0.10 inches per hour is acceptable.
3. The lowest elevation of the infiltration area shall be at least two (2) feet above the Seasonal High Water Table (SHWT) and bedrock, except in the case of limestone formations, in which case the distance shall be four (4) feet.
4. All roof drains shall discharge to infiltration systems, unless specifically approved by the Township Engineer, with appropriate measures such as leaf traps and cleanouts taken to prevent clogging by vegetation.
5. All infiltration systems shall have appropriate positive overflow controls to prevent storage within one (1) foot of the finished surface or grade.
6. All infiltration systems shall have a setback of fifteen (15) feet from all residential structures. Care should be taken to prevent any seepage into sub-grade structures. Infiltration systems greater than three (3) feet deep shall be located at least fifty (50) feet from any basement wall, wastewater treatment or wastewater treatment system replacement area. Any recharge system designed to handle runoff from any commercial or industrial impervious parking or outside storage areas shall be a minimum of one hundred (100) feet from any water supply well and fifty (50) feet from any wastewater treatment or wastewater treatment system replacement area.
7. All infiltration systems shall be designed to infiltrate the stored volume within seventy-two (72) hours; this limit may be extended with approval from the Township Engineer.
8. All surface inflows shall be designed to prevent the discharge of sediment into the infiltration system; accumulated sediment reduces stormwater capacity and ultimately clogs the infiltration mechanism. If sediment is reasonably expected to be generated, treatment to remove this sediment prior to entering the infiltration device must be provided. No sand or other particulate matter may be applied to a pervious surface for winter ice conditions.
9. Construction Phase Precautions. During site construction all infiltration system components shall be protected from compaction due to heavy equipment operation or storage of fill or construction material. Infiltration areas shall also be protected from sedimentation. All areas designated for infiltration shall not receive runoff until the contributory drainage area has

achieved final stabilization. These provisions should be included in the specifications provided for the proposed development.

10. System Overflow Design. All infiltration facility designs shall incorporate measures to provide for the overflow of runoff that exceeds the capacity of the proposed system, either in those cases of larger storm events or in those cases where the proposed system becomes clogged or otherwise dysfunctions, without increasing erosion or creating damage to any other stormwater management system components.

11. Special Construction Requirements. The following procedures and materials shall be required for all sub-surface infiltration facilities during construction:

- a. Excavation for the infiltration facility shall be performed with equipment which will not compact the bottom of the infiltration bed/trench, or like facility. Proper sequencing of excavated material and placement of gravel and other material also can minimize compaction.
- b. The bottom of the infiltration bed and/or trench shall be scarified prior to the placement of filter fabric and aggregate.
- c. Only clean aggregate, free of fines, shall be allowed.
- d. The top, bottom, and sides of all infiltration beds, trenches, or like facilities shall be covered with drainage filtration fabric in order to prevent the migration of sediment and soil from migrating into the infiltration system and causing clogging.
- e. Perforated distribution pipes connected to centralized catch basins and/or manholes with provisions for the collection of debris shall be provided in all facilities. The perforated pipes shall distribute stormwater throughout the entire infiltration bed/trench, or like facility.
- f. A positive outlet drain pipe placed at the top of the infiltration bed and/or trench or like facility shall be provided to safely convey larger storms events, as needed. Provision for positive outlet drains also may be made at lower elevations in the infiltration facility in those cases where permeability of the soil is near the lower acceptable limit and concern exists that water may remain in the infiltration facility for extended periods.
- g. Observation ports shall be included in sub-surface infiltration facilities whenever feasible, in order to evaluate their successful functioning.

#### B. Extended Detention and Retention Basin Facilities

Extended detention basins may be used in Penn Township to satisfy peak rate control Standards 2 and 3, and in partial fulfillment of nonpoint source pollution control (Standard 4 to a very limited extent). Extended detention basins must be designed to drain completely within an acceptable period of time, in order to eliminate mosquito generation and other problems. Retention basins are defined as having a permanent pool of water and must be designed and maintained to be aquatically successful with a healthy biota. Additional specifications for

extended detention basins and retention basins beyond that which is provided in this Ordinance are included in PADEP's *Pennsylvania Stormwater Best Management Practices Manual (December 2006)* and other sources. It is important to note that design and development of successful retention basins is difficult and must be guided not only by in situ stormwater management needs, but also by the requirements for healthy wet pond development.

1. Basin Design Criteria. The following design criteria shall be used in the design of all detention basins in Penn Township. The basins shall be designed to detain the quantity of water resulting from storms from the 2, 5, 10, 25, 50, and 100 year twenty-four (24) hour storms ( see the USDA\_NRCS Technical Release No. 55) under full development conditions released at a maximum outflow rate equal to that resulting from the same storms under existing (pre-development) conditions. In addition, standards set forth above which further reduce pre-development to post-development peak rates of runoff where runoff volume control is not being provided also are applicable (Standard 3). If an ACT 167 stormwater management plan for any designated watershed in Penn Township sets forth peak rate control standards, these standards also apply and supersede standards set forth in this ordinance to the extent that such 167 standards are more stringent than those included in this Ordinance. All flows in excess of the above mentioned standard(s) shall flow over an emergency spillway.
2. Riser. A riser or other acceptable outfall shall be provided at the outlet of all detention basins. The riser shall be constructed of precast or poured in place concrete with controlled orifices. The riser shall extend to an elevation one (1) foot below the crest elevation of the emergency spillway. The riser shall be designed so that the rate of outflow is controlled by the pipe barrel through the basin berm when the depth of water within the basin exceeds the height of the riser. A trash rack or similar appurtenance shall be provided to prevent debris from entering the riser. All risers shall have a concrete base attached with a watertight connection. The base shall be of sufficient weight to prevent flotation of the riser. An anti-vortex device shall be provided on the top of the riser.
3. Maximum Depth of Detention Basins. The maximum depth of water in a detention basin shall be three (3) feet unless a greater depth is approved by the Township Engineer. The minimum depth of permanent water in a retention basin shall be four (4) feet.
4. Emergency Spillway. Whenever possible, the emergency spillway for detention/retention basins shall be constructed on undisturbed ground. Emergency spillways shall be designed according to the USAD-NRCS Engineering Field Manual. All emergency spillways shall be constructed so that the detention/retention basin berm is protected against erosion. The minimum capacity of all emergency spillways shall be such that the combined capacity of the emergency spillway and the principal pipe barrel equal the peak flow rate from the one hundred (100) year design storm. Emergency spillways shall extend along the upstream and downstream berm embankment slopes. The upstream edge of the emergency spillway shall be a minimum of two (2) feet below the spillway crest evaluation. The downstream edge of the spillway shall, as a minimum, extend to the toe of the berm embankment. The emergency spillway shall not discharge over earthen fill and/or easily erodible material.

5. Anti-Seep Collars. Anti-seep collars shall be installed around the principal pipe barrel within the normal saturation zone of the detention/retention basin berms. The anti-seep collars and their connections to the pipe barrel shall be watertight. The anti-seep collars shall extend a minimum of two (2) feet beyond the outside of the principal pipe barrel. The maximum spacing between collars shall be fourteen (14) times the minimum projection of the collar measured perpendicular to the pipe.
6. Freeboard. Freeboard is the difference between the design flow elevations in the emergency spillway and the top of the settled detention/retention basin embankment. The minimum freeboard shall be one (1) foot.
7. Slope of Extended Detention/Retention Basin Embankment. Extended detention/retention basins shall be designed to utilize the natural contours of the land. When such design is impracticable, the construction of the basin shall utilize slopes as shallow as possible to blend the structures into the existing terrain. The maximum slope of earthen extended detention/retention basin embankments shall meet the requirements set forth below. Whenever possible, the side slopes and basin shape shall blend with the natural topography. Straight side slopes and rectangular basins shall be avoided whenever possible. The use of multiple extended detention facilities, which are smaller and less intrusive on the site, is encouraged to meet the requirements.
8. Width of berm. The minimum top width of extended detention/retention basin berms shall be ten (10) feet.
9. Slope of Basin Bottom. In order to insure proper drainage of the extended detention/retention basin, a minimum grade of two (2) percent shall be maintained for all sheet flow. A minimum grade of one (1) percent shall be maintained for all channel flow.
10. Energy Dissipators. Energy dissipating devices (rip-rap, end sills, etc.) shall be placed at all basin outlets. Any pipe or other component that discharges directly into the basin shall be equipped with energy dissipating devices and shall outlet into the bottom of the basin.
11. Design Information. As part of the stormwater management plan and report, all design information shall be submitted, including, but not limited to, the following:
  - a. A sketch of the berm embankment and outlet structure indicating the embankment top elevation, embankment side slopes, top width embankment emergency spillway elevation, perforated riser dimensions, pipe barrel dimensions, and dimensions and spacing of anti-seep collars.
  - b. Design computations for the pipe barrel and riser.
  - c. Stage-storage data (cubic-feet vs. elevation) and all supporting computations.
  - d. Flood routing computations utilizing computer analysis of generally accepted format.
  - e. A detailed plan of the trash rack and anti-vortex device.

- f. A plan, at a scale of one (1) inch equals fifty (50) feet, showing the grading, landscaping, and fencing around the detention/retention basin.

12. Landscaping and Grading of Extended Detention/Retention Basins. All landscaping and grading standards shall be as follows:

- a. Stormwater management facilities shall not be constructed in wooded areas if alternative locations exist which will not require disturbance of wooded areas. Clearing of existing trees in order to construct stormwater management basins should be avoided unless no other alternatives exist.
- b. Facilities that are constructed in wooded areas shall have side slopes of three (3) horizontal to one (1) vertical. These slopes shall be seeded with a non-mowable ground cover.
- c. Facilities that are constructed in non-wooded areas shall have the following slope requirements:
  - Slopes ranging from; three (3) horizontal to one (1) vertical; to but not including five (5) horizontal to one (1) vertical are permitted if seeded with a non-mowable ground cover such as crown vetch.
  - Slopes of five (5) horizontal to one (1) vertical or less are permitted and may be seeded with a mowable lawn or grass cover.
- d. The top of any fill or toe of the slope of any fill shall be located twenty-five (25) feet from any property line with the exception of a downstream property line where the toe of the embankment shall be placed a sufficient distance to allow for energy dissipating devices, but in no case less than one hundred (100) feet unless approved otherwise by the Township. Use of properly installed level spreaders is strongly preferred.

13. Adjacent properties. If a stormwater management plan involves directing some or all of the site's runoff to adjacent property, the applicant or his designated representative shall obtain written permission from adjacent property owners and any necessary easements or other property interests concerning the flowing of such water.

14. Open Space and Storm Management Areas.

- a. Planting Requirements. All proposed stormwater management areas that are also proposed for recreational use, whether active or passive, shall be planted to effectively naturalize the areas to become an integral and harmonious element in the natural landscape.
- b. Drainage Channels. All storm drainage channels, whether existing or proposed, shall be graded and planted as effectively naturalized areas so as to become an integral and

harmonious part of the landscape; planting should take into account contour, slope, and type of plant material employed.

- c. All earthen basins shall be hydroseeded with temporary and permanent grasses or other approved ground covers within seventy-two (72) hours after final grading.
- d. Fencing or vegetative screening shall be provided if required by the Planning Commission and/or Board of Supervisors.

### C. Stormwater Collection (Drainage) System Design Requirements

1. Design Flow Rate. The storm drain system, to the extent that it is necessary, shall be designed to carry a twenty-five (25) year peak flow rate, and a fifty (50) year peak flow rate at the sump area. The design twenty-five (25) year peak flow rate into each inlet shall be indicated on the stormwater management plan. The twenty-five (25) year flow rate (the Township Engineer may increase this to the 50-year flow rate if the proposed development is 50 percent impervious or more) shall be determined by the rational formula,  $Q = CIA$ . Where:

$Q$  = Peak Runoff rate, cubic feet per second (cfs):

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

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

$A$  = Drainage area in acres.

Approximate values for the runoff coefficient and rainfall intensity can be found in the following source:

Commonwealth of Pennsylvania  
Department of Transportation  
Design Manual, Part 2  
Highway Design Chapter 10

2. Overflow System. An overflow system shall be provided to carry flows safely when the capacity of the stormwater collection system as proposed is exceeded. The overflow system shall be of sufficient capacity to carry the difference between the hundred (100) year and the twenty-five (25) year peak flow rates.
3. Inlet Capacity. All inlets, when utilized, must be designed to accommodate the twenty-five (25) year peak flow rate. The capacity of all C, M or S type inlets shall be determined from the following source:



Commonwealth of Pennsylvania  
Department of Transportation  
Design Manual, Part 2 Highway Design

The capacity of each inlet shall be indicated in the design calculations.

4. Straight Pipe Sections. Wherever possible, all storm drain pipes, when utilized, shall be designed to follow straight courses. No angular deflections of storm sewer pipe sections in excess of five (5) degrees shall be permitted. No vertical curves shall be permitted in the storm drain pipe system.
5. Minimum Grade and size. All storm drain pipes shall be designed to maintain a minimum grade of one-half (1/2) percent. All storm pipes shall have a minimum inside diameter of fifteen (15) inches, except that pipes under a twenty-five (25) or greater fill shall not be less than twenty-four (24) inches, or a cross-sectional area of four hundred fifty-three (453) square inches.
6. Pipe Material and Thickness. All storm sewers shall be reinforced concrete or corrugated metal pipe of the proper class and thickness to support the loads and fill material and meet the life expectancy requirements of PADOT for local roads. The use of smooth-lined, corrugated polyethylene pipe shall be reviewed and approved by the Township engineer on a case-by-case basis.
7. Pipe Capacity The capacity of all pipe culverts shall, as a minimum, provide the required carrying capacity as determined by the following sources:  
  
United States Department of Commerce  
Bureau of Public Roads  
Hydraulic Engineering Circular No. 5  
Hydraulic Charts for the Selection of Highway Culverts  
  
United States Department of Commerce  
Bureau of Public Roads  
Hydraulic Engineering Circular No. 10  
Capacity Charts for the Hydraulic Design of Highway Charts
8. Pipe arches. Where headroom is restricted, equivalent pipe arches may be used in lieu of circular pipes.
9. Allowable Headwater Depth. At all inlets or manholes, the maximum allowable headwater depth shall be one (1) foot below the top of the inlet grate or the manhole cover.
10. Horizontal Pipe Deflections. A manhole or inlet shall be provided at all horizontal deflections in the storm pipe system exceeding five (5) degrees.

11. Minimum and Maximum Cover. A minimum of eighteen (18) inches of cover shall be maintained over all storm drain pipes. The top of storm drain pipes shall be at least one-half (1/2) foot below subgrade elevation.

12. Diversion of Runoff. All storm drain pipes shall be designed to carry the runoff into a stormwater management practice facility adequate to control the proposed volume, rate, and quality of runoff in accord with the standards set forth in this Ordinance. No discharge at the top or side of basin embankments will be permitted.

13. Culverts and Drainage Channels.

- a. Design Flow Standard. All culverts and drainage channels, except those utilized for conveying existing stream flow, shall be designed to carry a flow rate equal to a fifty (50) year, twenty-four (24) hour storm. All culverts and drainage channels utilized for conveying existing stream flow shall be designed to carry a flow rate equal to a one hundred (100) year, twenty-four (24) hour storm (USDA-NRCS Technical Release No. 55).
- b. Erosion Prevention. All drainage channels shall be designed to prevent the erosion of the bed and bank areas. The flow velocity in all vegetated drainage channels shall not exceed three (3) feet per second to prevent erosion unless special provisions are made to protect banks and channel bottoms against erosion. Water course erosion protection measures such as jute matting, wood excelsior blanket, or nylon erosion control mat are required to prevent erosion of the drainage channels. Where storm sewers discharge into existing drainage channels at an angle greater than thirty (30) degrees from parallel with the downstream channel flow, the far side bank shall be stabilized by the use of rip-rap or masonry, and/or concrete walls. The stabilization shall be designed to prevent erosion and frost heave under and behind the stabilizing media.
- c. Maximum Side Slope. Any vegetated drainage channel requiring mowing of the vegetation shall have a maximum grade of five (5) horizontal to one (1) vertical on those areas to be mowed.
- d. Design Standard. Because of the critical nature of the vegetated drainage channels, the design of all vegetated channels shall, as a minimum, conform to the design procedures outlined in the PADEP, Erosion and Sediment Pollution Control Program Manual. Several acceptable sources outline procedures for non-vegetated drainage channels, including the following:

United States Department of Commerce  
Bureau of Public Roads  
Hydraulic Engineering Circular No. 5  
Hydraulic Charts for the Selection of Highway Culverts

Federal Highway Administration  
Hydraulic Engineering Circular No. 13  
Hydraulic Design of Improved Inlets for Culverts

- e. Reference to publication and source documents in this Ordinance shall be deemed to include any amendments and revisions thereof.

#### 414.10 Riparian Buffer Zone (RBZ) Management.

The purpose of this section of the Ordinance is to:

- Regulate the land use, siting, and engineering of all development to be consistent with the intent and objectives of this Ordinance, accepted conservation practices, so as to respect the carrying capacity of existing natural resources as further development occurs.
- Reduce the amount of nutrients, sediment, organic matter pesticides, and other harmful substances that reach watercourses, wetlands, and other surface water bodies as well as subsurface waters by optimizing scientifically-proven processes including filtration, deposition, absorption, adsorption, plant uptake, biodegradation, denitrification through stabilizing concentrated flows and encouraging distributed sheet flow, and by improving infiltration in all watersheds and especially in watersheds designated as Special Protection Waters by the Commonwealth of Pennsylvania.
- Provide for shading (i.e., cooling) of the aquatic environment so as to moderate temperatures, protect fish habitat, retain more dissolved oxygen, and encourage the growth of diatoms, beneficial algae, and aquatic insects.
- Provide organic matter through leaf debris which falls into the stream and becomes trapped by woody debris (fallen trees and limbs) and rocks where such provides food and habitat for small bottom dwelling organisms (insects, amphibians, crustaceans, and small fish), essential to maintain the food chain.
- Increase stream bank stability and maintain natural fluvial geomorphology of the stream system, reducing streambank erosion and sediment production and protecting fish habitat.
- Conserve the natural features important to land and water resources (e.g., headwater areas, groundwater recharge zones, floodway, floodplain, springs, streams, wetlands, woodlands, prime wildlife habitats) and other features constituting high recreational value or containing amenities that exist on developed and undeveloped land.
- Conserve natural, scenic, and recreation areas within and adjacent to stream areas for the community's benefit, promoting the positive functions of greenways.
- Improve and maintain the safety, reliability and adequacy of the water supply for domestic, agricultural, commercial, industrial and recreational uses along with sustaining diverse populations of aquatic flora and fauna.
- Work with floodplain and other ordinances that regulate environmentally sensitive areas to minimize hazards to life, property, and stream features.

- Assist in the implementation of pertinent state laws concerning erosion and sediment control practices.

#### A. Riparian Buffer Zone (RBZ) Definition

Areas immediately adjacent to the Township's perennial streams and waterways as mapped on US Geological Survey 1:24,000-scale quadrangle maps shall be defined as the Riparian Buffer Zone (RBZ). In the RBZ, special requirements as set forth in this section shall apply in order to maintain important natural functions. These RBZ requirements are based on both the heightened sensitivity of the RBZ zone in terms of stormwater-related impacts and the potential to negatively impact the stream system when the vegetation and soil of this RBZ zone is disturbed. Additionally, the RBZ has the potential to mitigate negative effects of development in areas adjacent to the stream system. The RBZ shall include three sub-zones, Zones 1 through 3, extending landward from the top of the streambank where different requirements are imposed:

1. Zone 1, a 25-foot setback zone/increased to a 50-foot setback zone in Special Protection Waters, measured from the top of the bank of the waterbody, where no disturbance of vegetation and soil except for restoration shall occur, in order to shade the stream with natural vegetation, to provide a source of numerous other organic inputs to the aquatic system, to anchor the streambank and floodplain areas, and to consume and otherwise remove nitrogen, sediment, and other substances, which can adversely affect stream systems. Where there is subdivision or land development (i.e., a land-use change), Zone 1 should be reforested in native hardwood vegetation, with a management plan to assure survival of planted trees and control of non-native vegetation until the forest is fully established.
2. Zone 2, a 75-foot managed buffer zone/increased to a 150-foot managed buffer zone in Special Protection Waters, extending outward from Zone 1, where disturbance of natural vegetative cover and shall be limited to selective logging and other activities which minimally disrupt existing tree cover and soil mantle, in order to maximize filtering and overall physical removal of particulate-form pollutants from runoff generated upgradient and to promote subsurface vegetative uptake of nitrogen and other non-particulate elements from stormwater generated upgradient. Where there is hardwood vegetation, with a management plan to assure survival of planted trees and control of non-native vegetation until the forest is fully established.
3. Zone 3, a zone of varying width extending outward from Zone 2; Zone 3 is defined in those cases where upslope areas adjacent to the RBZ are being disturbed during the land development process and where direct discharge of stormwater would otherwise occur; Zone 3 must include level spreading devices as necessary to ensure that any directly discharged stormwater flows are properly distributed as sheet flow and channelization and point source discharges are avoided; if the conditions triggering Zone 3 are not present, Zone 3 does not exist, but where Zone 3 conditions are triggered, a minimum Zone 3 width is likely to be 50 feet beyond Zone 2.

## B. Uses Permitted in the Riparian Buffer Zone RBZ

In addition to regulated activities permitted by the State, if any, provision for unpaved trail access, and selective removal of hazardous or invasive vegetative species, the following uses are permitted in the Riparian Buffer Conservation Zone, either by right or after review and approval by Penn Township.

### 1. Zone 1: Uses Permitted by Right

Open space uses that are primarily passive in character shall be permitted to extend into the area defined as Zone 1, including:

- a. Wildlife sanctuaries, nature preserves, forest preserves, fishing areas, passive areas of public and private parklands, and reforestation.
- b. Agricultural uses existing at the time of adoption of this Ordinance, provided that appropriate conservation techniques are being applied.

### 2. Zone 1: Uses Requiring Municipal Review and Approval [This is essentially a conditional use and must be in a zoning ordinance].

- a. All new crossings by farm vehicles and livestock, recreational trails, roads, railroads, centralized sewer and/or water lines, and public utility transmission lines provided that any disturbance is offset by buffer improvements.
- b. Streambank stabilization.

### 3. Zone 2: Uses Permitted By Right

The following uses, which are primarily passive, shall be permitted by right to extend into the area defined as Zone 2:

- a. Open space uses including wildlife sanctuaries, nature preserves, forest preserves, passive areas of public and private parklands, and recreational trails.
- b. Reforestation.
- c. Minimum required front, side, and rear yards on private lots, provided that no yard may extend into Zone 2 more than half the distance between the outer boundaries of Zone 1 and Zone 2.
- d. Agricultural uses existing at the time of adoption of this Ordinance, provided that appropriate conservation techniques are being applied.

### 4. Zone 2: Uses Requiring Municipal Review and Approval [A conditional use required by a zoning ordinance.

- a. New agricultural uses.

- b. Buffer crossings by farm vehicles and livestock, roads, railroads, centralized sewer and/or water lines, and public utility transmission lines provided that any disturbance is at a minimum, offset by buffer improvements.
- c. Centralized sewer and/or water lines and public utility transmission lines running along the buffer, provided that any disturbance is, at a minimum, offset by buffer improvements. These lines shall be located as far from Zone 1 as practical.

#### 5. Zone 3: Uses Permitted By Right

Zone 3 must include level spreading devices as necessary to ensure that any directly discharged stormwater flows are properly distributed as sheet flow and channelization and point source discharges are avoided. All uses that allow for this level spreading and sheet flow to occur are acceptable. Acceptable uses include:

- a. Selective cutting of trees when removal is consistent with approved standards.
  - b. Areas such as camps, campgrounds, picnic areas and golf courses. Active recreation areas such as ballfields, playgrounds, and courts provided these uses are designed in a manner that will not permit concentrated flow.
  - c. Naturalized stormwater basins in compliance with acceptable comprehensive stormwater management guidelines appearing elsewhere in this Ordinance. The entire basin shall be located a minimum of 100 feet from the defined edge of an identified watercourses.
6. The RBZ may be included in net density calculations with uses permitted in the Township Zoning Ordinance, unless this RBZ is required to be subtracted out as the result of other applicable Zoning Ordinance regulations, such as regulation of the floodplain.
7. An RBZ adjacent to "High Quality Waters" and "Exceptional Value Waters" designated under the PADEP Chapter 93 Rules and Regulations shall be subject to the provisions of the PADEP "Special Protection Waters Implementation Handbook" and its amendments. To the extent that Penn Township and PADEP requirements are not consistent, the more restrictive requirements shall apply.

#### C. Uses Prohibited in the Riparian Buffer Zone (RBZ)

Any use or activity not authorized in this Ordinance shall be prohibited within the Riparian Buffer Zone. No woodland disturbance or other land disturbance shall be permitted within 25 feet of the outermost limit of any wetland or streambank, measured horizontally, except as noted in this Ordinance. The following activities and facilities are specifically prohibited:

- Clear-cutting of trees and other vegetation, Zones 1 and 2.
- Selective cutting of trees and/or the clearing of other vegetation within Zone 1, except where (1) such clearing is necessary to prepare land for a use permitted herein and the effects of these actions are mitigated by revegetation; and (2) such clearing involves removal of exotic vegetation for the purpose of enhancing the growth and survival of native woody vegetation.
- Selective cutting of trees and/or the clearing of other vegetation within Zone 2, except where (1) such clearing is necessary to prepare land for a use permitted herein and the effects of these actions are mitigated by revegetation, and (2) selective cutting of trees occurs as part of a vegetation management plan such as for timber production and harvesting.
- Removal of trees in excess of selective cutting, except where such removal is necessary as a means to eliminate dead, diseased, or hazardous tree stands that jeopardize public safety or as part of a reforestation project, provided that the removal is approved by the Township Engineer and/or directly by the Township.
- Removal or disturbance of vegetation in a manner that is inconsistent with erosion control and buffer protection.
- Storage of any hazardous or noxious materials.
- Use of fertilizers, pesticides, herbicides, and/or other chemicals in Zones 1 and 2, except that in Zones 1 and 2 herbicides may be applied directly (not sprayed) to cut stems of exotic vegetation, and in Zone 2 herbicides may be manually sprayed around the stems of individual trees as necessary to enhance survival of those trees; in Zone 3, such chemicals may be applied but only consistent with prescribed industry standards or the recommendations of the Chester County Conservation District.
- Roads or driveways, except where permitted as buffer crossings.
- Motor or wheeled vehicle traffic in any area not designed to accommodate adequately traffic type and volume.
- Parking lots.
- Any type of permanent structure, including fences, except structures needed for a use permitted herein.
- Subsurface sewage disposal areas.
- Sod farming.

#### 414.11 Steep Slope Conservation Districts.

The purpose of this Ordinance provision is to regulate the intensity of land development and use in areas with steep slopes in order generally to minimize the negative impacts of land development activity and to maintain the natural topography and drainage patterns of the land. The purpose of this Ordinance specifically is:

- To promote the public health, safety, and welfare through the protection of steep slope areas and by encouraging the retention of open space located and designed so as to constitute a harmonious and appropriate part of Penn Township.
- To permit only those uses of steep slope areas that are compatible with conservation of natural conditions and that maintain the natural terrain, stable soil conditions, and undisturbed drainage patterns by minimizing disturbances to vegetated ground covers and restricting grading of steep slope areas.
- To limit erosion, loss of soil, and resultant destruction of the land, siltation of streams and related degradation of surface water, and damage to property owners.
- To protect low lying areas from flooding by limiting the increase in stormwater runoff caused by grading of sloped areas, changes in vegetated cover, and the erection of structures and other impervious areas.
- To maintain the ecological integrity and habitat value of steeply sloped areas, including indigenous vegetation and wildlife which could be adversely affected by otherwise permitted disturbances.
- To allow the continued replenishment of ground water resources.

A. Steep Slope Conservation Districts: Definition

The Steep Slope Conservation Districts consist of two specially designated areas defined below. Steep Slope Conservation District calculations are to be based on a site survey by a registered surveyor, on topographic information plotted from a verified aerial survey, or an analysis of US Geological Survey topographic maps where the calculated slope category (i.e., greater than 25 percent or greater than 15 percent and less than or equal to 25 percent) exists for an area that spans five contiguous 10-foot contour intervals.

1. Prohibitive Slope: those slopes greater than 25 percent
2. Precautionary Slope: those slopes greater than 15 percent and less than or equal to 25 percent.

B. Steep Slope Conservation District Use Restrictions

1. General: The Steep Slope Conservation Districts shall be deemed to be an overlay on any zoning district now or hereinafter enacted by Penn Township.



a. The Steep Slope Conservation Districts shall have no effect on the permitted uses in the underlying zoning district, except where said uses are intended to be located within the boundaries of the Steep Slope Conservation Districts and said uses are in conflict with the permitted uses set forth in this Ordinance. These regulations apply only to those portions of the tract or lot that fall within the Steep Slope Conservation Districts.

b. The requirements of the steep Slope Conservation Districts, as defined, shall supersede the requirements of the underlying zoning district.

2. Prohibitive slope: On Prohibitive Slopes, no development, regarding or stripping of vegetation shall be permitted unless the disturbance is for roadway crossings or utility construction and unless it can be demonstrated that the roadway or utility improvement are necessary in the sloped area. The sloped area to be developed, regarded or stripped of vegetation shall be drawn on the development plans. Uses permitted as of right, provided that they are consistent with requirements of the underlying zoning district and other applicable requirements, include:

a. Parks and outdoor recreational uses, consistent with the goals of watershed protection. Site disturbance and impervious surfaces are to be minimized and/or avoided.

b. Logging and woodcutting, where such activity is limited to highly selective removal of trees, consistent with conservation-oriented Best Management Practices. Maximum precautions shall be taken to avoid destruction of or injury to understory brush and trees.

c. Grading for the minimum portion of a driveway necessary to access the proposed building or land use, when it has been demonstrated that no other routing that avoids steep slopes is feasible.

d. Yard area of any permitted building, as long as the building itself is not within the Prohibitive Slope area.

3. Precautionary Slope: Site design and grading on Precautionary Slopes shall provide the minimum disruption of view corridors and scenic vistas and shall preserve significant natural topographic features to the greatest extent possible. Uses permitted as of right, provided that they are consistent with requirements of the underlying zoning district and other applicable requirements, include:

a. Parks and outdoor recreational uses, consistent with the goals of watershed protection. Site disturbance and impervious surfaces are to be minimized and/or avoided.

b. Tree farming, forestry, and other agricultural uses when conducted in conformance with conservation practices, including minimum tillage methods, as approved by the Chester County Conservation District.

- c. Accessory uses excepting swimming pools necessary for the operation and maintenance of the above uses,
- d. Yard area of any permitted building or land use.
- e. Access roads for the passage of emergency vehicles.

C. Administration of the Steep Slope Conservation Districts

1. For all earth-moving activities within the Steep Slope Conservation Districts, the Applicant shall submit a site plan prepared by a Pennsylvania-licensed engineer that includes at a minimum the following:
  - a. Slopes in classes of 0 through 15 percent, greater than 15 through 25 percent, and greater than 25 percent based at minimum on ten foot (10') contour intervals.
  - b. Location of all waterbodies including but not limited to streams, lakes and wetlands.
  - c. Existing natural and topographic features.
  - d. Location of all proposed and existing buildings and streets.
  - e. Location of all existing vegetation including meadow, forest, and scrub lands broken down by those areas of vegetation that will be removed as well as vegetation to be preserved; specifications for revegetation shall also be included.
  - f. Specific methods that will be utilized to control soil erosion and sedimentation, soil loss, and excessive stormwater runoff both during and after construction.
  - g. A statement and description of the stability of the soils on-site and the appropriateness of the construction method proposed.
  - h. Hydrology, drainage, and flooding analysis to include a statement on the affect of the proposed development upon water bodies or wetlands in the vicinity of the project.
  - i. A statement describing the underlying geology attesting to the stability of the site.
  - j. Calculations of the area of proposed disturbance of each slope class on each proposed lot as well as within any proposed road right-of-way.
  - k. Grading plan for the construction site and all access routes.

2. The site plan submitted shall be reviewed by the Penn Township Engineer. The Penn Township Engineer shall accept or reject the plan as submitted or may require that specific conditions be complied with in order for the plan to meet approval. In evaluating the site plan for impacts where development encroaches into the Steep Slope Conservation District, the following criteria shall apply:
  - a. Disturbance to especially sensitive features, including the most steeply sloping portions of the site, shall be minimized
  - b. Disturbance to areas shall be minimized, where the length or area of steep slopes on the site and extending 200 feet into adjacent lands is extensive.
  - c. Disturbance shall not cause runoff and/or related problems off the site and onto adjacent properties.
  - d. Disturbance shall be undertaken in such a way to minimize adverse effects on visual qualities of the site, to the maximum extent feasible, including hilltops, ridgelines, rock outcroppings, and the overall natural terrain.
  - e. Disturbance shall be undertaken to minimize disturbance to and removal of natural vegetation at the site; vegetation removal shall be evaluated with particular regard to impacts on slope stability, transpiration and recharge of stormwater, existing drainage patterns, and the overall characteristics of the landscape. Special mitigation such as use of retaining walls to preserve the existing vegetation may be required.
  - f. Innovative building approaches that adapt themselves to sloping terrain should be required, if disturbance to steeply sloping areas is to be permitted.
  - g. Road construction, if it is to be permitted on steeply sloping terrain, should be required to follow the natural topography to the extent feasible.
3. No building permit shall be issued and no grading or site clearing shall occur until a site plan including all of the above items has been reviewed and approved by the municipality.

D. Special Steep Slope Conservation District Requirements

1. All development proposals that propose development in the Steep Slope Conservation Districts shall conform to the following:
  - a. Those lands to be undisturbed and preserved as open space due to the presence of steep slopes may be offered for dedication to the municipality, a private land trust or a non-profit agency in order to preserve and maintain the area in its natural state.
  - b. The use of conservation easements on steep slopes shall be encouraged to preserve the area in perpetuity.

**414.12 Woodland Protection: Preservation and Conservation of Existing Vegetation (For Future Inclusion).**

**414.13 Well Head Protection Zones (For Future Inclusion).**

**414.14 Wetlands Protection Zone.**

A. Wetlands are generally indicated by one or more of the following:

- The National Wetlands Inventory mapping as prepared by the US Fish and Wildlife Service of the Department of the Interior.
- Hydric soils, or soils with hydric inclusions as mapped in the *Soil survey of Chester and Delaware Counties* (USDA-SCSC now NRCS).
- Existence of hydrophytic vegetation, or wetland hydrology.
- Federal/State wetlands are formally defined in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands, January 19, 1989*, as amended. In most cases, Federal/State wetlands jurisdiction is indicated by the presence of hydric soils, hydrophytic vegetation, and wetland hydrology, in combination. Presence of hydric soil by itself does not establish a Federal/State wetland.

B. Applicants are required to determine all State and Federal jurisdictional wetlands present at each development site under review and to apply for and obtain all necessary State and Federal wetlands permits. Wetlands jurisdiction is established in the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands, January 19, 1989*, as amended.

C. Applicants are encouraged to have a qualified wetlands professional examine the site and provide a report regarding the existence of wetlands at the site. If no wetlands are found to exist on the site, a note must appear on the preliminary and final plans indication that "This site has been examined by (name and address with a statement of qualifications also submitted), and no wetlands, as defined by the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands, January 19, 1989*, were found to exist".

D. If applicants do not submit a wetlands report or if the wetlands report is disputed by Penn Township, the Township shall request, at its discretion, that either the US Army Corps of Engineers, US Fish and Wildlife Service, or Pennsylvania Department of Environmental Protection performs a wetlands jurisdictional analysis of the site; if these agencies are not able to provide this service in a timely manner, the Township may hire a qualified wetlands scientist to perform this wetlands mapping, with all costs passed on to the applicant. Lacking any wetlands mapping by the applicant, the Federal and/or State mapping of wetlands or the Township mapping will be designated as the official mapping of wetlands, and the applicant will be required to secure any wetlands permits or waivers pursuant to this mapping, unless the applicant's proposed action in no way impacts these wetlands (i.e., there exists separation distance of a minimum of 100 feet between proposed disturbance of any type and mapped wetlands).

- E. If, as in C. above, wetlands are evaluated by the applicant's consultant but disagreement develops as to the presence of wetlands or to their location, then the Township and/or applicant may either directly petition the US Army Corps of Engineers, US Fish and Wildlife Service, or Pennsylvania Department of Environmental Protection to perform a wetlands jurisdictional analysis, either confirming or modifying the applicant's wetlands mapping, or the Township may hire a qualified wetlands scientist to perform its own wetlands mapping, and the applicant will reimburse the Township for all costs the Township incurs with this mapping. If Federal/State wetlands mapping is undertaken, the Federal/State mapping constitutes responsibilities of the applicant pursuant to the Federal/State wetlands requirements.
- F. Where wetlands have been mapped at the site and the applicant's proposed action impacts these wetlands in some manner, requiring wetlands permits, waivers, and/or other agency actions, final plan approval from the Township shall not be granted until all of these outstanding wetlands actions are satisfactorily resolved and submitted to the Township.
- G. As indicated in other sections of this Ordinance, direct encroachment upon Federal and/or State jurisdictional wetlands, including any sort of filling of wetlands or intrusion into wetlands by some form of land disturbance or development action, should be avoided. Impacts and the mitigations required to offset these impacts are developed in concert with Federal/State agencies and the permits which must be obtained by the applicant.
- H. In Special Protection Waters (Exceptional Value and High Quality) watersheds, as designated by the State of Pennsylvania, applicants should establish a buffer zone extending with a 100-foot radius around all mapped wetlands present at a site. In non-Special Protection Waters, this buffer should be at least 25 feet in width. Within this Wetlands Buffer Zone (WBZ), disturbance of any type, including direct encroachment and location of major development intrusions (structures, parking areas, roadways, grading and vegetative demonstration has been made by applicant that no reasonable alternatives to the encroachment are available.

#### **414.15 Floodplain Protection Zone (For Future Inclusion)**

#### **414.16 Site Planning and Design Procedure for Comprehensive Stormwater Management and the Selection of Stormwater Best Management Practices.**

The optimal Comprehensive Stormwater Management Plan that achieves quantity and quality standards will vary from site to site and with different uses. Such a Plan evolves from an analytical process which defines a "one size fits all" approach to site planning and design. The challenge here is how to legislate good design. Although stormwater plans themselves will be different from site to site and use to use, the process or procedure for figuring out what to use where and under what conditions does have a structure and is set forth in this section of the Ordinance, defined here as the Site Planning and Design Procedure for Comprehensive Stormwater Management. This Procedure must be followed by all applicants.

In order to achieve the goals and objectives of this Ordinance, as set forth above, applicants for subdivision and land development approvals are required to apply the site Planning and Design

Procedure for Comprehensive Stormwater Management. This Procedure is described in Chapter 3 of the Penn Township Stormwater Manual. A Procedure Application Report must be submitted to Penn Township and the Township Engineer for review and approval, as part of the Comprehensive Stormwater Management Plan, defined below, in order to demonstrate that the Procedure has been applied. This Procedure Application Report included written responses and explanation to the listing of questions and issues which have been arrayed in the Procedure checklist Summary in Chapter 3 of the Penn Township Stormwater Manual, and further detailed in the body of that Chapter. Additional technical references and guidance documents also are available at Penn Township and through the Township Engineer.

Selection of a competent and creative design engineer by the applicant is critical if the Site Planning and Design Procedure for Comprehensive Stormwater Management is to be applied successfully and the goals and objectives of this Ordinance are to be achieved. This Ordinance anticipates that additional effort will be spent during the initial phases of the site planning and design process in order to balance both applicant development objectives with the objectives of the Township, as defined in this Ordinance. More time spent up front will translate into reduced environmental and other costs in the long term, as well as potentially reduced construction costs in some cases.

The Township strongly recommends that all applicants for subdivision and land development conduct an informational meeting with the Township Engineer, with Planning Commission and Board invited, to review concepts for site development and potential application of both Non-Structural and Structural Best Management Practices; a site visit/walk also is strongly recommended as part of this meeting.

#### **414.17 Comprehensive Stormwater Management Plan Related to Subdivision or Land Development.**

As part of all applications for preliminary subdivision and land development plans and building permits, except those exempted by this Ordinance, a Comprehensive Stormwater Management Plan must be prepared and submitted by the applicant for review and approval by the Township and the Township Engineer during a 90-day review period. This Comprehensive Stormwater Management Plan shall include the documentation called for in this Ordinance. This Plan shall be submitted to the Chester County Conservation District for its review and approval as well.

- A. The Comprehensive Stormwater Management Plan shall demonstrate that all land disturbance activities related to the subdivision or land development comply with the performance standards set forth in this Ordinance.
- B. The comprehensive Stormwater Management Plan shall contain all of the information required in sections of this Ordinance as specified below. The applicant and/or his engineer shall confer with the Township Engineer prior to the preparation of a Comprehensive Stormwater Management Plan.
- C. The Comprehensive Stormwater Management Plan shall be reviewed by the Township Engineer, who shall submit a report thereon to the Township Planning Commission within 30 days of submission of the Plan.

- D. If in the Township Engineer's view, the Comprehensive Stormwater Management Plan as submitted satisfies all requirements of this Ordinance, he shall recommend its approval to the Planning Commission. That recommendation may be considered by the Planning Commission and Board of Supervisors, together with the results of their own reviews and the comments of any other reviewing body.
- E. The Township may approve the Plan as submitted, approve the Comprehensive Stormwater Management Plan with conditions, or deny the Plan in accordance with the requirements of the Municipalities Planning Code.
- F. As part of any final subdivision or land development plan, the applicant shall submit:
1. All construction specifications for stormwater management facilities as outlined in this Ordinance and as further specified by the Township Engineer;
  2. Proof of liability insurance over the term of the project, if required;
  3. A performance guarantee to assure compliance with the terms of this Section, together with any financial security or other assurance required by other provisions of this Ordinance, and shall include such financial security under this Section at the same time as the applicant provided financial security in compliance with the other requirements of this Ordinance;
  4. All documents necessary to comply with the maintenance requirements of this Ordinance;
  5. Such other information as is deemed necessary by the Township Engineer.
- G. The failure to comply with Comprehensive Stormwater Management Plan requirements and/or requirements of this Ordinance may be considered grounds for denial of subdivision or land development application.

#### **414.18 Comprehensive Stormwater Management Plan Content**

Except as may be modified in accord with other sections of this Ordinance, the Comprehensive Stormwater Management Plan required by this Ordinance shall consist of two parts: (a) a map or maps describing the topography of the area, the proposed alteration to the area, the proposed erosion and sedimentation control measures and facilities, and the proposed permanent stormwater control measures and facilities; and (b) a narrative report describing the project and its compliance with applicable sections of this Ordinance, giving the purpose and the engineering assumptions and calculations for control measures and facilities. The following elements shall be included in the map and narrative portions of the Plan (such mapping may already be prepared as part of the preliminary subdivision or land development plan required by the Township Subdivision and Land Development Ordinance).

- A. A narrative summary of the project, including:
- general description of the project

- general description of accelerated erosion control;
- general description of sedimentation control;
- general description of stormwater management, both during and after construction;
- date project is to begin and expected date final stabilization will be completed.
- specific information concerning applicant's ownership and permanent obligations for the ownership and/or maintenance requirements.
- The existence of an association, or similar entity, created for control and use of any portion of the land described in the application, and its obligations with respect with this Plan.

B. Mapping of various physical features of the project area at an appropriate scale, both existing and proposed, including:

- the location of the project relative to highways, municipal boundaries, and other identifiable landmarks;
- property lines of proposed project area;
- contour lines at vertical intervals of not more than 2 feet for land with average natural slope of 4 percent or less, and at intervals of not more than 5 feet for land with average natural slope exceeding 4 percent (including location and elevation to which contour lines refer);
- acreage or square footage of the project;
- wetlands (both state and Federal jurisdiction), streams, lakes, ponds, or other bodies of water within the subject property or within 50 feet of any boundary of the property; intermittent streams and natural drainage ways also should be shown;
- other significant natural features, including existing drainage swales, tree masses, and areas of trees and shrubs to be protected during construction;
- proposed location of underground utilities, sewer and/or water lines;
- scale of map and north arrow;
- existing roads and easement.

C. Mapping of the soils and underlying geology of the project area, including:

- soil types, including depth, slope, texture, and structure
- Hydrologic Soil Group classifications and soil rated permeabilities in inches per hour
- soil constraints including depth to bedrock, depth to Seasonal High Water Table
- geologic formations underlying the project area and extending 50 feet beyond all property boundaries;
- describe aquifer characteristics of formations; highlight special formations such as limestone.

D. A map of proposed alterations to the project area, including;

- changes to land surface and vegetative cover, including zones of disturbance, zones of non-disturbance;
- areas of cuts;
- areas of fill;
- structures, roads, paved areas, and buildings;



- proposed stormwater control provisions, both non-structural and structural facilities;
  - finished contours at intervals as described above;
- E. Calculations and description of the amount of runoff from the project area and the upstream watershed area, in accordance with the terms of this Ordinance, including:
- method of calculation and figures used (including square footages for impervious surfaces of buildings, driveways, parking areas, etc.);
  - factors considered.
- F. The time schedule for land disturbance activities including:
- cover removal, including all cuts and fills;
  - installation of erosion and sediment control facilities and practices;
  - installation of improvements, including streets, storm sewers, underground utilities, sewer and water lines, buildings, driveways, parking areas, recreational facilities, and other structures;
  - program of operations to convert erosion and sedimentation controls to permanent stormwater management facilities, including a chart of the relative time sequence of activities.
- G. Temporary control measures and facilities for use during land disturbance, in both map and narrative form including:
- purpose;
  - temporary facilities or other soil stabilization measures to protect existing trees and shrubs from land disturbance activities;
  - types, locations, and dimensioned details of erosion and sedimentation control measures and facilities;
  - design considerations and calculations of control measures and facilities;
  - facilities to prevent tracking of mud by construction vehicles onto existing roadways.
- H. The required Comprehensive stormwater Management Procedure Report (the specific elements of this Report are defined in Chapter 3 of the Penn Township Stormwater Manual and include responses to questions set out in the checklist Summary; additional guidance regarding application of the Comprehensive Stormwater Management Procedure is available from the Township Engineer).
- I. Permanent stormwater management program and facilities for site restoration and long-term protection, in both map and narrative form, including:
- purpose and relationship to the objectives of this Ordinance;
  - establishment of permanent vegetation or other soil stabilization measures;
  - installation of infiltration facilities, roof-top storage, cisterns, seepage pits, French drains, etc., to serve individual buildings;
  - use of semi-pervious materials for driveways, parking areas, etc.;

- types, locations, and dimensioned details of facilities for stormwater detention and conveyance and for groundwater recharge;
  - design considerations and calculations supporting the stormwater management program;
  - location of drainage easements;
  - ownership of facilities and the method by which the owner and/or association shall provide permanent financial security for the maintenance and/or replacement of these facilities.
- J. An Inspection Plan Report shall be prepared as part of the Plan, including both During Construction and Post Construction parts. The objective of the Inspection Plan Report is to make sure that the proposed development, including all proposed stormwater BMPs, has been constructed in accordance with the approved development plan, and secondly, that this approved development plan with all stormwater management elements is functioning adequately. Proper During Construction inspection actions should be based on recommended inspection procedures for stormwater management BMPs set forth in PADEP's *Pennsylvania Stormwater Best Management Practices Manual (December 2006)*. The Township Engineer, who must review and approve the Plan and this Inspection Plan Report component, may require that he/she participate in some/all aspects of this inspection process. After one full year of operation and/or project completion, applicant and/or applicant's agent must complete a Post Construction inspection, determining if the completed project and all installed stormwater management BMPs are functioning adequately. This Inspection Plan Report shall be submitted by the applicant/applicant's agent to the Township Board of supervisors, copied to the Township Engineer (the Post Construction element shall be submitted approximately 1 year after project completion). The owner of the land shall reimburse the Township for all costs incurred in this process.
- K. A narrative description of the maintenance procedures for both temporary and permanent control facilities, and of ownership arrangements, including:
- the methods and frequency of removing and disposing of sedimentation and other materials collected in control facilities, both during and upon completion of the project;
  - the methods and frequency of maintaining all other control facilities, as necessary;
  - the proposed ownership and financial responsibility for maintenance of the permanent control facilities, including drainage and other easements, deed restrictions, and other legally binding provisions.
  - The estimated costs for the maintenance and replacement of the Plan, and type of financial security the owner will provide to assure continued operation of said Plan.

The approval of any plan required herein shall include a condition containing the approved Maintenance Plan.

- L. The Township Engineer shall review and approve proof of liability insurance and other ameliorative measures as deemed necessary.

#### **414.19 Maintenance Responsibilities**

##### **A. General Responsibilities**

The owner of stormwater management facilities shall be responsible for their proper maintenance during and after development, as identified in the terms and conditions for preliminary and/or final approval by the Township. A Maintenance Plan shall be prepared for review and approval by the Township Engineer and shall be executed and signed by the Township Engineer and applicant. Where appropriate, as described below, this Maintenance Plan also must be signed by the Homeowners Association. The financial and maintenance Responsibilities must be included as deed restrictions on individual lots, and every deed of conveyance of any lot shall include an express reference to the obligations described in the Plan. During all subsequent real estate transactions, maintenance responsibilities shall be pointed out to new owners. All deeds shall incorporate these specified maintenance responsibilities, making explicit individual owners responsibilities for stormwater management measures and for the common property.

On or before completion of subdivision or land development improvements, and as a condition for the issuance of occupancy permits, the permanent stormwater management system for a parcel shall be fully installed and functional in accordance with the approved Comprehensive Stormwater Management Plan. Temporary sediment trapping facilities in detention basins, upon inspection and approval by the Township Engineer shall be converted into permanent stormwater management basins; additional facilities designed to serve more than an individual lot shall begin operation. All such work shall be as specified in the approved Plan.

#### B. Homeowners Association Ownership (Other than On-Lot Stormwater Facilities)

A single entity taking the form of a private corporation, partnership firm, estate or other legal entity empowered to own real estate exclusive of individual lot owners (i.e., Homeowners Association) shall be set up to manage stormwater management facilities that are suitable for such management, and perform other functions defined in this Ordinance. Responsibilities for ownership and management of facilities shall be defined in the Comprehensive Stormwater Management Plan. Every entity's bylaw and controlling documents shall include specific and express references and disclosure concerning the obligations to the Association to assure permanent compliance with the provision of this Plan. Should an Association fail to satisfy the requirements of the Plan, the lot owners shall be jointly and/or severally responsible for the satisfaction of the requirements of the Plan.

The Association shall provide, as part of its annual budget, an item for the payment for an annual maintenance bond to assure satisfaction of the terms of the Plan. The Association must provide a written report to the Township no later than January 15, each year demonstrating compliance with this provision.

#### C. Individual Lot Stormwater Facilities

1. Stormwater management facilities and systems that are located on an individual lot are the responsibility of that landowner to maintain. As with non-individual lot situations, a Comprehensive Stormwater Management Plan must be prepared, including a Maintenance Plan which shall include:

- a. Any obligations concerning perpetuation of natural drainage or infiltration facilities, and/or the maintenance of facilities constructed by the individual lot owner under terms of his building permit (e.g., berms, cisterns, downspout connections, seepage pits, etc.)
- b. Assurances that no action will be taken by the occupant to disrupt or in any way impair the effectiveness of any stormwater management system.
- c. A description of the facilities and systems on the lot, as called for above, setting forth in deed restrictions binding on the landowner's successors in interest.

#### D. Municipal Ownership

Ownership of facilities shall remain with the owner and/or association unless the Township expressly agrees to accept the facilities. The Township has no obligation to accept any or all of the facilities at any time and/or under conditions. The Township may consider acceptance only in the event the owner and/or association demonstrate, as determined solely at Township's discretion, compliance with the provisions of this Section. Before the Township will consider acceptance of an offer of public dedication, the applicant shall submit a Comprehensive Stormwater Management Plan including a Maintenance Plan component, as defined above. Upon approval of the stormwater management facilities by the Township, the applicant shall provide financial security, in a form and amount approved by the Township Solicitor for maintenance and/or replacement guarantees, as follows:

1. Long-term Maintenance Bond- The long-term maintenance bond shall be in any amount equal to the present worth of maintenance of the facilities for a ten year period, as determined by a reasonable estimate by the Township Engineer.
2. Documentation – The terms of the maintenance guarantees shall be documented as part of the Comprehensive Stormwater Management Plan and the Maintenance Plan subpart.

- E Failure of any person, individual lot owner or private entity to properly maintain any stormwater management facility shall be construed to be a violation of this Ordinance and is declared to be a public nuisance.

### 414.20 PROHIBITIONS

#### A. Prohibited Discharges

1. No person in the Municipality shall allow, or cause to allow, stormwater discharges into the Municipality's separate storm sewer system which are not composed entirely of stormwater, except 1) as provided in subsection B below, and 2) discharges allowed under a state or federal permit.
2. Discharges that may be allowed, based on a finding by the Municipality that the discharge(s) do not significantly contribute to pollution to surface water of the Commonwealth, are:

- a. Discharges from fire fighting activities;
- b. Potable water sources including dechlorinated water line and fire hydrant flushing;
- c. Irrigation drainage;
- d. Routine external building washdown (which does not use detergents or other compounds);
- e. Air conditioning condensate;
- f. Water from individual residential car washing;
- g. Spring water from crawl space pumps;
- h. Uncontaminated water from foundation or from footing drains;
- i. Flows from riparian habitats and wetlands;
- j. Lawn watering;
- k. Pavement washwaters where spills or leaks of toxic or hazardous material have not occurred (unless all spill material has been removed) and where detergents are not used;
- l. Dechlorinated swimming pool discharges; and
- m. Uncontaminated groundwater.

3. In the event that the Municipality determines that any of the discharges identified in Section 414.27.A.2. significantly contribute to pollution of waters of the Commonwealth, or is so notified by the DEP, the Municipality will notify the responsible person to cease discharge.

4. Upon notice provided by the Municipality under Section 414.25, the discharger will have a reasonable time, as determined by the Municipality, to cease and/or change the discharge, as directed by the Municipality to achieve the purposes of this Ordinance.

5. Nothing in this section shall affect a discharger's responsibility under state law.

#### B. Prohibited Connections

1. The following connections and conveyances are prohibited, except as provided in Section 414.27.A.2.

- a. Any drain or conveyance, whether on the surface or subsurface, which allows any non-stormwater discharge including sewage, process wastewater, and/or wash water to enter

the separate storm sewer system, and any connections of indoor drains and sinks to the separate storm sewer system; and

- b. Any drain or conveyance from a commercial or industrial land use to the separate storm sewer system which connection or conveyance has not been documented clearly in plans, maps, or equivalent Township records, and approved in writing by the Municipality.

#### C. Roof Drains

1. Roof drains shall not be connected to sanitary or storm sewers or used to convey stormwater to streets or roadside ditches, except to the extent that the Municipality determines that such connection or conveyance is the only practical method to manage the stormwater in question.
2. Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

#### D. Alteration of BMPs and Drainage Easements

1. No person shall modify, remove, fill, landscape, or alter any existing stormwater BMP, without the Municipality's prior written approval, unless such action is part of an approved maintenance program.
2. No person, without the Municipality's prior written approval, shall place any structure, fill, landscaping, vegetation or waste material into or onto a BMP or within a drainage easement, to the extent that such placement would limit or alter the functioning of the BMP.

### **414.21 Need For Corrective Measures**

If the Township determines at any time that stipulated permanent stormwater management facilities have been eliminated, altered, or improperly maintained, the owner shall be advised of corrective measures required within a period of time set by the Township Engineer. If such measures are not taken by the owner, the Township may cause the work to be done and lien all costs against the property.

### **414.22 Inspections of Land Disturbances Related to Subdivision or Land Development**

All land disturbance work shall be performed in accordance with an inspection and construction control schedule (the Inspection Plan Report, as defined above), approved by the Township Engineer as part of the Comprehensive Stormwater Management Plan. The Township Engineer should be consulted for guidance regarding the timing and other details of necessary inspections. No work shall proceed to a subsequent phase, including the issuance of the Certificate of Occupancy, until inspected and approved by the Township Engineer or his designee. Township Engineer approval of the During Construction element must be acquired before a proposed development project is issued a building permit and able to proceed to construction. Township Engineer approval of the Post Construction element must be acquired before required performance guarantees are released to the applicant.

#### **414.23 Fees associated with Submissions and Inspections**

All fees required under this Ordinance shall be adopted by resolution by the Board of Supervisors, and paid by the applicant and owner prior to approval of any plans.

#### **414.24 Comprehensive Stormwater Management Plan Approval Fees**

##### **A. Land Disturbance Related to Subdivision or Land Development.**

All fees and escrow deposits incident to approval of a Comprehensive Stormwater Management Plan and conduct of the work approved thereunder, where the land disturbance activities are to be undertaken as part of a subdivision or land development, shall be established and submitted in accordance with the Township subdivision and Land Development Ordinance, and the developers' agreement, which the applicant and owner must sign at the time of the submission of any plans.

##### **B. Other Land Disturbance Activities.**

1. All parties submitting a Comprehensive stormwater Management Plan for land disturbances not related to Subdivision and Land Development shall agree, in writing, to reimburse the Township for all costs of administration and review of the Plan by the Township staff, Engineer, Solicitor, and/or professional consultants retained by the Township. The applicant shall provide an escrow fund, deposited with the Township secretary in an amount as specified by resolution of the Board of Supervisors. The Township may require periodic payments to assure prompt payments to such professional consultants during the review of any plans.
2. The Township will use this escrow fund only for the reasonable payment of the professional consultants it retains for the review of these plans, and a reasonable administrative fee. The unexpended balance of the deposit shall be returned to the applicant following approval of the Plan.
3. If the payment for these fees and costs exceed the then balance of the applicant's escrow account, the applicant and owner will deposit such additional funds to pay such fees and costs together with an amount the Township determines reasonably necessary, by resolution to assure the continued payment of such fees and costs, until the review of all plans are complete. Such required additional amounts must be deposited with the Township secretary prior to approval of the Plan.

#### **414.25 Performance Guarantees**

Where proposed land disturbance activities are related to a subdivision or land development, the applicant shall be subject to the requirements for a performance guarantee that are specified in the Township subdivision and Land Development Ordinance. A long-term maintenance bond and other requirements are imposed if the Township accepts an offer for public dedication of stormwater management facilities, in the amount the Township determines necessary under the terms of this Ordinance.

#### **414.26 Notification of Non-Compliance with Comprehensive Stormwater Management Plan.**

Any activity conducted pursuant to a Comprehensive Stormwater Management Plan approved by Township shall be performed in strict compliance with the provisions of the Plan. Violations shall be treated in the following manner:

A. Any non-compliance with the provisions of the Plan that is identified by the Township Engineer or his designee in the course of inspections as specified in this Ordinance shall be remedied by the applicant/owner according to the terms in this Ordinance.

B. If at any time work does not conform to the Plan, including all conditions and specifications and modifications thereof, a written notice to comply shall be given to the applicant/owner. Such notice shall set forth the nature of corrections required and the time within which corrections shall be made. Upon failure to comply within the time specified, the applicant/owner shall be considered in violation of this Ordinance, and the Township shall issue a cease and desist order on all work on the site, including any building or other construction, until corrections are made. If corrections are not undertaken within a specified time or the applicant/owner violates the cease and desist order: (1) penalties shall be imposed and/or (2) the work shall be completed by the Township and the costs charged to the applicant/owner.

#### **414.27 Penalties**

The penalties for violation of any of these sections shall be controlled by section 709 of the Penn Township Subdivision and Land Development Ordinance.

#### **414.28 Creation of a Penn Township Stormwater Manual.**

The Board of Supervisors hereby authorizes the Township Engineer to create a Stormwater Manual which will include various protocols and procedures for compliance with this Ordinance. This manual shall be used as a reference source to assist an applicant with the compliance procedures required in Section 414. The terms of the manual may be adopted and amended from time to time by resolution at a public meeting. A copy of the first proposed manual is available for inspection at the Township Building.

**Section 415**

**Section Deleted**



**Section 416                      Section Deleted**

**Section 417                      Streets**

**417.1.              Purpose**

The following standards shall apply to all new and existing public and private streets in the Township in order to:

- A. Provide adequate accessibility within the Township,
- B. Ensure safe conditions for vehicular and non-vehicular traffic, and
- C. Create consistent standards for streets which reflect the rural character of the Township.

**417.2.              Standards**

**A. Paving Standards**

**1. General Standards**

- a. All street construction and paving must conform to the applicable specifications contained herein including the applicable requirements of the Pennsylvania Department of Transportation Specifications, Publication 408 including latest revisions. All street construction shall be approved by the Township Engineer prior to acceptance by the Board of Supervisors. All design standards shall conform to the requirements established by this Ordinance and shall be subject to the approval of the Township Engineer.
- b. Where the construction of the new bituminous surface abuts existing bituminous surfaces, the existing bituminous surface shall be removed to form a six (6) inch wide paving notch outside of and parallel to, the new surface. The new surface shall be paved continuous into the key. A six (6) inch wide bond key shall also be placed around all inlets.
- c. All Township streets shall have a crown of one-quarter (1/4) inch per foot sloping away from the centerline.
- d. Manholes, inlet grates, valve covers and other utility fixtures shall be designed in accordance with PennDOT standards and, when installed within the vehicular or pedestrian travelway, no element will extend above the height of the finished and/or compacted travel surface.
- e. All backfill utilized within the roadway or shoulder shall be Township approved aggregate.

- f. Seamless paving shall be provided, where possible, at the direction of the Township Engineer and the Board of Supervisors.
  - g. Roadways dedicated to the Township must provide a stub, with easement rights, to any adjoining parcel.
  - h. The Township reserves the right to require a roadway width exceeding the minimum on approaches to intersections.
  - i. Speed humps, designed and constructed in accordance with all applicable PennDOT standards, shall be provided at the direction of the Board of Supervisors.
2. Sub-Grade: Wherever possible the subgrade shall be cut, or undisturbed subsoil. In no case shall the subgrade consist of filled or undisturbed topsoil or frozen soils. All deleterious material such as tree roots, leaves, branches, trash, stones exceeding six (6) inches in diameter and miscellaneous construction debris shall be removed from the subgrade. Compaction shall be compacted tight and dry in accordance with the applicable requirements of the PennDOT Publication 408. Compaction of the subgrade shall extend the full width of the cartway, including the width to be occupied by shoulders where applicable. Unstable areas shall be removed and replaced with suitable fill and then re-rolled as required to provide a uniform even surface. If in the opinion of the Township Engineer, based upon Soil Conditions, a Geotechnical Study, including Soil Borings may be required. The required road crown shall be built into the shaped subgrade.
  3. Geotextile: PennDOT approved separation/stabilization geotextile shall be installed on the finished subgrade prior to Sub-Base installation. The fabric should be rolled out in the direction of construction traffic and not dragged across the Sub-Grade. A minimum overlap of 1.5 feet should be provided; however increased overlaps may be required based on Sub-Grade conditions.
  4. Sub-base: The sub-base shall be as specified in 417.3. The sub-base shall be compacted to a firm and unyielding surface by rolling the entire area with a minimum of a ten (10) – twelve (12) ton vibratory roller. Prior to continuing to the next course, the sub-base shall be checked by the Township Engineer for grade, crown, and contour. Proper compaction will be determined by the Engineer based on non-movement of the material under the specified compaction equipment.
  5. Bituminous Concrete Base Course/Binder Course: The bituminous concrete base shall be installed as specified in 417.3. The bituminous concrete base shall be installed as specified in 417.3. The bituminous base course shall be placed in accordance with the applicable requirements of the PennDOT Publication 408.
  6. Wearing Course: After proper cleaning, repairing and preparation of the Binder Course, the base course shall be primed with a tack coat consisting of materials meeting the specifications of the PennDOT Publication 408. The material and

compacted depth shall be as specified in 417.2.3. The wearing course shall then be mixed, delivered, placed and protected in accordance with the applicable requirements of the PennDOT Publication 408.

7. Joint Seal: After application of the wearing course, all curb, inlet, manhole, utility boxes, etc., joints shall be sealed in accordance with PennDOT Publication 408. Joint seal material shall be fiber injected.

#### B. Curbs, sidewalks and Shoulders

1. Curbs shall be concrete. Concrete curbs and sidewalks shall be provided along all streets. Specific type of curb (rolled or vertical) subject to the approval of the Board of Supervisors. Concrete curb and sidewalks shall be constructed in accordance with PennDOT Publication 408.
2. Areas adjacent to roadways with rolled curbs shall be graded with a slope of  $\frac{1}{4}$  inches per foot toward the curbline, so that runoff within the right-of-way is directed to the curbline.
3. Curbed entrance islands are prohibited.
4. Stabilized shoulders, including compacted subgrade and approved geo-grid stabilization shall be provided adjacent to Collector and Minor streets.
5. ADA accessible ramps shall be provided as appropriate at all locations sidewalks or other pedestrian facilities cross streets and/or driveways.
6. Sidewalks shall be concrete, a minimum of four (4) feet wide and sloped toward the street at  $\frac{1}{4}$  inches per foot.
7. Sidewalks shall be provided on both sides of streets, except that sidewalks shall be required on only one side of the street if only one side of the street is developed.
8. All concrete sidewalks shall be constructed on a four (4) inch crushed stone or gravel base to ensure proper drainage.
9. The concrete shall be placed so that there is a tooled separation joint every five (5) feet. One-half ( $\frac{1}{2}$ ) inch pre-molded joint fillers shall be placed where the concrete sidewalk abuts a concrete curb and between every fifth sidewalk panel.
10. All concrete sidewalks shall have a minimum thickness of four (4) inches except at driveways where they shall have a minimum thickness of six (6) inches for residential uses or eight (8) inches for commercial or industrial uses. The concrete apron in the driveway area shall be reinforced with welded wire mesh six (6) inches by six (6) inches, No. 9 wire (minimum). Two layers of this mesh shall be utilized with a minimum of two (2) inch spacing between layers. The wire shall be installed

so that it is not closer than one (1) inch from the top or bottom surfaces of the driveway apron.

C. Storm Drainage Facilities

1. Drainage facilities in, along and across roadways shall be designed in accordance with PennDOT Design Manual Part 2 and shall meet the following minimum criteria:
  - a. Storm water piping and inlet systems shall be designed for a storm of twenty-five (25) year frequency;
  - b. Culverts across roadways for a storm of fifty (50) year frequency;
  - c. Surface water control measures and open water courses and swales as well as drainage systems servicing low points of roadways shall be designed for a storm of one hundred (100) year frequency.
2. Pavement basin drains shall be installed in all roadways and shall be designed in accordance with PennDOT Publication 408.

D. Utilities

1. Except as otherwise approved by the Board of Supervisors:
  - a. Utilities shall be placed underground.
  - b. Underground utilities shall be placed outside the paved limits of the street, within an area adjacent to the street not to exceed eight (8) feet from the back of curb, with the exception of storm sewer. Sanitary sewer to be placed outside the paved limits of the street at the discretion of the Board of Supervisors. Gas and water must be placed outside the paved limits of the street.
2. Any utility conduit located within the roadway or shoulder must be buried at a minimum of eighteen (18) inches below the pavement.
3. Sanitary sewer manholes must be designed to include liner hats to prevent the infiltration of stormwater into the sanitary sewer system.
4. All roadway repair associated with the installation of or modification to existing utilities shall comply with all sections of this Ordinance, including but not limited to the following:
  - a. The entire roadway shall be overlayed to Township standards within the limits of work.
  - b. Utility trenching must provide a key cut to match existing pavement in accordance with Township details.

- c. All backfill within the roadway shall be Township approved aggregate.
- d. Disturbed areas adjacent to the roadway shall be restored to pre-work conditions and to the satisfaction of the Township Engineer and Board of Supervisors.

E. Signs

- 1. All proposed street signage shall be approved by the Board of Supervisors.
- 2. Street signs shall meet all PennDOT specifications. All signs shall be ADA and Emergency Services approved.
- 3. Stop signs and painted stop bars are required at all roadway intersections.
- 4. Speed limit and No Parking signs are required throughout all developments.
  - a. Speed limit signs shall be installed within one-hundred (100) feet of each intersection with no more than one half (1/2) mile in between each.
  - b. Where parking is restricted, no parking signs shall be placed before and after each intersection and at intervals of no less than two-hundred (200) feet.
  - c. Location and placement of all proposed signage shall be approved by the Board of Supervisors.

F. Landscaping:

- 1. Street trees shall be provided in accordance with Section 1602 of the Penn Township Zoning Ordinance.
- 2. No street trees will be installed within:
  - a. Fifteen (15) feet of the back of curb in areas where utilities are underground:  
or
  - b. Twenty (20) feet in the back of curb where overhead utilities are present.
- 3. Street trees permitted closer to the back of the ultimate right-of-way will need to be demonstrated as varieties that will not negatively impact utilities, either underground or overhead, and be accompanied by a maintenance bond for trimming and/or replacement.

G. Street Widths

- 1. Minimum street right-of-way and cartway (pavement) widths shall be designed in accordance with 417.3.
- 2. Additional right-of-way and cartway widths may be required by the Township for the purpose of promoting public safety and convenience.

### 417.3 Roadway Design Criteria

#### A.

General	Arterial	Collector	Minor
Right-of-way	100'	80'	60'
Design Speed	50 mph	40 mph	30 mph
Speed Limit	45 mph	35 mph	25 mph
Minimum Paved Width	52'	32'	28'
Lane Widths	12'	16'	NA
Center Turn Lane	12'	NA	NA
Paved Shoulder	8'	NA	NA
Stabilized Shoulder	NA	6'	6'
Longitudinal Markings	Center and Edge	Center	None
Clear Zone 1	20'	14'	10'
Minimum Pavement Requirements 2			
Wearing – Superpave 9.5 mm	1.5"	1.5"	1.5"
Binder – Superpave 19 mm	2"	2"	2"
Base – Superpave 25 mm	5"	5"	5"
Subbase – 2A Stone	10"	8"	6"

1. Measured from edge of travel lane
2. The Township Engineer may require a formal pavement design completed in accordance with PennDOT Standards

#### B. Roadways within the Township are designed as follows:

1. Arterial: Route 796 (south of US Route 1).
2. Collector : Route 796 (north of US Route 1), Baltimore Pike, Route 896, State Road, Ewing Road, Tice Road, Corby Road, Kelton Road.
3. Minor: All other public and private roads.
4. Route 896 – As directed by the Board of Supervisors and consistent with the Route 896 Corridor Plan, improvements to Route 896 may be designed to provide 11 foot travel lanes with 4 foot paved shoulders, subject to PennDOT approval.

### 417.4. Restriction of Access

- A. Whenever a subdivision or land development abuts or contains an arterial or collector street according to the Comprehensive Plan, the Township shall restrict access to the arterial street by:

1. Provision of reverse frontage lots, or
2. Provision of service streets along the rear of the abutting lots, together with prohibition of private driveways intersecting the arterial or collector street, or
3. Provision of marginal access streets, provided that the reserve strips establishing such marginal access streets shall be placed within the jurisdiction of the Township under an agreement meeting the approval of the Township, or
4. Provision of a system of minor streets which would intersect the arterial or collector street and on which lots would front.

B. Except as specified by Section 417.4A.3., reserve strips shall be prohibited.

#### **417.5. Street Grades**

- A. There shall be a minimum centerline grade of one (1) percent.
- B. Centerline grades shall not exceed the following:
  1. Minor Street: eight (8) percent
  2. Collector Street: five (5) percent
  3. Arterial Street: five (5) percent
  4. Street Intersection: five (5) percent

#### **417.6 Horizontal Curves**

- A. Whenever street lines are deflected in excess of five (5) degrees, connection shall be made by horizontal curves.
- B. Minimum centerline radii for horizontal curves shall be as follows:
  1. Minor Streets: 150 feet
  2. Collector Streets: 300 feet
  3. Arterial Streets: 500 feet
- C. A straight section of road of at least one hundred (100) feet shall be introduced between all horizontal curves on collector streets and a straight section of road of at least two hundred (200) feet shall be introduced between horizontal curves on arterial streets.
- D. Contributions of the minimum radius and maximum grade shall not be permitted.

#### **417.7 Vertical Curves**

At all changes in street grades where the algebraic difference in grade exceeds one (1) percent, vertical curves shall be provided to permit the following minimum sight distances:

- A. Minor Streets: 200 feet
- B. Collector Streets: 300 feet
- C. Arterial Streets: 400 feet

#### **417.8 Intersections.**

- A. Streets shall intersect as nearly as possible at a ninety (90) degree angle and no street shall intersect another at an angle of less than seventy (70) degrees, nor more than one hundred ten (110) degrees. The angle of intersection with arterial streets shall not be less than eighty (80) degrees, nor more than one hundred (100) degrees.
- B. No more than two (2) streets shall intersect at the same point.
- C. Two opposing streets shall intersect the perpendicular street directly opposite to each other. If two opposing streets do not intersection directly opposite to each other they shall be separated according to the following (see figure 1):
  - 1. Along Collector roads, streets shall be separated according to the following:
    - a. Between two (2) minor streets, which may include marginal access or cul-de-sac streets, or between a minor street and a collector street, there shall be at least four hundred fifty (450) feet between centerlines, measured along the centerline of the street being intersected.
    - b. Between two (2) collector streets there shall be a minimum distance of one thousand five hundred (1500) feet.
  - 2. Along minor streets, streets shall be separated by a minimum of four hundred (400) feet.



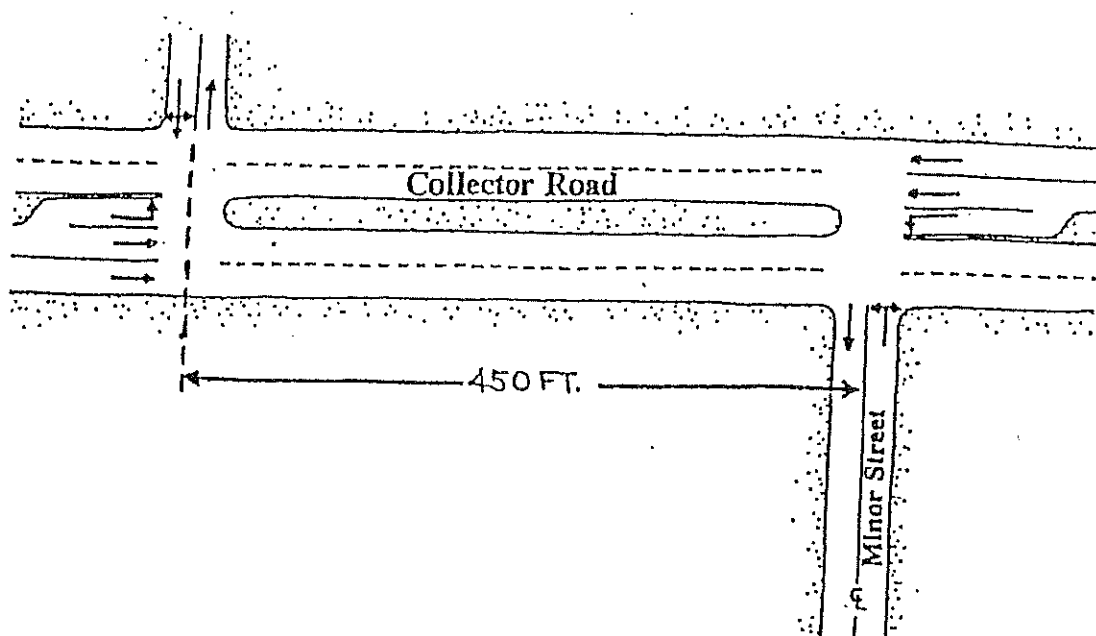


FIGURE 1 Intersection Spacing

- D. Intersections shall be approached on all sides by a straight leveling area, the grade of which shall not exceed five (5) percent within fifty (50) feet of the intersection of the nearest right-of-way lines.
- E. Intersections with arterial streets shall be located not less than two thousand (2000) feet apart, measured from centerline to centerline along the centerline of the arterial streets.
- F. Street curb intersections shall be rounded by a tangential arc with a minimum radius of:
  - 1. Twenty (20) feet for intersections involving only minor streets;
  - 2. Thirty (30) feet for all intersections involving a collector street;
  - 3. Forty (40) feet for all intersections involving an arterial street.
- G. Street right-of-way lines shall be parallel to (concentric with) curb arcs at intersections.

#### 417.9 Sight Distances at Intersections.

- A. Clear sight triangles and a clear sight distance shall be provided at all street intersections and shall be drawn on the Preliminary Plan.
  - 1. Clear sight triangles shall be established according to the following (see figure 2):

- a. Seventy-five (75) feet from the point of intersection of the centerlines except that clear sight triangles of one hundred fifty (150) feet shall be provided for all intersections with arterial streets.
- b. Whenever a portion of the line of such clear sight triangles occurs behind the required building setback line, such portion shall be considered a building setback line.
- c. Within such triangles no vision obstructing object shall be permitted which obscures vision above the height of thirty (30) inches and below the height of ten (10) feet, measured from the centerline grade of the intersecting streets.

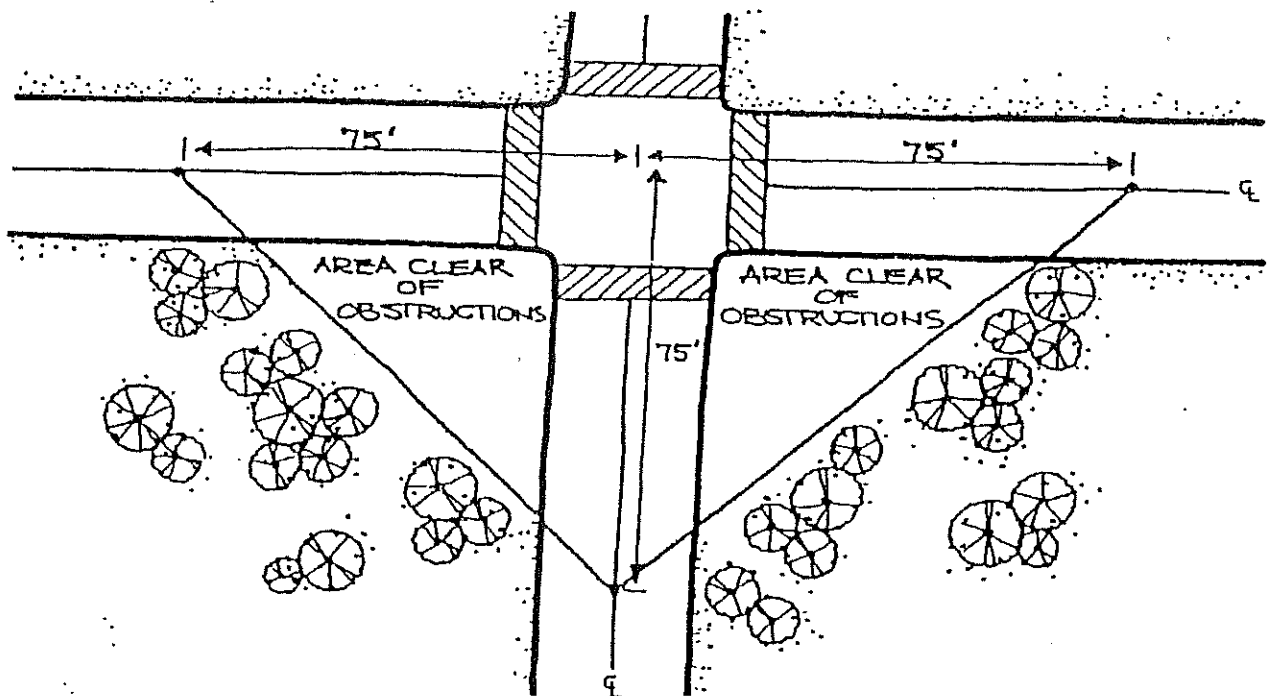


FIGURE 2 Clear Sight Triangle

2. Clear sight distance shall be established according to the following (see figure 3):
  - a. Clear sight distance shall be measured for the proposed access from a point fifteen (15) feet from the edge of the intersecting street line and thirty (30) inches above the pavement surface to a point no less than six (6) inches above the pavement surface at the centerline of the approaching lane of traffic.
  - b. All proposed accessways shall have a minimum sight distance based on the speed of traffic for the street being intersected according to the following:

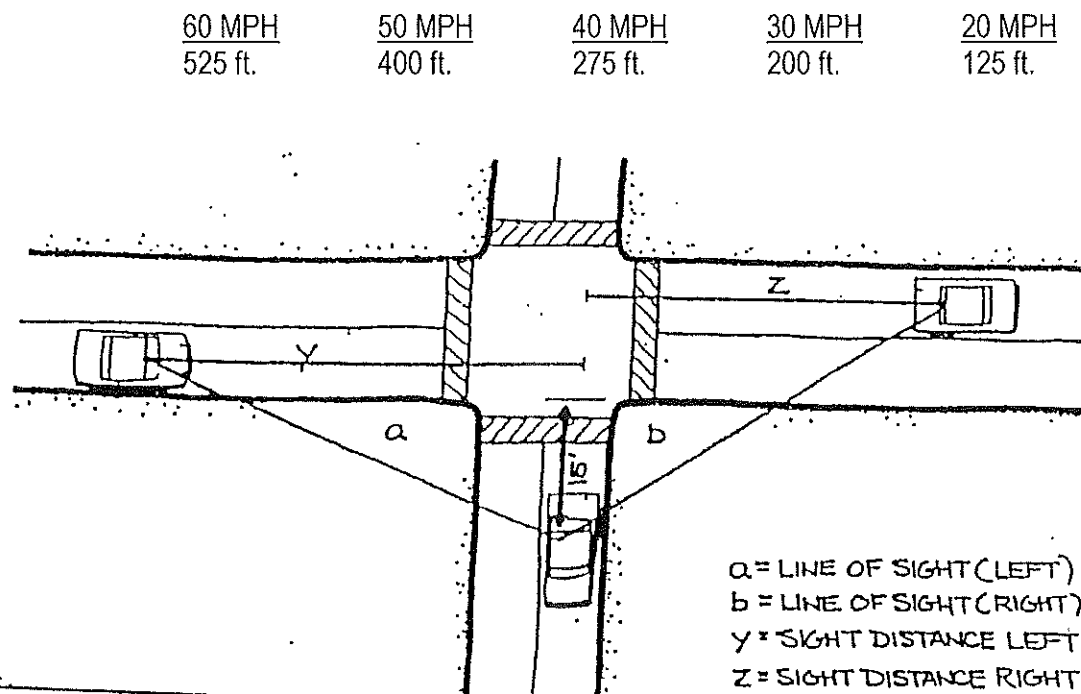


Figure 3 Clear Sight Distance

#### 417.10 Cul-de-Sac Streets

Cul-de-sac streets shall not be allowed within the Township.

#### 417.11 Street Names and Signs

- A. Proposed streets which in alignment with others already exist and named shall bear the names of existing streets.
- B. In no case shall the name of a proposed street duplicate an existing street name in the Township and the postal district, irrespective of the use of the suffix street, road, avenue, boulevard, driveway, place, court, lane, etc.
- C. All street names shall be subject to the approval of the Township, the postmaster, and the 911 Emergency Coordinator having jurisdiction.
- D. Street name signs shall be installed at all street intersections. The design and placement of such signs shall be subject to approval of the Township. The signs shall be visible from all directions of approach to an intersection. Generally, they shall be parallel to the street identified. The signs shall be of rustproof material or shall be adequately protected against corrosion and shall be of a type and size with mounting and supports as specified by the Township.

#### **417.12 Service Streets (Alleys).**

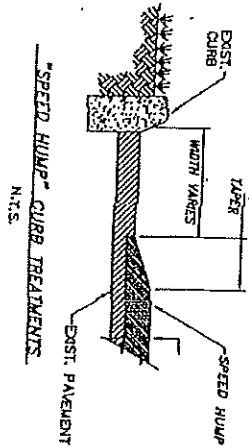
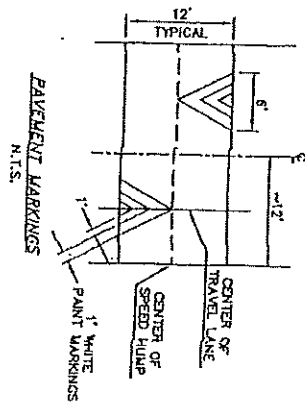
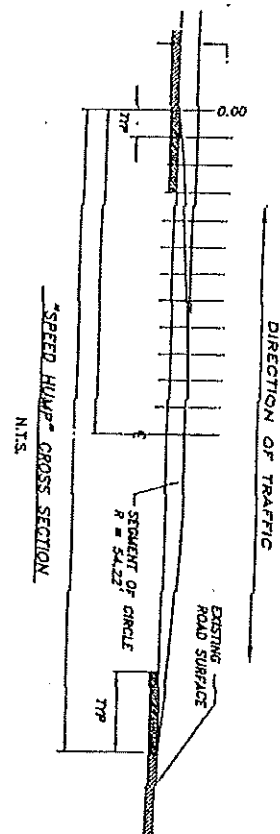
- A. Where permitted, service streets in residential developments shall have a minimum paved width of twenty (20) feet except that where service streets serve dwelling on only one (1) side and the service streets will be one (1) way, the Township may permit a paved surface of not less than twelve(12) feet.
- B. Dead-end service streets shall be prohibited, but where this proves impossible, Dead-end service streets shall be terminated with a paved circular turnaround with A minimum radius to the outer pavement edge (curb line) of fifty (50) feet.
- C. Sharp changes in alignment of service streets shall be avoided. Design of service streets which will encourage their use for through traffic (i.e. intersecting service streets) shall also be avoided.

#### **417.3 Intentionally left blank**

**417.4** Where a subdivision or land development abuts an existing Township and/or state street or road, the developer shall make the following improvements.

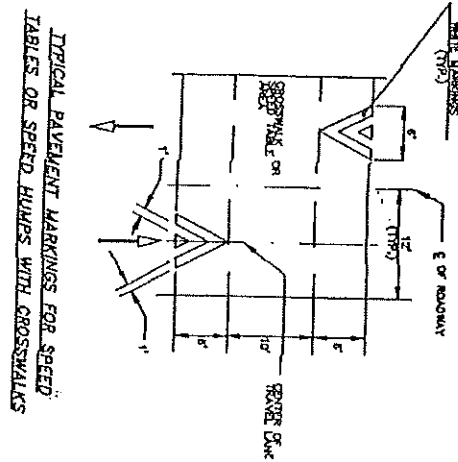
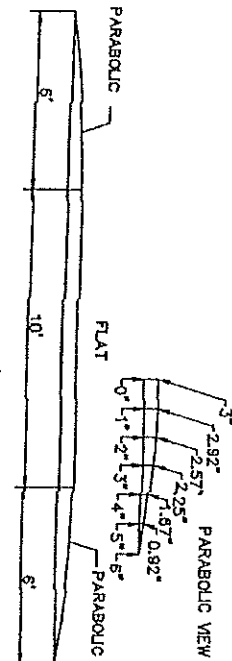
- 1. The existing street or road shall be improved to the cartway width established for new streets. Improvements shall include, but not be limited to, the installation of curb if required, widening and paving of the cartway, grading of shoulders and installing stormwater management facilities in accordance with the applicable sections of this Ordinance. Notwithstanding the foregoing, State streets or roads shall be improved in accordance with the requirements of the Pennsylvania Department of Transportation (PennDot) and any conditions imposed upon the granting of Highway Occupancy Permit by PennDot.
- 2. In case where the subdivision or land development is situated on one side of an existing street, the Board of Supervisors may, at their discretion, require that one or both sides of the street or road be improved.

**Section 418. Deleted**



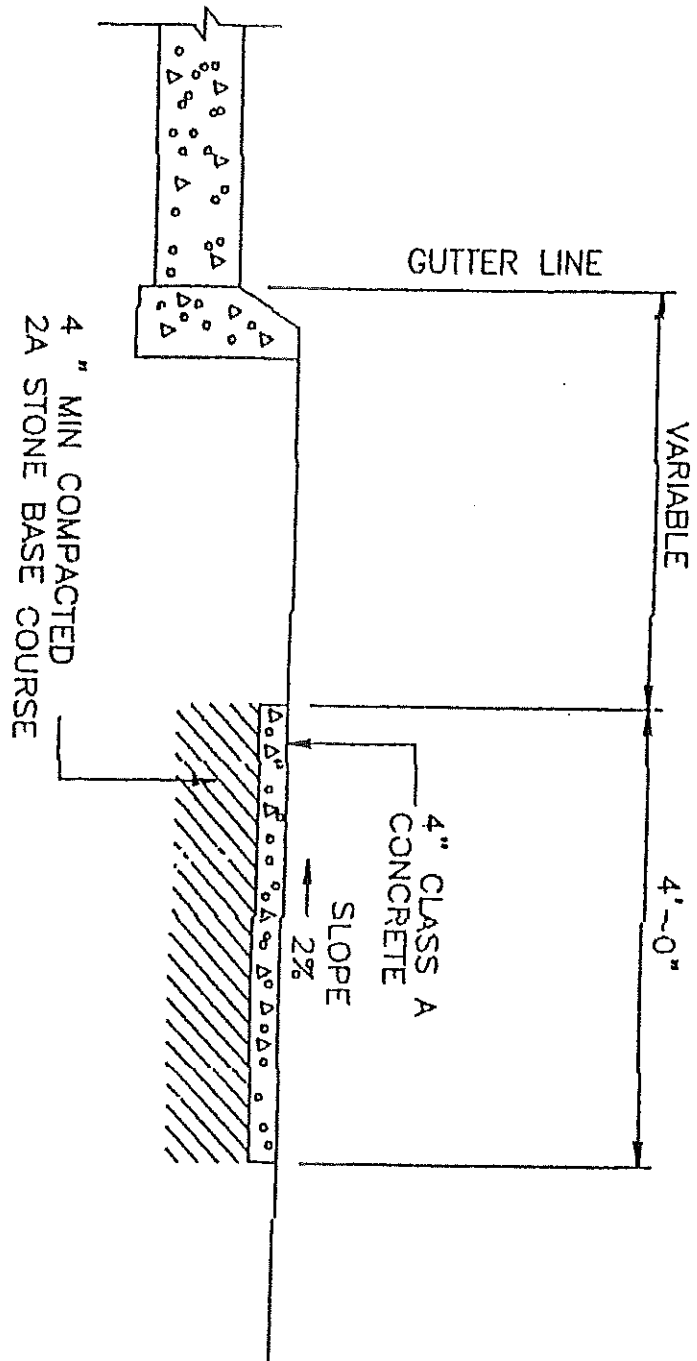
### SPEED HUMPS DETAIL

N.T.S.



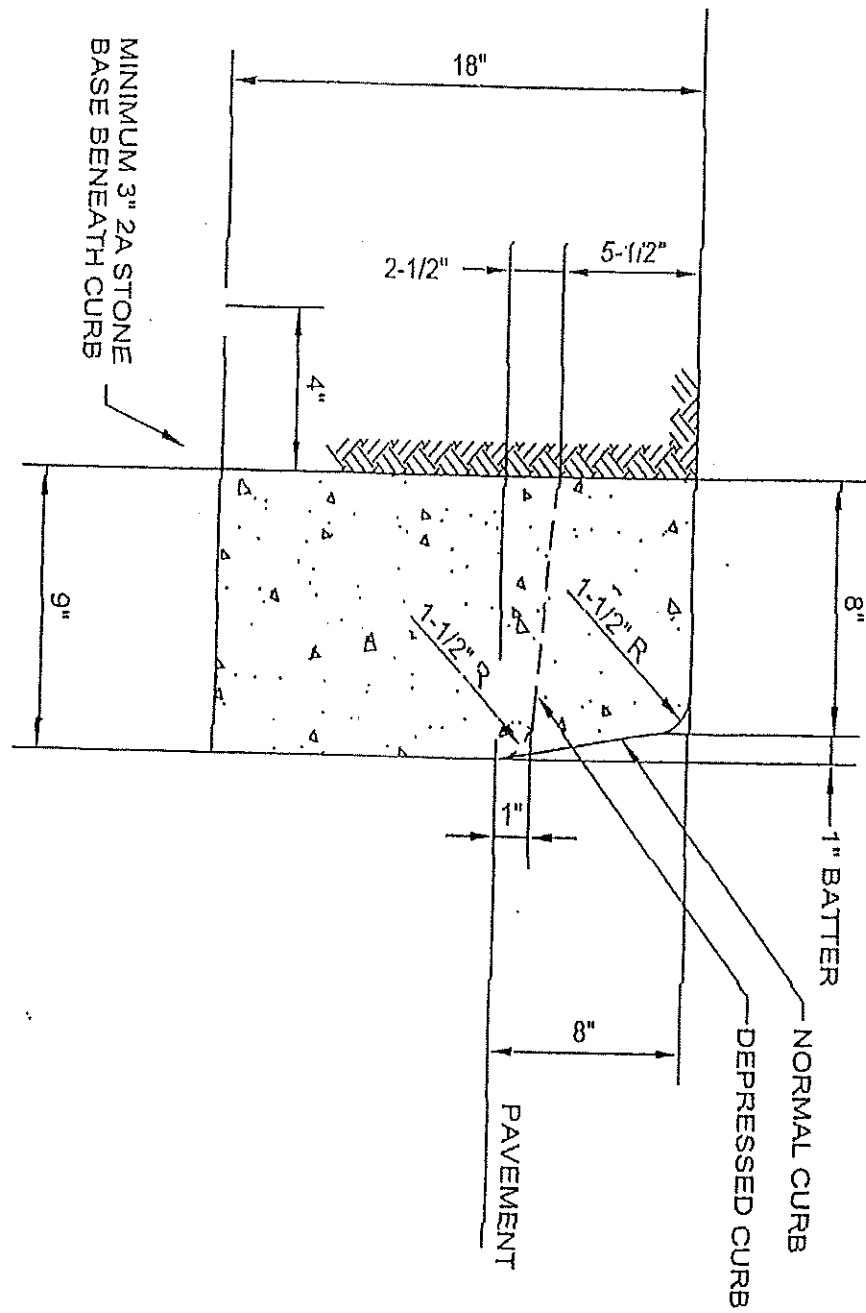
### SPEED TABLE DETAIL

N.T.S.

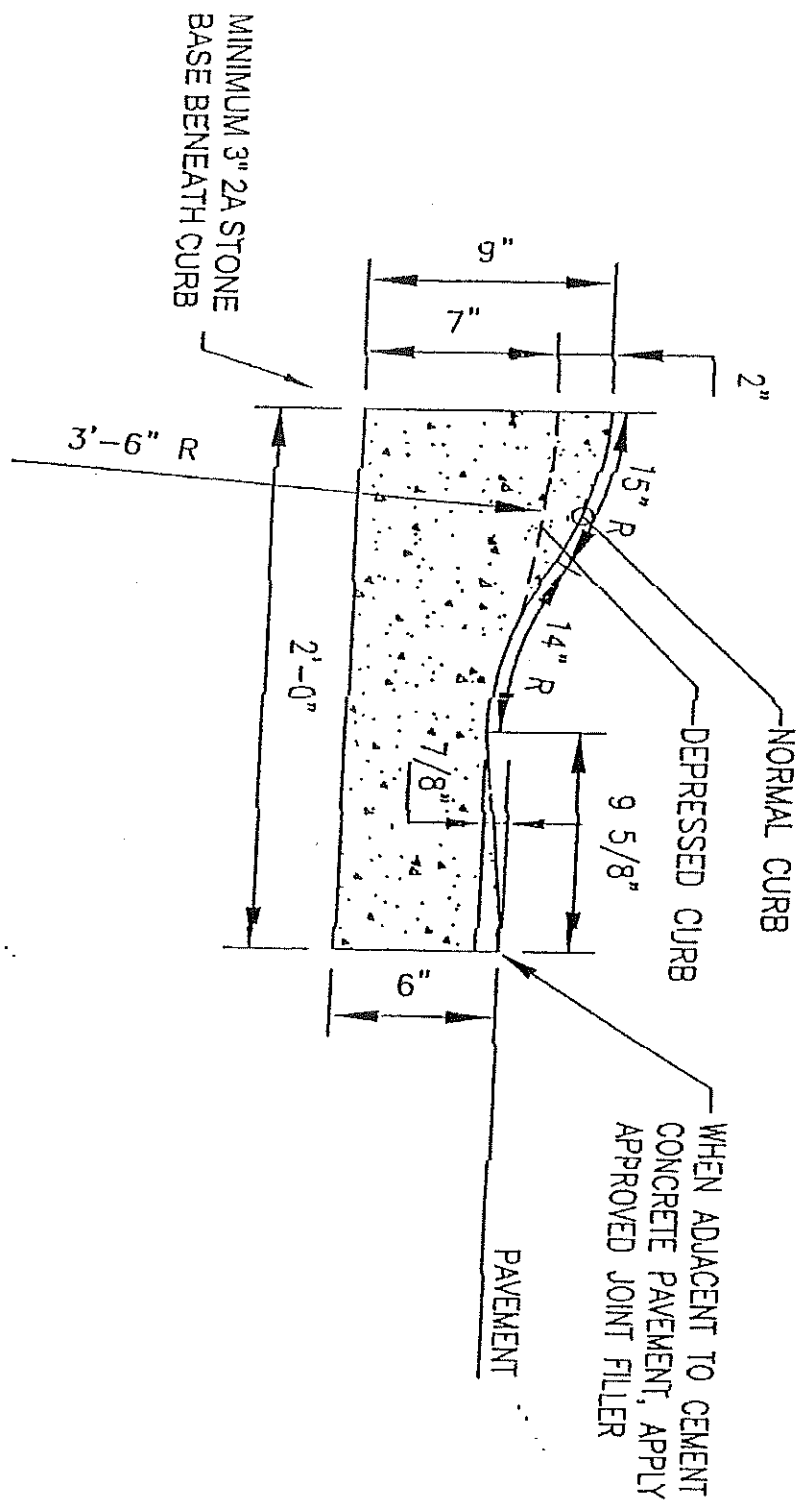


CONCRETE SIDEWALK, 4" THICK

N. T. S.



# CONCRETE VERTICAL CURB N.T.S.

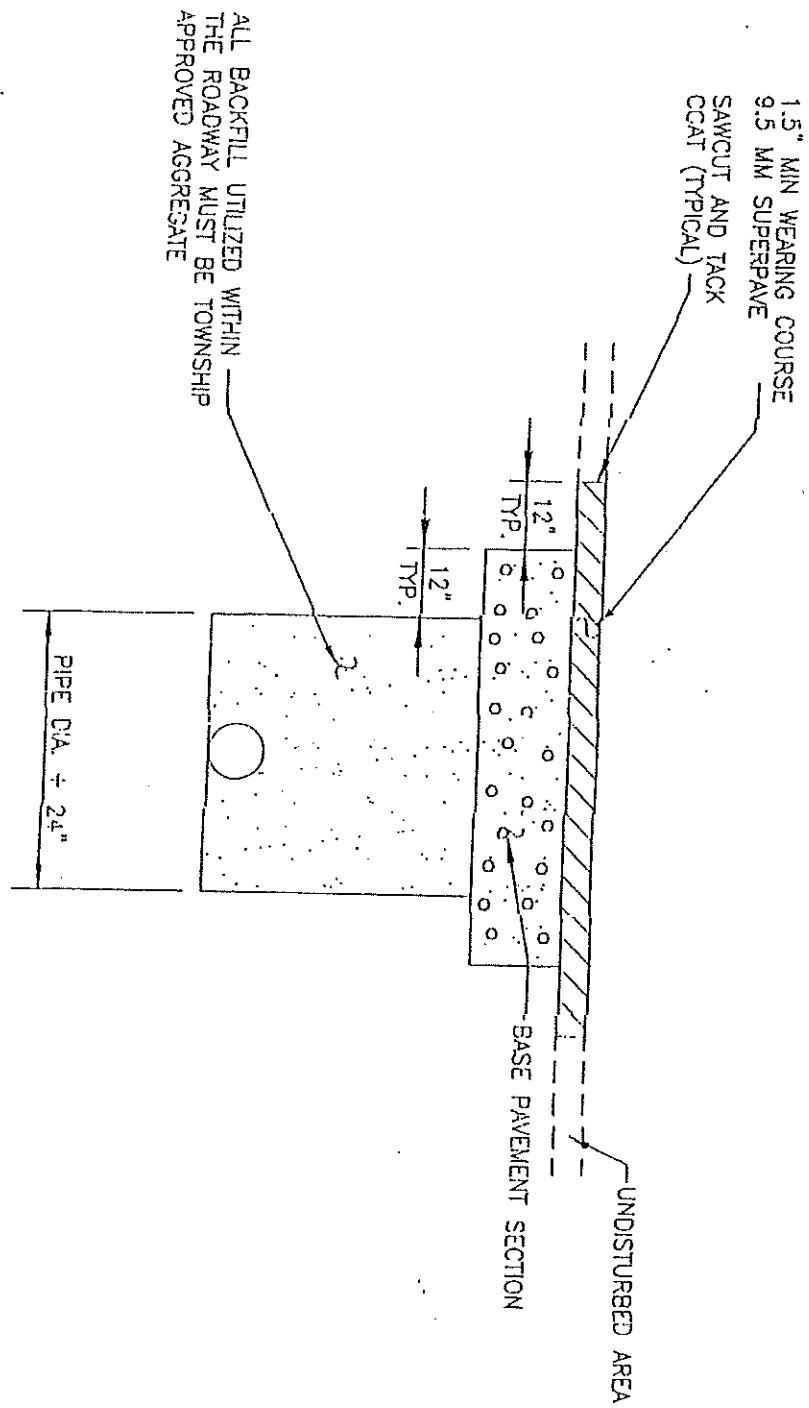


# CONCRETE ROLLED CURB

N.T.S.







# UTILITY TRENCH RESTORATION DETAIL N.T.S.

## **Section 419. Utility Easements**

- 419.1. Easements shall be provided for poles, wires, conduits, storm and sanitary sewers, storm water retention and infiltration facilities, gas, water and other utility lines intended to service the abutting lots. No structures or trees shall be placed within such easements. Local utility companies shall be consulted when locating utility easements.
- 419.2. Easements abutting street rights-of-way shall be a minimum of ten (10) feet in width. Other easements shall be a minimum of twenty (20) feet in width.
- 419.3. There shall be a minimum distance of fifty (50) feet, measured in the shortest distance, between any proposed dwelling unit and any petroleum products or natural gas transmission line which traverses the subdivision or land development.
- 419.4. Where gas or petroleum transmission lines are a part of the proposed development, either proposed or requiring relocations, construction of such facilities shall occur within a right-of-way of fifty (50) feet minimum and shall comply with the applicable requirements of the Pennsylvania Public Utilities Commission Regulations.
- 419.5. Underground electric distribution lines shall be installed in all new subdivisions and land developments of five (5) dwelling units or more. In existing subdivisions with five (5) or more unimproved lots, any extensions of the electric distribution lines shall be placed underground. An approved plan for the utilization of an electric distribution system shall be submitted to the Township prior to the recording of the Final Plan.

## **Section 420. Water Supply**

### **420.1. Purpose**

All subdivision and land development applications shall comply with the regulations of this section in order to:

- A. Secure a safe source of potable water,
- B. Ensure adequate availability of water, and
- C. Comply with County and State regulations regarding water supply.

### **420.2 General Standards.**

- A. Whenever an existing public or approved community water system is geographically and economically accessible to a proposed subdivision or land development and permission to connect thereto is secured, a distribution system shall be designed to furnish an adequate supply of water to each lot and dwelling unit with adequate main sizes and fire hydrant locations to meet the specifications of the Middle Department Association of Fire Underwriters. A copy of the approval of such system by the appropriate public agency or utility company shall be submitted with the Final Plan. A

suitable agreement shall also be established for the ownership and maintenance of such distribution system.

- B. Where public or community systems are not geographically or economically accessible, and on-site sanitary sewage disposal systems are proposed to be used, a community water supply may be required by the Township if deemed necessary for the public health, safety, and welfare. If such a system is provided, it shall be approved by the Chester County Health Department and the Pennsylvania Department of Environmental Protection, and appropriate agreements established to ensure proper and adequate maintenance shall be submitted to the Township.
- C. Where individual or community on-site water system(s) are to be utilized, compliance with the following shall be required:
  - 1. Each lot so served shall be of a size and shape to allow safe construction of such a system.
  - 2. Individual supply systems shall be constructed in full compliance with the rules and regulations of the Pennsylvania Department of Environmental Protection and the Chester County Health Department.
  - 3. All individual supply systems shall be placed a minimum of fifty (50) feet from any field that is currently cultivated or is intended to be actively cultivated during the next growing season.
- D. Prior to receiving plan approval by the Board, the applicant shall show approval by the Pennsylvania Department of Environmental Protection and the Chester County Health Department.

**Section 421. Park, Open Space and Recreation Areas, or the payment of a Fee in Lieu of Land for Such Purposes**

- A. Upon its review of a plan for subdivision or land development, the Township Planning Commission shall consider the open space and recreation needs of the additional residents that will result upon implementation of the subdivision or land development, discuss its findings and the further requirements of this section with the subdivider or land developer as it deems necessary in the furtherance of the public interest and the provisions of this section, and make such report thereon as it deems necessary for consideration by the Board of Supervisors in its review and processing of the development application.
- B. Subdividers and land developers shall be required to provide or reserve areas for facilities normally found in residential neighborhoods, including open space, parks, playgrounds and play fields. Areas provided or reserved for such community facilities shall be adequate to provide for building sites, landscaping and off-street parking appropriate to the types of facilities required or likely to be developed in the future.

Prior to the preparation of recordable plans, subdividers and land developers shall review with the Township Planning Commission the minimum standards for various community facilities applicable to the tract being subdivided.

- C. In residential subdivisions or and developments which are proposed to contain, or by re-subdivision could contain, ten (10) or more residential units, the developer shall be required to set aside, design and develop for park, open space and recreation area(s) (hereinafter called "POR") for use of the residents within the development., The amount of land set aside for such purposes shall be determined by application of the following formula:

Number of Approved Dwelling Units per Acre	Required Park and Recreation Area for Each 10 Dwelling Units
1. Less than 2	10,000 square feet
2. 2 through Less than 5	12,000 square feet
3. 5 or more	16,000 square feet

- D. In residential subdivisions proposed to contain fewer than ten (10) dwelling units but more than three (3), or in those residential subdivisions where application of the requirements and/or standards of subparagraph A or C are impractical, or in those instances in which the Board of Supervisors, in the exercise of its discretion, shall determine, this ordinance requires the payment of a fee in lieu of the dedication of the minimum acreage of open space otherwise required by application of subparagraph A of this section. This fee will be paid at final plan approval.
- E. The amount of any fee in lieu of land for POR areas shall be a flat fee based upon the number of dwelling units proposed to be created by the subdivision or land development. Such fee shall be initially set at One Thousand (1,000) Dollars per dwelling unit and thereafter set by resolution by the Board of Supervisors. All monies collected in lieu of land shall be retained by the Township in a capital reserve fund to be designated the "Penn Township Park, Open Space and Recreation Reserve Fund," which shall be expended only for the acquisition of POR land or for capital improvements for POR land within the Township at such locations as shall be selected by the Board for Community or neighborhood parks. This fund will be administered in accordance with the requirements of 53 P.S. § 10503 (11).
- F. In designating areas for POR within a subdivision or land development, the following criteria and standards shall be followed by the subdivider or land developer. All land designated for the foregoing purposed shall be:
1. Suitable for both active and passive recreational uses to the extent deemed necessary by the Board of Supervisors, based on recommendations or with the input of the Planning Commission. Such areas shall not interfere with the use of adjacent dwelling units, parking, driveways and roads. Active recreational uses include, but are not necessarily limited to play fields, ball fields, tennis and

racquetball courts, basketball courts, fitness trails, picnic areas, recreational buildings and similar facilities.

The minimum area required for active recreational open space use, which shall be comprised of ground suitable for development and construction of recreation-related improvements and uses thereon, shall not be less than fifty percent (50%) of the total required POR and shall be located or designated, as determined by the Board of Supervisors.

2. Comprised of no more than thirty percent (30%) of environmentally sensitive lands, including flood plains, woodlands, surface waters, wetlands and steep slopes.
3. Comprised of areas not less than one hundred (100) feet in width, except when part of a trail system or pathway network.
4. To the extent possible, interconnected with common POR areas on abutting parcels wherever possible, and also interconnected to pedestrian pathways for general public use to create a linked pathway system within the Township. The POR shall be accessible to all dwelling units within the development, either by abutting the POR or over easements expressly dedicated for that purpose but must, nevertheless, be accessible by one or more public streets.
5. Provided with sufficient parking when determined reasonably necessary by the Board of Supervisors for the resident's safe and convenient access by adjoining street frontage or other rights-of-way or easements capable of accommodating pedestrian, bicycle, maintenance and vehicle traffic, and containing customary and appropriate access improvements.
6. Free of all buildings and structures, except those related to POR use.
7. Suitably landscaped either by retaining existing natural cover and wooded areas and/or by a landscaping plan designed to enhance POR areas by utilization of plantings which are consistent with the purposes of this section, which minimize maintenance costs and which comply with this Ordinance, as applicable.
8. Made subject to such Declarations, Restrictions and Covenants, which shall be recorded in the Office of the Recorder of Deeds in and for Chester County, Pennsylvania contemporaneously with recordation of the final plan, as may be required by the Board of Supervisors for the purpose of preservation, maintenance and improvement of the POR for its intended purposes. Ownership of the POR may be in a homeowners association or corporation organized and existing solely for such purpose. Provided, however, the Declaration may be required to contain provisions which provide for an irrevocable offer to dedicate the POR to the Township as public POR lands. Nothing herein contained shall be construed to require the Township to accept dedication of any POR.

- G. It shall be incumbent upon the subdivider or land developer to reserve and protect all natural features in any POR, such as trees, watercourses, steep slopes, natural drainage areas, historic areas and structures and similar community assets, which will add attractiveness and value to the remainder of the subdivision. Trees shall not be disturbed or removed without the designated approval of the Planning Commission, made a part of the subdivision and land development plan approval, unless in strict compliance with the Township Zoning and Subdivision and Land Development ordinances and any Township ordinance governing timber harvesting. Wherever feasible in the opinion of the Planning Commission and the Board of Supervisors, natural vegetation shall be retained and protected and grade alterations shall be kept to a minimum.

## Section 422. Lighting

### A. Applicability

1. These regulations shall apply to lighting installations which are a part of a subdivision or land development plan under the terms of this Ordinance.
2. These regulations shall apply to any lighting installation put into place after the date of this Ordinance which violates the restrictions contained herein and which the owner cannot establish was in place prior to the effective date of this Ordinance.

### B. Criteria

1. Illumination Levels – Lighting, where required by this Ordinance, or otherwise required or allowed by the Township, shall have illuminances, uniformities and glare control in accordance with the recommended practices of the Illuminating Engineering Society of North America (IESNA), unless otherwise directed by the Township or this Ordinance.

Examples of illuminances for typical outdoor applications, as extracted from the IESNA Lighting Handbook, are presented below but are not intended to be all-inclusive.

Use/Task	Maintained Footcandles	Uniformity Ratio
(a) Streets, local commercial	0.9 Avg	6:1 Avg:Min
Streets, residential, when required by the Township	0.4 Avg	6:1 Avg:Min
(b) Parking, multi-family residential		
• Low vehicular/pedestrian activity	0.2 Min	4:1 Avg:Min*
• Medium vehicular/pedestrian activity	0.6 Min	4:1 Avg:Min*
(c) Parking, industrial/commercial/institutional/recreational		
• High activity, e.g. regional shopping centers/fast food Facilities, major athletic/civic/cultural events	0.9 Min	4:1 Avg:Min*
• Medium activity, e.g. community shopping centers, Office parks, hospitals, commuter lots, cultural/civic Recreational events	0.6 Min	4:1 Avg:Min*
• Low activity, e.g., neighborhood shopping,	0.2 Min	4:1 Avg:Min*

Industrial employee parking, schools, church parking		
(d) Sidewalks		
• Commercial	1.0 Avg	5:1 Avg:Min*
• Residential	0.5 Avg	5:1 Avg:Min*
(e) Building entrances, commercial, industrial, institutional per L&I	5.0 Avg	

- Notes 1. Illumination levels are maintained horizontal footcandles on the task, e.g., pavement or area surface.
2. Uniformity ratios dictate that average illuminance values shall not exceed minimum values by more than the product of the minimum value and the specified ratio. E.g. for high activity commercial parking, the average illuminance shall not exceed 3.6 foot-candles (0.9 X 4).
- \* In no case shall the maximum to minimum uniformity ratio for parking be in excess of 20:1
3. This tabulation is not intended to be inclusive of all permitted uses/tasks within the Township, nor does the fact that a use/task is listed mean that the use/task is permitted nor that lighting for that use/task is permitted.
4. The Township, at its discretion, may permit the average to be increased to 20 footcandles, when the intensities at existing adjacent commercial use so justifies.

## 2. Lighting Fixture Design

- a. For the lighting of predominantly horizontal surfaces such as, but not limited to parking areas, roadways, vehicular and pedestrian passage areas, merchandising and storage areas, automotive-fuel dispensing facilities, automotive sales areas, loading docks, cul-de-sacs, active and passive recreational areas, building entrances, sidewalks, bicycle and pedestrian paths, and site entrances, fixtures shall be aimed straight down and shall meet IESNA full-cutoff criteria. Fixtures, except those containing directional lamps, with an aggregate rated lamp output not exceeding 500 lumens, e.g., the rate output of a standard non-directional 40-watt incandescent lamp, are exempt from the requirements of this paragraph. In the case of decorative street lighting, the Township may approve the use of luminaries that are fully shielded or comply with IESNA cutoff criteria, so long as the lamps do not exceed 16,000 initial lumens.
- b. For the lighting of predominantly non-horizontal surfaces such as, but not limited to, facades, landscaping, signs, billboards, fountains, displays and statuary, when their use is permitted by the Township, fixtures shall be fully shielded and shall be installed and aimed so as to not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward or onto a public roadway. Fixtures, except those containing directional lamps, with an aggregate rated lamp output not exceeding 500 lumens, e.g. the rated output of a standard non-directional 40-watt incandescent lamp, are exempt from the requirements of this paragraph.
- c. "Barn lights", aka "dawn-to-dusk lights", where visible from another property, shall be shielded to the extent that they do not shine directly onto property of another.

## 3. Control of Glare

- a. All 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 traverse



and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property.

- b. Directional fixtures such as floodlights and spotlights, when their use is permitted, shall be so shielded, installed and aimed that they do not project their output into the windows of neighboring residences, adjacent uses, past the object being illuminated, skyward or onto a public roadway or pedestrian way.
- c. Parking facility and vehicular and pedestrian-way lighting (except for safety and security applications and all-night business operations), for commercial, industrial and institutional uses shall be automatically extinguished no later than one-half hour after the close of business or facility operation. When safety or security lighting is proposed for after-hours illumination, it shall not be in excess of twenty-five (25) percent of the number of fixtures or illumination level required or permitted for illumination during regular business hours. Alternatively, where reduced but continued activity requires even illumination, the use of dimming circuitry to reduce illumination levels by 50% after 11:00 p.m. or after normal business hours, shall be permitted.
- d. Illumination for signs, billboards, building facades and/or surrounding landscapes for decorative, advertising or aesthetic purposes is prohibited between 11:00 p.m. and dawn, except that such lighting situated on the premises for a commercial establishment may remain illuminated while the establishment is actually open for business, and until one-half hour after closing. Such lighting shall be automatically extinguished using a programmable controller.
- e. The illumination projected from any use onto a residential use shall at no time exceed 0.1 footcandle, measured line-of-sight from any point on the receiving residential property.
- f. The illumination projected from any property onto a non-residential use shall at no time exceed 0.5 footcandles, measured line-of-sight from any point on the receiving property.
- g. Fixtures meeting IESNA full-cutoff criteria shall not be mounted in excess of twenty (20) feet above finished grade. For the illumination of greater than 100 contiguous parking spaces, the Township may permit the use of a mounting height not to exceed twenty-five (25) feet for fixtures meeting IESNA full-cutoff criteria when it can be demonstrated to the satisfaction of the Township that light trespass and glare control requirements in this Ordinance have been met. Mounting heights in excess of 20' AFG shall not be permitted when located less than 100' from a residential district or use. Fixtures not meeting IESNA full-cutoff criteria, when their use is specifically permitted by the Township, shall not be mounted in excess of sixteen (16) feet above finished grade, except as otherwise permitted in this Ordinance.
- h. Only the United States and the state flag shall be permitted to be illuminated from dusk to dawn. All other flags shall not be illuminated past 11:00 p.m. Flag lighting sources shall not exceed 7,000 lamp lumens per flagpole. The light source shall have

a beam spread no greater than necessary to illuminate the flag and shall be adequately shielded.

- i. Under-canopy lighting for such applications as gas/service stations, hotel/theater marquees, fast-food/bank/drugstore drive-ups, shall be accomplished using flat-lens full-cutoff fixtures aimed straight down and shielded in such a manner that the lowest opaque edge of the fixture shall be below the light source at all lateral angles. The average illumination in the area directly below the canopy shall not exceed 20 initial footcandles and at no point shall the maximum exceed 30 initial footcandles.

#### 4. Installation

- a. Electrical feeds for lighting poles shall be run underground, not overhead.
- b. Poles supporting lighting fixtures for the illumination of parking areas and located directly behind parking spaces, or where they could be hit by snow plows, shall be placed a minimum of five (5) feet outside paved area, face or curb or tire stops, or placed on concrete pedestals at least thirty (30) inches high above the pavement, or suitably protected by other Township-approved means.
- c. Pole mounted fixtures for lighting horizontal tasks shall be aimed straight down and poles shall be plumb.

- 5. Maintenance – Lighting fixtures and ancillary equipment shall be maintained so as to always meet the requirements of this Ordinance.

### C. Regulations Established in Districts

#### 1. Residential Development Fixture Placement

A. For residential developments where lot sizes are or average less than 20,000 square feet, the Township may require that street lighting is to be provided at:

- a. the intersection of public roads with entrance roads to the proposed development,
- b. intersections involving proposed public or non-public major thoroughfare roads within the proposed development,
- c. the apex of the curve of any major-thoroughfare road, public or non-public, within the proposed development, having a radius of 300 feet or less,
- d. cul-de-sac bulbs,
- e. terminal ends of center median islands having concrete structure curbing, trees and/or other fixed objects not having breakaway design for speeds of 25 m.p.h. or greater,

- f. defined pedestrian crossings located within the development,
  - g. at other locations along the street as deemed necessary by the Township.
- B. Where lot sizes permit the parking of less than (3) vehicles on the residential lot, thereby necessitating on-street parking, street lighting may be required along the length of the street.
- C. In multi-family developments, common parking areas of 4 spaces or greater shall be illuminated.
- D. In residential developments with lots of less than twenty thousand (20,000) square feet where five (5) or more common contiguous parking spaces are proposed, such spaces may be required to be illuminated.
2. Recreational Uses – The nighttime illumination of outdoor recreational facilities for such aerial sports as baseball, basketball, soccer, tennis, track and field, and football typically necessitate higher than normally allowed fixture mounting heights and aiming angles, utilize very high-wattage lamps and potentially produce unacceptable levels of light trespass and glare when located near residential properties. Permission to illuminate such facilities shall be granted only when the Township is satisfied that the health, safety and welfare rights of nearby property owners and the Township as a whole have been properly protected. When recreational uses are specifically permitted by the Township for operation during hours of darkness, the following requirements shall apply:
- A. Recreational facilities for basketball, baseball, football, soccer, miniature golf, tennis or track shall not be illuminated if located within a residential district or sited on a nonresidential property located within 500 ft of a property containing a residential district.
- B. Sports events shall be timed to end at such time that all lighting in the sports facility, other than lighting for safe exit of patrons, shall be extinguished by ten (10:00) p.m., regardless of such occurrences as extra innings or overtimes.
- C. Maximum mounting heights for recreational lighting shall be in accordance with the following:
- a. Basketball 20'
  - b. Football 70'
  - c. Soccer 70'
  - d. Little League Baseball
    - (1) 200' Radius 60'
    - (2) 300' Radius 70'

- e. Miniature Golf 20'
- f. Swimming Pool Aprons 20'
- g. Tennis 20'
- h. Track 20'

D. To assist the Township in determining whether lighting will be permitted, applications for illuminating recreational facilities shall be accompanied not only with the information required under Section G. below but also by a visual impact plan that contains the following:

- a. Plan views containing a layout of the recreational facility and showing pole locations and the location of residences on adjoining properties.
- b. Elevations containing pole and fixture mounting heights, horizontal and vertical aiming angles and fixture arrays for each pole location
- c. Elevations containing initial vertical illuminance plots at the boundary of the site, taken at a height of 5' line-of-sight
- d. Elevations containing initial vertical illuminance plots on the windowed facades of all residences facing and adjacent to the recreational facility. Such plots shall demonstrate compliance with the light trespass and glare control requirements of this Ordinance.
- e. Proposed frequency of use of the facility during hours of darkness on a month-by-month basis and proposed time when the sports lighting will be extinguished.
- f. A narrative describing the measures proposed to achieve minimum off-site disturbance.

3. Plan Submission – Where site lighting is required by this Ordinance, is otherwise required by the Township or is proposed by Applicant, lighting plans shall be submitted for Township review and approved for Subdivision and Land Development applications. The submitted information shall contain the following:

- A. A plan or plans of the site, complete with all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), vegetation that might interfere with lighting, and adjacent uses that might be adversely impacted by the lighting. The lighting plan shall contain a layout of all proposed fixtures by location, orientation, aiming direction, mounting height and type. The submission shall include, in addition to existing and proposed area lighting, all other exterior lighting, e.g., architectural, building-entrance, landscape, flag, sign, etc.

- B. A 10'X10' illuminance grid (point-by-point) plot of maintained horizontal footcandles overlaid on the site plan, plotted out to 0.0 footcandles, which demonstrates compliance with the light trespass, illuminance and uniformity requirements as set forth in this Ordinance or as otherwise required by the Township. When the scale of the plan, as judged by the Township, makes a 10'X10' grid plot illegible, a larger grid spacing may be permitted.
- C. The maintenance (light-loss) factors, IES candela file nomenclature, initial lamp-lumen rates and lamp manufacturer's specific lamp ordering nomenclature, used in calculating the presented illuminance levels.
- D. Description of the proposed equipment, including fixture catalog cuts, photometrics, glare reduction devices, lamps, on/of control devices, mounting heights, pole foundation details and mounting methods.
- E. When landscaping plans are involved, they shall contain the lighting fixture locations and shall demonstrate that the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- F. When requested by the Township, Applicant shall also submit a visual-impact plan that demonstrates appropriate steps have been taken to mitigate the potential consequences of on-site and off-site glare and to retain the intended character of the Township. This plan may require the inclusion of initial vertical footcandle values at specific off-site venues, e.g., bedroom windows of adjacent residential uses.
- G. Plan Notes – The following notes shall appear on the Lighting Plan:
  - a. Post-approval alterations to lighting plans or intended substitutions for approved lighting equipment shall be submitted to the Township for review and approval.
  - b. The Township reserves the right to conduct post-installation inspections to verify compliance with the Ordinance requirements and approved Lighting Plan commitments, and if deemed appropriate by the Township, to require remedial action at no expense to the Township.
  - c. All exterior lighting shall meet IESNA full-cutoff criteria unless otherwise approved by the Township.
  - d. Installer shall notify the Township to arrange for inspection and approval of all exterior lighting, including building-mounted lighting, prior to its installation.

## ARTICLE V – IMPROVEMENT SPECIFICATIONS

### **Section 500. General Requirements**

- 500.1. Physical improvements to the property being subdivided, resubdivided, or developed shall be provided, constructed, and installed as shown on the Record Plan and on all supplemental plans and drawings accompanying the approved Final Plan, in accordance with the requirements of the Township.
- 500.2. The subdivider shall agree with the Township as to the installation of all improvements shown on the Plan and required by this Ordinance and shall execute and file Subdivision Improvements Agreement, Form 4, or such other Improvements Agreement as may be prepared by the Township solicitor and approved by the Board from time to time.
- 500.3. All improvements installed by the subdivider shall be constructed in accord with the applicable design specifications of the Township and applicable authorities, or, where none exist, as prepared by the Township Engineer. Where required, the specifications of the applicable State agency shall be used.
- 500.4. Supervision of the installation of improvements required by this Ordinance shall be the responsibility of the Township or the appropriate State regulatory agency.
- 500.5. No application shall be granted final approval and no building permits shall be issued until the applicant has completed all required improvements or has provided an improvement guarantee in accordance with Section 206.

### **Section 501. Inspection.**

- 501.1. The construction or installation of all improvements shall at all times be subject to inspection by representatives of the Township or any other governing authority. If such inspection reveals that work is not in accordance with the approved plans and specifications, that construction is not being done in a satisfactory manner, or that erosion sediment is being deposited on adjacent areas as a result of the land development, the said representative is empowered to require corrections to be made and/or the suspension of the subdivision approval and to issue a cease and desist order, which may include any or all of the following sanctions:
  - A. That no lot in the subdivision shall be conveyed or placed under agreement of sale;
  - B. That all construction of any lot for which a building permit has been issued shall cease; and/or
  - C. That no further building permits for any lots shall be issued.

- 501.2. That said cease and desist order shall be terminated upon the determination of the Board or by the Township representative that the said defects or deviations from plan requirements have been corrected.
- 501.3. A preconstruction meeting to be coordinated through the Township Secretary shall be scheduled to occur at least one (1) month prior to the start of construction. The developer shall provide at least twenty-four (24) hours notice prior to the start of construction of any improvements that are subject to inspection. All inspections of completed items for the release of escrow funds shall be submitted, in writing, at least forty-eight (48) hours in advance of the inspection time and date. No underground pipes, structures, subgrades, or base course shall be covered until inspected and approved by the Township.

Generally, the following phases of site construction require mandatory inspections:

- A. Upon completion of preliminary site preparation including clearing of vegetation, stripping, and stockpiling of topsoil, and installation of temporary erosion and sedimentation control devices.
- B. Upon completion of rough grading, but prior to placing topsoil, installing permanent drainage, or other site improvements and ground cover.
- C. During the construction of permanent stormwater management facilities. All storm sewers, culverts, etc, must be inspected prior to backfilling.
- D. During construction of water supply treatment and distribution systems and sanitary sewer distribution and treatment systems.
- E. Preparation of Road Subgrade. At the time of this inspection, the subgrade should be proof rolled and the proposed crown and grade should be checked. This inspection must occur prior to the placement of any stone subbase.
- F. Placement and Compaction of Road Subbase. At the time of this inspection, the depth of subbase should be checked after compaction, the subbase should be proof rolled in the same manner as the subgrade and crown, and the grade should be checked again. This inspection must occur prior to any binder or base course being placed.
- G. During installation of roadway curbing.
- H. Placement and Compaction of the Base Course. At the time of this inspection, the depth of the base course should be checked, the ambient temperature should be monitored, and the temperature of the bituminous material should be checked. The crown and grade should be rechecked. This inspection must occur prior to the wearing course being placed. (The total depth required shall be reached in two lifts of equal amount of material).

I. Placement and Compaction of the Wearing Course.

J. Final inspection

The above general list of phrases may be amended by mutual agreement between the Township and developer when the site requires special construction procedures.

#### **Section 502. Inspection Fees.**

502.1 The applicant shall be required to pay for all reasonable and necessary expense incurred by the municipality for the inspection of improvements. Such expenses shall be based upon a fee schedule established by resolution of the Board.

502.2 Such inspection fees shall be reasonable and in accordance with the ordinary and customary charges by the Township Engineer for similar services, but in no event shall the fees exceed the rate or cost charged by the Engineer to the Township. In the event the applicant contests the amount of the inspection fees, the applicant and the Township shall follow the procedure for dispute resolution set forth in Section 707.

#### **Section 503. Release from Improvements Guarantee.**

Upon completion and approval of improvements the improvement guarantee held by the Township shall be released to the applicant in accordance with Section 206.3.

#### **Section 504. As-Built Plans.**

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

#### **Section 505. Dedication and Acceptance of Public Improvements.**

505.1 Upon completion of any public improvement shown on an approved subdivision or land development plan and within ninety (90) days after approval of such public improvements as herein provided, the developer shall submit a written offer of such public improvements for dedication to the Township using the certification form shown in Appendix I, completed in its entirety.

505.2 The applicant shall be responsible for maintenance of all improvements until the time that such improvements are accepted by the Township.



**Section 506. Maintenance Guarantee.**

Prior to the Board's acceptance of some or all of the improvements required for a subdivision or land development plan, the Board may require the applicant post a maintenance guarantee in accordance with Section 206.5.

## **Article VI – Mobile Home Park**

### **Section 600. General Regulations.**

- 600.1. An application for development of a lot or parcel of land for mobile home park purposes shall be made and approved or approved as modified before any Mobile Home Park permit for such use shall be issued.
- 600.2. Articles III and IV of this Ordinance shall govern the content and processing of all applications for mobile home park development and accordingly are incorporated herein in their entirety.
- 600.3. In addition to the requirements contained in Article IV of this Ordinance, an application for preliminary or final approval of a mobile home park shall indicate by drawings, diagrams, maps, text, affidavit or other legal instrument, the following:
- A. The placement, location and number of mobile home lots and mobile home pads on a layout map of the parcel at a scale of one (1) inch equals fifty (50) feet.
  - B. The location, dimension, and arrangement of all areas to be devoted to lots, buffer strips and screen planting.
  - C. The location of well or wells when a community water system is proposed.
  - D. The location of all waste water treatment facilities when a community on-lot disposal system is proposed for the treatment and release of sewage.
  - E. The location of open space and recreational areas with a description of the intended purpose of each area.
  - F. The location of service buildings including those for administrative and storage purposes.

### **Section 601. Permits, Licenses, and Inspections**

#### **601.1. Permits Required.**

- A. It shall be unlawful for any person to construct, alter, extend, or operate a mobile home park within Penn Township unless and until the following are obtained:
  - 1. A valid permit issued by the Chester County Health Department, in the name of the operator for a specified construction, alteration, or extension proposed: and
  - 2. A mobile home park permit issued by the Penn Township Zoning Officer in the name of the operator, which shall not be issued until a copy of the Health Department permit has been furnished, all permits for water supply and sewage

systems shall have been obtained, and all other requirements contained herein have been complied with, and final approval of the application has been granted by the Board.

B. Annual Licenses.

In addition to the initial permits, the operator of a mobile home park shall apply to the Chester County Health Department and to the Penn Township Zoning Officer on or before the first day of December of each year for an annual license to continue operation of the mobile home park during the following calendar year. The Zoning Officer shall issue the annual license upon satisfactory proof that the park continues to meet the standards prescribed by state and county agencies having jurisdiction and the standards of this ordinance. The license so issued shall be valid for the calendar year applied for, or part thereof remaining at the time of issuance.

C. Fees.

1. Fees for the initial application and preliminary and final approvals shall be prescribed by regulation of the Board.
2. The fee for the annual license shall be prescribed by regulation of the Board and shall be submitted to the Zoning Officer with the application for the annual license.
3. Fees for the inspection of a mobile home park during and following construction shall be established by resolution of the Board.

601.2. Inspections.

- A. Upon notification to the licensee, manager or person in charge of a mobile home park, the Zoning Officer or his designated representative may inspect a mobile home park at any reasonable time to determine compliance with this Ordinance or with the Zoning Ordinance.
- B. Upon receipt of the application for annual license and before issuing such annual license, the Zoning Officer or other designated representative of Penn Township shall make an inspection of the mobile home park to determine compliance with this ordinance. The Zoning Officer or other representative shall thereafter notify the licensee of any instances of non-compliance with the Ordinance and shall not issue the annual license until the licensee has corrected all such violations.

601.3. Appeal of Mobile Home Park Permit Denial.

Where the applicant or licensee feels that the Zoning Officer has failed to follow procedures or has misinterpreted or misapplied any provisions of this Ordinance in the review of an application for a Mobile Home Park Permit of an annual license renewal, he may appeal such action to the Penn Township Zoning Hearing Board in accordance with Section 909 of the Pennsylvania Municipalities Planning Code.

601.4. Transferability of Mobile Home Park Permit.

No permit issued under this Ordinance shall be transferable to a different location.

601.5. Changes to Mobile Home Park Size.

No person, holding a permit under this Ordinance, shall extend or reduce the area of any mobile home park, add any new facility or structure, or eliminate any existing facility or structure, until notice of such proposed changes shall have been given to the Inspector and the Inspector shall have ascertained, after investigation as in the case of an original application for a permit, that such proposed change is in accordance with all the requirements of this Ordinance, and shall have signified that fact by his approval.

**Section 602. Density, Dimensional, and General Layout Regulations.**

602.1. Regulations governing the density of dwelling units, the minimum tract size, open space, and coverage in any mobile home park and the dimensions of any mobile home park or mobile home lot therein shall be as specified in Article VIII of the Penn Township Zoning Ordinance.

602.2. The mobile home park shall be located on a well drained site, and shall be so located that its drainage will not endanger any water supply. Developed or otherwise used areas of all such mobile home parks shall be in areas free from floodplains, wetlands, marshes, swamps, or other potential breeding places for insects or rodents.

602.3. Every mobile home lot shall be clearly marked and shall contain a driveway with unobstructed access to a public street. Mobile homes shall be located on such lots so that there will be a minimum setback of fifteen (15) feet between the lot line and each mobile home and so that no mobile home will be less than twenty-five (25) feet from the exterior boundary of the mobile home park.

602.4. It shall be unlawful to locate a mobile home, service building, or access road (with the exception of the entrance road(s)) less than twenty-five (25) feet from any public street or so that any part of such mobile home will obstruct any roadway or walkway in a mobile home park.

602.5. Site Layout.

- A. Mobile homes placed on individual lots are encouraged to be placed off-center on the lots so as to provide a large usable open yard space and outdoor living area in one section of the lot.
- B. Groups or clusters of units, so placed as to create interior spaces and courtyards, shall be incorporated whenever feasible.

- C. Mobile homes are encouraged to be arranged in a variety of orientations., and are strongly encouraged to have many units with their long axes east-west, offering south exposure to their longest wall and roof areas, and to provide variety and interest. Site layout shall be designed to ensure that mobile home units are offset to block long uninterrupted corridors between units. When topographic conditions make street orientation for good solar orientation of units difficult or undesirable, lots should be laid out so that units can be oriented to the south to the greatest extent possible.

### **Section 603. Street System.**

#### **603.1. Street Design and Construction Standards.**

With the exception of those street standards specified in this Article, the standards in Section 417 of the Penn Township Subdivision and Land Development Ordinance shall govern the design and construction of streets in a mobile home park.

#### **603.2. Park Entrances.**

Each mobile home park shall provide access directly to a paved public road according to the following:

- A. The entrance shall be paved.
- B. The said paved entrance shall be at least thirty-five (35) feet wide at its point of intersection with the paved public road.
- C. The paved entrance shall be at least fifty (50) feet long. From the point of intersection with the paved public road, the said paved entrance width may be gradually tapered within the distance of fifty (50) feet so that the minimum width standards of Section 417 are attained as it connects with or becomes the interior street.
- D. At no point shall the width of the paved entrance be less than the width of the interior street; provided, that if the mobile home park is located so as to provide access to two or more different paved public roads, one entrance may be provided for each such road.
- E. Where twenty (20) or more mobile home lots are proposed, a minimum of two (2) entrances shall be created.

#### **603.3. Street Construction.**

All entrances, interior streets, and other heavily traveled areas shall be constructed in accordance with the standards of Section 417.

#### **603.4. Street Widths.**

The mobile home park interior street system shall be functionally classified according to collector and minor streets, as defined by this Ordinance. In no case shall the width of the paved cartway or the width of the right-of-way be less than that required by Section 417.

#### 603.5. On-street Parking

On-street parking shall only be permissible on one (1) side of the street provided the minimum street width requirements of Section 417. are met.

### **Section 604 Off-Street Parking and Walkways.**

#### 604.1. Driveway and Off-street Parking Standards.

- A. The requirements of Section 406.4 of this Ordinance shall be applicable to all mobile home parks.
- B. Off-site common parking areas may be provided in lieu of the required two (2) parking spaces on each mobile home lot according to the following:
  - 1. Parking shall be provided at the rate of two (2) spaces for each mobile home not equipped with two (2) on-site parking spaces.
  - 2. Common parking areas shall be fully accessible to all residents and shall be connected by means of sidewalks.
  - 3. Common parking areas shall be located no more than one hundred and fifty (150) feet from the farthest mobile home the parking area is intended to serve.
- C. Additional parking spaces for vehicles of non-residents shall be provided.

#### 604.2. Walkways.

- A. All mobile home parks shall provide safe, convenient, all-season pedestrian walkways of adequate width for their intended use, durable and convenient to maintain, between the park streets and all community facilities provided for park residents.
- B. All mobile home sites shall be connected to common walks, and to streets or to driveways connecting to a paved street. Each such walk shall have a minimum width of three (3) feet.
- C. Where pedestrian traffic is concentrated, each walk shall have a minimum width of five (5) feet.

### **Section 605. Service Buildings and other Facilities.**

Service buildings, when provided, shall comply with the following:

- 605.1. Service buildings shall contain a toilet and lavatory for each sex.
- 605.2. Service buildings may contain storage areas for occupants of the park.
- 605.3. The applicant may provide laundry facilities, management office, repair shop, indoor recreational facilities and/or commercial uses to supply essential goods and services to park residents only.
- 605.4. It is also recommended that the applicant provide shelter waiting areas for transportation and a mail box area for residents.
- 605.5. Construction of service buildings shall be in compliance with all applicable building codes, plumbing codes, etc. and shall be maintained in clean, sanitary, and structurally safe condition.

#### **Section 606. Water Supply**

The requirements of Section 420 of this Ordinance shall be applicable to any system of supplying water to any mobile home park.

#### **Section 607. Sanitary Sewage Disposal.**

The requirements of Section 411 of this Ordinance shall be applicable to any system and facilities for sanitary sewage treatment and disposal.

#### **Section 608. Refuse Disposal.**

- 608.1. The storage, collection, and disposal of refuse in the mobile home park shall be so managed as to create no health hazards, rodent harborage, insect-breeding areas, accident or fire hazards or air pollution.
- 608.2. All refuse shall be stored in flytight, watertight, rodent-proof containers, which shall be located not more than two hundred (200) feet from any mobile home space. Containers shall be approved in sufficient number and capacity to properly store all refuse.
- 608.3. Racks or holders shall be provided for all refuse containers. Such container racks or holders shall be so designed as to prevent containers from being tipped, to minimize spillage and container deterioration, and to facilitate cleaning around them.
- 608.4. All refuse shall be collected at least twice weekly. Where suitable collection service is not available from municipal or private agencies, the mobile home park operator shall provide this service. All refuse shall be collected and transported in covered vehicles or covered containers.

## **Section 609. Stormwater Management.**

The provisions of Section 414, Stormwater Management (Drainage); Section 415, Stormwater Management (Detention); Section 416, Stormwater Management (Retention and Infiltration); and Section 403 Erosion and Sediment Controls, of this Ordinance shall be applicable to all mobile home park developments.

## **Section 610. Utilities and Exterior Lighting.**

- 610.1. An electrical outlet supply at least one hundred ten (110) volts of sixty (60) cycle alternating current shall be provided for each mobile home space. Such electrical outlets shall be grounded and weatherproof.
- 610.2. Public streets, driveways, and walkways shall be lighted at night with a minimum illumination of at least 0.6 footcandles. Lighting fixtures shall be so equipped as to provide adequate levels of illumination throughout the park for the safe movement of vehicles and pedestrians.
- 610.3. All utilities shall be installed and maintained in accordance with utility company specifications regulating such systems, and shall be underground.

## **Section 611. Fuel Systems.**

### **611.1. Liquefied petroleum gas systems.**

- A. The design, installation and construction of containers and pertinent equipment for the storage and handling of liquefied petroleum gases shall conform to the Act of Pennsylvania Legislation 1951, December 27, P.L. 1973, as it may be amended; and to the regulation thereof promulgated by the Pennsylvania Department of Labor and Industry, or its successor.
- B. Liquefied petroleum gas systems provided for mobile homes, service buildings, or other structures, when installed, shall be maintained in conformity with the rules and regulations of the Pennsylvania Department of Labor and Industry and shall include the following:
  1. Systems shall be provided with safety devices to relieve excessive pressures and shall be arranged so that the discharge terminates at a safe location.
  2. Systems shall have at least one accessible means for shutting off gas. Such means shall be located outside the mobile home and shall be maintained in effective operating condition.
  3. All liquefied petroleum gas piping outside of the mobile home shall be well supported and protected against mechanical injury. Unduluted liquefied petroleum gas in liquid form shall not be conveyed through piping equipment or systems in mobile homes.



4. Vessels of at least twelve (12) U.S. Gallons and less than sixty (60) U.S. gallons gross capacity shall be maintained in a vertical position and shall be securely, but not permanently, fastened to prevent accidental overturning. No vessel shall be placed any closer to a mobile home exit than five (5) feet, and no closer to any window than three (3) feet.
5. No liquefied petroleum gas vessel shall be stored or located inside or beneath any storage cabinet, carport, mobile home, or any other structure.
6. All pipe connection shall be of a flare type.

#### 611.2. Fuel Oil Supply systems.

- A. All fuel oil supply systems provided for mobile homes, service buildings, and other structures shall be installed and maintained in conformity with the rules and regulations of the authority having jurisdiction.
- B. All piping from outside fuel storage tanks or cylinders to mobile homes shall be securely, but not permanently, fastened in place.
- C. All fuel oil supply systems provided for mobile homes, service buildings, and other structures shall have shut-off valves located within five (5) inches of storage tanks.
- D. All fuel storage tanks or cylinders shall be securely placed and shall not be less than five (5) feet from any mobile home exit, and not less than three (3) feet from any window.
- E. Storage tanks located in areas subject to traffic shall be protected against physical damage.

### Section 612. Fire Protection.

- 612.1. The Mobile home park area shall be kept free of litter, rubbish and other flammable materials.
- 612.2. Portable hand-operated fire extinguishers of a type suitable for use on oil fires, and approved by the West Grove Fire Company or other appropriate fire authority, shall be kept in each service building under park control and shall be required by the mobile home park operator to be placed in each mobile home in the park, located inside the mobile home in a fixed location preferably near a door but not in close proximity to cooking facilities.
- 612.3. All mobile home parks shall be provided with fire hydrants to meet the specifications of the Middlestates Department Association of Fire Underwriters, but in any case, in sufficient numbers to be within six hundred (600) feet of all existing and proposed structures and mobile homes, measured by way of accessible streets.

612.4. Where the water supply system does not provide at least a six (6) inch water main, there shall be provided a two (2) inch frost-protected water riser within three hundred (300) feet of each mobile home or building.

612.5. Fires shall be made only for purposes of heating and cooking.

612.6. All mobile home parks shall be operated so as to comply with all state and local laws, ordinances and regulations pertaining to fire prevention.

612.7. Mobile home park manager shall consult periodically with the West Grove Fire Co. and/or other appropriate fire authorities as to proper fire prevention practices, accessibility of streets, testing of fire hydrant pressure, location and operation of equipment, community education programs, etc.

### **Section 613. Miscellaneous Structural Requirements.**

#### **613.1. Additions.**

No permanent additions shall be built onto or become a part of any mobile home unless they are in accordance with the applicable state and local laws, ordinances and regulations including but not limited to the Penn Township Zoning Ordinance and the Penn Township Subdivision and Land Development Ordinance.

#### **613.2. Alterations.**

All plumbing and electrical alterations or repairs in the mobile home part shall be made in accordance with applicable state and local laws, ordinances, and regulations including but not limited to the Penn Township Zoning Ordinance and the Penn Township Subdivision and Land Development Ordinance.

#### **613.3. Mobile Home Pad.**

A concrete pad, properly graded, placed and compacted so as to be durable and adequate for the support of the maximum anticipated loads during all seasons, shall be used for all mobile homes.

#### **613.4. Anchoring.**

Every mobile home placed within a mobile home park shall be anchored to the mobile home pad where it is located prior to the unit being occupied or used in any other way, or the expiration of seven (7) days, whichever occurs first. The anchoring system shall be designed to resist a minimum wind velocity of ninety (90) mile per hour.

#### **613.5. Stability.**

Each mobile home placed within a mobile home park shall prior to occupancy or other use, be affixed to its mobile home pad in such a way as to prevent tilting of the unit.

#### 613.6. Skirts.

Each mobile home placed within a mobile home park shall, prior to occupancy or other use, have a skirt installed which is designed to complement the appearance of the mobile home and is coordinated with other units throughout the park.

#### 613.7. Hitch

The hitch or tow bar attached to a mobile home for transport purposes shall be removed and remain removed from the mobile home when it is placed on its mobile home pad.

### **Section 614. Common Open Space and Buffers.**

#### 614.1. Common Open Space Areas.

- A. At least twenty (20) percent of the remaining gross area of each mobile home park, after subtraction of required buffer areas, shall be set aside as common open space for the use and enjoyment of the residents of the mobile home park. Such common open space shall be substantially free of structures except for those designed for recreational purposes.
- B. Common open space areas shall be located and designed as areas easily accessible to residents and preserving natural features. Common open space areas should include both active recreation areas for all age groups and, particularly where the site includes a watercourse or hilly or wooded areas, land which is left in its natural state.
- C. No more than fifty (50) percent of the minimum required common open space areas shall be comprised of floodplains, wetlands, and steep slope areas.

#### 614.2. Buffer Areas.

- A. Buffered setbacks shall consist of a visual screen of mixes evergreen and deciduous plant material of varying species. At the time of planting, a sufficient amount of evergreen material to visually screen the property shall be at least five (5) feet in height (after planting) and the remainder of plantings may be of varying heights.
- B. The plantings shall be maintained permanently and replaced within one (1) year in the event of death of any plant material. Plantings shall not be placed closer than three (3) feet from any property line.
- C. All existing deciduous and evergreen trees above two (2) inches in caliper or six (6) feet in height shall be preserved in the buffer areas, except where clearance is required to ensure sight distance.

- D. A minimum of thirty five (35) percent of plant material shall be evergreen and ten (10) percent flowering material.

#### **Section 615. Landscaping.**

- 615.1. No portions of tree masses or trees with caliper of four (4) inches or greater shall be cleared unless necessary for effectuation of the proposed mobile home park development. Applicants shall make all reasonable efforts to harmonize their plans with the preservation of existing trees.
- 615.2. In addition to plantings for buffered setbacks, a mobile home park shall be provided with the following landscape requirements:
  - A. Disturbed topsoil shall be stockpiled and replaced after construction.
  - B. Deciduous trees of varying species shall be planted within the mobile home park at a ratio of two (2) per mobile home. In the event that a substantial portion of the tract is wooded and a substantial number of trees remain after development, the governing body may modify this requirement.
  - C. Deciduous and/or evergreen shrubs of varying species shall also be planted within the mobile home park at a ration of at least four (4) per mobile home.
  - D. Planting of landscape material shall be in accordance with a plan prepared by a registered landscape architect, and shall be completed within six (6) months of approval of the Final Plan, and failure to carry out the landscaping plan within such time shall warrant denial of the park's annual license under Section 601.1.B. hereof.

#### **Section 616. Registration of Occupants; Removal of Mobile Homes.**

##### **616.1. Register of Occupants.**

The park manager shall maintain a register containing the number of occupied mobile home pads and the names of all park occupants. Such register shall be available to any authorized person inspecting the park. The manager shall notify the appropriate offices in accordance with state and local taxation laws of the arrival and departure of each mobile home. The register shall be submitted to the Township as part of the application for renewal of the mobile home park's annual license.

##### **616.2. Removal of Mobile Homes**

- A. No mobile home shall be removed from the Township without first obtaining a removal permit from the Penn Township Tax collector as required by Act No. 54, 1969, of the Pennsylvania General Assembly. Such permit shall be issued upon payment of a fee of Two (2) dollars and real estate taxes assessed against the home and unpaid at the time the permit is requested.

- B. Any person who removes a mobile home from Penn Township without first having obtained a removal permit shall be subject to penalty in accordance with Section 616.2.A.

#### **Section 617. Maintenance of Common Areas and Facilities**

- 617.1. The operator and licensee of a mobile home park shall be responsible for maintaining all common facilities including, but not limited to, roads, parking areas, sidewalks or pathways, common open space, water supply and sewage disposal systems, and service buildings, in a condition of proper repair and maintenance.
- 617.2. The licensee of a mobile home park shall, prior to issuance of a certificate of occupancy pursuant to final approval of an application for new development or expansion, post with the Township a maintenance bond according to section 206.5.
- 617.3. If it is noted by the Zoning Officer or representative of the Township that the operator and licensee have not maintained facilities in compliance with this ordinance, the operator and licensee shall have thirty (30) days in which to correct any such violation. The operator and licensee will be notified in writing by certified mail regarding such offense(s) and necessary action, should said operator and licensee fail to correct such violations.

#### **Section 618. Penalties**

##### **618.1. Summary Offense.**

Any person who violates any provision of this Ordinance shall be subject to the provisions of Section 709 of this Ordinance.

##### **618.2 Revocation or suspension of License.**

Upon repeated violation by the same permittee, his right to the issuance of a permit, or to continued operation under a permit, may be suspended for a fixed term or permanently revoked, after notice and hearing, subject to the right of appeal to the Chester County Common Pleas Court.

#### **Section 619. Conflict of Ordinances; Effect of Partial Invalidity**

In any case where a provision of this ordinance is found to be in conflict with a provision of any Zoning building, fire, safety, or health ordinance of Penn Township existing on the effective date of this ordinance, the provision which in the judgment of the Inspector, establishes the higher standard for the promotion and protection of the health and safety of the people shall prevail.

## ARTICLE VII – FEES

### Section 700. Fees

- 700.1 The Board of Supervisors shall fix 700.1 Subdivision and land development application and review fees by resolution. In addition to such application fees, all disbursements by the Township incident to plan review, approval, inspection of construction, inspection of dedicated improvements, including but not necessarily limited to professional consultants, costs of material or site testing, any maintenance costs prior to acceptance of improvements by the Township, any inspection costs incurred after dedication of public improvements but prior to the eighteen months maintenance period, any costs the Township incurs in enforcing the maintenance security, and any other professional services used by the Township in conjunction with plan review shall be paid by the applicant and/or withdrawn from any security provided by the applicant. The costs and fees required by this section shall be in amounts customarily charged by the professional consultant and in no event shall such fees and cost exceed the rate charged by professional consultants to the Township.
- 700.2 Any fees that the Township incurs prior to final approval of a development plan must be reimbursed by the landowner and/or developer prior to the recording of the final approved land development plan. Any fees incurred by the Township after the final plan is approved, but prior to dedication of public improvements must be paid before the Township will accept the improvements. Any fees that the Township incurs after public improvements have been dedicated but prior to the expiration of the eighteen month maintenance period must be paid before the maintenance security is released.
- 700.3 Upon submission of a sketch plan, the landowner, their agent, tenant and other person submitting a land development for review (jointly and severally obligated as the "applicant") shall deposit an amount as set and established from time to time by resolution of the Board of Supervisors to be held in an escrow account with the Township. Any interest earned shall be paid to the Township.
- 700.4 Upon submission of a preliminary plan, the landowner, their agent, tenant or any other person (jointly and severally obligated as the "applicant") shall deposit with the Township an amount as set and established from time to time by resolution by the Board of Supervisors, to be held in an escrow account with the Township. Any interest earned shall be paid to the Township.
- 700.5 Upon submission of a final plan, the landowner, their agent, tenant or any other person (jointly and severally obligated as the "applicant") shall deposit an amount as set and established from time to time by resolution of the Board of supervisors to be held in escrow account with the Township.
- 700.6 Upon receipt of an invoice or bill from a professional consultant or other fee incurred in the review of any plan, permitted by the PA Municipalities Planning Code for services rendered in review of the sketch plan, preliminary plan and final plan, the Township shall withdraw from the designated escrow account the amount necessary to pay the

consultant's bill as it becomes due. The Township shall send the applicant a copy of the consultant's bill as it becomes due. The Township shall send the applicant a copy of the consultant's invoice and notice that such bill has been paid from the escrow funds. In the event that the applicant's escrow account is depleted prior to the consultants' fees being paid in full, or is insufficient to cover the consultant's or the Township determines the remaining balance will be insufficient to pay the unpaid or the pending unbilled services, the Township may require the applicant deposit additional funds in the escrow account to cover the unpaid consultants' fees. Should the applicant not provide the additional payment, Township may require such other security as is necessary to assure the payment of these fees. Prior to the date when the applicant executes and submits a performance guaranty or escrow agreement, the Township may use the escrow funds established as the performance guaranty for the payment of consultants' fees. After the applicant has executed and submitted a maintenance guarantee, the Township may use the funds established as the maintenance guarantee for the payment of consultants' fees.

- 700.7 The Board of supervisors may by resolution at a public meeting create, revise and/or amend any form required in this Article, including but not limited to the escrow agreement, improvement agreement, maintenance agreement, fee schedule and/or other guaranty.

#### **Section 701. Modifications**

- 701.1. The Board may modify these provisions in individual cases as may be deemed necessary in the public interest, provided that such modification shall not have the effect of nullifying the intent and purpose of this Ordinance. If the literal compliance with any mandatory provisions of this Ordinance is shown by an applicant to a majority of the Board present at a per-scheduled public meeting, to be unreasonable and to cause undue hardship as applied to his property, the Board may grant a modification of such mandatory provisions if the modification will promote the purpose and intent of the ordinance and will be to the benefit of the public interest according to the following:
- A. All requests for a modification shall be 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, the provision or provisions of the ordinance involved and the minimum modification necessary.
  - B. The Board may refer the request for modification to the Planning Commission for advisory comments.
  - C. The Board, or Planning Commission, as the case may be, shall keep a written record of all account on all requests for modifications.
- 701.2. No changes, erasures, modifications or revisions shall be made in any plan of a subdivision or land development after the plan has been endorsed by the Board, unless the plan is first resubmitted to and approved by the Board in accordance with the provisions of this Ordinance.

## **Section 702. Revision and Amendment**

The Board may amend this Ordinance. Any amendments shall be made in accordance with the procedures established by the MPC.

## **Section 703. Keeping of Records.**

The Township Planning Commission and the Board shall keep a record of their findings, decisions, and recommendations relative to all subdivision and land development plans filed for review. Such records shall be made available to the public for review.

## **Section 704. Responsibility.**

The applicant shall be responsible for observing the procedures established in this Ordinance and for submitting all plans and documents as may be required.

## **Section 705. Conflicts.**

- 705.1. Whenever there is a difference between the minimum standards specified herein and those included in other official Township regulations, the more stringent requirements shall apply and are not hereby repealed.
- 705.2. All existing ordinances or parts of ordinances which are contrary to the provisions of this Ordinance are hereby repealed to the extent necessary to give this Ordinance full force and effect.

## **Section 706. Reconsideration.**

Any person or persons aggrieved by a finding, decision, or recommendation of the Board may request and receive opportunity to appear before the Board, present additional relevant information and request reconsideration of the original finding, decision, or recommendation.

## **Section 707. Mediation.**

- 707.1. When requested by an applicant and approved by the Board, mediation shall be an option to resolve conflict according to the regulations of this Section and those set forth in the MPC.
- 707.2. Participation in mediation shall be wholly voluntary. The appropriateness of mediation shall be determined by the particulars of each case and the willingness of parties to negotiate.
- 707.3. Prior to commencement of the actual mediation, the mediating parties, with the assistance of a mediator if desired, shall develop terms and conditions for;
  - A. Funding the mediation;



- B. Selecting a mediator, who, at a minimum, shall have working knowledge of municipal zoning and subdivision procedures, and demonstrated skills in mediation;
- C. Completing mediation, including timing limits for such completion;
- D. Suspending time limits specified by this Ordinance and authorized by the MPC, provided that there is written consent by the mediating parties, and by the Board or applicant if either is not a party to the mediation;
- E. Identifying all parties and affording them the opportunity to participate;
- F. Determining whether any or all of the mediation sessions shall be open to the public subject to legal constraints;
- G. Assuring that mediated solutions are in writing and signed by the parties and become subject to review and approval by the Board pursuant to the procedures of this Ordinance and those established in the MPC.

707.4. No offers or statements made in the mediation sessions, excluding the final written mediated agreement, shall be admissible as evidence in any subsequent judicial or administrative proceedings.

#### **Section 708. Challenges.**

- 708.1. Any person desiring to challenge the validity of any provision of this Ordinance, or any amendment thereof, shall make such challenge as prescribed by the MPC as amended.
- 708.2. Any person aggrieved by action of the Board may appeal the action as prescribed by the MPC as amended.

#### **Section 709. Enforcement.**

- 709.1. Any person, partnership or corporation who or which has violated the provisions of this ordinance shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Township, pay a judgment of not more than \$500.00 plus all court costs, including reasonable attorney fees incurred by the municipality as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of a violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the Township may enforce the judgment pursuant to the application rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership or corporation violating the ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of determination of a violation by the district justice and thereafter each day that a violation continues shall constitute a separate violation.

709.2. 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.

709.3. Nothing contained in the section shall be construed or interpreted to grant to any person or entity other than the Township the right to commence any action for enforcement pursuant to this section.

**Section 710. Effect of Subdivision and Land Development Ordinance.**

No lot, parcel or dwelling unit in a subdivision or land development shall be sold, no permit to erect any building upon land in a subdivision or land development shall be issued, and no buildings shall be erected in a subdivision or land development until a Final Plan of such subdivision or land development shall have been approved and properly recorded and until improvements have been either constructed or guaranteed.

## **Article VIII – Definitions**

**Section 800.** This Article clarifies by Definition, terminology used within and in relationship to this subdivision and land development ordinance.

**Section 801.** Unless otherwise expressly stated, the following terms shall, for the purpose of these regulations, have the meaning indicated:

- A. Words in the singular include the plural, and those in the plural include the singular.
- B. Words used in the present tense include the future tense.
- C. Words "person", "subdivider", "owner", "developer", and "applicant" include a corporation, incorporated association and a partnership, or other legal entity, as well as an individual.
- D. The word "building" includes structures, and shall be construed as if followed by the phrase, "or part thereof".
- E. The word "watercourse" includes channel, creek, ditch, dry run, spring, stream and river.
- F. The words "should" and "may" are permissive; the words "shall", "must", and "will" are mandatory and directive.

**Section 802.** Other terms or words used herein shall be interpreted or defined as follows:

**Agricultural Activity.** The work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops, or pasturing and raising of livestock and installation or conservation measures. Construction of new buildings or impervious area is not considered an Agricultural activity.

**Alley.** See Service Street.

**Anchoring.** The fastening of the mobile home to its pad (or stand) in order to prevent upset or damage due to wind, erosion, flooding, or other natural forces.

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

**Block.** An area bound by streets.

**BMP (Best Management Practice).** Activities, facilities, designs, measures or procedures used to manage stormwater impact from Regulated Activities, to meet State Water Quality Requirements, to promote groundwater recharge and to otherwise meet the purposed of this Ordinance. BMPs include but are not limited to infiltration, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, forested buffers, sand filters and detention basins. Structural BMPs are permanently constructed stormwater mitigative devices at a project site, consistent with

the Final Pennsylvania BMP Manual (December 2006), contrasted with preventive Non-Structural BMPs. See the Manual for a more complete discussion.

**Board.** Board of Supervisors of the Township of Penn, Chester County, Pennsylvania.

**Building.** A structure enclosed with exterior walls or fire walls, built, erected and framed of component structural parts, designed for the housing, shelter, enclosure and support of individuals, animals, or property of any kind.

**Building Reserve (Setback) Line.** The line within a property defining the minimum required distance between any building and a street right-of-way.

**Cartway (Roadway).** The portion of a street right-of-way, paved or unpaved, intended for vehicular use, including but not limited to travel lanes, acceleration or deceleration lanes, and on-street parking areas.

**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.

**Commission.** The Planning Commission of the Township of Penn, Chester County, Pennsylvania.

**Common Open Space.** A parcel or parcels of land or an area of water or a combination of land and water designed and intended for the use or enjoyment of residents, not including streets, off-street parking areas, areas set aside for public facilities, and required setbacks and buffers.

**Common Parking Area.** A parking facility other than those provided within the lot lines of a lot on which one single family detached dwelling, one single family semi-detached dwelling, one townhouse, one two-family detached dwelling, or one two-family semi-detached dwelling is located.

**Conservation District.** A conservation district, as defined in section 3(C) of the Conservation District Law (3 P. S. § 851(c)), which has the authority under a delegation agreement executed with the PADEP to administer and enforce all or a portion of the erosion and sediment control program in this Commonwealth; in this case, the Chester County Conservation District.

**County.** The County of Chester, Commonwealth of Pennsylvania.

**County Planning Commission.** The Planning Commission of the County of Chester, Commonwealth of Pennsylvania.

**Dbh.** The diameter of a tree at breast height, measured 4.5 feet from the ground surface.

**Design Storm.** The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g. a 5-year storm) and duration (e.g. 24-hours), used in the design and evaluation of stormwater management systems (typically referred to as the 2-, 5-, 10-, 25-, 50-, and 100-year storms).

**Detention.** The quantity of stormwater runoff that is captured temporarily and then discharged into the Waters of this Commonwealth at a controlled rate.

**Developer.** Any landowner, agent of such landowner, or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or a land development.

**Developer's Agreement.** A written document containing the terms and obligations an applicant agrees to satisfy as a condition for the review and approval of any land development and/or subdivision plan. The Township may establish and amend the developer's agreement by resolution.

**Development Site.** See Project site.

**Dwelling Unit.** Any structure or part thereof, designed to be occupied as living quarters as a single housekeeping unit.

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

**Easement.** A right-of-way granted, but not dedicated, for limited use of private land for a public or quasi-public purpose, and within which the owner of the property shall not erect any permanent structure, but shall have the right to make any other use of the land which is not inconsistent with the rights of the grantee.

**Endorsement.** The application of the signatures of at least a majority of the Board of Supervisors and the Township Seal to the Plan and the application of the signature of the County Planning Commission to the Plan.

**Engineer.** A licensed professional engineer registered by the Commonwealth of Pennsylvania.

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

**Floodplain.** Any land area susceptible to inundation by water from any natural source or delineated by applicable Federal Emergency Management Agency (FEMA) maps and studies as being a Special Flood Hazard Area. Also included are areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania Department of Environmental Protection (PADEP) Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by PADEP), sometimes referred to as "alluvial soils".

**Floodway.** The channel of the watercourse and those portions of the adjoining floodplains that is reasonably required to carry and discharge the 100-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it

is assumed – absent evidence to the contrary – that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

**Footcandle.** Unit of light density incident on a plane (assumed to be horizontal unless otherwise specified), and measurable with an illuminance meter, a.k.a. light meter.

**Full Cutoff .** Attribute of a lighting fixture from which no light is emitted at or above a horizontal plane drawn through the bottom of the fixture and no more than 10% of the lamp's intensity is emitted at or above an angle 10° below that horizontal plane, at all lateral angles around the fixture.

**Fully Shielded.** Attribute of a lighting fixture provided with internal and/or external shields and louvers to prevent brightness from lamps, reflectors, refractors and lenses from causing glare at normal viewing angles. In the case of fixtures aimed straight down, the fixture shall have no light emitted at or above a horizontal plane drawn through the bottom of the fixture.

**Glare.** Excessive brightness in the field of view that is sufficiently greater than the brightness to which the eyes are adapted, to cause annoyance or loss in visual performance and visibility, so as to jeopardize health, safety or welfare.

**Grade.** The inclination with the horizontal, of a road, unimproved land, etc., which is generally expressed by stating the vertical rise or fall as a percentage of the horizontal distance.

**Hitch.** A device which is part of the frame or attaches to the frame of a mobile home and connects it to a power source for the purpose of transporting the unit.

**Hydrologic Soil Group (HSG).** Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The Natural Resources Conservation Service of the US Department of Agriculture (USDA-NRCS; previously the SCS) defines the four HSG groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local USDA-NRCS offices or county conservation district offices. Soils become less permeable as the HSG varies from A to D.

**Illuminance.** Quality of light, measured in footcandles

**Impervious Surface (Impervious Area).** A surface that prevents the infiltration of water into the ground. Impervious surfaces (or covers) shall include, but not be limited to, roofs, additional indoor living spaces, patios, garages, storage sheds and similar structures, and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.

**Improvements.** Those physical additions and changes to the land that may be necessary to produce usable and desirable lots.

**Inspector.** The Zoning Officer of Penn Township or his authorized representative.

**Land Development or Development.** Inclusive of any or all of the following meanings: (1) the improvement of one lot or two or more contiguous lots, tracts, or parcels of land for any purpose involving (a) a principal building used for any purpose other than a single-family residential dwelling, agricultural use, or any accessory thereto, or (b) the division or allocation of land -- between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups, or other features; (2) any subdivision of land; (3) development in accordance with Section 503(1.1) of the Pennsylvania Municipalities Planning Code; (4) Earth Disturbance Activity affecting more than 5000 square feet or addition of more than 1000 square feet of impervious surface.

Land developments are subject to all regulations and requirements set forth in this Ordinance.

**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, shall be deemed to be a landowner for the purpose of this Ordinance.

**Landscape Plan.** A plan for the installation and maintenance of plantings and other landscape improvements, demonstrating compliance with the provisions of Section 615 of this Ordinance and Section 1602 of the Penn Township Zoning Ordinance.

**Light Trespass.** Light emitted by a light source or installation, which is cast beyond the boundaries of the property on which the lighting installation is sited.

**Lot (Parcel).** An area of land intended for transfer of ownership, use, development or improvement.

**Lot Area.** The area contained within the property lines of a lot (as shown on the Plan), excluding space within all street rights-of-way and within all permanent drainage easements, but including the areas of all other easements.

**Lumen.** As used in the context of this Ordinance, the light-output rating of a lamp (light bulb).

**Maintenance Guarantee.** A guarantee by the subdivider in a form satisfactory to the Township that he shall maintain all improvements in good condition for a period of one year after completion of construction and installation of all such improvements.

**Major Subdivision.** See Plan, Major.

**Marker.** A metal pipe or pin of at least ¾ inch in diameter and at least 24 inches in length.

**Minor Subdivision.** See Plan, Minor.

**Mobile Home.** A transportable, single-family dwelling intended for permanent occupancy contained in one unit, or in two units designed to be joined into one integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for

minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation, including any addition or accessory structure, such as porches, sheds, decks or additional rooms. All mobile homes shall meet construction standards set by the U.S. Department of Housing and Urban Development.

**Mobile Home Lot or Site.** A parcel of land in a mobile home park, improved with the necessary utility connections and other appurtenances necessary for the erection thereon of a single mobile home, which is leased by the park owner to the owner or occupants of the mobile home erected on the lot.

**Mobile Home Pad.** A concrete pad at least six inches in thickness with at least six tie-down rings to which the mobile home shall be secured, and equal in length and width to the dimensions of the mobile home to be placed thereon.

**Mobile Home Park.** A parcel of land under single ownership which has been planned and improved for the placement of mobile homes for non-transient use, consisting of two or more mobile home lots.

**Mobile Home Park Permit.** A written permit issued by the Inspector and subject to annual renewal, permitting the mobile home park to operate under this ordinance and other pertinent ordinances and regulations.

**Monument.** A stone or concrete monument with a flat top at least 4 inches in diameter or square, containing a copper or brass dowel (1/4 inch drill hole) and at least 24 inches in length. It is recommended that the bottom sides or radius be at least 2 inches greater than the top to minimize movements caused by frost.

**Multiple Dwelling Building.** A building providing separate dwelling units for three or four families.

**Municipality.** Township of Penn, Chester County, Pennsylvania.

**PADEP.** The Pennsylvania Department of Environmental Protection.

**Peak Rate of Discharge or Peak Discharge.** The maximum rate of stormwater runoff from a specific storm event, usually given in cubic feet per second or cfs; peak rate of discharge is related but not equal to total volume of discharge.

**Performance Guarantee.** Any security which is accepted by the Township to guarantee that certain improvements will be made within the subdivision or land development, including performance bonds, escrow agreements and any other collateral or surety agreements.

**Plan, Final.** A complete and exact subdivision or land development plan (including all required supplementary data), prepared for official recording to define property rights and proposed streets and other improvements.

**Plan, Major.** Any subdivision or land development proposal other than those qualifying as a minor plan.



**Plan, Minor.** Any subdivision or land development proposal. Including but not limited to re-subdivision proposals or lot line adjustments, in which:

- A. No public improvements are to be constructed;
- B. No land disturbance activities will take place except those incidental to construction of a single-family detached dwelling on each lot; and
- C. No more than three (3) lots are created, whether individual or cumulatively, as of the effective date of this Ordinance.

**Plan, Official.** The Comprehensive Development Plan, and/or Master Plan, and/or Future Land Use Plan, and/or Ultimate Right-of-Way Plan, and/or Official Map, and/or Topographical Survey, and/or other such plans, or portions thereof, as may have been adopted pursuant to statute.

**Plan, Preliminary.** A tentative subdivision or land development plan (including all required supplementary data), in lesser detail than a Final Plan showing, among other things, topographical data and approximate proposed street and lot layout as a basis for consideration prior to preparation of a Final Plan.

**Plan, Record.** The copy of the Final Plan which contains the original endorsements of the County Planning Commission and the Board of supervisors and which is intended to be recorded with the County Recorder of Deeds.

**Plan, Sketch.** An informal plan indicating salient existing features of a tract and the general layout of a proposed subdivision or land development.

**Planning Commission.** Penn Township, Chester County, Planning Commission.

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

**Project Site.** The specific area of land or property where any proposed land disturbance activities in the Township are planned, conducted, or maintained.

**Regulated Activities.** All activities involving land development and/or earth disturbance, as regulated by this Ordinance. Regulated Activities may involve major and minor subdivisions and land developments as well as building permits.

**Reserve Strip.** A parcel of ground in separate ownership, separating a street from other adjacent properties, or from another street, either proposed or existing.

**Resubdivision.** Any replatting of land, including changes to recorded subdivision or land development plans. See also Subdivision.

**Return Period.** The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period storm would be expected to occur on average once every twenty five years.

**Reverse Frontage Lot.** A lot extending between and having frontage on two generally parallel streets, excluding service streets, with vehicular access solely from one street.

**Right-of-Way.** The total width of any land reserved or dedicated as a street, alley, crosswalk, or for other public or semi-public purposes.

**Runoff.** Any part of precipitation that flows over the land and is discharged from the Project Site.

**Sanitary Sewage Disposal, On-site.** Any structure designed to treat sanitary sewage within the boundaries of an individual lot.

**Sanitary Sewerage System, Community.** A sanitary sewage collection system in which sewage is carried from individual lots by a system of pipes to a temporary central treatment and disposal plant, generally serving a neighborhood area.

**Sanitary Sewerage System, Public.** A sanitary sewage collection system in which sewage is carried from individual lots by a system of pipes to a central treatment and disposal plant, generally not confined to one neighborhood.

**Sediment.** Soils or other materials transported by surface water as a product of erosion.

**Separate Storm Sewer System.** Any and all stormwater management and/or conveyance structures, facilities, physical conditions and/or systems (e.g., roadways, streets, road drainage facilities, curbs, gutters, ditches, swales, natural and/or manmade channels, storm sewers, inlets, drains and basins) designed, used and/or intended to be used to or which do collect and/or convey stormwater runoff across property boundaries and/or to or into waters of the Commonwealth.

**Septic Tank.** A watertight receptacle which receives sewage or industrial waste and is designed and constructed to provide for sludge storage and decomposition and to separate solids from the liquid, through a period of detention before allowing the liquid to be discharged.

**Sight Distances.** The required length of roadway visible to the driver of a passenger vehicle at any given point on the roadway when the view is unobstructed by traffic. Sight distance measurement shall be made from a point 4.5 feet above the centerline of the road surface to a point 0.5 feet above the centerline of the road surface.

**Skirts.** Panels specifically designed for the purpose of screening the underside of a mobile home by forming an extension of the vertical exterior walls of the mobile home and covering the entire distance between the bottom of the exterior walls and the ground elevation below.

**State Water Quality Requirements.** The regulatory requirements to protect, maintain, reclaim, and restore water quality under Pennsylvania Code Title 25 and the Clean Streams Law.

**Stormwater.** Runoff which drains from the surface of the land resulting from precipitation or snow or ice melt.

**Stormwater Management Facility.** Any structure, natural or man-made, that due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to: rain gardens and other bioretention devices, infiltration basins and trenches and dry wells, porous pavements with recharge, retention basins (wet ponds), constructed wetlands, vegetated swales and filter strips, storm sewers, pipes, and infiltration structures.

**Stormwater Management Site Plan-** The plan prepared by the Developer or his representative indicating how storm water runoff will be managed at the development site in accordance with this Ordinance. Stormwater Management Site Plan will be designed as SWM Site Plan throughout this Ordinance.

**Street.** A strip of land, including the entire right-of-way (i.e., not limited to the cartway) intended to be used by vehicular traffic or pedestrians. The word "street" includes street, avenue, boulevard, road, highway, freeway, parkway, lane, alley, viaduct and other ways used or intended to be used by vehicular traffic or pedestrians whether public or private. Streets are further classified according to the function they perform:

- A. **Arterial Street.** A street serving a large volume of comparatively high-speed and long-distance traffic, including all facilities classified as main and secondary highways by the Pennsylvania Department of Transportation.
- B. **Collector Street.** A street which intercepts minor streets to provide a route to give access to community facilities and/or other collector and arterial streets.
- C. **Cul-de-Sac Street.** A minor street intersecting another street at one end, and terminating in a vehicular turnaround at the other end.
- D. **Half (Partial) Street.** A street, generally parallel and adjacent to a property line, having a lesser right-of-way width than normally required for improvement and use of the street.
- E. **Marginal Access Street.** A minor street parallel and adjacent to an arterial street, but separated from it by a reserve strip, which provided access to abutting properties and control of intersections with the arterial street.
- F. **Minor Street.** A street used primarily to provide access to abutting properties or buildings.
- G. **Service Street (Alley).** A minor right-of-way providing secondary vehicular access to the side or rear of two or more properties.
- H. **Private Street.** A street privately owned and maintained and built to the standards for a minor street as determined by the subdivision and Land Development Ordinance.

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

**Subdivider.** Any landowner, agent of such landowner, or tenant with the permission of such landowner, who makes or causes to be made a subdivision or a land development.

**Subdivision.** The division or redivision of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land, including changes in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership or building or lot development; provided, however, that the division of land for agricultural purposes into parcels of more than 10 acres not involving any new street or easement of access shall be exempted. The term subdivision shall refer, as appropriate in this Ordinance, to the process of subdividing land or the land proposed to be subdivided.

The term subdivision includes resubdivision.

**Township Planning Commission:** The Planning Commission of the Township of Penn, Chester County, Pennsylvania

**Township Supervisors.** Board of Supervisors of the Township of Penn, Chester County, Pennsylvania.

**Surveyor.** A licensed surveyor registered by the Commonwealth of Pennsylvania.

**Tile Disposal Field.** A system of open jointed or perforated pipes laid in the upper strata of the soil to distribute sewage effluent into the soil for absorption and vaporization.

**Township.** The township of Penn, Chester County, Pennsylvania.

**Township Engineer.** An engineer who the Board of Supervisors may designate to undertake certain review actions which are provided for in this Ordinance.

**Water Distribution System Community:** A system for supplying and distributing water from a common source or two or more dwellings and or other buildings within a single neighborhood.

**Water Distribution System, On-Site.** A system for supplying and distributing water to a single dwelling or other building from a source located on the same lot.

**Water Distribution System, Public,:** A system for supplying and distributing water from a common source to dwellings and other buildings, but generally not confined to one neighborhood.

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

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

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

## ARTICLE IX – EFFECTIVE DATE AND ENACTMENT

ARTICLE IX - EFFECTIVE DATE AND ENACTMENT

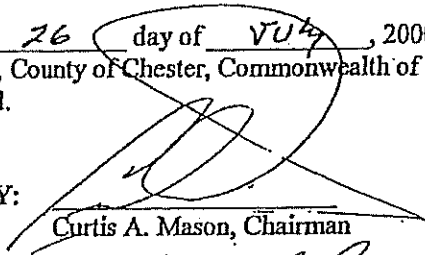
**SEVERABILITY.**

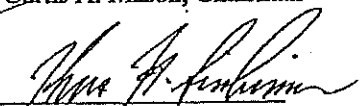
If any sentence, clause, section, or part of this Ordinance is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts thereof. It is hereby declared as the intent of the Board of Supervisors that this Ordinance would have been adopted had such ,unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

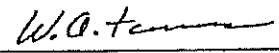
This Ordinance shall be effective on the 5th day from the date of its enactment.

DULY ORDAINED AND ENACTED this 26 day of July, 2000, by the Board of Supervisors of the Township of Penn, County of Chester, Commonwealth of Pennsylvania, in lawful session duly assembled.

BY:

  
Curtis A. Mason, Chairman

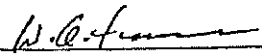
  
Thomas H. Sinsheimer, Vice Chairman

  
W.A. Finnen, Secretary

ABSENT  
Thomas O'Rourke, Member

ABSENT  
Daniel C. Price III, Member

ATTESTED:



(7)

## Appendix I

### Certification of Ownership, Acknowledgment of Plan, and Offer of Dedication

The following certification, in the wording shown, must be labeled and completed on the Final Subdivision or Land Development Plan:

Commonwealth of Pennsylvania  
County of Chester

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned officer, personally appeared \_\_\_\_\_, who being duly sworn according to law, deposes and says that she/he is the \_\_\_\_\_ 1 \_\_\_\_\_ of the property shown on this plan, that the subdivision plan thereof was made at his/her direction, that she/he acknowledges the same to be his/her act and plan \_\_\_\_\_ 2 \_\_\_\_\_, and that all streets \_\_\_\_\_ 3 \_\_\_\_\_, shown and not heretofore dedicated are hereby dedicated to the public use \_\_\_\_\_ 4 \_\_\_\_\_.

\_\_\_\_\_  
5  
Signature of Secretary of Corporation

\_\_\_\_\_  
6  
Signature of individual, of partners,  
or of president of corporation (7)

\_\_\_\_\_  
8  
Notary: (9)

My Commission Expires:

\_\_\_\_\_, 20\_\_\_\_\_

1. Insert either: "Owner", "Equitable Owner", or "President of (the name of corporation)".
2. Whenever applicable, insert "and desires the same to be recorded as such according to law".
3. Whenever applicable, insert: "and open space contained in lots number \_\_\_\_\_".
4. If necessary, insert: "except those labeled "not for dedication" (and any other restrictions or reservations."
5. Where necessary, signature of secretary of corporation.
6. Signature of individual, of partners, or of president of corporation.
7. If necessary, corporate seal.
8. Signature and (9) seal of notary public or other officer.

## Appendix II

### Certification of Accuracy

The following certification, in the wording shown, must be labeled and completed on the Final Subdivision or Land Development Plan:

I hereby certify that the plan shown and described hereon is true and correct to the accuracy required by the Penn Township Subdivision and Land Development Ordinance.

Date: \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_ 1 \_\_\_\_\_ (2)

- (1) signature of the registered engineer or registered surveyor responsible for the preparation of the plan.
- (2) the seal of the engineer or surveyor.



## Appendix III

### Certification of Municipal Approval

The approval of the Final Plan by each municipality in which the subdivision or land development is located must be indicated on the Record Plan, in substantially the following form:

At a meeting held on \_\_\_\_\_, 20\_\_\_\_, the \_\_\_\_\_ 1\_\_\_\_  
of \_\_\_\_\_ 2\_\_\_\_ of \_\_\_\_\_ 3\_\_\_\_, by  
\_\_\_\_\_ 4\_\_\_\_ duly enacted, approved the subdivision plan for the property of  
\_\_\_\_\_ 5\_\_\_\_, as shown hereon.

\_\_\_\_\_ 6\_\_\_\_  
Chairman

7

\_\_\_\_\_  
Vice-Chairman

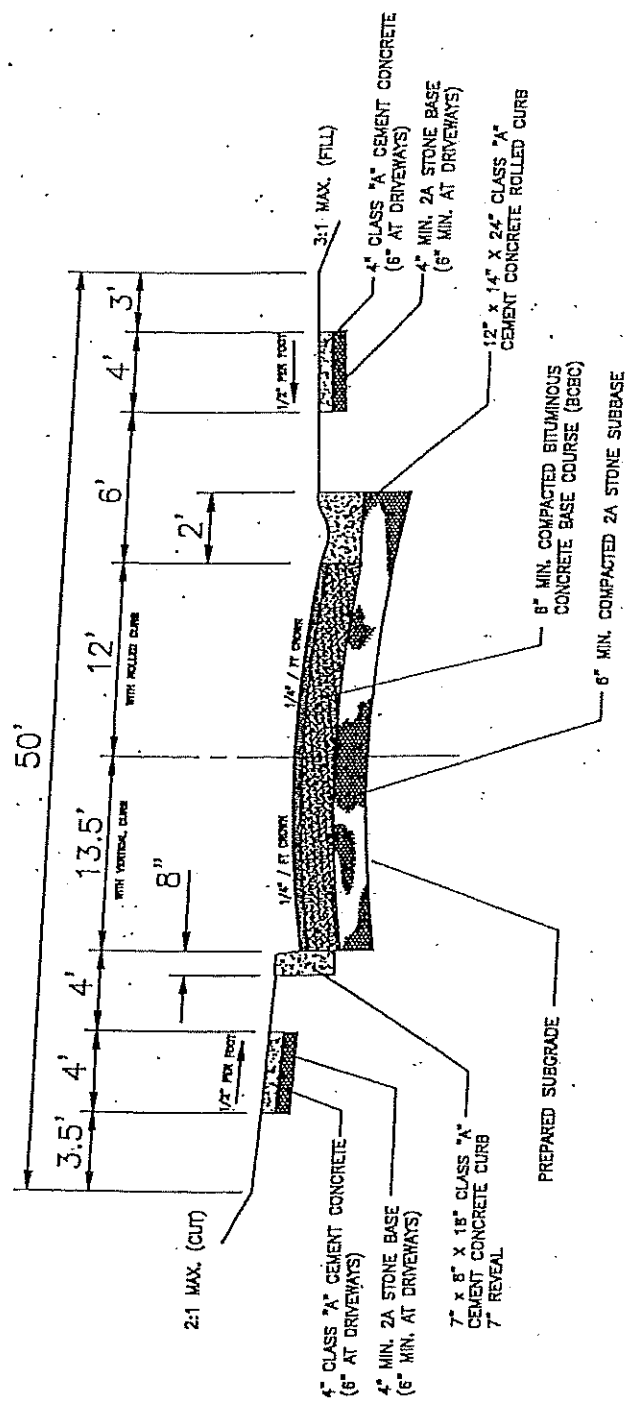
\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Supervisor

- (1) insert either the "Board of Supervisors" or "Borough Counsel"
- (2) insert either "Township" or "Borough"
- (3) insert the name of the municipality
- (4) insert a resolution or ordinance number
- (5) insert the name of the property owner
- (6) signatures of either the Township supervisors or the Borough Council
- (7) municipal seal

APPENDIX IV



TYPICAL ROAD CROSS SECTION

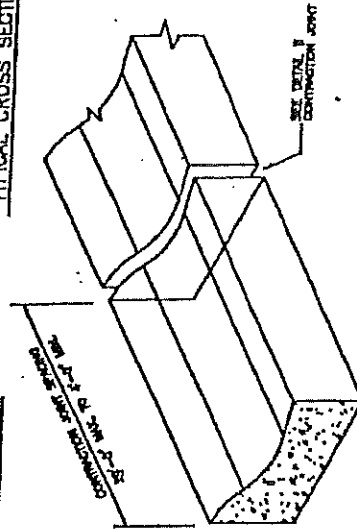
NTS

# APPENDIX V



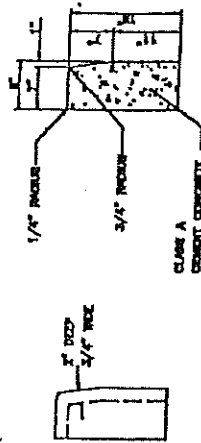
DETAIL A  
CONTRACTION JOINT

TYPICAL CROSS SECTION



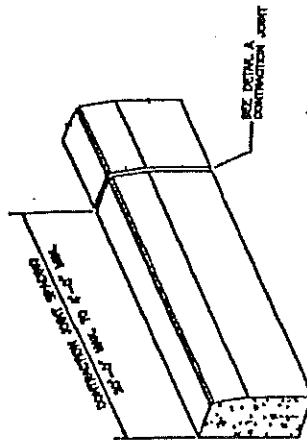
DETAIL B  
CONTRACTION JOINT

TYPICAL CROSS SECTION



DETAIL A  
CONTRACTION JOINT

TYPICAL CROSS SECTION



DETAIL B  
CONTRACTION JOINT

TYPICAL CROSS SECTION

NTS

- NOTES:
1. MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PENN. DOT PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND SECTION 641 FOR PLAIN CEMENT GUTTER CURB.
  2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
  3. PLACE 3/4" PREMOULDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO THE AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.

NTS

**FORM I**  
**APPLICATION FOR SKETCH PLAN REVIEW**

An application is hereby made for review of Sketch Subdivision or Land Development Plan submitted herewith and more particularly described:

1. Name of Applicant(s): \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Parcel Number: \_\_\_\_\_
  2. Name of Owner(s): \_\_\_\_\_  
(If other than applicant): \_\_\_\_\_
  3. Applicant's interest, if other than owner: \_\_\_\_\_
  4. Location of Subdivision/Land Development: \_\_\_\_\_  
\_\_\_\_\_
  5. Engineer or Surveyor responsible for plan: \_\_\_\_\_  
Address: \_\_\_\_\_ Phone Number: \_\_\_\_\_
  6. Total Acreage: \_\_\_\_\_ Number of Lots: \_\_\_\_\_
  7. Acreage being subdivided: \_\_\_\_\_ Minimum lot area: \_\_\_\_\_
  8. Lot use proposed:  

<input type="checkbox"/> Single Family	<input type="checkbox"/> Two Family	<input type="checkbox"/> Townhouse
<input type="checkbox"/> Multi-Family	<input type="checkbox"/> Commercial	<input type="checkbox"/> Industrial
<input type="checkbox"/> Other (specify) _____		
  9. Zoning Classification: \_\_\_\_\_
  10. Type of water supply proposed:  

<input type="checkbox"/> Public System	<input type="checkbox"/> Community System	<input type="checkbox"/> Individual On-Site
--	---	---
  11. Type of sanitary sewage disposal proposed:  

<input type="checkbox"/> Public System	<input type="checkbox"/> Live	<input type="checkbox"/> Capped	<input type="checkbox"/> Community System	<input type="checkbox"/> Individual On-Site
--	-------------------------------	---------------------------------	---	---
  12. Type of off-street parking proposed:  

<input type="checkbox"/> Garages	<input type="checkbox"/> Driveways	<input type="checkbox"/> Other _____
----------------------------------	------------------------------------	--------------------------------------
  13. List of proposed improvements:  
1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_
- Date of Plan: \_\_\_\_\_, 20\_\_\_\_
- Signature of Applicant(s) \_\_\_\_\_  
\_\_\_\_\_

**FORM 2**  
**APPLICATION FOR REVIEW OF PRELIMINARY PLAN**

An application is hereby made for review of the Preliminary Subdivision or Land Development Plan submitted herewith and more particularly described below:

1. Name of Subdivision: \_\_\_\_\_  
Plan Dated: \_\_\_\_\_  
County Deed Book No.: \_\_\_\_\_ Page Number: \_\_\_\_\_

2. Name of Applicant(s): \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_

3. Name of Property Owner(s): \_\_\_\_\_  
(If other than Applicant)

Address: \_\_\_\_\_

4. Applicant's interest, if other than owner: \_\_\_\_\_

5. Engineer or Surveyor responsible for plan: \_\_\_\_\_

6. Total Acreage: \_\_\_\_\_ Number of Lots: \_\_\_\_\_

7. Acreage of adjoining land in same ownership (if any): \_\_\_\_\_

8. Lot use proposed:  
☐ Single Family                      ☐ Two Family                      ☐ Commercial  
☐ Industrial                              ☐ Townhouse  
☐ Multi-Family                      ☐ Other (specify) \_\_\_\_\_

9. Will construction of building be undertaken immediately?      ☐ Yes                      ☐ No  
If yes, by whom?      ☐ Subdivider      ☐ Other Developer      ☐ Purchasers of individual lots

10. Type of water supply proposed:  
☐ Public System                      ☐ Community System      ☐ Individual on-Site

11. Type of sanitary sewage disposal proposed:  
☐ Public system      ☐ Live      ☐ Capped      ☐ Community System      ☐ Individual On-Site

12. Type of off-street parking proposed:  
☐ Garages                              ☐ Driveways                      ☐ Other

13. Lineal feet of new streets planned: \_\_\_\_\_

Form 2 - Page 2

14. Are all streets proposed for dedication? ☐ Yes ☐ No

15. Deed restrictions that apply or are contemplated. (if no restrictions, state "none", if "yes" attach a copy of restrictions): ☐ None ☐ Yes \_\_\_\_\_  
\_\_\_\_\_

16. Acreage proposed for parks or other public use: \_\_\_\_\_

17. Zoning Classification: \_\_\_\_\_  
Zoning Changes to be requested: \_\_\_\_\_

18. Have the appropriate public utilities been consulted? ☐ Yes ☐ No

19. List proposed improvements and utilities and intentions to install or post performance guarantee proper to final endorsement by the Township.

	<u>Improvement</u>	<u>Intention</u>
a.	_____	_____
b.	_____	_____
c.	_____	_____
d.	_____	_____
e.	_____	_____

20. List of maps and other material accompanying application and number of each:

	<u>Item</u>	<u>Number</u>
a.	_____	_____
b.	_____	_____
c.	_____	_____
d.	_____	_____
e.	_____	_____

Signature of Applicant(s): \_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_, 20\_\_\_\_

**FORM 3**  
**APPLICATION FOR REVIEW OF FINAL PLAN**

An application is hereby made for final approval of the Final Subdivision and Land Development Plan submitted herewith and described in the accompanying maps and documents:

1. Name of Subdivision: \_\_\_\_\_  
Plan Dated: \_\_\_\_\_ County Deed Book No.: \_\_\_\_\_  
Page No.: \_\_\_\_\_ Parcel Number: \_\_\_\_\_

2. Name of Applicant(s): \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_

3. Name of Property Owner(s): \_\_\_\_\_  
(If other than applicant):  
Address: \_\_\_\_\_

4. Dater of approval of Preliminary Plan: \_\_\_\_\_

5. Final Plan follows exactly the approved Preliminary Plan: ☐ Yes ☐ No

If "no" list changes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. List of Maps and other documents accompanying the application and the number of each.

	<u>Item</u>	<u>Number</u>
a.		
b.		
c.		
d.		
e.		
f.		

7. Total amount of square footage of floor space: \_\_\_\_\_

Date: \_\_\_\_\_ Signature of Applicant: \_\_\_\_\_

## SUBDIVISION IMPROVEMENTS AGREEMENT

In consideration of the mutual covenants contained herein, it is hereby agreed between the Board of supervisors of Penn Township, Chester County, Pennsylvania, and \_\_\_\_\_, the subdivider of the property shown on the plan of \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_\_\_ that in accordance with Township requirements and specifications, the responsibility for the provision of the improvements shown on the plan will be as follows:

IMPROVEMENT:	TO BE APPROVED BY:		
	<u>Cost</u>	<u>Subdivider</u>	<u>Township</u> <u>Other (specify)</u>
Street Grading	_____		
Street Base	_____		
Street Paving	_____		
Curbs	_____		
Sidewalks	_____		
Storm Sewer Facilities	_____		
Sanitary Sewers;			
Trunk Lines	_____		
Main	_____		
House Connection	_____		
On-Site Sewage Facilities	_____		
Water Mains	_____		
On-Site Water Supply	_____		
Fire Hydrants	_____		
Street Monuments	_____		
Street Name Signs	_____		
Street Lights	_____		
Erosion and Sediment Controls	_____		
_____	_____		
_____	_____		



**FORM 4 – PAGE 2**

The applicant agrees to furnish to the Township as-built drawings of all improvements listed in the Subdivision Improvements Agreement, which are to be provided by the applicant.

The applicant shall pay the cost of Township inspection of all improvements. An estimated cost for such inspection shall be included within the Improvements Guarantee. The supervision of all installations shall be the responsibility of the \_\_\_\_\_.

This agreement shall be subject to such modifications as may be mutually agreed upon by the applicant and the Township.

\_\_\_\_\_  
*Witness*

\_\_\_\_\_  
*Applicant Signature*

\_\_\_\_\_  
*Witness*

\_\_\_\_\_  
*Applicant Signature*

Approved by resolution of the Board of Supervisors of Penn Township at the meeting held on

\_\_\_\_\_ 20,\_\_\_\_\_

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Vice-Chairman

\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Supervisor