CORNWALL BOROUGH

SUBDIVISION AND
LAND DEVELOPMENT ORDINANCE

ORDINANCE 3-2002

ADOPTED JANUARY 14, 2002

CORNWALL BOROUGH
36 BURD COLEMAN ROAD
CORNWALL, PA 17016
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER 1.</td>
<td>PURPOSE AND AUTHORITY</td>
<td></td>
</tr>
<tr>
<td>101.</td>
<td>Title</td>
<td>1-1</td>
</tr>
<tr>
<td>102.</td>
<td>Purpose</td>
<td>1-1</td>
</tr>
<tr>
<td>103.</td>
<td>Objectives</td>
<td>1-1</td>
</tr>
<tr>
<td>104.</td>
<td>Application of Regulations</td>
<td>1-2</td>
</tr>
<tr>
<td>105.</td>
<td>Jurisdiction</td>
<td>1-2</td>
</tr>
<tr>
<td>106.</td>
<td>Compatibility with other Permit and Ordinance Requirements</td>
<td>1-3</td>
</tr>
<tr>
<td>107.</td>
<td>Restrictions Related to Storm Water Management</td>
<td>1-3</td>
</tr>
<tr>
<td>108.</td>
<td>Waiver of Liability</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>CHAPTER 2. DEFINITIONS</td>
<td></td>
</tr>
<tr>
<td>201.</td>
<td>Rules of Interpretation</td>
<td>2-1</td>
</tr>
<tr>
<td>202.</td>
<td>Specific Terms</td>
<td>2-2</td>
</tr>
<tr>
<td></td>
<td>CHAPTER 3 PROCEDURES</td>
<td></td>
</tr>
<tr>
<td>301.</td>
<td>Intent</td>
<td>3-1</td>
</tr>
<tr>
<td>302.</td>
<td>Pre-Application Review (Sketch Plan)</td>
<td>3-1</td>
</tr>
<tr>
<td>303.</td>
<td>Formal Application</td>
<td>3-2</td>
</tr>
<tr>
<td>304.</td>
<td>Acceptance for Filing</td>
<td>3-2</td>
</tr>
<tr>
<td>305.</td>
<td>Preliminary Plan Application</td>
<td>3-3</td>
</tr>
<tr>
<td>306.</td>
<td>Final Plan Application</td>
<td>3-7</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS (CONTINUED)

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHAPTER 3</strong></td>
<td>PROCEDURES (CONTINUED)</td>
<td></td>
</tr>
<tr>
<td>307.</td>
<td>Plans Exempted from Standard Procedures</td>
<td>3-11</td>
</tr>
<tr>
<td>308.</td>
<td>Procedure for Requesting Consideration of Modification of Provisions of this Ordinance</td>
<td>3-13</td>
</tr>
<tr>
<td>309.</td>
<td>Compliance with Zoning Ordinance and Zoning Hearing Board Decisions</td>
<td>3-14</td>
</tr>
<tr>
<td>310.</td>
<td>Effects of Changes in the Ordinance</td>
<td>3-14</td>
</tr>
<tr>
<td><strong>CHAPTER 4</strong></td>
<td>PLAN REQUIREMENTS</td>
<td></td>
</tr>
<tr>
<td>401.</td>
<td>Sketch Plan</td>
<td>4-1</td>
</tr>
<tr>
<td>402.</td>
<td>Preliminary Plan</td>
<td>4-1</td>
</tr>
<tr>
<td>403.</td>
<td>Final Plans</td>
<td>4-9</td>
</tr>
<tr>
<td>404.</td>
<td>Lot Annexation Plans and Natural Subdivisions</td>
<td>4-15</td>
</tr>
<tr>
<td>405.</td>
<td>Feasibility Report on Sewer and Water Facilities</td>
<td>4-16</td>
</tr>
<tr>
<td>406.</td>
<td>Traffic Impact Study</td>
<td>4-17</td>
</tr>
<tr>
<td>407.</td>
<td>Wetlands Study</td>
<td>4-21</td>
</tr>
<tr>
<td>408.</td>
<td>Conservation Plan</td>
<td>4-23</td>
</tr>
<tr>
<td><strong>CHAPTER 5.</strong></td>
<td>DESIGN STANDARDS</td>
<td></td>
</tr>
<tr>
<td>501.</td>
<td>Intent</td>
<td>5-1</td>
</tr>
<tr>
<td>502.</td>
<td>General Standards</td>
<td>5-1</td>
</tr>
<tr>
<td>503.</td>
<td>Energy Conservation Standards</td>
<td>5-3</td>
</tr>
<tr>
<td>504.</td>
<td>Topography</td>
<td>5-4</td>
</tr>
</tbody>
</table>
## TABLE OF CONTENTS (CONTINUED)

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CHAPTER 5.</strong></td>
<td><strong>DESIGN STANDARDS (CONTINUED)</strong></td>
<td></td>
</tr>
<tr>
<td>505.</td>
<td>Grading</td>
<td>5-5</td>
</tr>
<tr>
<td>506.</td>
<td>Blocks and Lots</td>
<td>5-5</td>
</tr>
<tr>
<td>507.</td>
<td>Storm Water Management and Design Criteria</td>
<td>5-8</td>
</tr>
<tr>
<td>508.</td>
<td>Sewage Disposal</td>
<td>5-29</td>
</tr>
<tr>
<td>509.</td>
<td>Water Supply</td>
<td>5-32</td>
</tr>
<tr>
<td>510.</td>
<td>Streets, Private Streets and Driveways</td>
<td>5-36</td>
</tr>
<tr>
<td>511.</td>
<td>Vehicular Parking Facilities, Sidewalks and Curbs</td>
<td>5-49</td>
</tr>
<tr>
<td>512.</td>
<td>Survey Monuments and Markers</td>
<td>5-51</td>
</tr>
<tr>
<td>513.</td>
<td>Other Utilities</td>
<td>5-51</td>
</tr>
<tr>
<td>514.</td>
<td>Easements and Rights-of-Ways</td>
<td>5-52</td>
</tr>
<tr>
<td>515.</td>
<td>Landscaping and Screening</td>
<td>5-53</td>
</tr>
<tr>
<td>516.</td>
<td>Refuse Collection (Dumpster) Stations</td>
<td>5-59</td>
</tr>
<tr>
<td>517.</td>
<td>Stripping, Piling, Replacement, or Removal of Topsoil</td>
<td>5-59</td>
</tr>
<tr>
<td>518.</td>
<td>Public Dedication of Park and Open Space</td>
<td>5-59</td>
</tr>
</tbody>
</table>

| **CHAPTER 6.** | **CONSTRUCTION OF REQUIRED IMPROVEMENTS AND DEDICATION** | |
| 601. | Completion of Improvements or Guarantee Thereof Prerequisite to Final Plan Approval | 6-1 |
| 602. | Effect of Plan Recording on Dedication and Reservations | 6-4 |
| 603. | Release from Financial Security | 6-4 |
| 604. | Remedies to Effect Completion of Improvements | 6-5 |
## TABLE OF CONTENTS (CONTINUED)

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER 6</td>
<td>CONSTRUCTION OF REQUIRED IMPROVEMENTS AND DEDICATION (CONTINUED)</td>
<td></td>
</tr>
<tr>
<td>605</td>
<td>Inspection during Construction</td>
<td>6-6</td>
</tr>
<tr>
<td>606</td>
<td>Construction in Accordance with Plans</td>
<td>6-7</td>
</tr>
<tr>
<td>607</td>
<td>As-Built Plan</td>
<td>6-8</td>
</tr>
<tr>
<td>608</td>
<td>Dedication</td>
<td>6-8</td>
</tr>
<tr>
<td>609</td>
<td>Development Agreement</td>
<td>6-9</td>
</tr>
<tr>
<td>CHAPTER 7</td>
<td>FLOOD PLAIN MANAGEMENT</td>
<td></td>
</tr>
<tr>
<td>701</td>
<td>Intent</td>
<td>7-1</td>
</tr>
<tr>
<td>702</td>
<td>Definition of Terms Utilized in this Chapter</td>
<td>7-1</td>
</tr>
<tr>
<td>703</td>
<td>Applications, Procedures and Plan Requirements</td>
<td>7-3</td>
</tr>
<tr>
<td>704</td>
<td>Design Standards and Improvements</td>
<td>7-4</td>
</tr>
<tr>
<td>705</td>
<td>Performance Guarantee</td>
<td>7-7</td>
</tr>
<tr>
<td>706</td>
<td>Municipal Liability</td>
<td>7-7</td>
</tr>
<tr>
<td>CHAPTER 8</td>
<td>ADMINISTRATION, ENFORCEMENT AND PENALTIES</td>
<td></td>
</tr>
<tr>
<td>801</td>
<td>Fees</td>
<td>8-1</td>
</tr>
<tr>
<td>802</td>
<td>Waivers</td>
<td>8-2</td>
</tr>
<tr>
<td>803</td>
<td>Application Requirements</td>
<td>8-2</td>
</tr>
<tr>
<td>804</td>
<td>Action on Waiver Applications</td>
<td>8-2</td>
</tr>
<tr>
<td>805</td>
<td>Enforcement</td>
<td>8-3</td>
</tr>
<tr>
<td>806</td>
<td>Violations, Penalties and Preventative Remedies</td>
<td>8-3</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>TITLE</td>
<td>PAGE</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>901</td>
<td>Appeals</td>
<td>9-1</td>
</tr>
<tr>
<td>902</td>
<td>Interpretation and Application of Provisions</td>
<td>9-1</td>
</tr>
<tr>
<td>903</td>
<td>Application of Ordinance</td>
<td>9-1</td>
</tr>
<tr>
<td>904</td>
<td>Ordinance Construction</td>
<td>9-2</td>
</tr>
<tr>
<td>905</td>
<td>Severability</td>
<td>9-2</td>
</tr>
<tr>
<td>906</td>
<td>Effective Date</td>
<td>9-2</td>
</tr>
</tbody>
</table>

List of Appendices ........................................................................................................... Following Text
CHAPTER 1
PURPOSE AND AUTHORITY

An ordinance providing for the control of the subdivision and
development of land and the approval of plats and replats of land
within the jurisdiction of the Borough of Cornwall, as a part of the
master plan for Lebanon County, Pennsylvania.

Now, therefore, be it ordained by the Council of the Borough of
Cornwall, Pennsylvania, under authority of Article V and VII of the
General Assembly No. 247; as amended.

SECTION 101 TITLE

These regulations, rules, and standards for planning, subdividing, and developing land
within Cornwall Borough, Lebanon County, Pennsylvania, including procedures for the
application and administration, and penalties for the violation thereof, shall be known,
cited and referred to as the SUBDIVISION AND LAND DEVELOPMENT ORDINANCE
for the Borough of Cornwall. (Ord. 3-2002).

SECTION 102 PURPOSE

The general purpose of this ordinance shall be to guide and regulate the planning,
subdividing, and development of land in order to promote and protect the public health,
safety, convenience, comfort, prosperity, and general welfare of the residents of
Cornwall Borough.

SECTION 103 OBJECTIVES

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

Orderly development of the land to obtain harmonious and stable neighborhoods;
and
Safe and convenient vehicular and pedestrian circulation; and
Adequate and economical provisions for utilities and public services to conserve
the public funds; and
Ample public open spaces for schools, recreational and other public purposes; and
Accurate surveying of land, preparing and recording of plats; and
Discouraging of premature, uneconomical, or scattered subdivision; and
Maximize conservation of all forms of energy; and
Storm water management, by reducing stream erosion and maintaining natural storm water runoff characteristics; and
Coordination of land development in accordance with the Zoning Ordinance, Comprehensive Plan, and other plans of the Municipality and County.

SECTION 104 APPLICATION OF REGULATIONS

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

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

SECTION 105 JURISDICTION

A. All proposed subdivision and land development plans must be reviewed by Lebanon County Planning Department and the Cornwall Borough Planning and Zoning Commission. The Planning Department shall submit its written comments on all plans to the Borough within thirty (30) days of the date the application is forwarded to the Planning Department. The review by the Planning Department does not supersede or circumvent any applicable requirement of any local municipal ordinance or regulation.
In all cases involving preliminary or final subdivision or land development plan applications, the Planning and Zoning Commission shall review and recommend approval or rejection to the Borough Council. Borough Council shall thereafter either approve or reject the plan application within ninety (90) days of the date a complete application was filed with the Borough Secretary, before any such plans shall be recorded or before any lots are sold or transferred.

Plan approval by Borough Council shall not constitute acceptance of any proposed dedication of land and/or improvement by the Borough.

SECTION 106 COMPATIBILITY WITH OTHER PERMIT AND ORDINANCE REQUIREMENTS

Permits and approvals issued 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. If more stringent requirements concerning regulation of storm water or erosion and sedimentation control are contained in the other code, rule, act or ordinance, the more stringent regulation shall apply.

SECTION 107 RESTRICTIONS RELATED TO STORM WATER MANAGEMENT

Within that portion of the Borough located in any watershed for which there is an adopted Watershed Plan (under Act 167, as amended), any ordinance or provision of any ordinance that is inconsistent with the provisions of this Ordinance is hereby repealed to extent of the inconsistency only. Within the remainder of the Borough, this Ordinance supersedes any provisions currently in effect with respect to storm water management and erosion control; all other ordinances and regulations shall remain in full force and effect to the extent that those provisions are more restrictive than the provisions of this Ordinance.

SECTION 108 WAIVER OF LIABILITY

Except as specifically provided by the Pennsylvania Storm Water Management Act, Act of October 4, 1978, P.L. 864, No. 167, as amended, 32 P.S. §680.1 et seq., the making of any administrative decision by the Borough or any of its officials or employees shall not constitute a representation, guarantee or warranty of any kind by the Borough of the practicability or safety of any proposed structure or use with respect to damage from erosion, sedimentation, storm water runoff, flood, or any other matter, and shall create no liability upon or give rise to any cause of action against the Borough and its officials and employees. The Borough Council, by enacting this ordinance, does not waive or limit any immunity granted to the Borough and its officials and employees by the Governmental Immunity Act, 42 Pa. C.S. §8541 et seq., and does not assume any liabilities or obligations.
CHAPTER 2
DEFINITIONS

SECTION 201 RULES OF INTERPRETATION

For the purpose of this Ordinance, the terms and words listed in this Section shall have the meaning herein defined. Words not herein defined shall have the meanings given in Webster's Unabridged Dictionary (most recent edition) and shall be interpreted so as to give this Ordinance its most reasonable application.

For the purpose of this Ordinance, the following rules of interpretation shall apply:

A. Words in the present tense include the future tense.

B. Words in the singular include the plural and words in the plural include the singular.

C. The words "used" and "occupied" as applied to any land or buildings shall be construed to include the words "or intended, arranged or designed to be used or to be occupied, or offered for occupancy".

D. The term "such as" shall be considered as introducing a typical or illustrative designation of items, and shall not be interpreted as constituting a complete list.

E. The words "person" and "owner" shall be deemed to include a firm, company, corporation, unincorporated association, organization, trust and a partnership, or other legal entity, as well as an individual.

F. The words "building" and "structure" shall be construed as if followed by the phrase "or part thereof".

G. The word "lot" includes the words "plot" and "parcel".

H. The word "water body" includes lake, pond, dammed water and water-filled quarry.

I. The word "erect" shall mean to build, construct, alter, repair, display, relocate, attach, hang, place, suspend, affix or maintain any structure or building and shall also include the painting of exterior wall signs.

J. The term "shall" is always mandatory; the terms "may" and "should" are permissive.
SECTION 202    SPECIFIC TERMS

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

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

ALLEY - A minor public right-of-way providing secondary vehicular access to the side or rear of two or more properties.

ANNEXATION - To append or unite a lot, tract or parcel to an adjacent lot, tract or parcel, thus creating and resulting in one lot comprised from two or more adjacent lots. Annexation in this context shall be deemed to mean the increase in area or size of an existing lot, tract or parcel and shall not be construed to mean the creation of a new building lot for development purposes.

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

APPLICATION FOR DEVELOPMENT - Every application, whether preliminary, tentative or final, required to be filed and approved prior to start of construction or development including but not limited to, an application for a building permit, for the approval of a subdivision plat or plan or for the approval of a development plan.

ACT 247 - See “Pennsylvania Municipalities Planning Code”.

BEST MANAGEMENT PRACTICE (BMP) - Structural devices or other methods that temporarily store or treat storm water runoff to reduce flooding, remove pollutants, and provide other environmental amenities.

BLOCK - A tract of land, a lot, or two or more contiguous lots, bounded by streets, public parks, railroad rights-of-way, watercourses, boundary lines of the Township, unsubdivided land or by any combination of the above.

BOROUGH - The Borough of Cornwall or Cornwall Borough.

BOROUGH COUNCIL - The governing body of the Borough of Cornwall (Borough Council).

BUILDING - A structure that has a roof supported by columns, piers or walls, which is intended for the shelter, housing or enclosure of persons, animals or chattel or which is to house a use of a commercial or manufacturing activity.
BUILDING, ACCESSORY - A building detached from and subordinate to the principal building or use on the same lot and used for purposes customarily incidental to the principal building, but not including vehicles, mobile homes, travel trailers, truck trailers, or any parts thereof. An accessory building may not house a principal use nor may it stand alone on a lot as a principal building.

BUILDING, PRINCIPAL - A building in which the principal use of the lot is conducted.

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

CARTWAY - The portion of the street right-of-way, paved or unpaved, intended for vehicular use. The shoulder is not considered part of the cartway.

CENTER LINE OF STREET OR ROAD - A line midway between and parallel to the two street or road property or right-of-way lines, or as otherwise defined by the Borough.

CHANNEL - A natural or artificial watercourse with a definite bed and banks that confine and conduct continuously or periodically flowing water.

CLEAR SIGHT TRIANGLE - An area of unobstructed vision at the intersection of two (2) or more streets, driveways or alleys. It is defined by lines of sight between points at a given distance from the intersection of the centerlines of streets, driveways or alleys.

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

CONSERVATION - The planned management of a natural feature to prevent its exploitation, destruction, or neglect.

CONSERVATION PLAN - A plan for controlling the adverse effects of any site disturbance on natural features for an identified area of land, including a map(s) and narrative that, at a minimum, outlines methods and management practices which will be employed to prevent or minimize said impacts.

CONSTRUCTION - The building, reconstruction, demolition activities for reconstruction, extension, expansion, alteration, substantial improvement, erection or relocation of a building or structure, including mobile homes. This shall include the placing and fastening of construction materials in a permanent position. Earth moving activities shall not be deemed construction.

COE - United States Army Corps of Engineers.
COUNTY – The County of Lebanon, Commonwealth of Pennsylvania.

CROSSWALK (INTERIOR WALK) - A publicly or privately owned right-of-way for pedestrian use extending from a street into a block or across a block to another street.

CUL-DE-SAC - A street intersecting another street at one end and terminating at the other in a vehicular turnaround.

CULVERT - A structure with appurtenant works that carries a watercourse under or through an embankment or fill.

CURB - The raised edge of a pavement to confine surface water to the pavement and to protect the abutting land from vehicular traffic; all curbs shall be constructed in accordance with the specifications in this Ordinance or any other Ordinance enacted by the Borough Council setting requirements for the construction of roads, curbs and sidewalks.

DBH - The diameter of a tree at breast height, usually measured 4.5 feet from the ground surface.

DECISION - Final adjudication of any board or other body granted jurisdiction under any land use ordinance or the MPC to do so, either by reason of the grant of exclusive jurisdiction or by reason of appeals from determinations. All decisions shall be appealable to the court of common pleas of the county and judicial district wherein the municipality lies.

DEDICATION - The deliberate appropriation of land by its owner for any general and public, or limited public, use, reserving to himself no other rights than such as are compatible with the full exercise and enjoyment of the public uses to which the property has been devoted.

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) - The Department of Environmental Protection of the Commonwealth of Pennsylvania or any agency successor thereto.

DEPARTMENT OF TRANSPORTATION (PENNDOT) - The Department of Transportation of the Commonwealth of Pennsylvania or any agency successor thereto.

DESIGN STORM - The magnitude of precipitation from a storm event measured in probability of occurrence (e.g., 10-year storm) and duration (e.g., 24-hour), and used in computing storm water management control systems.

DETENTION BASIN – A vegetated pond, swale, or other structure designed to drain completely after storing runoff only for a given storm event and release it at a predetermined rate. Also known as a dry pond.
DETERMINATION - Final action by an officer, body or agency charged with the administration of any land use ordinance or applications thereunder, except the following:

A. the governing body;

B. the zoning hearing board; or

C. the planning agency, only if and to the extent the planning agency is charged with final decision on preliminary or final plans under the subdivision and land development ordinance or planned residential development provisions.

Determinations shall be appealable only to the boards designated as having jurisdiction for such appeal.

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

DEVELOPMENT - Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, logging, excavation, or drilling operations.

DEVELOPMENT PLAN - The provisions for development, including a planned residential development, a plat of subdivision, all covenants relating to use, location and bulk of buildings and other structures, intensity of use or density of development, streets, ways and parking facilities, common open space and public facilities. The phrase "provisions of the development plan" when used in this Ordinance shall mean the written and graphic materials referred to in this definition.

DOUBLE FRONTAGE LOT - A lot, other than a corner lot, fronting on two (2) streets.

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

DRAINAGE RIGHT-OF-WAY - The lands required for the installation of storm sewers or drainage ditches, or required along a natural stream or watercourse for preserving the channel and providing for the flow of water therein to safeguard the public, particularly the owners of downstream land, against flood damage.

DRIVEWAY - Every entrance or exit used by vehicular traffic to or from properties abutting a street or highway.
EARTH DISTURBANCE - Any activity including, but not limited to construction, mining, farming, timber harvesting, and grubbing which alters, disturbs and exposes existing land surfaces. (See “land disturbance activity”).

EASEMENT – The authorization by a property owner of a right-a-way granted, but not dedicated, for limited use of private land for public or quasi-public purpose, within which the owner of the property shall not erect any permanent structures, but shall have the right to make any other use of the land which is not inconsistent with the rights of the grantee of the easement.

EASEMENT OF ACCESS - Any driveway or other entrance from a public or private road. A field road providing access to agriculturally used fields and not providing access to any residential, commercial or industrial structure is not considered an easement of access.

ENCROACHMENT - Any physical action which may jeopardize the health and longevity of a natural feature, or any structure or activity which in any manner changes the course, current or cross-section of any wetland, water course, or body of water.

ENERGY DISSIPATOR – A device used to slow the velocity of storm water particularly at points of concentrated discharge such as pipe outlets.

ENFORCEMENT OFFICER - The duly constituted municipal official designated to administer and enforce this Ordinance. The Enforcement Officer shall administer this Ordinance in accordance with its literal terms. The Enforcement Officer also may be the Building Inspector and/or Zoning Officer of the Borough.

ENGINEER, BOROUGH – A Registered Engineer designated by the Council to review a subdivision plan and perform duties as required by this Ordinance on behalf of the Borough.

ENGINEER, PROFESSIONAL – An individual licensed and registered as a Professional Engineer by the Commonwealth of Pennsylvania.

EROSION - The removal of soil particles by the action of water, wind, ice, or other geological agents.

EROSION AND SEDIMENTATION CONTROL PLAN - A plan that is designed to minimize accelerated erosion and sedimentation.

FINANCIAL SECURITY - A letter of credit or other form of guarantee in accordance with the requirements of Article V of the Municipalities Planning Code posted by a developer to secure the completion of improvements indicated on an approved plan.

FLOOD PLAIN - (1) A relatively flat or low land area adjoining a river, stream, or watercourse, which is subject to partial or complete inundation by water; (2) an area subject to the unusual and rapid accumulation or runoff of surface water from any
source. For the purposes of this Ordinance, the flood plain shall be considered to be the One Hundred (100) Year Flood Plain which is a flood plain having a one percent (1%) chance of being subject to the above conditions during any given year.

FREEBOARD – The difference between the design flow elevation in the emergency spillway and the top of the settled embankment.

FRONTAGE - The width of a lot or property that abuts a street, being the distance measured along the street right-of-way line from one side lot line to the other.

GOVERNING BODY – The Borough Council of the Borough of Cornwall, Lebanon County, Pennsylvania.

GRADE - The slope expressed in a percent that indicates the rate of change of elevation in feet per hundred feet.

GRADE, FINISHED - The completed surfaces of lawns, walks, and roads brought to elevations as shown on official plans or designs relating thereto.

GRASSED WATERWAY – A natural or man-made drainageway of parabolic or trapezoidal cross-section shaped to required dimensions and vegetated for safe disposal of runoff. (Also known as a swale)

GROUND WATER - Subsurface water in a zone of saturation.

GROUNDWATER RECHARGE - Replenishment of geologic structures and rock or soil interstices that have the capacity to store water.

GRUBBING - The clearing of land by digging up roots and stumps.

HARDSHIP - A condition, not economic in nature, not caused by the applicant or developer for whom he may request a waiver.

HOLDING POND – A retention or detention pond.

HYDRIC SOIL - A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of wetlands vegetation.

IMPERVIOUS AREA - Any portion of a lot covered by an impervious surface.

IMPERVIOUS SURFACE - Those surfaces that do not absorb rain. All buildings, including roof overhangs, parking areas, driveways, roads, sidewalks, and such areas as those in concrete and asphalt shall be considered impervious surfaces within this definition. In addition, other areas determined by the Borough Engineer to be impervious within the meaning of this definition will also be classed as impervious surfaces.
IMPROVEMENTS – Physical additions and change to the land, necessary to produce usable and desirable lots. Includes, but is not limited to, grading, paving, curbing, street lights and signs, fire hydrants, water mains, sanitary sewer mains including laterals to the street right-of-way line, storm drains including all necessary structures, sidewalks, cross-walks, street trees, and monuments.

LAND DEVELOPMENT – Any of the following activities: (I) the improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving (a) a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; (b) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features; (II) a subdivision of land.

LAND DISTURBANCE ACTIVITY - Any use involving the installation of ground cover, grading, filling or excavation of land; or the erection of a dwelling or other principal structure; or the modification, removal, filling, or alteration of an existing stormwater management facility or drainage easement.

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

LANDSCAPE ARCHITECT - A licensed landscape architect registered in the Commonwealth of Pennsylvania.

LANDSCAPING - The planting of turf, trees, shrubs, and other appropriate vegetative materials and ground cover within the open areas of a lot other than for agricultural purposes, and including the maintenance and replacement thereof, for the purposes of erosion control, retention of precipitation, protection against the elements and promotion of human comfort and welfare.

LOCATION MAP - A map showing the site with relation to adjoining areas.

LOT – A designed parcel, tract or area of land established by a plat or otherwise as permitted by law and to be used, developed or built upon as a unit.

LOT AREA – An area of land that is determined by the limits of the property lines bounding that area and expressed in terms of square feet or acres. Any portion of a lot within a street right-of-way shall not be included in calculating the required lot area.

LOT, CORNER - A lot at the point of intersection of and abutting on two (2) or more intersecting streets, and which has an interior angle of less than 135 degrees at the intersection of the two (2) street lines.
LOT, FLAG - A lot or parcel that has been approved with access provided to the bulk of the lot by means of a narrow corridor. Said lot has less frontage on a street than is normally required.

LOT, INTERIOR - A lot other than a corner lot, the side property lines of which do not abut a street.

LOT, REVERSE FRONTAGE - A lot extending between and having frontage on two generally parallel streets, (excluding service streets), with vehicular access solely from one street.

LOT, THROUGH - A lot extending between and having frontage on two (2) streets.

LOT AVERAGING - A development design option that allows some lots within a development to be larger or smaller than is otherwise required by a zoning district; provided the average lot size is equal to or greater than the requirements of the district and where no common open space is provided.

LOT COVERAGE - The percentage of the lot or property area covered by buildings or structures, excluding driveways, sidewalks, and other standard paved vehicular or pedestrian accessways.

LOT DEPTH - A mean horizontal distance between the front and rear lot lines, measured in the general direction of its side lot lines.

LOT FRONTAGE - That portion of a lot extending along a street or road right-of-way line.

LOT LINE - Any line dividing one lot from another lot, street or parcel.

LOT WIDTH - The horizontal distance between the side lot lines measured at right angles to its depth. The required lot width shall be measured at the required minimum front-yard setback line, except that pie-shaped lots at the turnaround of cul-de-sac streets shall have lot frontage equal to at least fifty (50) percent of the required lot width and shall achieve required lot width at a point equal to fifty (50) percent of the lot depth.

MAINTENANCE GUARANTY - A guaranty by the subdivider/developer that he shall maintain all improvements in good condition for a period after completion of construction and inspection of any improvements intended for public use.

MARKER - A solid metal pin of at least 1/4" in diameter and at least 24" in length.

MITIGATION - Includes (a) avoiding the impact altogether by not taking a certain action or parts of an action; (b) minimizing impacts by limiting the degree of magnitude of the action or its implementation; (c) rectifying the impact by repairing, reducing or eliminating the impact over time by preservation and maintenance operations during life of the action; and (d) compensating for the impact by replacing or providing substitute resources.
MOBILEHOME – A transportable, single family dwelling intended for permanent occupancy, contained in one unit, or in two or more units designed to be joined into one integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation.

MOBILEHOME LOT – A parcel of land in mobile home park, improved with the necessary utility connections and other appurtenances necessary for the erections thereon of a signal mobilehome.

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

MONUMENT - A stone or concrete monument with a flat top at least 4" diameter or square and at least 24" in length (preferred 30" to 36"). Concrete monuments shall contain a copper or brass dowel (plug). The bottom sides or radius shall be at least 2" greater than the top, to minimize movements caused by frost.

MUNICIPALITY – The Borough of Cornwall, Lebanon County, Pennsylvania.

NON-RESIDENTIAL - Any use other than a dwelling. An institutional use, in which persons may reside, such as a dormitory, prison, nursing home, or hospital, shall be considered a non-residential use.

NWI - National Wetland Inventory.

OBSTRUCTION - Any wall, dam, wharf, embankment, levee, dike, pile abutment, projection, excavation, channel, rectification, culvert, building, fence, stockpile, refuse, fill, structure, or matter in, along, across or projecting into any channel, watercourse, or floodprone area, which may impede, retard, or change the direction of the flow of water either in itself or by catching or collecting debris carried by such water or is placed where the flow of the water might carry the same downstream to the damage of life and property.

ON-SITE STORM WATER MANAGEMENT – The control of runoff to allow water falling on a given site to be absorbed or detained on site to the extent that after development the peak rate of discharge leaving the site is no greater than if the site had remained undeveloped.

PADEP – See “DEPARTMENT OF ENVIRONMENTAL PROTECTION”.

PEAK DISCHARGE - The maximum rate of flow of water at a given point and time resulting from a specified storm event.
PENNSYLVANIA MUNICIPALITIES PLANNING CODE (MPC) – Adopted as Act 247 of 1968, this act enables municipalities to plan for, and regulate, community development with subdivision and land development ordinances. The code also contains guideline for subdivision and land development ordinance content. For the purpose of this Ordinance, the Code, enacted as Act 247 of 1968, and amended by Act 170 of 1988, and Acts 67 and 68 of 2000, is intended to include the current code and any further amendments thereto and shall be referred to hereafter as “MPC”.

PERMEABLE SURFACE - A surface that permits the passage of water (opposite of impervious surface).

PLAN, AS-BUILT - A plan of the original approved facilities showing those changes made during the construction process, including all supplementary data specified in Section 607 of this Ordinance.

PLAN, FINAL – A complete and exact subdivision and/or land development plan including all supplementary data specified in Section 403 of this Ordinance; a final plat.

PLAN, LOT ANNEXATION - A complete and exact subdivision plan including all supplementary data specified in Section 404 of this Ordinance.

PLAN, PRELIMINARY – A subdivision and/or land development plan including all required supplementary data specified in Section 402 of this Ordinance, showing approximate locations.

PLAN, RECORD - A final plan which contains the original endorsement of the local municipality and the Planning Commission which is intended to be recorded with the Lebanon County Recorder of Deeds.

PLAN, SKETCH – An informal plan, not necessarily to exact scale, indicating salient existing features of a tract and its surroundings, with the general layout of a proposal prepared in accordance with Section 401 of this Ordinance.

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

PLANNING COMMISSION – The Cornwall Borough Planning and Zoning Commission.

PLANNING DEPARTMENT – The Lebanon County Planning Department.
PLANNING MODULE FOR LAND DEVELOPMENT - A revision to the Borough Official Act 537 Plan submitted in connection with the request for approval of a subdivision or land development in accordance with DEP regulations.

PLANTING, SCREEN - A strip of planting sufficient to provide an effective screen.

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

PRESERVATION OR PROTECTION - When used in connection with natural and historic resources, shall include means to conserve and safeguard these resources from wasteful or destructive use, but shall not be interpreted to authorize the unreasonable restriction of forestry, mining or other lawful uses of natural resources.

PRIME AGRICULTURAL LAND - Land used for agricultural purposes that contains soils of the first, second or third class as defined by the United States Department of Agriculture Natural Resource And Conservation Services County Soil Survey.

PRIME WILDLIFE HABITAT - Those areas necessary to maintain an existing population of a given species, the destruction of which will cause a reduction in population density.

PROJECT SITE - An area of land under land disturbance or development and within the jurisdiction of this Ordinance.

RARE - A species or subspecies that due to unique habitat requirements or sporadic distribution may not commonly occur in a given area or region.

RECORDER OF DEEDS - The Recorder of Deeds in and for Lebanon County, Pennsylvania.

REPLACEMENT LOCATION - A location designated as the future location of an individual on-lot sewage system that shall be installed should the initial individual on-lot system installed or to be installed fail or otherwise become inoperable and which shall meet all the regulations of DEP and all applicable Borough Ordinances for an individual on-lot sewage system.

REPORT - Any letter, review, memorandum, compilation or similar writing made by any body, board, officer or consultant other than a solicitor to any other body, board, officer or consultant for the purpose of assisting the recipient of such report in the rendering of any decision or determination. All reports shall be deemed recommendatory and advisory only and shall not be binding upon the recipient, board, officer, body or agency, nor shall any appeal lie therefrom. Any report used, received or considered by the body, board, officer or agency rendering a determination or decision shall be made available for inspection to the applicant and all other parties to any proceeding upon request, and copies thereof shall be provided at cost of reproduction.
RESERVE STRIP - A parcel of ground in separate ownership separating a street from other adjacent properties, or from another street, either proposed or existing.

RESUBDIVISION - Any redivision of land, limited to changes in lot lines on the approved Final Plan or Recorded Plan as specified in Article III, Section 308, of these regulations. Other replattings shall be considered as constituting a new subdivision of land. See "Subdivision.

RETENTION BASIN – A pond, swale, or other structure containing a permanent pool of water designed to store runoff for a given storm event.

REVIEW - The process of making a determination whether a subdivision or land development plan and required accompanying documents and data, conform with the ordinance and other applicable ordinances, laws, rules, and regulations.

RIGHT-OF-WAY – The total width of any land reserved or dedicated for use as a street, road, or other public or semi-public purposes.

RIGHT-OF-WAY LINES - The lines that form the boundaries of a right-of-way.

ROADWAY - See "Cartway".

SANITARY SEWAGE DISPOSAL, ON-SITE - Any structure designed to biochemically treat sanitary sewage within the boundaries of an individual lot.

SANITARY SEWAGE DISPOSAL, COMMUNITY - 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.

SEASONAL HIGH WATER TABLE SOILS - Those soils in which the groundwater surface is no more than twenty (20) inches from the ground surface at certain times of the year.

SEDIMENT - Soils or other surficial materials transported by surface water as a product of erosion.

SEDIMENT BASIN – A temporary dam or barrier constructed across a waterway or at other suitable locations to intercept the runoff and to trap and retain the sediment.

SEDIMENTATION - The process by which sediment is deposited on stream bottoms.

SEDIMENTATION CONTROL - The use of manmade or other methods to minimize accelerated erosion and sedimentation.

SEPTIC TANK - A covered watertight settling tank of monolithic concrete or other DEP-approved material in which raw sewage is biochemically changed into solid, liquid, and gaseous states to facilitate further treatment and final disposal.
SETBACK - The horizontal distance from a lot line to the part of the building nearest to such a lot line.

SEWAGE ENFORCEMENT OFFICER - The Borough official, who being certified by the State Board of Certification or Pennsylvania Department of Environmental Protection, issues and reviews permit applications and conducts such investigations, inspections and tests as are necessary to implement the Pennsylvania Sewage Facilities Act as amended, and the rules and regulations issued thereunder, and borough Ordinances.

SHOULDER - The portion of a street, contiguous to the main traveled portion, for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses and pavements.

SIGHT DISTANCE - The length of street, measured along the centerline, which is continuously visible from any point three and one-half (3 1/2) feet above the centerline.

SITE DISTURBANCE - Any activity which involves removal of vegetation, or which causes land on a given site to be exposed to the danger of erosion, including clearing, grading, filling, plowing, and other types of earthmoving.

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

SOIL PERCOLATION TEST - A field test conducted in accordance with Pennsylvania Department of Environmental Protection (PADEP) standards to determine the suitability of the soil for on-site sanitary sewage disposal facilities by measuring the absorptive capacity of the soil at a given location and depth.

STEEP SLOPE AREA

STEEPLY SLOPING LAND - Land with a topographic gradient in excess of twenty-five percent (25%).

STRONGLY SLOPING LAND - Land with a topographic gradient in excess of fifteen percent (15%) but not in excess of twenty-five percent (25%).

STORAGE STRUCTURE - A retention or detention structure.

STORM SEWER - A system of pipes, conduits, swales, or other similar structures including appurtenant works which carries intercepted runoff, and other drainage, but excludes domestic sewage and industrial wastes.

STORM WATER - Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.
STORM WATER MANAGEMENT – A program of controls and measures including BMPs designed to regulate the quantity and quality of storm water runoff from a development while promoting the protection and conservation of ground waters and groundwater recharge.

STORM WATER MANAGEMENT FACILITIES - Those controls and measures used to effect a storm water management program.

STREAM - A natural drainage way having defined bed and banks that supports aquatic life including, but not limited to, fish, reptiles and macroinvertebrates.

STREET – Any street, avenue, boulevard, road, highway, freeway, parkway, lane, alley, viaduct, or any other way used or intended to be used by vehicular traffic or pedestrians, whether public or private. The word "street" includes the entire right-of-way and is not limited to the cartway area.

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

STREET LINE - The dividing line between the street and lot, also known as right-of-way line.

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

STRUCTURE, ACCESSORY - A structure subordinate to and detached from the principal structure on the same lot and used for the purposes customarily incidental to the principal structure.

SUBDIVIDER – “See Developer”.

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

SUBDIVISION, NATURAL - The division of land into two or more portions by virtue of the location of a public road.

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

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

SWALE – A natural channel or other low-lying stretch of land, which collects or carries surface water runoff.

TILE DISPOSAL FIELD - A system of open jointed or perforated pipes laid on the upper strata of the soil to distribute sewage effluent into the soil for absorption and evaporation.

TILE FIELD (TILING) - The installation of subsurface drainage facilities (i.e. pipe, etc.) to drain areas otherwise affected by high groundwater levels.

TIMBERING (TIMBER HARVESTING) - The cutting down and removal of trees and logs to be converted to any forest product.

TREE DRIPLINE - The line marking the outer edges of the branches of the tree.

WAIVER - The granting of a modification to these regulations which in the opinion of the Borough Council will not be detrimental to the general welfare, impair the intent of those regulations or conflict with the comprehensive plan.

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

WATER SUPPLY 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 SUPPLY SYSTEM, COMMUNITY - A system for supplying and distributing water from a common source to two or more dwellings.

WATERSHED - All the land from which water drains into a particular watercourse.

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

WETLAND DELINEATION - The defined boundary between a wetland and upland, in accordance with the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, 1987.
CHAPTER 3
PROCEDURES

SECTION 301 INTENT

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

SECTION 302 PRE-APPLICATION REVIEW (SKETCH PLAN)

The municipality shall make available to developers copies of this Subdivision and Land Development Ordinance, the Zoning Ordinance, the Comprehensive Plan and other adopted plans, street maps, and other information, which may affect the development of the property under consideration. Applications for approval of a subdivision or land development shall be in accord with these regulations, other codes and plans as adopted and information furnished.

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

Any advice or assistance shall be given solely at the discretion of the Planning and Zoning Commission or Borough Council. Submission of a sketch plan is optional and will not constitute formal filing of a plan with the Borough.

A. Pre-Application Plans and Data Procedure. Prior to the preparation and filing of the preliminary plan for subdivision or land development, the applicant may submit to the Borough the following plans and data, which shall be forwarded to the Planning and Zoning Commission for consideration. The plans shall include those elements that should be considered in the design of the subdivision or land development. These shall include any features of the Borough’s future land use plan, thoroughfares plan, community facilities plan, or of any plans of the Borough, including but not limited to, proposed streets, recreation areas, drainage reservation, future schools sites and public areas. A specific site analysis shall be provided which highlights man-made and natural features. The analysis should include information pertaining to soil types and stability, wetlands, scenic vistas, watercourses, drainage patterns, slope, and transportation patterns and systems.
including deficiencies of existing roadways, public utilities, recreational facilities, and any other features of the site and nearby areas that may be interlaced or impacted by the proposed development and land use.

B. Submission of Pre-Application (Sketch) Plans. Prospective applicants submitting a pre-application plan for review by the Planning and Zoning Commission shall include those items listed in Section 401 of this Ordinance. Plans shall be considered for informal review and discussion and shall not constitute formal filing of the plan with the Borough. Plans shall be submitted ten (10) calendar days prior to the regularly scheduled monthly meeting of the Planning and Zoning Commission in order to be placed on the agenda for said meeting. All plan submittals shall be accompanied by a completed Appendix 9.

SECTION 303 FORMAL APPLICATION

All applications for approval of a subdivision plan, land development plan, or improvement construction plan shall be made by the developer filing an application form, to be supplied by the Borough, together with the appropriate plans, studies, reports, supporting data, and required filing fee, with the Borough.

SECTION 304 ACCEPTANCE FOR FILING

A. Initial Application. The Borough shall have fourteen (14) calendar days from the date of submission of an application to check the plans and documents to determine if on their face they are in proper form and contain all information required by this Ordinance. No application shall be considered complete if the required filing fee is not paid. If defective, the application may be returned to the applicant with a statement of rejection, within the fourteen (14) calendar day period; otherwise, it shall be deemed accepted for filing as of the date of submission. Acceptance for filing shall not, however, constitute a waiver of any requirement of this Ordinance.

B. Amendments or Corrections to an Application. The Borough shall have fourteen (14) calendar days from the date of submission to examine amended or corrected applications filed to determine whether such amended or corrected application results in a substantial amendment to the plan or in the filing of a plan so changed as to be considered a new plan. If the Borough determines that the amended or corrected application constitutes a substantial amendment, it shall so inform the applicant and shall inform the applicant that the Borough shall consider the ninety (90) day review procedure to have been restarted as of the date of the filing of the substantial amendment. If the Borough determines that the amended or corrected application constitutes a new plan it shall so inform the applicant and shall inform the applicant that a new application and new fees are required.
SECTION 305  PRELIMINARY PLAN APPLICATION

A. Preliminary Plan Application. With the exceptions noted in Section 307 of this Ordinance, a preliminary plan is required for all land development plans and all subdivisions.

1. Preliminary plans may be filed with the Borough on any Borough business day; however, the Planning and Zoning Commission may review a plan at a particular meeting only if the plan was filed at least fifteen (15) calendar days prior to that meeting in order to be placed on the agenda for said meeting.

2. In addition to submitting the required material in accordance with Section 305 B., the applicant shall file with the Borough the required number of copies of plans, supporting information and all filing fees as required by the Borough.

B. Application Requirements. All preliminary plan applications shall include the following:

1. At the discretion of the Borough Planning and Zoning Commission, up to nine (9) copies of the preliminary plan. The Applicant shall consult with the Borough Planning and Zoning Commission to determine the number of copies required to be submitted. All plans shall be either black on white, blue on white, or color on white paper prints. Copies shall be distributed as follows:

   a. One (1) copy to the Borough Office.
   b. One (1) copy to the Borough Engineer.
   c. Five (5) copies to the Borough Planning and Zoning Commission.
   d. One (1) or two (2) to the Lebanon County Planning Department.

2. Four (4) copies of all notifications and certifications which are not provided on the preliminary plan. Copies shall be distributed as follows:

   a. One (1) copy to the Borough Office.
   b. One (1) copy to the Borough Engineer.
   c. One (1) copy to the Borough Planning and Zoning Commission.
   d. One (1) copy to the Lebanon County Planning Department.

3. Four (4) copies of the application form (see Appendix No. 10). Copies shall be distributed as follows:

   a. One (1) copy to the Borough Office.
   b. One (1) copy to the Borough Engineer.
   c. One (1) copy to the Borough Planning and Zoning Commission.
   d. One (1) copy to the Lebanon County Planning Department.
4. Two (2) copies of a completed fee schedule and the appropriate filing fee and deposit account.

5. Four (4) copies of all reports required by Section 402.E.3. Copies shall be distributed as follows:
   a. One (1) copy to the Borough Office.
   b. One (1) copy to the Borough Engineer.
   c. One (1) copy to the Borough Planning and Zoning Commission.
   d. One (1) copy to the Lebanon County Planning Department.

C. Planning Commission Review Process. At the first meeting of the Planning and Zoning Commission no action will be taken for most applications. The plan will be considered as a briefing item for general comments and introduction by the Borough staff. The Planning and Zoning Commission may elect to take action on any subdivision or land development if deemed to be in order and all review comments from the Borough staff, Borough Engineer, and County Planning Department are available.

The Planning and Zoning Commission may discuss the preliminary plan application with the developer or his agent at the next regular meeting and will review the application to determine if it meets the standards set forth in this Ordinance. The preliminary plan shall then be submitted by the Planning and Zoning Commission together with its analysis and recommendations, including those of the Borough staff and Engineer to the Borough Council.

D. Review by the Borough Staff.

1. The Borough Zoning Officer and any Borough personnel as directed by the Borough Council shall review the application documents to determine if they are in compliance with this Ordinance, the Zoning Ordinance, the comprehensive plan, and the Borough planning objectives and accepted planning standards. These personnel shall provide comments and recommendations, including written findings when directed by the Borough Council.

2. The Borough Engineer shall review the application documents to determine compliance with this Ordinance and any other applicable Borough Ordinances, Borough standards and good engineering practices. He shall prepare a written report of his findings and recommendations.


1. After receipt of the Borough Planning and Zoning Commission's recommendations, Borough Council shall:
2. 
   a. Evaluate the applicant's submission, presentation and report to the Borough Planning and Zoning Commission and review comments of the Borough Engineer.
   b. Determine whether the Plan meets the objectives and requirements of This Ordinance and other ordinances of the Borough.
   c. Either approve, conditionally approve, or disapprove the Plan.

2. Borough Council shall render its decision and communicate it to the applicant not later than ninety (90) days following the date of the regular meeting of Borough Council or the Planning Commission (whichever first reviews the application) next following the date the application was filed or after a final order of court remanding an application, provided that should the said next regular meeting occur more than thirty (30) days following the filing of the application or the final order of the court, the said ninety (90) day period shall be measured from the thirtieth (30th) day following the day the application was filed.

3. The Borough Council shall not approve any Plan until the County Planning Department report is received or until the expiration of thirty (30) days from the date the application was forwarded to the County.

F. Notification of Borough Council Action. The decision of the Borough Council shall be in writing and shall be communicated to the applicant in the manner and within the time period required by the MPC.

1. When the application is not approved in terms as filed, the decision shall specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite the provisions of the Ordinance relied upon.

2. Failure of the Borough Council to render a decision and communicate it to the applicant within the time and in the manner required herein, unless a greater period of time has been authorized by the Municipalities Planning Code, shall be deemed an approval of the application in terms as presented, unless the applicant has agreed in writing to an extension of time or change in the prescribed manner or presentation of communication of the decision; in which case, failure to meet the extended time or change in manner of presentation of communication shall have like effect.

G. Compliance with the Borough Council Action. If the Borough Council conditions its preliminary plan approval upon receipt of additional information, changes and/or notifications, such data shall be submitted and/or alterations noted on two (2) copies of the plan to be submitted to the Borough for approval. Such data shall be submitted to the Borough Council within ninety (90) days of their conditional
approval, unless the Borough Council grants a waiver by extending the effective time period.

The Borough Council's approval of the plan shall be rescinded automatically should the developer fail to accept or reject the conditions as permitted by the MPC.

H. Borough Council Approval and Certification. The Borough Council will acknowledge the satisfactory compliance with all conditions, if any, of the preliminary plan approval at a regularly scheduled public meeting. Additionally, at the option of the applicant, after receipt of preliminary plan approval and compliance with all conditions of approval, a preliminary plan may be presented to the Borough for acknowledgment through a formal statement on the plan (See Appendix No. 5).

Approval of a preliminary application shall constitute approval of the proposed subdivision and/or land development as to the character and intensity of development and the design of streets, lots, structures, and other planned facilities, but shall not constitute final plan approval. The preliminary plan may not be recorded in the office of the Recorder of Deeds.

After Preliminary Plan approval, the applicant may proceed with site work and the installation of required improvements or common amenities. However, no other development activities are permitted prior to the approval of a Final Plan in accordance with the provisions of Sections 306 or 307 and of Article 6.

I. Submission of Final Plan after Preliminary Approval:

Except as provided for in Section 310 of this Ordinance, Preliminary Plan approval shall expire within five (5) years after being granted, unless, due to extenuating circumstances, an extension is requested by the developer, recommended by the Planning Commission and approved by Borough Council. Requests for extensions must be submitted to the Borough Secretary thirty (30) days prior to any prevailing expiration date. Extensions may be granted for no more than one (1) one-year period.

Failure to submit a Final Plan within five (5) years of the preliminary approval of the plan, or approved time extensions thereof, shall automatically rescind the preliminary approval and any subsequent plan submission shall be treated as a new Preliminary Plan subject to all ordinances existing at the time of the submission.
SECTION 306 FINAL PLAN APPLICATION

A. Final Plan Applications.

1. Final plans may be filed with the Borough on any business day; however, the Planning and Zoning Commission will review a plan at a particular meeting only if the plan was filed at least fifteen (15) calendar days prior to that meeting in order to be placed on the agenda for said meeting.

2. In addition to submitting the required material in accordance with Subsection 306 C. of this Section, the applicant shall file with the Borough the required number of copies of plans, supporting information and all filing fees required by the Borough plus documentation that plans have been properly filed with the County Planning Department.

3. The final plan may be submitted in sections, each section covering a reasonable portion of the entire proposed subdivision as shown on the approved preliminary plan; provided that each section, except for the last section, shall contain a minimum of twenty-five (25) percent of the total number of units of occupancy as depicted on the approved preliminary plan.

4. The Borough Council may accept a final plan modified to reflect a change to the site or its surroundings, which occurs after the preliminary plan review. The Borough Council shall determine whether a modified final plan will be accepted or whether a new preliminary plan shall be submitted. The Borough Planning and Zoning Commission may make recommendations to the Borough Council.

C. Application Requirements. All final plan applications shall include the following:

1. Sixteen (16) copies of the final plan. Except as otherwise noted, all plans shall be either black on white, blue on white, or color on white paper prints. Copies shall be distributed as follows:

   a. One (1) copy to the Borough Office.
   b. One (1) copy to the Borough Engineer.
   c. Five (5) copies to the Borough Planning and Zoning Commission.
   d. Nine (9) copies to the Lebanon County Planning Department, including the following:

      (1) Seven (7) paper prints,
      (2) One (1) mylar copy, and
      (3) One (1) opaque mylar for recording purposes.

2. Four (4) copies of all notifications and certifications which are not provided on the preliminary plan. Copies shall be distributed as follows:
a. One (1) copy to the Borough Office.
b. One (1) copy to the Borough Engineer.
c. One (1) copy to the Borough Planning and Zoning Commission.
d. One (1) copy to the Lebanon County Planning Department.

3. Four (4) copies of the application form (see Appendix No. 10). Copies shall be distributed as follows:

a. One (1) copy to the Borough Office.
b. One (1) copy to the Borough Engineer.
c. One (1) copy to the Borough Planning and Zoning Commission.
d. One (1) copy to the Lebanon County Planning Department.

4. Two (2) copies of a completed fee schedule and the appropriate filing fee and deposit account.

5. Four (4) copies of all reports required by Section 403.E.3. Copies shall be distributed as follows:

a. One (1) copy to the Borough Office.
b. One (1) copy to the Borough Engineer.
c. One (1) copy to the Borough Planning and Zoning Commission.
d. One (1) copy to the Lebanon County Planning Department.

6. In the case of a plan that requires access to a highway under the jurisdiction of the Department of Transportation, two (2) copies of the plans submitted to support the application for Highway Occupancy Permit.

D. Plan Requirements. All final plans shall be prepared in conformance with the provisions of Section 403 of this Ordinance.

E. Borough Action.

1. In general, the Planning and Zoning Commission will schedule the final plan application for action at a regular meeting that is at least fifteen (15) calendar days following the filing of the application by the applicant. The Planning and Zoning Commission will discuss the final plan application with the developer or his agent at a regular meeting and will review the application to determine if it meets the standards set forth in this Ordinance. The final plan application shall be submitted by the Planning and Zoning Commission, together with this analysis and recommendations, to the Borough Council for consideration.

2. After receipt of the Borough Planning and Zoning Commission's recommendations, Borough Council shall:
3. a. Evaluate the applicant's submission, presentation and report to the Borough Planning and Zoning Commission and review comments of the Borough Engineer.

b. Determine whether the Plan meets the objectives and requirements of This Ordinance and other ordinances of the Borough.

c. Either approve, conditionally approve, or disapprove the Plan.

3. Borough Council shall render its decision and communicate it to the applicant not later than ninety (90) days following the date of the regular meeting of Borough Council or the Planning Commission (whichever first reviews the application) next following the date the application was filed or after a final order of court remanding an application, provided that should the said next regular meeting occur more than thirty (30) days following the filing of the application or the final order of the court, the said ninety (90) day period shall be measured from the thirtieth (30th) day following the day the application was filed.

4. The Borough Council shall not approve any Plan until the County Planning Department report is received or until the expiration of thirty (30) days from the date the application was forwarded to the County.

5. Final plan approval will be effective for ninety (90) days from the date of the Borough Council's action on the final plan, unless the Borough Council grants a waiver by extending the effective time period of the approval. Within this time period, the applicant must meet all conditions of approval, if any; certify plans as specified in Section 306.H of this Ordinance; and record plans as specified in Section 306.1 of this Ordinance.

F. Compliance with Borough Council Action. If the Borough Council conditions its final plan approval upon receipt of additional information, changes and/or notifications, such data shall be submitted and/or alterations noted on two (2) copies of the plan to be submitted to the Borough for approval. Such data shall be submitted to the Borough Council within ninety (90) days of their conditional approval, unless the Borough Council grants a waiver by extending the effective time period.

The Borough Council's final approval of the plan shall be rescinded automatically should the developer fail to accept or reject the conditions as permitted by the MPC.

G. Final Plan Certification. After the Borough Council's approval of the final plan and the required changes, if any, are made, the applicant shall proceed to prepare two (2) sets of final plans which shall be either (a) black ink on tracing cloth or (b) transparent reproductions of the original plan with black line on cloth or stable plastic base film and one (1) set of final plans which shall be a paper copy for the
Borough's files. The two (2) transparent copies of the final plan shall be certified in the following manner: both final plans shall be presented to the Borough Council for the signature of the President and Vice President or their designees (See Appendix No. 6). Final plans will not be signed by the Borough Council if submitted more than ninety (90) days from the Borough Council's final approval action unless the Borough Council grants a waiver by extending the effective time period of the approval. The final plan or record plan shall not be signed nor recorded until the financial improvements agreement is executed by all parties.

H. Final Plan Recordation.

1. After approval by Borough Council and the Borough Planning and Zoning Commission, and with all endorsements indicated on nine (9) copies, the subdivider or developer shall record his plan. No subdivision/land development plan may be legally recorded unless it bears the Borough approval and seal, and an indication that review by the County has taken place. The subdivider shall submit the following:

   a. Two (2) signed copies to the Recorder of Deeds, to include one (1) opaque mylar and one (1) print to send out for microfilming.

   b. Two copies to the County Planning Department, to include one (1) transparent mylar and one (1) paper print.

2. All Subdivision and Land Development Plans shall be recorded within ninety (90) days of the date of final approval. At the time of recording at the County, an additional copy of the plan shall be presented to the Lebanon County Planning Department to be stamped and the Lebanon County Recorder of Deeds to be time stamped, and this copy shall be returned to the Borough for the Borough's records. The Recorder's Certificate that the approved plan has been recorded with Plan Book and page numbers indicated shall be submitted to the Borough. If the developer fails to properly record the plan with the Lebanon County Recorder of Deeds then the final approval of the plan given by the Borough Council shall be rescinded automatically.

I. Effect of Recording of Final Plan. Recording the final plan, after approval of the Borough Council, shall have the effect of an irrevocable offer to dedicate all streets and other areas designated for public use, unless reserved by the landowner as provided in Section 403.E.2.e of this Ordinance. However, the approval of the Borough Council shall not impose any duty upon the Commonwealth, County or Borough concerning acceptance, maintenance or improvement of any such dedicated areas or portion of same until the proper authorities of the Commonwealth, County or Borough actually accept same by resolution in accordance with Section 608 of this Ordinance.
SECTION 307  PLANS EXEMPTED FROM STANDARD PROCEDURES

A. Revised Subdivision and/or Land Development Plans. Any resubdivision of recorded plans shall be considered as a new application and shall comply with all requirements of this Ordinance, except that plans may be changed, provided that in making such changes:

1. No lot or tract of land shall be created that does not meet the minimum design standards required by this Ordinance and existing Borough regulations.
2. No structure shall be relocated which does not meet the minimum design standards required by this Ordinance and existing Borough regulations.
3. No increase is made in the overall density (number of lots on the tract).
4. The storm water management facilities are not altered in a manner that affects the discharge of storm water to an adjacent property or significantly relocates a major storm water management facility within the project.
5. Street locations and block sizes shall not be changed.
6. The character and land use of the original application shall be maintained.
7. In every case where a plan alteration conforms to the above, the applicant shall:
   a. Submit six (6) black on white or blue on white paper copies of the revised final plan and one application form (See Appendix No. 10) to the Borough Planning and Zoning Commission and two (2) black on white or blue on white paper copies of the revised final plan and one application form to the County Planning Department. Upon review of the revision, the Borough Planning and Zoning Commission will, in writing, advise the applicant whether or not the revision complies with the above.
   b. If the revision complies, the applicant shall then submit the plan to the Borough Council for signature as specified in Section 306.H of this Ordinance (See Appendix No. 6).
   c. The plans shall then be recorded as specified in Section 306.I of this Ordinance.
8. In addition to submitting the required material, in accordance with Subsection 307.A.7. of this section, the applicant shall file with the Borough the required number of copies of plans, supporting information and all filing fees required by the Borough plus documentation that plans have been properly submitted to the County Planning Department.
B. **Minor Subdivision Plans.** A plan for subdivision qualifies as a Minor Subdivision Plan if (1) not more than four (4) lots or dwelling units are created, (2) the improvement of a new street is not proposed or required and (3) no installation of any utility outside the frontage road is required. For the purpose of interpreting this section of the ordinance, a subdivision of not more than three (3) lots shall not include the remaining undeveloped tract of the minor subdivision, sometimes called the residue tract, which does not count as a numbered lot so long as said residue could not be further subdivided under this subdivision and land development ordinance. The subdivision of lots from a property after four (4) or more lots have been previously subdivided or four (4) or more dwelling units have been previously created shall be considered a Major Subdivision. A Minor Subdivision Plan may be submitted as a combined Preliminary and Final Plan for approval. Minor Subdivision Plans shall follow the requirements for submission of a Final Plan in accordance with Sections 306 and 403 of this Ordinance, with the exceptions noted below.

1. A **Water Feasibility Study** as described in Section 405, subsections C through G, is not required for a minor residential development or subdivision. When the number of lots or dwelling units proposed to be subdivided and/or developed exceeds four (4), either initially or cumulatively, all requirements of Section 405 shall apply. For the purposes of this subsection, the cumulative number of lots or dwelling units to be subdivided or developed shall be based on the original tract of land, which can be referenced as the parent tract of land, the parent tract of land shall be all the land held in single and separate ownership by the applicant without regard to the actual land submitted by the applicant for development or subdivision. Single and separate ownership is defined as ownership that is separate and distinct from that of the adjoining property.

2. A **Traffic Impact Study** as described in Section 406 is not required for a minor residential development or subdivision.

C. **Lot Annexation Plans.** The lease, conveyance, sale, or transfer of land for the sole purpose of increasing the lot size of an adjacent contiguous lot shall comply with the following lot annexation procedure, provided that the proposal does not alter a subdivision plan of record, create additional lots or result in a nonconformity with the design standards found in Chapter 5 of this Ordinance. In every case where a proposal conforms to the above, the application shall comply with the following procedures:

1. The applicant shall submit to the Borough sixteen (16) black on white, blue on white, or color on white paper prints of a lot add-on plan prepared to the standards specified in Section 404 of this Ordinance and four (4) application forms (See Appendix No. 10). Copies will be distributed in accordance with the procedures of Section 306 C. of this Ordinance. In addition to submitting the required material, the applicant shall provide all filing fees required by the
Borough. Upon review of the revision, the Borough will, in writing, advise the applicant whether or not the proposal qualifies as a lot annexation.

2. If the plan qualifies, the applicant shall then submit nine (9) copies of the plan to the Borough Council for signature as specified in Section 306.H of this Ordinance (See Appendix No. 6).

3. The plans shall then be recorded as specified in Section 306.I of this Ordinance.

D. Natural Subdivisions. Whenever a portion of an applicant’s land is divided into two or more portions by virtue of the location of a public road, either State or Borough, it may be construed as having been “naturally” subdivided providing that the separate portions must meet all the requirements of the Cornwall Borough Zoning Ordinance relating to the applicable zoning district. In cases where a “naturally subdivided” section of land does not meet the zoning requirements, it may be conveyed only for annexation to an adjoining parcel and not as a separate building lot. Natural subdivisions shall be processed in the same manner as Lot Annexation Plans.

SECTION 308 PROCEDURE FOR REQUESTING CONSIDERATION OF A MODIFICATION OF PROVISIONS OF THIS ORDINANCE

A. A modification of the minimum standards contained in this Ordinance may be submitted for review where literal compliance with the mandatory provisions is shown by the applicant to be unreasonable and to cause undue hardship. The applicant shall have the burden to demonstrate by substantive evidence (i) that the applicant shall use an alternative method which shall achieve equal or better results or (ii) that due to the unique characteristics of the property, no development of the property would be possible without the requested modification. The applicant shall provide evidence that no practicable alternative is available which can meet overall project purposes. In considering whether an alternative is practicable, the applicant and the Borough Council shall consider cost, existing technology, logistics, project purposes and restrictions imposed by federal, state and local statutes, laws and regulations.

B. All requests for modification shall be in writing, and shall accompany and be a part of the application for Plan approval. (See Appendix 11.)

C. The request shall state in full the grounds and facts of unreasonableness or hardship, and the provision or provisions of the ordinance involved, and the minimum modification necessary.

D. In general, the Planning and Zoning Commission will schedule a request for a modification for action at a regular meeting that is at least fifteen (15) calendar days following the filing of the application by the applicant. The Planning and Zoning Commission will schedule a request for a modification for action at a regular meeting that is at least fifteen (15) calendar days following the filing of the application by the applicant.
Commission will review the request to determine (1) if compliance with the provisions of the Ordinance creates an undue hardship or appears to be unreasonable as it applies to the particular property or (2) if the applicant demonstrates that an alternative proposal will allow for equal or better results, and take such action as it shall deem necessary or advisable in the public interest.

E. The request for a modification and accompanying documentation shall be submitted by the Planning and Zoning Commission, together with its analysis and recommendations, to the Borough Council for consideration. All applications for approval of a waiver shall be acted upon by the Borough Council who shall render its decision and communicate it to the applicant.

F. Notification of Action of Borough Council. After the meeting at which the waiver was reviewed, the Borough Council shall send a written notice of the Borough Council's action to the applicant.

G. The granting of a modification shall not be contrary to the public interest and shall observe the intent and purpose of this remaining tract Ordinance.

SECTION 309 COMPLIANCE WITH ZONING ORDINANCE AND ZONING HEARING BOARD DECISIONS

Whenever the Zoning Ordinance provides that the use proposed by the applicant for subdivision or land development approval shall constitute a use by special exception or conditional use, or when a variance from the terms of the Zoning Ordinance is required to develop in accordance with the plan, the applicant shall obtain such special exception, variance or conditional use approval from the Borough Zoning Hearing Board or Borough Council, as applicable, prior to the submission of the preliminary plan. The plan shall be designed and developed in accordance with any conditions that have been imposed upon the grant of such special exception, variance or conditional use, or zoning amendment by the Borough Zoning Hearing Board or Borough Council, as applicable.

SECTION 310 EFFECTS OF CHANGES IN THE ORDINANCE

A. From the time an application for approval of a plan, whether preliminary or final, is duly filed as provided in this Ordinance, and while such application is pending approval or disapproval, no change or amendment of the zoning, subdivision or other governing ordinance or plan shall affect the decision on such application adversely to the applicant and the applicant shall be entitled to a decision in accordance with the provisions of the governing ordinances or plans as they stood at the time the application was duly filed. In addition, when a preliminary application has been duly approved, the applicant shall be entitled to final approval in accordance with the terms of the approved preliminary application as hereinafter provided. However, if an application is properly and finally denied, any subsequent application shall be subject to the intervening change in governing regulations.
B. When an application for approval of a plan, whether preliminary or final, has been approved without conditions or approved by the applicant's acceptance of conditions, no subsequent change or amendment in the zoning, subdivision or other governing ordinance or plan shall be applied to affect adversely the right of the applicant to commence and to complete any aspect of the approved development in accordance with the terms of such approval within five years from such approval. The five-year period shall be extended for the duration of any litigation, including appeals, which prevent the commencement or completion of the development, and for the duration of any sewer or utility moratorium or prohibition, which was imposed subsequent to the filing of an application for preliminary approval of a plan. In the event of an appeal filed by any party from the approval or disapproval of a plan, the five-year period shall be extended by the total time from the date the appeal was filed until a final order in such matter has been entered and all appeals have been concluded and any period for filing appeals or requests for reconsideration have expired. Provided, however, no extension shall be based upon any water or sewer moratorium which was in effect as of the date of the filing of a preliminary application.

C. Where final approval is preceded by preliminary approval, the aforesaid five-year period shall be counted from the date of the preliminary approval. In the case of any doubt as to the terms of a preliminary approval, the terms shall be construed in the light of the provisions of the governing ordinances or plans as they stood at the time when the application for such approval was duly filed.

D. Where the landowner has substantially completed the required improvements as depicted upon the final plan within the aforesaid five-year limit, or any extension thereof as may be granted by Borough Council, no change of municipal ordinance or plan enacted subsequent to the date of filing of the preliminary plan shall modify or revoke any aspect of the approved final plan pertaining to zoning classification or density, lot, building, street or utility location.

E. In the case of a preliminary plan calling for the installation of improvements beyond the five-year period, a schedule shall be filed by the landowner with the preliminary plan delineating all proposed sections as well as deadlines within which applications for final plan approval of each section are intended to be filed. Such schedule shall be updated annually by the applicant on or before the anniversary of the preliminary plan approval, until final plan approval of the final section has been granted and any modification in the aforesaid schedule shall be subject to approval of the Borough Council in its discretion.

F. Each section in any residential subdivision or land development, except for the last section, shall contain a minimum of 25% of the total number of dwelling units as depicted on the preliminary plan, unless a lesser percentage is approved by the Borough Council in its discretion. Provided the landowner has not defaulted with regard to or violated any of the conditions of the preliminary plan approval, including compliance with landowner's aforesaid schedule of submission of final plans for the various sections, then the aforesaid protections afforded by
substantially completing the improvements depicted upon the final plan within five years shall apply and for any section or sections, beyond the initial section, in which the required improvements have not been substantially completed within said five-year period the aforesaid protections shall apply for an additional term or terms of three years from the date of final plan approval for each section.

G. Failure of landowner to adhere to the aforesaid schedule of submission of final plans for the various sections shall subject any such section to any and all changes in zoning, subdivision and other governing ordinance enacted by the municipality subsequent to the date of the initial preliminary plan submission.
CHAPTER 4
PLAN REQUIREMENTS

SECTION 401 SKETCH PLAN

Sketch Plans may be drawn by the landowner, subdivider or developer, or by his engineer, surveyor or agent and should include sufficient data to make a discussion with the Borough Planning and Zoning Commission meaningful. Sketch plans shall contain the following information drawn legibly to scale but not necessarily showing precise dimensions:

A. Tract boundaries accurately labeled with the name(s) of adjacent landowner(s) and adjacent plan(s) of record.

B. Name and address of the developer (if applicable) and landowner.

C. Name of the individual and/or the firm that prepared the plan.

D. Name of the municipality in which the subdivision/land development is located.

E. North point, scale (written and graphic) and date.

F. Name of proposed subdivision or other identifying title.

G. Significant topographical and physical features including bodies of water, quarries, floodplains, soil types, and tree masses and existing vegetation, structures, and suspected wetlands (as determined from the Lebanon County Soil Survey, National Wetland Inventory Maps or DEP).

H. Proposed general street and lot layout.

I. A location map with sufficient information to enable the location of property.

J. Statement of total acreage of the tract being subdivided or developed.

K. Proposed land use. If several land uses are proposed, the location of each land use shall be indicated.

L. Statement explaining the methods of water supply and sewage disposal to be used.

SECTION 402 PRELIMINARY PLAN

Preliminary subdivision plans and/or land development plans shall be prepared by a registered professional. Such plans shall be prepared in accordance with the "Engineer, Land Surveyor and Geologist Registration Law", except that this requirement shall not
preclude the preparation of a plan in accordance with the "Landscape Architect's Registration Law", when it is appropriate to prepare the plan using professional services as set forth in the definition of the "practice of landscape architecture" under Section 2 of that act. The preliminary plan shall show, be accompanied by, or be prepared in accordance with the following:

A. Drafting Standards.

1. The Preliminary Plan shall be clearly and legibly drawn by a registered professional, to a scale of one inch equals fifty feet or larger, except that:
   a. If the average size of the proposed lots in the subdivision is two acres or larger, the plan may be drawn to a scale of one inch equals one hundred feet.

2. Dimensions shall be in feet and decimals; bearings shall be in degrees, minutes and seconds. Lot line descriptions shall read in a clockwise direction.

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

4. Preliminary Plans and all submitted prints thereof shall be made on sheet from 18 inches by 24 inches to 24 inches by 36 inches. If the plan is prepared in two (2) or more sections, a key map showing the location of the sections shall be placed on each sheet. If more than one (1) sheet is necessary, each sheet shall be the same size and numbered to show the relationship to the total number of sheets in the plan (e.g. Sheet 1 of 5).

5. Plans shall be legible in every detail.

B. Location and Identification.

1. The proposed project name or identifying title.

2. Name of the municipality or municipalities in which the project is located, including the location of any municipal boundaries if located within the vicinity of the tract.

3. The name and address of the owner of the tract (or his authorized agent), the developer/subdivider, and the firm that prepared the plans.

4. The file or project number assigned by the firm that prepared the plan, the plan date and the date(s) of all plan revisions.

5. A north arrow, graphic scale and written scale.
6. The entire existing tract boundary with bearing and distances. In the case of lot annexation plans, the boundary of the receiving tract shall also be identified as a deed plotting and may be drawn at any legible scale.

7. The total acreage of the entire existing tract.

8. The location of existing lot line markers along the perimeter of the entire existing tract.

9. A key map for the purpose of locating the property being subdivided/developed drawn at a scale not less than one inch equals eight hundred (800) feet and showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all streets, roads, municipal boundaries, zoning districts, water courses, and any areas subjected to flooding, and recorded subdivision/development plans existing within one thousand (1,000) feet of any part of the property. Where applicable, the approximate distance to the nearest existing street shall be shown. A scale and north point shall be indicated.

10. Source of title, deed, book, page, plan book (if applicable), and tax map number.

C. Existing Features.

1. Contour lines at vertical intervals of at least two feet for land with average natural slope of four percent or less, and at intervals of at least five feet for land with average natural slope exceeding four percent. Contour interval may be adjusted based upon horizontal scale with concurrence of the Borough Engineer.

2. Locations and elevation of the datum to which contour elevations refer shall be the closest USC&G established benchmark, or an established benchmark approved by the Borough Engineer.

3. The names of all adjacent landowners; both adjoining and across existing rights-of-way, along with the deed, book, page, plan book (if applicable), and tax map number of all previously recorded plans for adjacent properties.

4. The following items when located within two hundred (200) feet of the subject tract:
   a. The location, names and dimensions of existing rights-of-way and cartways for private or public streets, alleys and driveways.
   b. The location and size of the following features and related rights-of-way: sanitary sewer mains, water supply mains, fire hydrants, buildings, and storm water management facilities.
c. The location of existing rights-of-way for electric, telephone, cable TV, gas and oil transmission lines, and communications towers.

d. Significant man-made or natural features such as floodplains, watercourses, quarry sites, solid waste disposal areas, historic structures, cemetery or burial sites, or wooded areas.

5. The following items when located within the subject tract:

a. The location, name and dimensions of existing rights-of-way and cartways for streets, alleys and driveways.

b. The location and size of the following features and related rights-of-way: sanitary sewer mains, water supply mains, fire hydrants, and storm water management facilities.

c. The location of existing rights-of-way for electric, telephone, cable TV, gas and oil transmission lines, and communications towers.

d. The size, capacity and condition of the existing storm water management system and any other facility that may be used to convey storm flows.

e. The location and size of existing on-lot sewage systems and wells.

f. All existing buildings or other structures and the approximate location of all existing tree masses, rock out-crops, water or other significant features.

g. The location of wetlands and subsequent data or information required by Section 407 of this Ordinance.

h. Other features required to be shown to comply with the Conservation Plan Mapping requirements Section 408 of this Ordinance.

D. Plan Information.

1. The layout of streets, alleys and sidewalks, including cartway and right-of-way widths, any conditions governing their use, and suggested types (i.e., collector, major, minor, etc.)

2. The layout of lots with approximate dimensions.

3. Block and lot numbers in consecutive order (e.g. Block "A", Lots 1 through 10; Block "B", Lots 11 through 22).
4. The location and configuration of proposed buildings, parking compounds, streets, alleys, driveways, curbs, sidewalks, street lights, street signs, fire hydrants, common open space, recreational areas, and all other significant planned facilities.

5. Total number of lots, units of occupancy, density, and proposed land use. If a multiple land use is proposed, the location of each land use shall be indicated.

6. Easements and rights-of-way. All easements or rights-of-way where provided for or owned by public services 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 in accordance with Pennsylvania Act 287, the names, addresses, and telephone numbers of affected utilities shall be listed on the plan.

7. Building setback lines and building envelope.

8. Identification of buildings to be demolished.

9. Typical street cross-section for each proposed public or private street and typical cross-section for any existing street that will be improved as part of the application. Each cross-section shall include the entire right-of-way width.

10. Profiles along the centerline of cartway (pavement) of each proposed public or private street including corresponding centerline stationing. Such profiles shall show existing and proposed grades.

11. The design of any proposed sanitary sewer mains and water supply mains and facilities. This information shall include the size, vertical location and horizontal location, if applicable.

12. Storm water management and erosion and sediment control data and plans designed in accordance with Section 507 of this Ordinance. This information may be provided on a sheet with other data or on separate sheets and need not necessarily be recorded with the final plan.

13. Proposed street names.

14. Where the proposed subdivision or land development is located partially or wholly within an area prone to frequent flooding (either by impoundment or conveyance) as indicated by the flood insurance rate map profiles and supporting data, soil type or local historical record; the developer shall supply the location and elevation of all proposed roads, fills, utilities, buildings, storm water management, and erosion control facilities;
15. Location of all percolation test holes, deep probe holes and proposed well locations.

16. Easements for the on-lot sewage replacement locations.

17. Easements around delineated wetlands.

18. Clear sight triangles and stopping sight distances for all intersections as described in Sections 510 E.7 and 8. of this Ordinance shall be shown on the plan.

19. Parks, playgrounds, and other areas proposed to be dedicated or reserved for public use with any condition governing such use.

20. Preliminary designs of any bridges or culverts that may be required. Such designs shall meet all applicable requirements of the DEP, PennDOT, and other applicable agencies. Calculations for waterway opening shall be included. All designs shall be subject to approval by the Borough.

21. A statement on the plan indicating any special exception, conditional use or variance, if applicable, related to the property, along with a copy of any Zoning Hearing Board or Borough Council decision, so that any conditions imposed will be readily evident.

22. A listing on the plan identifying all waivers of the requirements of this ordinance requested by the subdivider/developer. The listing should be specific and refer to the particular section of this ordinance for which waiver is being requested.

23. A table indicating the existing zoning district, total tract area, required lot size, required setbacks, required maximum and/or minimum development density, maximum building height and number of lots in the proposed subdivision along with the proposals for each of these parameters.

24. A statement of the intended use of all lots, with reference to restrictions of any type which exist or will exist as covenants in the deed for the lots contained in the subdivision and, if covenants are recorded, including the deed book and page number.

25. Where a Preliminary Plan shows the proposed subdivision or land development of only a part of the landowner's total property, a sketch shall be required showing the prospective street system in the remainder of the property so that the street system in the submitted portion shall be considered in relation to future connections with the unsubmitted portion. To prevent undue hardship in the case of extremely large properties, the Borough Planning and Zoning Commission may, based on existing natural
or man-made features, delineate the area for which a prospective street system shall be sketched.

26. In case of a preliminary plan calling for the installation of improvements beyond a five (5) year period from preliminary plan approval or any approved time extension thereof, a schedule shall be provided delineating all proposed sections as well as deadlines within which applications for final plan approval of each section are intended to be filed. Such schedule shall be updated annually by the applicant on or before the anniversary of the preliminary plan approval, until final plan approval of the final section has been granted and any modification in the aforesaid schedule shall be subject to approval of the Borough Council at its discretion. Failure of the landowner to adhere to the aforesaid schedule of submission of final plans for the various sections shall subject any such section to any and all changes in zoning, subdivision and other governing ordinance enacted by the Borough subsequent to the date of the initial preliminary plan submission.

27. Each section in any residential subdivision or land development, except for the last section, shall contain a minimum of twenty-five (25) percent of the total number of dwelling units as depicted on the preliminary plan, unless a lesser percentage is approved by the Borough Council in its discretion. Provided the landowner has not defaulted with regard to or violated any of the conditions of the preliminary plan approval, including compliance with landowner's aforesaid schedule of submission of final plans for the various sections, then the aforesaid protections afforded by substantially completing the improvements depicted upon the final plan within five years shall apply and for any section or sections, beyond the initial section, in which the required improvements have not been substantially completed within said five-year period the aforesaid protections shall apply for an additional term or terms of three years form the date of final plan approval for each section.

E. Certificates, Notifications and Reports.

1. Certificates - the following certificates shall be included on the plan:

a. Certificate of review by the Borough Planning and Zoning Commission (See Appendix No. 8).

b. Certificate of review by the County Planning Department.

c. Certificate for approval by the Borough Council with space for the signatures of members (See Appendix No. 5).

d. Certificate, signature and seal of the surveyor registered in the Commonwealth of Pennsylvania to the effect that the survey is correct (See Appendix No. 2).
e. Certificate, signature and seal of a professional registered in the Commonwealth of Pennsylvania and qualified to perform such duties, to the effect that the plan is correct (See Appendix No. 1).

e. Certificate, signature and seal of a professional registered in the Commonwealth of Pennsylvania and qualified to perform such duties, indicating compliance with the provisions of Section 507 of this Ordinance (See Appendix No. 3).

g. A statement duly acknowledged before an officer authorized to take acknowledgment of deeds and signed by the landowner, certifying that the subdivision or land development shown on the plan is the act and the deed of the owner; that all those signing are all the owners of the property shown on the survey and plan; that they desire the same to be recorded as such, and that all streets and other property identified as proposed public property are dedicated for public use. (See Appendix No. 4). This must be dated following the last change or revision to said plan.

2. Notifications - the following notifications shall be included on the plan:

a. Where the tract described in the application includes any public utility, electric transmission line, gas pipeline, or petroleum product transmission line located within the tract, the applicant or lessee of such right-of-way shall notify the owner of the right-of-way of his intentions. A note stating any conditions regarding the use of the land, minimum building setback or right-of-way lines shall be included on the plan. This requirement may also be satisfied by submitting a copy of the recorded agreement.

b. Where the land included in the subject application has an agricultural, woodland or other natural resource easement located within the tract, the application shall be accompanied by a letter from the party holding the easement stating any conditions on the use of the land. This requirement may also be satisfied by submitting a copy of the recorded easement.

3. Reports - the following reports shall be submitted with the plan:

a. A hydraulic report and erosion and sedimentation narrative as required by Section 507 of this Ordinance.

b. A preliminary conservation plan as described in Section 408 of this Ordinance.

c. A water and sewer feasibility report as described in Section 405 of this Ordinance.
d. A preliminary traffic impact study as described in Section 406 of this Ordinance.

e. A wetland report as described in Section 407 of this Ordinance.

F. Filing Fee. The preliminary plan shall be accompanied by a check or money order drawn to the order of the Borough in an amount specified on the fee schedule adopted by the Borough Council.

SECTION 403 FINAL PLANS

Final subdivision and/or final land development plans shall be prepared by a registered professional licensed to practice in the Commonwealth of Pennsylvania. The final plan shall be accompanied by, or prepared in accordance with the following:

A. Drafting Standards. The same standards shall be required for a final plan as specified for a preliminary plan in Section 402.A of this Ordinance.

B. Location and Identification. The same standards shall be required for a final plan as specified for a preliminary plan in Section 402.B of this Ordinance.

C. Existing Features. The same standards shall be required for a final plan as specified for a preliminary plan in Section 402.C of this Ordinance.

D. Plan Information.

1. Complete description of the centerline and right-of-way line for all new streets, whether public or private, and alleys. This description shall include distances to the nearest one-hundredth of a foot and bearings to the nearest thirty (30) seconds with curve segments comprised of radius, tangent, arc, and chord.

2. Lot lines with accurate bearings to the nearest thirty (30) seconds, distances to the nearest one-hundredth of a foot, and lot areas for all parcels. Curve segments shall be comprised of arc, chord, bearings, and distances. Along existing street rights-of-way the description may utilize the existing deed lines or street centerlines; along all proposed street rights-of-way, the description shall be prepared to the right-of-way lines.

3. Block and lot numbers in consecutive order (e.g. Block "A", Lots 1 through 10; Block "B" Lots 11 through 22).

4. The location and configuration of proposed buildings, parking compounds, streets, alleys, driveways, recreational areas, and all other significant planned facilities shall be shown.
5. Total number of lots, units of occupancy, density, and proposed land use. If a multiple land use is proposed, the location of each land use shall be indicated.

6. Easements and rights-of-way. All easements or rights-of-way where provided for or owned by public services 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 in accordance with Pennsylvania Act 287, the names, addresses, and telephone numbers of affected utilities shall be listed on the plan.

7. Building setback lines and building envelope.

8. Identification of buildings to be demolished.

9. Typical street cross-section for proposed public or private streets and alleys and a typical cross-section for any existing street that will be improved as part of the application. Each cross-section shall include the entire right-of-way width.

10. Final vertical and horizontal alignment for proposed public or private streets and alleys, sanitary sewer, and water distribution systems. All street profiles shall show at least the existing (natural) profile along the centerline, proposed grade at the centerline and the length of all proposed vertical curves for streets. All water distribution and sanitary sewer systems shall provide manhole locations and size and type of material. This information may be provided on separate sheets and is not subject to recording with the final plans.

11. Final storm water management and erosion and sediment control data and plans designed in accordance with Section 507 of this Ordinance. This information may be provided on a sheet with other data or on separate sheets and need not necessarily be recorded with the final plan. In the case of any dispute in the methodology used in the design of any storm water management plan and/or in the presentation of such information, the Borough Council shall make the final determination on the design criteria, methodology and form of presentation.

12. Final street names and street addresses (house numbers).

13. Where the proposed subdivision or land development is located partially or wholly within an area prone to frequent flooding (either by impoundment or conveyance) as indicated by the flood insurance rate map (profiles), soil type or local historical record; the applicant shall supply the location and elevation of all proposed roads, fills, utilities, buildings, storm water management, and erosion control facilities.
14. Location, elevation and material of all permanent monuments and lot line markers. All monuments and lot markers shall be set prior to final plan approval.

15. A detailed grading plan. The grading plan shall include finished grades and ground floor elevations. This information may be provided on separate sheets and is not subject to recording with the final plans.

16. Location of all percolation test holes, deep probe holes, and proposed well locations.

17. Easements for the on-lot sewage replacement locations.

18. Easements around delineated wetlands.

19. In the case of a plan which requires access to a highway under the jurisdiction of the Department of Transportation, the inclusion of the following plan note:

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

20. Clear sight triangles and stopping sight distances for all intersections as described in Sections 510 E.7 and 8. of this Ordinance shall be shown on the plan.

21. Where required to satisfy a requirement of the Borough Zoning Ordinance or other governing regulation, a complete landscape plan, prepared by a landscape architect, showing the location, size and type of all plant material required by provisions of this Ordinance or any other applicable Borough regulations, including but not limited to, screening, buffer planting, parking landscaping, replacement trees, and street trees. The landscape plan should be provided on separate sheets and must include the signature and seal of the registered landscape architect responsible for preparation of the plan.

22. Identification of any lands to be dedicated or reserved for public, semi-public or community use.

23. A table indicating the existing zoning district, total tract area, required lot size, required setbacks, required maximum and/or minimum development density, maximum building height, and number of lots in the proposed subdivision along with the proposals for each of these parameters.
24. A statement on the plan indicating the granting of special exception, conditional use or variance, or zoning amendment, if applicable, related to the property, along with a copy of any Zoning Hearing Board or Borough Council decision, and along with waivers granted by the Borough Council to sections of this Ordinance, so that any conditions imposed will be readily apparent.

25. A detailed schedule of inspections as generally outlined by Section 605 of this Ordinance, which is tailored for the site under consideration.

E. Certificates, Notifications and Reports.

1. Certificates - the following certificates shall be included on the plan:

   a. Certificate, signature and seal of a professional registered in the Commonwealth of Pennsylvania and qualified to perform such duties, to the effect that the plan is correct (See Appendix No. 1).

   b. Certificate, signature and seal of the surveyor registered in the Commonwealth of Pennsylvania to the effect that the survey is correct. (See Appendix No. 2).

   c. Certificate, signature and seal of a professional registered in the Commonwealth of Pennsylvania and qualified to perform such duties, indicating compliance with the provisions of Section 507 of this Ordinance (See Appendix No. 3).

   d. Certificate of review by the Planning and Zoning Commission (See Appendix No. 8).

   e. Certificate for approval by the Borough Council with space for signatures by members of the Borough Council. (See Appendix No. 6)

   f. A statement duly acknowledged before an officer authorized to take acknowledgment of deeds and signed by the landowner, certifying that the subdivision or land development shown on the plan is the act and the deed of the owner; that all those signing are all the owners of the property shown on the survey and plan; that they desire the same to be recorded as such, and that all streets and other property identified as proposed public property are dedicated for public use. (See Appendix No. 4). This must be dated following the last change or revision to said plan.
g. A statement signed by the applicant acknowledging the fact that the proposed subdivision or land development may be subject to other Borough, State and Federal regulations.

h. Certificate of review by the County Planning Department.

i. A blank space measuring three (3) inches square shall be left along the lower edge of the sheet, in order that the Recorder of Deeds may acknowledge receipt of the plan when it is presented.

2. Notifications - the following notifications shall be included on the plan:

a. Notification from DEP that approval of the sewage facilities plan revision (plan revision module for land development) or supplement has been granted or notice from DEP that such approval is not required. A note to that effect shall also be placed on the plan.

b. Where the tract described in the subject application includes any public utility, electric transmission line, gas pipeline, or petroleum product transmission line located within the tract, the applicant or lessee of such right-of-way shall notify the owner of the right-of-way of his intentions. A note stating any condition regarding the use of the land, minimum building setback or right-of-way lines shall be included on the plan. This requirement may also be satisfied by submitting a copy of the recorded agreement.

c. Where the land included in the subject application has an agricultural, woodland or other natural resource easement located within the tract, the application shall be accompanied by a letter from the party holding the easement stating any conditions on the use of the land. This requirement may also be satisfied by submitting a copy of the recorded easement.

d. Notice from the postmaster of the postal district in which the tract is located and the emergency service providers in the Borough stating that the proposed private and/or public street names are acceptable.

e. A note placed on the plan indicating any area that is not to be offered for dedication, if applicable.

f. Written notice from the Borough Engineer that all proposed improvements have been designed to the standards of the Borough and that financial guarantees in a form suitable to the Borough Council have been received. (See Appendices No. 13 and 15 and Chapter 6).
When the applicant posts financial guarantee in lieu of completion of the improvements, the Final Plan shall be accompanied by a completed improvement guarantee agreement.

g. Such written notices of approval as required by this Ordinance, including written notices approving the water supply systems, sanitary sewage systems and storm water runoff to adjacent properties.

h. The submission of a controlling agreement in accordance with Section 609 when an application proposes to establish a street which is not offered for dedication to public use.

i. Notification from the appropriate state and federal agencies that approvals have been received, permits have been issued, or are not required, for any proposed activities within streams, wetlands or any other state or federally regulated body of water. These permits and/or approvals include, but are not limited to, Erosion and Sediment Control, Floodplain Encroachment Permits, Dam Safety Permits, Earth Disturbance Permits, Stream Encroachment Permits, and General Permits.

When the final plan is submitted in sections, the above notifications for all applicable activities on the entire site, shown on the approved preliminary plan shall be provided upon submittal of the first final phase of the project.

3. Reports - the following reports shall be submitted with the plan:

a. A final hydraulic report and erosion and sedimentation narrative as required by Section 507 of this Ordinance

b. A final conservation plan as described in Section 408 of this Ordinance.

c. A final traffic impact study as described in Section 406 of this Ordinance.

d. A final wetland report as described in Section 407 of this Ordinance.

e. A sewage planning module with hydrogeologic study, if required.

F. Filing Fee. The final plan shall be accompanied by a check or money order drawn to the order of the Borough in an amount specified on the fee schedule adopted by the Borough Council.
SECTION 404 LOT ANNEXATION PLANS AND NATURAL SUBDIVISIONS

Lot annexation plans and plans of natural subdivisions shall be prepared by a qualified person and shall include the following information:

A. **Drafting Standards.** The same standards shall be required for a lot annexation/natural subdivision plan as specified for a preliminary plan in Section 402.A of this Ordinance.

B. **Location and Identification.** The same standards shall be required for a lot annexation/natural subdivision plan as specified for a preliminary plan in Section 402.B of this Ordinance.

C. **Existing Features.**

1. The names of all adjacent landowners; both adjoining and across existing rights-of-way, along with the deed, book, page, plan book (if applicable), and tax map number of all previously recorded plans for adjacent properties.

2. The following items when located within the subject tract(s):
   
   a. The location, name and dimensions of existing rights-of-way and cartways for private or public streets, alleys and driveways.
   
   b. The location and dimensions of rights-of-way for sanitary sewer mains, water supply mains, and storm water management facilities.
   
   c. The location of existing rights-of-way for electric, telephone, cable TV, gas and oil transmission lines, and communications towers.
   
   d. The location and size of existing on-lot sewage systems and wells.

D. **Plan Information.**

1. Building setback lines and building envelope.

2. A table indicating the existing zoning district, total tract area, required lot size, required setbacks, required maximum and/or minimum development density, and maximum building height.

3. All lots proposed as lot additions shall be identified by letter designations – not number designations.

4. In the case of a lot annexation, the inclusion of the following notes on the plan:
a. "The sole purpose of this plan is for annexation of land to an existing lot, and not for the purpose of creating a new building lot. The combined tracts shall hereafter be treated as one lot for all purposes under this Subdivision and Land Development Ordinance and all other ordinances of Cornwall Borough."

b. Plan notation prohibiting separate conveyance - see sample language in Appendix 16.

5. In the case of a natural subdivision which creates one or more lots meeting the minimum requirements of the Zoning Ordinance, evidence of the suitability of said lot(s) for on-site water supply and on-site sewage disposal shall be provided as part of the application for plan approval.

E. **Certificates** - the following certificates shall be included on the plan:

1. Certificate, signature and seal of a surveyor registered in the Commonwealth of Pennsylvania to the effect that the survey is correct (See Appendix 2).

2. Certificate of review by the Planning and Zoning Commission (See Appendix No. 8).

3. Certificate for approval by the Borough Council (See Appendix No. 7).

4. A statement, duly acknowledged before an officer authorized to take acknowledgment of deeds and signed by the landowner, to the effect that the subdivision or land development shown on the plan is the act and the deed of the owner, that all those signing are all the owners of the property shown on the survey and plan, and that they desire the same to be recorded as such (See Appendix No. 4).

5. Certificate of review by the County Planning Department.

F. **Filing Fee.** The plan shall also be accompanied by a check or money order drawn to the Borough in an amount specified on the fee schedule adopted by the Borough Council.

**SECTION 405 FEASIBILITY REPORT ON SEWER AND WATER FACILITIES**

The applicant shall submit a feasibility report for all proposed subdivision and land development plans, in triplicate, concerning the availability of a public sewer and public water system in or near the proposed subdivision or land development. Said report shall be prepared by a registered professional engineer. Said report(s) shall address the requirements of Sections 508 and 509 of this ordinance.
SECTION 406 TRAFFIC IMPACT STUDY

All residential developments or subdivisions and all non-residential developments proposing the construction of a street and/or driveway subject to Pennsylvania Department of Transportation jurisdiction shall comply with the applicable state regulation. All land developments or subdivisions that are proposing access to a Borough road which (1) will contribute more than three hundred (300) vehicle trips per day or (2) are located within one-half (½) mile of an intersection with a level of service C or lower (i.e., D, E or F) shall provide studies and reports in accordance with the requirements of this Section.

All applicants with developments that do not meet the above stated criteria shall submit the information required in Section 406.V.5.

The applicant shall furnish a Traffic Impact Study with the following minimum considerations:

A. The Traffic Impact Study shall be prepared under the supervision of qualified and experienced transportation engineers with specific training in traffic and transportation engineering and at least 2 years of experience related to preparing traffic studies for existing or proposed developments.

B. At a minimum, the Traffic Impact Area (TIA) shall include all streets and major intersections within a one-half mile radius of each any every entrance to the proposed development, and if a street abutting the proposed development does not contain an intersection with another street within that area, the first intersection with such abutting street. Whenever a proposed project will generate one hundred (100) new vehicle trips in the peak direction (inbound or outbound) during the site peak traffic hour, the traffic impact area shall include all streets and major intersections within a one and one-half mile radius.

C. Existing 24-hour and peak hour traffic volume data, including weekdays, Saturdays and Sundays, for all streets which provide direct access to the proposed development and for the collectors and arterials which will serve it, as well as any major intersection within the impact area.

D. Twenty-four (24) hour and peak hour traffic volume data, including weekdays, Saturdays and Sundays, for all streets which provide direct access to the proposed development and for arterial streets and collector streets which will serve the proposed development, as well as any major intersection within the TIA projected for the design year without the impacts of the proposed development.

E. The design year shall be considered the point in time when the development is completed and shall be determined in accordance with accepted engineering practices. In the event of a dispute as to the design year, the determination of the Borough engineer shall be final.
F. Estimates of the total number of vehicle trips to be generated by the development for a typical 24-hour period, including weekdays, Saturdays and Sundays, and including typical a.m. and p.m. peak periods, including weekdays, Saturdays and Sundays.

G. The traffic forecasts shall be prepared for the anticipated opening year of the development, assuming full build out and occupancy. This year shall be referred to as the horizon year in the remainder of this section.

H. The traffic impact study report shall include a table showing the categories and quantities of land uses, with the corresponding trip generation rates or equations (with justification for selection of one or the other), and resulting number of trips. The trip generation rates used must be either from the latest edition of Trip Generation by ITE, or from a local study of corresponding land uses and quantities. All sources must be referenced in the study.

I. If pass-by trips or shared trips are a major consideration for the land use in question, studies and interviews at similar land uses must be conducted or referenced.

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

K. The reasoning and data used in developing a trip generation rate for special/unusual generators must be justified and explained in the report.

L. Trip distribution must be estimated and analyzed for the horizon year. A multi-use development may require more than one distribution and coinciding assignment for each phase. Consideration must also be given to whether inbound and outbound trips will have similar distributions.

M. Assignments must be made considering logical routings, available roadway capacities, left turns at critical intersections, and projected minimum travel times. In addition, multiple paths should often be assigned between origins and destinations to achieve realistic estimates rather than assigning all of the trips to the route with the shortest travel time. The assignments must be carried through the external site access points. When the site has more than one access driveway, logical routing and possibly multiple paths should be used to obtain realistic driveway volumes. The assignment should reflect conditions at the time of the analysis. Assignments can be accomplished either manually or with applicable computer models.

N. If a thorough analysis is required to account for pass-by trips, the following procedure should be used:

1. Determine the percentage of pass-by trips in the total trips generated.

2. Estimate a trip distribution for the pass-by trips.
3. Perform two separate trip assignments based on the new and pass-by trip distributions.

4. Combine the pass-by and new trip assignment.

O. Upon completion of the initial site traffic assignment, the results should be reviewed to see if the volumes appear logical given characteristics of the road system and trip distribution.

P. Traffic estimates for any site with current traffic activity must reflect not only new traffic associated with the site's redevelopment, but also the trips subtracted from the traffic stream because of the removal of a land use. The traffic impact report should clearly depict the total traffic estimate and its components.

Q. Capacity analysis must be performed at each of the major street and project site access intersection locations (signalized and unsignalized) within the study area. In addition, analyses must be completed for major roadway segments within the study area. These may include such segments as internal site roadways, parking facility access points, and reservoirs for vehicles queuing off site and on site. Other locations may be deemed appropriate depending on the situation.

R. The recommended level-of-service analysis procedures detailed in the most recent edition of the Highway Capacity Manual must be followed. It is considered that the overall level-of-service ratings A, B, C and D to be acceptable for signalized intersections (Levels C or better are considered desirable); level-of-service E or F is considered to be unacceptable.

S. The operational analyses in the Highway Capacity Manual should be used for analyzing existing conditions, traffic impacts, access requirements, or other future conditions for which traffic, geometric, and control parameters can be established.

T. The recommendations of the traffic impact study shall provide safe and efficient movement of traffic to and from and within and past the proposed development, while minimizing the impact to non-site trips. The current levels of service must be maintained if they are C or D, not allowed to deteriorate to worse than C if they are currently A or B, and improved to D if they are E or F. If an improvement to a resultant level of service E or F cannot be met, then there can be no increase in delay (overall, approach, and lane) from the future pre-developed condition to the post-developed condition.

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

1. The documentation for a traffic impact study shall include, at a minimum:

   a. Study purpose and objectives.

   b. Description of the site and study area.
c. Existing conditions in the area of the development.
d. Recorded or approved nearby development.
e. Trip generation, trip distribution, and modal split.
f. Projected future traffic volumes.
g. An assessment of the change in roadway operating conditions resulting from the development traffic.
h. Recommendations for site access and transportation improvements needed to maintain traffic flow to, from, within, and past the site at an acceptable and safe level of service.

2. The analysis shall be presented in a straightforward and logical sequence. It shall lead the reader step-by-step through the various stages of the process and resulting conclusions and recommendations.

3. The recommendations shall specify the time period within which the improvements should be made (particularly if the improvements are associated with various phases of the development construction), and any monitoring of operating conditions and improvements that may be required.

4. Data shall be presented in tables, graphs, maps, and diagrams wherever possible for clarity and ease of review.

5. To facilitate examination, an executive summary of one or two pages shall be provided, concisely summarizing the purpose, assessment of the change in roadway operating conditions resulting from the development traffic, conclusions and recommendations.

V. Contribution in Lieu of Preparation of Studies. If an applicant believes that the preparation of traffic study and report required herein is not warranted, he may request the Borough Council to waive the preparation of such study.

1. The applicant for approval of any commercial, industrial or institutional subdivision or land development shall provide the Borough with a certification of the usable building floor area to be constructed for the purpose of determining the contribution in lieu of preparation of studies.

2. The contribution in lieu of preparation of studies provided for herein shall be in addition to all other review, inspection and other fees or charges imposed by the Borough, and all sums otherwise agreed to be paid by the applicant.

3. The applicant shall enter into an agreement with the Borough setting forth the contribution in lieu of preparation of studies to be paid and the studies to
be waived by the Borough. All such agreements shall be in a form satisfactory to the Borough Solicitor.

4. All contributions in lieu of preparations of fees shall be paid prior to approval of the final plan by the Borough Council.

5. All developments receiving a waiver of preparation of a traffic evaluation study in accordance with this section shall provide, as a minimum, the following information:

Trip Generation. Identify the amount of traffic generated by the site for daily and the three (3) peak hour conditions (AM, PM and site generated). The trip generation rates shall be justified and documented to the satisfaction of the Borough.

SECTION 407 WETLANDS STUDY

A. The applicant shall submit a wetland study in duplicate with the submittal of all subdivision and land development plans. The purpose of the study shall be to determine the presence and extent of wetlands on the site.

B. The study shall be performed by a qualified wetland scientist. Qualified individuals should possess a minimum of a bachelor's degree in biology, botany, zoology, ecology, or environmental sciences. In general, other professionals, such as engineers, landscape architects, surveyors, planners, and geologist are not considered fully qualified to perform wetland delineations, unless they possess special ecological training and experience beyond their discipline. The Borough reserves the right, in as much as no recognized certification program exists for wetland scientists, to determine the qualification of those preparing wetland delineations. Should a state or federal wetland scientist certification program be established, the Borough will consider only those certified individuals qualified to perform delineations.

C. Requirements for Wetland Studies:


2. Delineations shall be supported by reports. The report shall contain the following sections:

   a. Introduction. Description of the physical features of the site, its location and the proposed plans for the site.
b. **Methods.** Description of the methods used for the survey, with particular emphasis on any deviation from the outlined federal method. Relevant information includes the date of the field studies, the number of transects and plots used, the size of vegetation quadrats employed, the size of soil pits used, taxonomic references used, and the disposition of any voucher specimens.

c. **Results and Discussion.** Description of the findings of the study. Soils, vegetation and hydrology for wetland and upland areas of the site should be discussed. Any problem areas should be thoroughly treated.

d. **Conclusions.** The extent of wetlands on the site should be discussed. The impact of the proposed project on these wetlands should also be considered.

3. Included in the report as appendices or tables should be:
   a. Site location map (USGS 7.5’ quadrangle will suffice).
   b. NWI map.
   c. Soil survey map with soil descriptions.
   d. Data sheets for each plot.
   e. **Wetland boundary map.** Wetland boundaries shall be surveyed by a registered professional surveyor and shown on a plan of appropriate scale. The limits of the wetland study shall be clearly shown. The plan shall also show the location of all plots and/or transects used in the study, the date of the delineation, a statement of the method used for the study, the name of the consulting firm which performed the delineation, the name of the surveyor, and a disclaimer statement indicating no wetland boundary is considered jurisdictional until approved by DEP and COE.
   f. Color photos of wetland areas on the site, with locations and directions of view keyed to the wetland boundary map.
   g. Resumes of the wetland scientist(s) who performed the delineation.

D. For sites on which no wetlands occur, or are expected of occurring, an abbreviated report may be submitted. The abbreviated report should contain the introductory material, the methods section and a discussion of the result of the study. Site location, NWI and soil maps should also be provided.
E. All subdivision plans shall contain notes for future lot owners. The wetland boundary on each lot will be clearly marked. Each lot which contains wetlands, or to which access may be restricted by wetlands, shall have a note which states state and federal laws require permits for all activities which result in a deposition of fill into delineated wetlands. The note shall also state that refusal of such a permit may restrict some uses of all or portions of the lot. Easements around delineated wetlands shall be provided and shown on the plans.

F. Compensatory mitigation projects required as part of state or federal permits shall be shown on the subdivision plans. Future lot owners whose property encompasses all or part of a mitigation area shall be notified that the portion of their property that includes the mitigation area may not be altered, and is considered a jurisdictional wetland by the state and federal governments. Lot owners may be responsible for maintenance of mitigation areas. In order to help ensure the long-term viability of wetland mitigation efforts, the Borough discourages multiple ownership of mitigation areas. Ownership by one individual or a homeowners association is encouraged. Owners of the wetland mitigation areas must be clearly identified to the Borough.

G. The Borough reserves the right to reject any submitted wetland delineations. Should the Borough feel the actual wetland area differs from that shown on the subdivision plan, the Borough has the right to secure, at the developer's expense, qualified personnel to check the delineation and redraw the boundary as necessary. Should the developer subsequently disagree with the Borough’s delineation, a jurisdictional delineation by DEP and COE will be requested. Any charges for the jurisdictional delineation will be the responsibility of the developer.

H. Where the study shows the existence of wetland areas, the delineated wetland boundary shall be temporarily flagged at the time of plan submission to aid in plan evaluation. Upon plan approval, the delineated boundary shall be properly fenced off to prevent encroachment. Snow fence or other acceptable material shall be used (the use of silt fence is not acceptable). The fence shall be properly installed, at a minimum distance of five (5) feet outside the delineated boundary, prior to any construction or issuance of building permits. The fence must be properly maintained until all occupancy permits have been issued and/or for the extent of all construction.

SECTION 408 CONSERVATION PLAN

All preliminary and final subdivision and/or land development plans, excluding lot annexation plans and natural subdivision plans, shall be accompanied by a conservation plan prepared in accordance with the requirements of Article 20 of the Cornwall Borough Zoning Ordinance. When any of this information already has been prepared as part of the preliminary and/or final plan submission, it may be so referenced.
CHAPTER 5
DESIGN STANDARDS

SECTION 501 INTENT

The design standards established in this Chapter are intended to be fundamental requirements to be applied with professional skill in the subdividing and planning of land so as to produce attractive and harmonious neighborhoods, convenient and safe streets, and economical layouts of residential and other land development. The design standards are further intended to encourage and promote flexibility and ingenuity in the layout and design of subdivisions and land developments, in accordance with modern and evolving principles of site planning and development.

It is also the intent of this Chapter to require subdividers and developers to follow all applicable codes, regulations, and standards adopted by the municipality relative to improvements to the subdivision or development site. In all cases, the codes, regulations and standards of the municipality shall be followed and the improvements shall be approved by the municipal governing body before the final plan is approved. In cases where development codes, regulations, and standards do not exist at the municipal level, the requirements of this Chapter shall be followed and approved by the Borough. All improvements as specified in this Chapter or in applicable municipal ordinances shall be installed before the final plat is approved or, in lieu thereof, a guarantee of installation shall be provided by the subdivider or developer prior to final plat approval. The guarantee shall assure the Borough Council that required improvements will be installed in accordance with the subdivision or land development plan.

During the design and approval of subdivision and land development plans the County Planning Department, the Planning Commission and governing body, and the developer shall give primary consideration to all thoroughfare plans, water plans, sewer plans, community facility plans, and official maps as may be in effect in the municipality.

SECTION 502 GENERAL STANDARDS

A. The standards and requirements contained in this Chapter are intended as the minimum for the promotion of the public health, safety, and general welfare, and shall be applied as such by the Borough Planning and Zoning Commission and Borough Council in reviewing all subdivision/land development plans.

B. Whenever other Borough Ordinances and/or regulations impose more restrictive standards and requirements than those contained herein, such other ordinances and/or regulations shall be observed; otherwise, the standards and requirements of this Ordinance shall apply.
C. The standards and requirements of this Ordinance may be modified by the Borough Council, upon submission to the Borough Planning and Zoning Commission for review and recommendation, where such modifications achieve substantially the objective of this Ordinance and which are further protected by such covenants or other legal provisions as will assure conformity to and achievement of the subdivision/land development plan.

D. Land subject to hazards to life, health, or property, such as may arise from fire, flood disease, or other causes, shall not be subdivided or developed for building purposes unless such hazards have been eliminated or unless the subdivision/land development plan shall show adequate safeguards against them, which shall be approved by the appropriate regulatory agencies.

E. Subdivision/land development plans shall give due recognition to the Comprehensive Plans of the Borough and of the County or to such parts thereof as may have been adopted pursuant to statute.

F. Land proposed for subdivision or land development shall not be developed or changed by grading, excavating, or by the removal or destruction of the natural topsoil, trees, or other vegetative cover unless adequate provisions for minimizing erosion and sediment are proposed under DEP Rules and Regulations.

G. Whenever all or a portion of the land contained within an application for subdivision or land development approval constitutes all or a portion of land included in a prior subdivision or land development plan approved by the Borough and recorded in the Office of the Recorder of Deeds in and for Lebanon County, Pennsylvania, the plan shall comply with all conditions, restrictions and notes imposed on the prior approval and/or included upon the recorded subdivision or land development plan. The applicant shall identify all prior recorded subdivision and/or land development plans of which all or a portion of the land contained in the plan was a part and all conditions, restrictions and notes which affect the current application. Failure to identify all applicable conditions, restrictions and notes of record on prior plans constitutes a violation of this Ordinance. The applicant shall submit with the application for preliminary plan approval a statement identifying the prior plans reviewed; the conditions, restrictions and notes which would impact development in accordance with the plan for which approval has been requested; and an explanation of the manner in which the proposed plan has been designed to comply with such conditions, restrictions and notes. This information shall be signed by the applicant or the applicant's registered professional.
SECTION 503 ENERGY CONSERVATION STANDARDS

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

A. Orientation

1. Lots shall be designed for energy efficient siting of buildings with respect to slopes and existing trees.

2. Southerly exposures should be utilized for development. North slopes, especially those over 10% slope, should be avoided because the long shadows created severely restrict solar access.

3. New lots and new residences shall be oriented to make maximum effective use of passive solar energy. The long axis (depth) of each lot should run North-South, with a possible East-West variation of 22 1/2 degrees. Lot design should provide for lots of adequate width, depth, and slope for solar orientation. Lot layout should facilitate solar access by at least 75% of the proposed dwellings or buildings within a development.

4. The largest yard setback should be stipulated on the south side of proposed buildings. Buildings should be situated to the North end of the lot to permit maximum on-lot control of solar sky space.

B. Streets

1. Streets should be oriented along an East-West axis, with maximum North-South deviations of 30 degrees. This should be required to the maximum extent possible, although size, configuration or orientation of the property; nature of the surrounding development; circulation patterns; existing physical features such as topography and vegetation (trees); and improved design potential may be considered to determine the feasibility of this requirement for a given site.

2. Street system shall be designed to reduce overall lengths and facilitate traffic flow (minimum number of intersections).

C. Vegetation and Wind

1. Site design shall emphasize the preservation of all beneficial natural features of the site, such as existing slope, naturally wooded areas, and watercourses. The site design should also avoid requiring removal of large isolated trees and desirable woods and other vegetation, particularly...
those existing plant materials that serve as wind barriers and aide in energy conservation.

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

SECTION 504 TOPOGRAPHY

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

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

A. Streets - Land in which is relatively flat or of very gentle slopes should be planned so that the streets follow the natural drainage courses and as many lots as possible shall be above the street grade. On more irregular topography, streets shall be designed to avoid extensive cuts and fills and follow the ridges or be planned approximately parallel to contour lines, and adjusted, however, so that lots on one (1) side of the street will not be excessively below the street grade.

B. Natural Drainage - Subdivisions shall be designed, particularly on land of very gentle slopes, to take every advantage of natural grades so that all the land can be drained without excess grading. Unless water courses or drainage ways are enclosed, the plan shall be adjusted so that rear lot lines shall be approximately parallel to the natural or straightened course, and only where such plan is not possible, should side lot lines be arranged parallel to an open drainage course. Easements for drainage ways and low-lying land which are subject to flooding may be included as part of a lot but shall not be used as building sites or included in calculating the required lot area or width.

C. Natural Features - Natural features, irregularities, changes in level, brooks, lakes, hilltops, and other focal points within the site, and distant views outside the
subdivision shall be integrated in the design to obtain variations and interest in each neighborhood and more attractive building sites. Trees, topsoil, and other natural resources shall be preserved and utilized in the development of the subdivision.

D. Driveways - Private driveways shall be designed to furnish safe and convenient access, with reasonable clear sight distance at intersection with the street. Steep slopes shall be traversed diagonally to minimize grades.

SECTION 505  GRADING

The developer shall grade each subdivision or land development to establish street grades, floor elevations of buildings, and lot grades in proper relation to each other and to existing topography. However, grading shall be kept to a minimum to avoid loss of topsoil and erosion potential. Lots shall be graded to secure drainage away from buildings. The grading shall facilitate collection of storm water in designated areas and avoid concentration of water in the sewage system location.

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

SECTION 506  BLOCKS AND LOTS

A. General Configuration. The configuration of blocks and lots shall be based upon the lot area requirements, the salient natural features, the existing man-made features, and the proposed type of structure. Lot configurations should provide for flexibility in building locations while providing safe vehicular and pedestrian circulation. Lots with areas that are two (2) or more times the minimum requirements shall, wherever feasible, be designed with configurations that allow for additional subdivision.

B. Residential Blocks. All blocks in a residential subdivision shall have a maximum length of twenty (20) times the minimum allowable lot width, but not to exceed twelve hundred (1200) feet.

1. Wherever practicable, blocks shall be two (2) lot depths in width.

2. In blocks over one thousand (1,000) feet in length, a dedicated right-of-way shall be provided for a pedestrian walkway at or near the middle of such blocks.
C. **Non-Residential Blocks.** Blocks in non-residential areas may vary from the requirement of Section 506.B when required by the nature of the use. Adequate provisions shall be made for off-street parking, loading areas and traffic and pedestrian circulation.

D. **Lot and Parcel Configuration.**

1. Whenever practical, side lot lines shall be radial to street lines.

2. In order to avoid jurisdictional problems, lot lines shall, wherever feasible, follow municipal boundaries rather than cross them. Where a lot is divided by a municipal boundary, the minimum standards of both municipalities shall apply.

3. All lots with a width of fifty (50) feet or more shall contain an average depth not less than one-half (1/2) or more than two and one-half (2 1/2) times their width.

4. Lot and parcel configuration shall conform to the Borough Zoning Ordinance.

5. All lots shall front on an approved public or private street and maintain a minimum lot width in accordance with the Zoning Ordinance.

6. Double frontage lots are prohibited except where provided as reverse frontage lots. Reverse frontage lots are only permitted when a reduction of driveway intersections along a street with a high volume of vehicular movements is desired. All reverse frontage lots shall include an identification of the frontage for use as a road access.

7. All reverse frontage lots shall, immediately adjacent to the rear street right-of-way, have a buffer area and planting screen at least ten (10) feet in width, across which there shall be no vehicular access. The buffer and planting screen shall be in accordance with applicable provisions of the Zoning Ordinance.

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

E. **Lot Size and/or Intensity.** All lot sizes shall conform to the Borough Zoning Ordinance.

F. **Flag Lots.** Flag lots shall be discouraged. The Borough Council may approve the creation of a flag lot in accordance with the guidelines set forth in this section.
1. A flag lot shall be approved only when necessary for the productive use of land located to the rear of road front lots due to unique topographic conditions, avoidance of stream crossings or tract boundary conditions, and shall not be used as a substitute for available alternative land planning concepts.

2. Approval of a flag lot may be granted by Borough Council at its discretion, on a case-by-case basis, consistent with the public health, safety and welfare.

3. Access strips of a minimum width of fifty (50) feet, must be provided to connect the flag lot to a public or private street, and must be conveyed in fee as part of the lot.

4. The minimum lot size and widths, building setback lines and other applicable portions of the Borough Zoning Ordinance and this ordinance shall be applicable to the main portion of the flag lot, excluding the access strip.

5. No more than two (2) adjoining flag lots shall be permitted. Double tier flag lot shall not be permitted.

6. No further development shall be permitted off of a flag lot unless the landowner can show, through credible evidence, that such additional development will not be in conflict with this or any other Borough land use ordinance.

7. The Borough Planning and Zoning Commission and/or Borough Council shall attach necessary and reasonable conditions to the approval of a flag lot to assure proper compliance with other portions of this ordinance, including but not limited to erosion and sediment controls, storm drainage, and utility easements.

G. Building Setback Lines and Building Separation

1. A building setback line shall be provided along each street and private street. The area in front of the building setback line shall be preserved in accordance with the Borough Zoning Ordinance.

2. The distance to the building setback line shall be measured from the street centerline or right-of-way line as required by the Borough Zoning Ordinance. Setback lines on private streets shall be the required setback as per the Borough Zoning Ordinance.

3. In the case of corner lots, the setback from each adjacent street shall apply.
4. All building separations and height requirements shall conform to the Borough Zoning Ordinance.

5. On any lot abutting or traversed by a high voltage transmission line, no dwelling shall be placed within seventy-five (75) feet of any portion of the right-of-way.

6. Where application for a land development plan is made for the purpose of erecting more than one (1) principal structure on a single lot, the appropriate setback and yard requirements shall be provided for each structure as though it were on an individual lot. In each case, the Borough shall require suitable provisions for utilities and access in the event of potential subdivision of the tract.

H. Subdivision of property with existing dwellings or development shall be regulated by the following:

1. Each dwelling or use shall be serviced by separate utility connections. Shared sewage systems are not permitted.

2. Each dwelling or use subdivided shall be on sufficient land area to satisfy minimum lot area and yard setback requirements.

SECTION 507 STORM WATER MANAGEMENT AND DESIGN CRITERIA

A. Scope - A Storm Water Management Plan shall be required for each subdivision or land development plan (except single family residential lots meeting the criteria of Section 507 A.1.) at both the preliminary and final plan submittal stages. As an integral part of the Storm Water Management Plan, erosion and sedimentation control measures shall be included. For purpose of this section of the Ordinance, any expansion or construction where such development occupies an area in excess of 10,000 square feet (combined building and other impervious area) shall be considered a land development plan and also require a Storm Water Management Plan in accordance with the applicable regulations of this Section. The 10,000 square foot requirement applies on individual large projects, projects that exceed a cumulative total of 10,000 square feet after December 8, 1980, and any projects occurring after the 10,000 square feet level has been reached. A storm water management plan must be approved before construction of any expansion may proceed.

1. Exception – Single family residential lots may be exempted from the mandatory design and installation of certain storm water management facilities when the lot improvements (house, driveway, regrading, etc.) on the proposed subdivision plan document to the satisfaction of the Planning Commission and the Borough Engineer that the lot improvements will not
result in detrimental storm water discharges within the lot(s) or upon adjoining lands, roads, waterways or other areas. Exemption may be granted by the Borough Council provided all of the following criteria are satisfied:

a. The subdivision plan shall meet all of the criteria for a minor subdivision; and

b. The minimum lot area shall be two (2) acres; and

c. The slope of the lot shall not exceed four (4) percent in the lot improvement area and slopes in excess of eight (8) percent shall not exist within fifty (50) feet of the lot improvement area; and

d. Streams, waterways and ecologically sensitive areas shall not exist within one hundred (100) feet of the lot improvement area; and

e. The proposed lot improvements shall be a minimum of fifty (50) feet from the side and rear lot lines, unless site conditions or other requirements necessitate greater setback; and

f. Plan notes shall document that the soils within the lot improvement area are in hydrologic soil group A, B, or C, as published in the current edition of TR-55, Urban Hydrology for Small Watersheds; and

g. Storm water discharges shall not endanger or potentially damage the lot improvements, adjoining lands, roads or otherwise pose a threat to the health, safety or welfare of the public; and

h. No unique or adverse lot conditions shall exist which warrant refusal of the exemption request; and

i. The exemption request shall be submitted in writing with the subdivision application and shall address all the criteria cited herein; and

j. Subdivision application shall be accompanied by standard application and inspection fees to assure evaluation of lot(s) for compliance with the exemption criteria at the design, construction and inspection stages; and

k. Subdivision plans containing any lots which have received storm water management design and installation exemptions in accordance with these provisions shall contain a prominent plan...
I. Any lot receiving a storm water management installation exemption and subsequently found to be developed, or under development, contrary to the approved subdivision plan, contrary to these exemption provisions or otherwise evidencing a storm water runoff problem shall forthwith be subject to the following:

(1) Corrective action shall be taken in the lot development to eliminate the noncompliance.

(2) Submission of a revised subdivision plan shall be required, depicting necessary storm water management facilities, in accordance with the standard plan processing procedures.

(3) Lot owner(s), developer(s) or other responsible person(s) who fail to take corrective lot development action or fail to submit a required revised plan shall be guilty of a violation of this Ordinance, punishable as provided by Section 806 of this Ordinance.

B. In addition to other plan requirements of this Ordinance, storm water management plans shall include the following:

1. The Following Proposed Features:

   a. The proposed land use, the number of lots and dwelling units and the extent of commercial, industrial, or other nonresidential uses.

   b. The locations and dimensions of all proposed streets, parks, playgrounds, and other public areas; sewer and water facilities; lot lines and building locations, and parking compounds and other impervious and semi-pervious surfaces.

   c. The proposed changes to land surface and vegetative cover including areas to be cut or filled.

   d. Proposed topographical data. This information shall be provided by contour lines. Proposed contour lines shall be provided at two (2) foot vertical intervals for slopes of four (4) percent or less, and at vertical intervals of five (5) feet for more steeply sloping land.

   e. Plans and profiles of all proposed storm water management facilities including vertical and horizontal alignment, size, and type of material.
This information shall be of the quality required for the construction of all facilities.

f. For all basins that hold two (2) acre-feet or more of water and have an embankment that is six (6) feet or more in height, soil structure and characteristics shall be provided. Plans and data shall be prepared by a registered professional engineer. These submissions shall provide design solutions for frost-heave potential, shrink-swell potential, soil bearing strength, water infiltration, soil settling characteristics, fill and back-filling procedures, and soil treatment techniques as required to protect the improvements for adjacent structures.

g. The type, location, and extent of all temporary and permanent erosion and sedimentation control measures shall be shown on an erosion and sedimentation control plan that conforms to the requirements of the Soil Erosion and Sedimentation Control Manual of the Pennsylvania Department of Environmental Protection and which shall be submitted to the Lebanon County Conservation District for review.

h. Data concerning subsoil and rock foundation conditions and the physical properties of the materials entering into the construction of all BMPs.

2. Written hydraulic report and erosion and sedimentation narrative including or prepared in accordance with the following:

a. Storm water runoff calculations for both pre-development and post-development conditions for peak discharge and pollutant removal.

b. An erosion and sedimentation control plan narrative that conforms to the requirements of the Soil Erosion and Sedimentation Control Manual of the Pennsylvania Department of Environmental Protection and provides a description of all erosion and sedimentation control measures, temporary as well as permanent, including the staging of earth-moving activities, sufficient in detail to clearly indicate their function.

c. Description of an ownership and maintenance program, in a recordable form, that clearly sets forth the ownership and maintenance responsibilities for all temporary and permanent storm water management facilities, including the following:
(1) Description of the method and extent of the maintenance requirements.

(2) When maintained by a private entity, identification of an individual, corporation, association, or other entity responsible for ownership and maintenance.

(3) When maintained by a private entity, a copy of the legally binding document which provides that the Borough shall have the right to:

   (a) Inspect the facilities at any time.

   (b) Require the private entity to take corrective measures and assign the private entity reasonable time periods for any necessary action.

   (c) Authorize maintenance to be done and lien the cost of the work against the properties of the private entity responsible for maintenance.

   (d) Establishment of suitable easements for access to storm water management facilities.

This document shall be recorded upon approval by the Borough.

d. For all proposed detention basins and retention basins, and temporary sedimentation basins, the documentation shall include a plotting or tabulations of storage volumes with corresponding water surface elevations and the outflow rates for those water surfaces.

e. For all proposed detention basins and retention basins, and temporary sediment basins, documentation shall set forth the design hydrology, and the short-cut routing method or a method of equal caliber acceptable to the Borough Engineer and Borough Planning and Zoning Commission or Borough Council utilized to determine the function of the basin.

f. A Pennsylvania Department of Transportation Highway Occupancy Permit for any storm water management facility proposed within the right-of-way of a state road.

g. Receipt of appropriate state and Federal permits for all activities in or along any bodies of water, waters of the U.S., or wetlands.
h. Receipt of approvals or permits from the appropriate agency for the Erosion and Sedimentation Control Plan.

C. General Design Recommendations

1. In the interest of (1) reducing the total area of impervious surface, (2) preserving existing features that are critical to storm water management, and (3) reducing the concentration of storm water flow, the design should consider alternate design concepts.

2. Maximum use should be made of the existing on-site natural and man-made storm water management facilities.

3. Innovative storm water management and recharge facilities shall be used whenever and wherever feasible or necessary to protect adjoining properties; to control the volume of water leaving the site; to remove pollutants from runoff leaving the site; or to provide for recharge of ground water supplies. Such facilities may include rooftop storage, dry wells, cisterns, diversion structures, aeration of lawns, holding tanks, infiltration systems, stream channel storage, in line storage in storm sewers, and grading patterns. Applications including such facilities shall be accompanied by detailed engineering plans and performance capabilities for review by the Borough.

4. Where possible, the number of detention/retention facilities should be minimized by providing larger facilities to serve larger drainage areas. The use of multiple detention/retention facilities for a single development should be avoided where possible and practical.

D. General Design Requirements

1. All storm water management plans shall be designed and certified by individuals registered in the Commonwealth of Pennsylvania and qualified to perform such duties.

2. All storm water runoff flowing over the project site shall be considered in the design of the storm water management facilities.

3. Storm water management facilities located within or affecting the floodplain of any watercourse shall also be subject to the requirements of the Cornwall Borough Zoning Ordinance, as amended, the relevant Act 167 Watershed Storm Water Management Plan, or any future Ordinances regulating construction and development within areas of the Borough subject to flooding. All facilities shall also receive all other local, county, state and federal approvals and permits required by any regulatory agency having jurisdiction.
4. Storm water runoff from a project site shall flow directly into a natural watercourse or into an existing storm sewer system. If neither of these is available, the applicant shall obtain an easement from the downstream landowner to allow the runoff discharge from the 10-year storm to be piped to a natural watercourse or existing storm sewer system. Where the downstream owner will not grant such an easement, the runoff from the applicant's site shall flow onto the adjacent property in a manner similar to the runoff characteristics of the pre-development flow. Where such an easement is granted, the 25- through 100-year discharge from the basin shall flow onto the adjacent property in a manner similar to the runoff characteristics of the pre-development flow.

5. Storm water management facilities shall be provided so that the peak rates of runoff for storm water originating on the project site must meet the following conditions, for all watersheds (as defined by Section 507 D.9.) within the site:

a. The 2-, 10-, 25-, 50-, and 100-year post-development peak flows must be less than or equal to 50% of the corresponding calculated 2-, 10-, 25-, 50-, and 100-year pre-development peak flows.

6. Storm water management facilities should be supplemented by BMPs as outlined in the Cornwall Borough BMP Design Standards, Section 507 1. Required storage volume should be provided to minimize the impacts to water quality of receiving waters.

7. Runoff calculations for the pre- and post-development comparison shall consider five (5) different storm frequencies. (2-, 10-, 25-, 50-, and 100-year storm events.)

8. Consideration shall be given to the relationship of the subject property to the drainage pattern of the watershed.

9. Storm water shall not be transferred from one watershed to another, unless (1) the water-sheds are sub-watersheds of a common watershed that join together within the perimeter of the property, or (2) the effect of the transfer does not alter the peak discharge onto adjacent lands.

10. A concentrated discharge of storm water to an adjacent property shall be within an existing watercourse or enclosed in an easement.

11. The applicant shall demonstrate that any facilities intended to be installed and located on an individual or group of individual lots can be maintained by the lot owner or owners.
E. Methods for Calculation of Runoff

1. Runoff calculations for on-site storm water facilities shall be based upon the following methods:

   a. Rational Method. This method is recommended and preferred for design of all collection, conveyance, and retention facilities when drainage areas are less than 20 acres or where times of concentration are less than 60 minutes.

   b. SCS TR-55 Tabular Hydrograph Method (1986, or latest revision). This method is recommended and preferred for design of conveyance and retention facilities when drainage areas are greater than 20 acres. For drainage areas greater than 20 acres, the Borough will also accept PSRM, TR-20 and HEC-I.

2. Criteria and assumptions to be used in the determination of storm water runoff and design of storm water management facilities are as follows:

   a. Runoff coefficients shall be based on the land use coefficients listed in Appendices No. 22 and 23 of this Ordinance and in conjunction with the criteria outlined by Section 507 E.3. of this Ordinance.

   b. Times of concentration shall be based on the following design parameters:

      (1) Overland flow: The maximum length for each reach of overland flow before concentrated swale and/or sheet flow develops is one hundred fifty (150) feet. The nomograph in Appendix No. 24 shall be used for determination of the times of concentration.

      (2) Concentrated flows: At points where overland flows concentrate in field depressions, swales, gutters, curbs, or pipe collection systems, the time of concentration between these design points shall be based upon Manning's Equation.

   c. If the Rational Method is used, the Rainfall Intensity Duration-Frequency Chart shown in Appendix No. 21 shall be used to compute the rainfall intensities.

   d. If the Soil-Cover-Complex Method (SCS TR-55) is used, storm water runoff shall be based on the following 24-hour storm events:
<table>
<thead>
<tr>
<th>Storm Event</th>
<th>Inches of Rainfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years</td>
<td>3.0 inches</td>
</tr>
<tr>
<td>5 years</td>
<td>4.0 inches</td>
</tr>
<tr>
<td>10 years</td>
<td>4.8 inches</td>
</tr>
<tr>
<td>25 years</td>
<td>5.3 inches</td>
</tr>
<tr>
<td>50 years</td>
<td>6.0 inches</td>
</tr>
<tr>
<td>100 years</td>
<td>6.7 inches</td>
</tr>
</tbody>
</table>

e. Use of other criteria, assumptions, references, calculation methods, and/or computer modeling may be utilized, provided detailed design information and programming with references are submitted and approved by the Borough.

3. For the purpose of determining pre- and post-development runoff coefficients, the following criteria shall be used:

a. Pre-development runoff coefficients for all areas within the site boundaries shall be based on a good grass cover unless portions of the site contain wooded areas. When the site contains wooded areas, runoff coefficients shall be based on forest/woodland cover.

b. Off-site land use conditions used to determine storm flows for the pre- and post-development comparison shall be based on existing land uses assuming summer or good conditions for onsite areas and winter or poor conditions for offsite areas.

c. Off-site land use conditions used to determine storm flows for collection and conveyance facilities shall be based on existing land uses assuming winter or poor conditions.

F. Design Standards - Detention and Retention Facilities

1. Retention basins and detention basins shall be designed to safely discharge the peak basin inflow rate of a post-development one hundred (100) year frequency storm event through an emergency spillway in a manner which will not damage the integrity of the basin. The emergency spillway shall be constructed in undisturbed ground. An easement shall be provided from the spillway outfall to a natural or artificial watercourse. The emergency spillway shall not be considered to function as part of the primary outlet structure. The primary outlet structure shall control the flow from all storm events up to and including the 100-year event. The purpose of the emergency spillway is to function in the event that the primary structure becomes non-functional for any reason.

2. Retention basins and/or detention basins, and water-carrying facilities shall be stabilized in accordance with current engineering and U.S. Soil
Conservation Service practices, and the Cornwall Borough BMP Design Standards.

3. Retention basins and/or detention basins shall be designed and maintained to insure the design capacity after sedimentation has taken place.

4. Basins that are not designed to release all storm water shall be specifically identified as retention basins or permanent pond basins. All other basins shall have provisions for de-watering. Low flow channels or tile fields will be used to de-water the bottom of a basin. Discharge structures shall be designed to eliminate blockage during operation.

5. Retention basins and/or detention basins that are designed with earth fill dams shall incorporate the following minimum standards:
   a. The maximum water depth shall not exceed eight (8) feet.
   b. The minimum top width of all dams shall be eight (8) feet.
   c. The side slopes of earth fill dams shall not be less than three (3) horizontal to one (1) vertical.
   d. Basins without restricted access shall have impoundment areas with side slopes no greater than five (5) horizontal to one (1) vertical. Basins with side slopes steeper than five (5) horizontal to one (1) vertical shall be protected by fencing that will discourage access.
   e. A clay core and key trench of impervious material shall be provided under all dams.
   f. All pipes and culverts through dams shall have properly spaced concrete cutoff collars or factory welded anti-seep collars.
   g. A minimum one (1) foot freeboard above the 100-year post-development flow through the emergency spillway shall be provided.
   h. Minimum floor elevations of the lowest floor, for all structures that would be affected by a basin, other temporary impoundments, or open conveyance systems where ponding may occur shall be two (2) feet above the Q100 year water surface.

6. All detention basins specifically designed to release all storm water shall include provisions for an outlet structure that permits draining the basin to completely dry position within 24 hours following the end of the design rainfall.
7. All outlet structures and emergency spillways shall include a satisfactory means of dissipating the energy of flow at its outlet to insure conveyance of flow without endangering the safety and integrity of the basin and the downslope drainage area.

8. No outflow from a detention basin shall discharge directly onto or be conveyed onto a public road. Discharge into a culvert under, or storm sewer along a public road is acceptable provided that the applicant provides evidence of adequate capacity in the culvert or storm sewer.

9. Appropriate easements to enclose and permit access to all detention and retention facilities shall be provided.

G. Design Standards - Collection and Conveyance Facilities

1. The design of storm water management collection and conveyance facilities that service drainage areas within the site shall be based upon a twenty-five (25) year storm frequency event. Storm water management facilities that convey off-site storm water through the site must be designed to convey a fifty (50) year event.

2. All developments must also include design provisions that allow for the overland conveyance of the post Q100 year storm flows through the site without damage to any private or public property.

3. When the design of the overall storm water management Plan requires a transfer of watershed, as outlined by Section 507 D.9. of this Ordinance, the design shall illustrate that the facilities utilized to accomplish the transfer can safely convey the 100-year post-development storm event. Transfers into Act 167 study areas are prohibited.

4. The capacities of the pipes, gutters, inlets, culverts, outlet structures, and swales shall consider all possible hydraulic conditions. The following minimum design standards have been established by the Borough.

   a. For grass swales and roadside gutters two (2) design considerations shall be met: the first shall consider channel velocity and stability based upon a low degree of retardance ("n" of .03); the second shall consider channel capacity based upon a high degree of retardance ("n" of .05).

   b. The "n" factors to be used for paved or riprap swales or gutters shall be based on accepted engineering design practices.

   c. The following chart shall be used to determine the "n" factors for corrugated metal pipe:
Factors
Pipe Diameter (inches)  "n" Factors

<table>
<thead>
<tr>
<th></th>
<th>Helical Capacity</th>
<th>Helical Velocity</th>
<th>Annular Capacity</th>
<th>Annular Velocity</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 18</td>
<td>.017</td>
<td>.014</td>
<td>.026</td>
<td>.024</td>
</tr>
<tr>
<td>21 through 30</td>
<td>.021</td>
<td>.017</td>
<td>.026</td>
<td>.021</td>
</tr>
<tr>
<td>larger than 30</td>
<td>.026</td>
<td>.019</td>
<td>.026</td>
<td>.019</td>
</tr>
</tbody>
</table>

d. The "n" factor for concrete or any other smooth pipe shall be 0.010 for velocity and 0.013 for capacity.

e. The velocity to be used in the design of any piped storm water conveyance system shall be based on the maximum velocity obtainable. The capacity shall be based upon full flow conditions.

f. Inlets, culverts, and basin discharge systems shall be designed for the worst-case condition. Inlet capacity shall be based on design data provided by the manufacturers. If acceptable information is not available, inlets in non-ponding areas shall be designed for a maximum capacity of four (4) cubic feet per second (cfs). Where ponding occurs, inlet capacity shall be based on accepted engineering design practices. Culvert design shall consider either inlet/outlet control or a combination of hydraulic losses through the system, whichever is greater. Basin discharge systems shall be designed to the same standards as culverts. If it cannot be readily determined which hydraulic condition controls, the basin discharge rate shall be based on the highest possible discharge rating curve with the basin capacity sized to store the excessive storm runoff based on the lowest possible discharge rating curve.

5. Manholes and inlets, when proposed, shall not be spaced more than four hundred (400) feet apart. Additionally, manholes shall be placed at points of abrupt changes in the horizontal or vertical direction of storm sewers. Inlets shall be substituted for manholes where they will serve a useful purpose. Inlets shall be located along the curb line and are not permitted along the curb radius at an intersection. For the purpose of inlet placement, curb, gutter, or roadside swale design, depths of stormwater flow shall not exceed three (3) inches along the roadway and one and one-half (1 ½.) inches across streets and all other access drives.

6. Curves in pipes or box culverts without an inlet or manhole are prohibited. Tee joints, elbows, and wyes are also prohibited.

7. Storm water management pipe collection and conveyance systems shall have a minimum diameter of fifteen (15) inches and shall be made of
reinforced concrete pipe (RCP), corrugated galvanized metal pipe (CMP), smooth lined high density polyethylene pipe (HDPE) or polyvinylchloride pipe (PVC). Where installation depths exceed fifteen (15) feet from ground surface to the crown of the pipe structural calculations that address the actual design requirements will be required.

8. All storm sewer pipe and culverts shall be laid to a minimum depth of one (1) foot from finished subgrade to the crown of pipe in paved areas and one (1) foot from finished grade to the crown of pipe in grassed areas.

9. All storm sewer pipes, culverts, manholes, inlets, endwalls and endsections shall be constructed in accordance with Pennsylvania Department of Transportation, Form 408, as amended.

10. Storm sewer pipes, culverts, manholes, inlets, endwalls, and endsections proposed for dedication or located along streets shall conform to the requirements of the Pennsylvania Department of Transportation, Bureau of Design, Standards for Roadway Construction, Publication No. 72, in effect at the time the design is submitted, as modified by the adopted Borough construction standards.

11. Inlets shall be depressed 2" below the grade of the street gutter or ground surface. Inlets used in ground areas will have their tops installed level. Inlets used along curbed streets shall have their tops installed at a grade equal to the street or curb grade.

12. Where storm sewers exceed 15 percent slope, properly spaced concrete anchors will be used.

13. Storm water roof drains and pipes shall discharge water into a storm water runoff dispersion and infiltration control device and not directly into storm sewers or street gutters.

14. All storm pipe, other than culverts for existing channels, which discharge from residential lots to a street or from a street to residential lots shall extend from the street right-of-way a minimum distance of 2/3 the length of the longest adjacent lot dimension.

15. The proposed storm water discharge at the perimeter of the site shall not be beyond the capacity of any existing, immediately contiguous, storm water management facility into which it flows.

16. Storm pipes that discharge to a detention or retention basin shall be located as to outlet directly to the basin floor. If located to not directly outlet to the basin floor, measures to prevent erosion in the basin shall be provided and approved by the Borough Engineer.
17. Endwalls and endsections shall be used where storm water runoff enters or leaves the storm sewer horizontally from a natural or manmade channel.

18. Storm facilities not located within a public right-of-way shall be centered within an easement having a minimum width of eighteen (18) feet plus the top width of a swale or outside diameter of a pipe, or 20 feet, whichever is greater.

H. Design Standards - Erosion and Sedimentation Control

1. The applicant must comply with the Erosion Control Rules and Regulations of Title 25 Rules and Regulations, Part I. Department of Environmental Protection, Subpart C. Protection of Natural Resources, Article II. Water Resources, Chapter 102, Erosion Control, as amended.

2. The design plan and construction schedule shall incorporate measures to prevent soil erosion and sedimentation.

3. The following principles shall be applied to the design plan and construction schedule to minimize soil erosion and sedimentation.

   a. Erosion and Sedimentation Controls designed in conformance with the Department of Environmental Protection Erosion and Sedimentation Pollution Control Program Manual shall be implemented during the construction and post-construction periods to prevent soil erosion, sedimentation, and other pollutants from entering streams, lakes, etc.

   b. Natural vegetation shall be retained and protected on all undisturbed areas.

   c. The extent of the disturbed area and the duration of its exposure shall be kept to a minimum. Stockpiles to remain in place longer than twenty (20) days shall be seeded.

   d. It shall be the applicant's responsibility during construction to prevent soil pollution to neighboring property, public streets, and streams. Soil dropped from construction equipment and sedimentation shall be immediately removed from roads, public and private property, and streams.

   e. Drainage provisions shall accommodate the storm water runoff both during and after construction.

   f. Soil erosion and sedimentation facilities shall be installed prior to any on-site earth disturbance.
4. The maximum swale, gutter, or curb velocity of storm water runoff shall be maintained at levels that result in a stable condition both during and after construction.

The following are considered characteristics of a stable condition:

a. It neither aggrades nor degrades the condition of the channel.

b. The channel banks do not erode to the extent that the channel cross-section is changed.

c. Sediment bars do not develop.

d. Erosion does not occur around culverts and bridges or elsewhere.

e. Gullies do not form or enlarge due to the entry of uncontrolled storm water runoff.

5. Grass lined channels shall be considered stable if the calculated velocity does not exceed the allowable velocities shown below:

a. Three (3) feet per second where only sparse vegetation can be established and maintained because of shade or soil condition.

b. Four (4) feet per second where normal growing conditions exist and vegetation is to be established by seeding.

c. Five (5) feet per second where a dense, vigorous sod can be quickly established or where water can be temporarily diverted during establishment of vegetation. Jute matting and mulch shall be used for establishing vegetation.

d. Six (6) feet per second where there exists a well established high quality sod.

6. Where swale bends occur, the allowable velocities listed above shall be divided by the following factors:

a. Swale bends 0 to 30 degrees 1.50

b. Swale bends 30 to 60 degrees 1.75

c. Swale bends 60 to 90 degrees 2.00

d. Swale bends 90 degrees and over 2.50

The method of erosion protection proposed must be supported by design information and/or references.
7. Flow velocities from any storm sewer may not result in a deflection of the receiving channel.

8. Energy dissipators shall be placed at the outlets of all storm sewer pipes, culverts, and bridges where flow velocities exceed maximum permitted channel velocities.

I. Design Standards - Best Management Practices (BMP)

1. Best Management Practices (BMPs) should be implemented in Cornwall Borough in order to protect the Borough's water quality. BMPs shall be applied to all subdivision and land development plans and other activities regulated by this Ordinance.

2. The purpose of these Design Standards is to provide designers with guidance to meet (BMP) requirements. This field is in its infancy and modifications will be necessary as new methods become available. Innovations are strongly encouraged in order to meet the objectives at a reasonable cost.

3. The strategy employed avoids the use of performance standards related to effluent standards. Instead, it establishes a suggested long-term storage volume to be provided with any proposed land use. Other design methods are available and may be utilized provided documentation is furnished and reviewed by the Borough Engineer and approved by the Borough Council.

4. General Conditions:

   a. Minimize on-site impervious area.

      (1) Preserve natural wooded cover and drainageways on-site.

      (2) Pervious surfaces such as porous pavement and gravel are considered BMPs.

   b. Maximize the amount of on-site drainage areas that are directed to BMPs. Minimum accepted area is 70% of the site. All impervious areas shall be directed to BMPs.

   c. Minimize directly connected impervious area. Promote natural removal of pollutants using vegetation and soil. Direct impervious area runoff to pervious area.

      For example:

      Roof downspouts to lawns
      Driveways to lawns
      Parking areas to lawns or grassed swales.
d. Prevent mixing of off-site and on-site runoff, unless the upstream drainage area is less than five percent (5%) of the total on-site area.

e. Delay construction of BMPs until all other land disturbing activities are complete to prevent clogging and the need for maintenance or remedial action.

f. Incorporate the site's soil conditions to ensure the maximum life of facility.

g. Use water tolerant vegetation (orchard and Bermuda grass, perennial rye, fescue, and Reed Canary grass), in swales with slopes of 2% or less and where swale dikes are utilized.

h. Provide a length to width ratio in basins/ponds of at least 2:1. The distance between inflow and outflow shall be at least the length of the basin/pond.

i. Provide proper erosion protection at all pipe outlets.

j. Utilize underdrains for all ponds.

k. Size BMP outlets to release water at a rate producing a 36-hour drawdown time - in addition to normal basin storage drawdown time. Orifices should be sized to accomplish this (minimum 1/2" diameter holes). To prevent clogging around a vertical riser, use a cone of gravel or a non-corrosive fine-mesh screen.

l. Infiltration trenches provided for storm water management do not require additional storage volume calculations for BMP.

m. Minimize disturbed project area.

5. **System of Controls:**

a. The Cornwall Borough approach to protect water quality is to eliminate the impact of pollutants in storm water runoff through a system of controls. These controls can be at the source, in the lot, at the site, or at some regional facility. Examples are listed below.

b. **Source Controls** - eliminate the opportunity for pollutants to mix with storm water runoff.

   (1) Street sweeping

   (2) Cover chemical storage areas

   (3) Dike potential spill areas
c. **Lot Controls** - prevent the potential for concentrating pollutants and concentrating storm water runoff.
   
   1. Eliminate directly connected impervious areas
   2. Minimize impervious areas
   3. Utilize grass swales and filter strips
   4. Utilize infiltration trenches, where applicable
   5. Utilize porous pavement

d. **Site Controls** - structural methods required to meet storage volume requirements and water quality objectives.
   
   1. Grass swales
   2. Infiltration basins
   3. Detention ponds
   4. Wetlands

e. **Regional Controls** (Drainage Area greater than 100 Acres) - off-site structural measures for large projects.
   
   1. Detention basins
   2. Retention basins

J. **Storm Water Management Districts**

The Borough shall comply with the applicable provisions of any watershed storm water management plans adopted in the future. If the provisions of this Ordinance are sufficient to regulate development within the Borough in a manner consistent with the governing watershed storm water management plan, this Ordinance shall be deemed to satisfy the requirements of Section 11(b) of Act 167 without the necessity of reenactment.

K. **Maintenance of Storm Water Management Facilities and BMP Facilities**

Maintenance is an essential part of the successful functioning of a storm water management system.
1. Maintenance during development of a project shall be the responsibility of
the developer and/or landowner and shall usually include but not be limited
to:

a. Removal of silt from sediment traps when the volume is reduced from
2,000 cubic feet per tributary acre to 1,300 cubic feet per tributary
acre (35%); and sediment basins when volume is reduced from 7,000
cubic feet per tributary acre to 5,000 cubic feet per tributary acre
(28%);

b. Periodic maintenance (after each storm event) of temporary control
facilities such as replacement of straw bale dikes, straw filters, silt
fence, or similar measures;

c. Establishment or reestablishment of vegetation by seeding and
mulching or sodding of scoured areas or areas where vegetation has
not successfully been established;

d. Installation of necessary controls to correct unforeseen problems
caused by storm events within design frequencies; and

e. The applicant shall be responsible for removal of all temporary
measures and installation of permanent measures upon completion
of the project.

2. Maintenance of project after physical completion:

a. It is the purpose of this Ordinance that the Borough shall not become
responsible for maintenance and supervision of developed areas.
Such responsibility falls upon the party responsible for land
development who shall remain personally responsible for those areas
of the development that are subject to the requirements of this
Ordinance. This responsibility may be retained or assigned to third
persons as is deemed most acceptable to the party responsible for
land development. In the event that any portion of land development
would, but for the existence of areas requiring maintenance subject to
this Ordinance, be dedicated to the Borough, the applicant may apply
to the Borough Council for acceptance by the Borough of such
portions of the land development. In the event that the Borough
Council, by formal action, accepts such portions of land development,
maintenance and responsibility for such portions shall fall upon the
Borough.

b. It is the intent of this Ordinance that the purposes of the Ordinance
shall be carried out through the exercise of responsibility by private
parties, and therefore it is anticipated that control plans shall be
developed with the view towards projects which can effectively be contained within the tracts to be owned and maintained by private parties. To foster this purpose, with respect to portions or parts of a project as shown on a plan of a developer or contractor, which portions will not otherwise become part of Borough property, such portions shall become the responsibility of the individual property owners on whose property such portions of a project lie including but not limited to retention ponds, detention ponds, sediment basins, energy dissipators, or grassed water-ways. Persons including contractors and developers conveying property of a development to another party, which property contains any portions of a Land Disturbance Plan, after that plan has been established, shall include a specific deed reference to such grantee's responsibility for the maintenance and care of the portions of such project as are included within said grantee's conveyed property. The deed reference to such portions shall be in the form of a deed restriction imposing responsibilities upon said property owner for the maintenance of the portions of the project within the boundary lines of said property as may be necessary for proper maintenance of the project in accordance with the terms of this Ordinance. Such maintenance shall include the following:

1. **Liming and fertilizing vegetated channels and other areas according to specifications in the "Penn State Agronomy Guide."**

2. **Reestablishment of vegetation by seeding and mulching or sodding of scoured areas or areas where vegetation has not been successfully established.**

3. **Mowing as necessary to maintain adequate stands of grass and to control weeds. No stands of grass shall be permitted to exceed eight (8) inches in height.**

4. **Removal of silt from all permanent structures that trap silt or sediment in order to keep the material from building up in grass waterways thus reducing their capacity.**

5. **Regular inspection (four times per year) of the areas in question to assure proper maintenance and care.**

6. **Removal of silt from all permanent drainage structures, in particular BMPs, in order to maintain the design storage volumes.**
c. The deed restrictions hereinabove mentioned shall also include notice that in the event the individual property owners should fail to comply with the terms of this Ordinance for the maintenance and care of the land in question, Cornwall Borough shall have the authority to carry out those duties hereby imposed upon individual property owners. The Borough may, after giving notice to an individual property owner that he is not properly maintaining the areas subject to this Ordinance, and by making demand that such compliance shall be made within thirty (30) days, enter upon said private property and take such actions as may be required to bring the area into compliance with this Ordinance. The Borough shall further have the right to file a municipal lien against such property for the cost of maintenance work carried out under this section. The Borough shall in addition to the filing of a municipal lien have any other remedies provided by law against any property owner who should fail to comply with the terms of this Ordinance.

d. Storm water management facilities existing on the effective date of this Ordinance on individual lots, which have not been accepted by the Borough or for which maintenance responsibility has not been assumed by a private entity such as a homeowners' association, shall be maintained by the individual property owners. Such maintenance shall include at a minimum those items set forth in subsection (B) above. If the Borough determines at any time that any permanent storm water management facility has been eliminated, altered, blocked through the erection of structures or the deposit of materials, or improperly maintained, the Borough may determine that such condition constitutes a nuisance and shall notify the property owner of corrective measures which are required, and provide for a reasonable period of time, not to exceed thirty (30) days, within which the landowner shall take such corrective action. If the property owner does not take the required corrective action, the Borough may either perform the work or contract for the performance of the work and bill the property owner for the cost of the work plus a penalty of ten (10%) percent of the cost of the work. If such bill is not paid by the property owner within thirty (30) days, the Borough may file a municipal claim against the property upon which the work was performed in accordance with applicable laws.

e. Where the Borough Council accepts dedication of all or some of the required storm water management facilities following completion, the Borough Council may require the posting of financial security to secure structural integrity of said facilities as well as the functioning of said facilities in accordance with the design and specifications as depicted on the approved storm water management plan for a term not to exceed eighteen (18) months from the date of acceptance of
Said financial security shall be the same type as required with regard to installation of such facilities, and the amount of the financial security shall not exceed fifteen (15%) percent of the actual cost of installation of said facilities.

L. Permanence of Storm Water Management Facilities

No person shall modify, remove, fill, landscape or alter storm water management facilities and/or BMP facilities which may have been installed on a property unless a Storm Water Management Plan approval has been obtained to permit such modification, removal, filling, landscaping or alteration. No person shall place any structure, fill, landscaping or vegetation into a storm water management facility, a BMP facility or within a drainage easement.

SECTION 508 SEWAGE DISPOSAL

Sewage disposal facilities shall be designed and constructed to meet the needs of the proposed subdivision or land development. Sewage disposal facilities shall also meet all requirements of Pennsylvania Department of Environmental Protection, the Borough and the Municipal Authority. The following requirements specify the design and installation standards for on-site sewage disposal and public and private sewerage systems.

A. On-Site Sewage Disposal – All subdivisions and land developments proposing on-site sewage disposal shall be designed and submitted in compliance with the prevailing requirements of the Pennsylvania Sewage Facilities Act. It is the intent of this section to co-ordinate a simultaneous review of subdivision and land development plans with sewage planning modules at the municipal level, thereby avoiding the approval of lots that are not suitable for sewage disposal. In accordance with those standards, application for subdivision or land development approval shall satisfy the following procedural requirements.

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

2. Major Subdivision/Land Developments – The subdivider shall submit a preliminary plan depicting general lot layout and street design, as required elsewhere herein. After preliminary approval, the subdivider shall submit the required sewage planning module and associated information to the
sewage enforcement officer at the time of final plan application. The subdivision or land development plan shall not be processed until documentation is provided to verify that the sewage enforcement officer has received the sewage-planning module.

3. The Borough Council will approve on-site sewage disposal systems only when the Borough Sewage Enforcement Officer and/or a sanitarian of DEP shall certify that both an initial location and a replacement location for the on-site sewage disposal system are present on each lot.

a. The replacement location shall be of a size and capacity to allow complete abandonment of the initial system in the event of failure.

b. The replacement location shall be protected from traffic and no filling or excavation shall be allowed within its boundary.

c. The standards for installation of the replacement system shall be as required by DEP at the time of its construction.

4. Subdivisions not utilizing a conventional on-site sewage disposal system which propose to use alternate on-site sewage disposal systems will not be approved by the Borough Council unless:

a. The Borough Sewage Enforcement officer and/or a sanitarian of DEP certifies that a proposed sewage disposal site cannot reasonably be located so as to enable the lot to utilize a conventional on-site sewage disposal system; and

b. The lot itself cannot reasonably be redesigned or relocated consistent with the Borough Zoning Ordinance and other Borough regulations so as to enable utilization of a conventional on-site sewage disposal system.

5. Preliminary Hydrogeologic Studies

a. Policy. It is the policy of this provision to protect and preserve the quality and quantity of groundwater in Cornwall Borough. This Policy provides for the review of preliminary hydrogeologic studies in conjunction with the Borough's Act 537 Official Sewage Facilities Plan, in order to establish a range of appropriate densities and other methods to meet the goals of the Water Policy. Therefore, all applications proposing uses that would rely upon on-lot sewage disposal systems shall require the preparation of a preliminary hydrogeologic study with the submittal of the appropriate Planning Module for Land Development.
b. Content of Studies. Where required, preliminary hydrogeologic studies shall consist of the following minimum considerations:

1. A topographic map indicating the location of the site, any proposed on-site sewage disposal systems and wells. Narrative descriptions of the types of these systems shall also be furnished.

2. A description of the geologic conditions on and around the site that would affect the groundwater recharge rate and the degree of groundwater renovation. Such conditions can include, but need not be limited to, closed depressions, sinkholes, high water table conditions, springs, lineaments, faults, outcrops of bedrock, soil mottling, surface drainage into the ground, ghost lakes, and similar hydrogeological features.

3. A map and narrative description of the area that will be impacted from the proposed use of on-lot sewage disposal systems. Such analysis will consider and identify the system's dispersion plumes and mixing zones, which shall be calculated from the surface topography and known geologic conditions. The analysis will then describe anticipated water quality/quantity impacts to areas located down gradient and/or along any geologic strike or fault. These anticipated impacts should also consider existing and potential land uses located within the affected area.

4. Should it be determined that the proposed use(s) would result in a degradation of surface or groundwater quality, or impair the potential use of nearby properties, the study shall present measures that can be employed to mitigate these adverse impacts.

c. The results of these feasibility studies, tests, and reported well yield shall be filed with the Borough and added to its official well data and mapping. This data will be used by the Borough in assessing sewage disposal need as part of the Borough's process for reviewing Planning Modules for Development.

B. Existing Public Sewers – When a subdivision or land development has public sewers available on-site or within one thousand (1,000) feet of the site, connection to public sewer is required. Sewer lines shall be included on the subdivision or land development plan and installation must be approved by the municipal authority responsible for the sewer system.
1. If there are no connections available within one thousand (1,000) feet of the proposed subdivision or land development, the distance from the project to the nearest point in the public sewer system shall be shown.

2. Certification shall be provided from the public sewer utility provider that capacity exists to accommodate the needs of the proposed subdivision or land development if connection to the public sewer system is proposed.

C. Planned Sewer Area – When a proposed subdivision or land development is located in an area not presently served by public sewers, but which has received design data preparatory to sewer system installation within eighteen (18) months, then the municipality shall determine the necessity of installing house connections and/or capped mains, even though on-site facilities will be required in the interim. Installation of house connections and capped mains shall be in accordance with municipal design data approved by the municipal engineer prior to approval of a preliminary or final plan.

D. Private Sewerage System – When a subdivision or land development is to be provided with a private sewage system, a statement shall be submitted to the Borough Council from the Pennsylvania Department of Environmental Protection verifying that a permit has been issued approving the proposed facilities. Additionally, the municipality must be satisfied that adequate provisions have been made to guarantee the construction and maintenance of the proposed private sewage system.

E. Plan Notice

1. Subsurface Sewage Disposal – All subdivision and land development plans shall contain a plan note specifying that approval of the plan does not guarantee permit issuance for sewage disposal.

2. Public Sewers – All subdivision and land development plans shall contain a plan note specifying that connection to public sewer lines is required.

SECTION 509 WATER SUPPLY

A water supply system shall be designed and constructed by the subdivider or developer as required by the Borough or water authority in relation to the specific site of the proposed subdivision or land development. The water supply system shall be capable of meeting the needs of the proposed use(s). When possible, the subdivision or land development should be served by a public water supply system approved by Borough water officials or a community water system approved by the Pennsylvania Department of Environmental Protection. If the subdivision or land development is to be supplied by a public or community water system, the subdivider or developer shall submit a written certification, commitment or evidence that the municipal water company
or authority or the association of lot owners or private company, as applicable, has adequate water capacity and has agreed to provide water service.

A. If the water supply system proposed is a non-public system involving (1) the utilization of water obtained from the tract being subdivided or developed and (2) the proposed withdrawal of 10,000 gallons per day or more, that water supply source will be evaluated using the following criteria:

1. The net groundwater recharge on the specific tract in question will exceed the anticipated water usage during drought conditions. The net recharge shall be estimated by a certified professional geologist, and shall, at a minimum, be calculated by accounting for the volumes of water related to:
   a. The amount of impervious cover.
   b. A detailed estimate of storm water runoff and retention.
   c. The estimated recharge from an on-lot disposal system.
   d. An estimate of water consumed in processing or for other than processing.
   e. An estimate of water exported in a product, by a wastewater treatment system, or other means.
   f. The base flow component for the site, estimated for a one (1) in ten (10) year drought, as determined by the USGS using the site's position in the watershed.

2. The installation of the proposed water system(s) shall not adversely impact surface water or the riparian rights of adjacent landowners, nor shall the proposed water use lower the groundwater table in the area so as to endanger or decrease the adequacy of water supplies currently available, or which may be necessary in the future, for by-right uses on properties adjacent to the proposed project.

3. Water supplies must be potable and meet all applicable standards of the DEP, and the United States Environmental Protection Agency.

B. To evaluate the adequacy of the water supply subject to the requirements of Subsection A. above to meet the needs of the proposed use, feasibility studies must be conducted by a certified professional geologist and incorporate the following:

1. A groundwater availability study that demonstrates:
a. **Sufficient water to supply occupants based upon the number of bedrooms in the proposed dwelling(s).** For conservative planning purposes, determining the consumptive use of each dwelling shall be based upon the specifications of 25 PA. Code §73.17. (See Appendix 17). The daily per capita sewage flow specified in §73.17 shall be increased by twenty percent (20%) to provide for water uses that are not included in the DEP-specified sewage flow.

b. **Sufficient water to supply the maximum number of occupants for any non-residential application.** Commercial and non-residential applications shall specify their per capita or daily water needs based upon their maximum water needs, by adding twenty (20%) percent to the per capita sewage flow indicated for the particular use as specified in §73.17 or in a standard technical reference document. (See Appendix 18).

c. **Sufficient water supply as certified by a qualified professional geologist.** A demonstration of adequacy for any other applications shall be made by a qualified professional geologist, based on estimated consumption. The supply shall be adequate to meet the peak daily flow of the proposed development, assuming a combination of well yield and storage sufficient to meet peak withdrawal rates for concurrent multiple uses.

d. **Sufficient water supply in drought conditions.** For all intended uses, the water supply shall be adequate to meet basic residential or non-residential needs in the event of drought conditions with either a one (1) in ten (10) year recurrence potential, if such data is available, or with a ninety (90) day no recharge event.

2. **An analysis of water quality which will demonstrate through adjacent property sampling or through on-site wells that the water source will meet DEP and United States Environmental Protection Agency water quality standards.** At a minimum, testing should analyze nitrate-nitrogen, nitrite-nitrogen, total coliform, fecal coliform, pH and lead, but possible contamination by past activity in the area would necessitate testing for specific hazardous substances). If the raw water supply exceeds DEP/EPA standards for the parameters listed, then appropriate water treatment will be required prior to use.

C. **Hydrogeologic studies for non-public water systems subject to the requirements of Subsection A. above shall consist of the following minimum considerations:**

1. A topographic map indicating the location of the site, any proposed on-site sewage disposal systems and possible locations for wells. Narrative descriptions of the types of these systems shall also be furnished.
2. A description of the geologic conditions on and around the site that would affect the groundwater recharge rate and the degree of groundwater renovation. Such conditions can include, but need not be limited to, closed depressions, sinkholes, high water table conditions, springs, lineaments, faults, outcrops of bedrock, soil mottling, surface drainage into the ground, ghost lakes, and similar hydrogeological features.

3. A map and narrative description of the area that will be impacted from the proposed use of on-lot sewage disposal systems. Such analysis will consider and identify the system's dispersion plumes and mixing zones, which shall be calculated from the surface topography and known geologic conditions. The analysis will then describe anticipated water quality/quantity impacts to areas located down gradient and/or along any geologic strike or fault. These anticipated impacts should also consider existing and potential land uses located within the affected area.

4. Should it be determined that the proposed use(s) would result in a degradation of surface or groundwater quality, or impair the potential use of nearby properties, the study shall identify the measures to be employed to eliminate these adverse impacts.

D. The results of these feasibility studies, tests, and any reported well yield(s) shall be filed with the Borough and added to its official well data and mapping. Copies shall also be forwarded to the Pennsylvania Topographic and Geologic Survey and to the Susquehanna River Basin Commission. This data will be used by potential developers and the Borough in assessing the need for additional well testing as part of the Borough's process for reviewing conservation plans and planning modules for land development.

E. In those cases where a public or community water system is not available or practical, a well shall be provided for each lot. Wells shall not be within one hundred feet (100') of any part of the absorption field of any on site sewage disposal system and they shall not be placed within fifty feet (50') of lakes, streams, ponds, quarries, etc.

F. Subdivision and land development plans shall contain a plan note specifying the source of water supply. Plans proposing the use of public or community water shall contain a note specifying that connection to the public or community water line, as applicable, is required. Plans proposing the use of individual wells shall contain a note specifying that the lot(s) has not been tested for the availability of water adequate quality or quantity and no guarantee of water availability is provided.
SECTION 510  STREETS, PRIVATE STREETS, AND DRIVEWAYS

A. Classification and General Design Goals.

1. Proposed streets shall conform to Borough and State street and highway plans as have been prepared, adopted and/or filed as prescribed by law.

2. Streets shall be designed with consideration to both existing and planned streets. All streets shall be arranged to conform as closely as possible to the original topography. New streets shall be connected with streets of similar function, to form continuations thereof. Local streets shall be laid out to discourage use by through traffic. Streets shall be laid out to provide convenient and safe access to the property. The rigid rectangular street pattern need not be adhered to; the use of curvilinear streets may be provided when their use will result in a more desirable layout. Where a development abuts an existing or proposed arterial or collector street, the Borough Council may require the use of reverse frontage lots or such other treatment that will provide protection for abutting properties, reduce the number of intersections with the major street and separate the local and through traffic.

3. Streets shall be logically related to the topography so as to produce, satisfactory drainage and suitable building sites.

4. Half streets, or streets centered upon a boundary line of a tract to be subdivided are prohibited. All plans shall be designed to provide for the entire right-of-way and cartway widths.

5. When existing stub streets, temporary cul-de-sac streets, or dedicated or platted areas reserved for future street usage join the tract to be developed, they shall be extended into the site and made part of the proposed street layout. Where a temporary cul-de-sac is being extended, the bulb shall be reconstructed to Borough street specifications, any existing sidewalk extended through the area and the remaining areas shall be regraded and seeded.

6. The extension of existing streets that are presently constructed with a cartway different from current Borough standards shall be provided with a transition area, the design of which is subject to Borough approval.

7. All existing streets at the perimeter and/or through the development shall be improved according to Borough or Penn DOT specifications:

   a. if an existing street lies at the perimeter of the development, it shall be improved to the centerline of the street; and
b. if an existing street lies through the development, it shall be improved to the full width of the street as required by Borough or Penn DOT specifications and design standards.

8. When the proposed development requires construction within an existing street right-of-way, such as sewer, water or storm water lines, the Borough may require construction of a new wearing course along the frontage and/or disturbed area.

9. If lots resulting from original subdivision are large enough to permit re-subdivision or if a portion of the tract is not subdivided, adequate rights-of-way for streets and other required improvements shall be reserved as necessary to permit further subdivision and be reflected in the Borough Official map.

10. As a minimum, all new streets shall be graded to the right-of-way line. All cut and fill banks shall not exceed a maximum of 3:1 slope.

11. Streets shall be designed to preclude or minimize the need for guide rail. The Borough may, however, require guide rail to be placed for protection on embankments when a barrier is indicated as warranted in Design Manual Part 2 Highway Design by Penn DOT, January 1990 edition, as amended.

The design and selection of guide rail shall generally be in accordance with the standards in Design Manual Part 2 Highway Design, January 1990 edition, as amended, however, the Borough shall approve all guide rail systems.

12. Streets that are extensions of or obviously in alignment with existing streets shall bear the names of the existing streets. Street names shall not be repeated within the Borough and all street names shall be subject to the approval of the Borough. Notice that the proposed new street names are acceptable shall be submitted prior to final plan approval.

13. Street name signs shall be installed at all intersections and their design shall be approved by the Borough. All signing shall identify both intersecting streets. Regulatory signs shall be installed at all locations identified by a traffic circulation study prepared by the developer. Standard traffic signs shall be approved by the Borough, and shall be supplied and installed in accordance with Borough regulations; Penn DOT Publication 68, Official Traffic Devices; and the MUTCD, Manual on Uniform Traffic Control Devices, FHWA.

14. All proposed streets shall be offered for dedication. Where a waiver of this Section is granted by the Borough, all private streets shall conform to the requirements of Section 510.H.
15. **Street Classifications.**

a. **Arterials/Highways** – function primarily for the movement of fast traffic between points of heavy traffic generation. They shall be planned for continuation of existing streets in the system at the same or greater width in accordance with adopted municipal standards. Such streets shall contain as few intersections as possible.

b. **Collector Streets** – function to collect traffic from local streets and distribute it into arterials, and, as such, they will normally contain a relatively large number of intersections with local streets and few with main streets. A collector street system may be required wherever a residential neighborhood near an arterial is over 150 acres in area or where the local street pattern is so designed as to converge and serve over 500 one-family dwellings, or 100 multi-family units. Collector streets shall be planned for continuity and to lead more or less directly to one or more focal points or centers or traffic generation, and may become bus routes.

c. **Local Streets** – provide direct access to each lot and function to allow traffic to circulate toward the principal directions of travel, bus routes, schools and playground; however, the design shall discourage through and high speed traffic. The traffic pattern shall be indirect and yet continuous to prevent through traffic, formed of straight, moderately winding, curved, looped or angular streets formed of straight, moderately winding, curved, looped or angular streets. Tee-intersections shall be an underlying systematic neighborhood pattern; however, gridiron and other rigid geometrical patterns should be avoided where possible.

The street pattern shall include extensions to the boundaries of the development to provide circulation between adjoining neighborhoods.

d. **Cul-de-Sac Streets** – provide direct access to properties from other streets. Ordinarily, a cul-de-sac is a short street with only one outlet and having an appropriate terminal for safe and convenient reversal traffic movement. Drainage should be towards the open end. If drainage is towards the closed end it shall be conducted away in an underground storm sewer.

e. **Alleys** – provide access between a street and off-street parking facilities for two (2) or more dwelling units or nonresidential properties. Alleys provide secondary access to lots. Alleys are on the same level as a local street, and are used in cases of narrow lot.
frontages. No parking is generally permitted and alleys are designed to discourage through traffic. Alleys may also be designed as one-lane streets.

B. **Horizontal Alignment.**

1. Horizontal street alignments shall be measured along the centerline. Horizontal curves shall be used at all angle changes greater than 1 degree.

2. The centerline of the street cartway shall correspond with the centerline of the street right-of-way.

3. Plans with street locations along the perimeter of a property shall be required to show building setback lines and clear site triangles within the adjacent properties. Written permission from the affected adjacent landowner shall be provided prior to preliminary plan approval.

4. There shall be a tangent of at least one hundred (100) feet between reverse curves for all local and collector streets.

5. Horizontal curve centerline radii shall be designed in coordination with vertical geometry, subject to the approval of the Borough Engineer. Generally, however, the minimum acceptable centerline radii shall be one hundred fifty (150) feet.

C. **Vertical Alignment.**

1. Vertical curves shall be used in all changes of grade in excess of 1 percent.

2. The following minimum and maximum vertical grades shall be used:

<table>
<thead>
<tr>
<th>Type</th>
<th>Maximum</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial Street</td>
<td>State Highway Standards</td>
<td>1%</td>
</tr>
<tr>
<td>Collector Street</td>
<td>8%</td>
<td>1%</td>
</tr>
<tr>
<td>Local Street</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>Cul-de-Sac</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>Alley</td>
<td>10%</td>
<td>1%</td>
</tr>
<tr>
<td>At all intersections, 60 ft. each side</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

3. The minimum length of vertical curve for all streets shall be seventy-five (75) feet.

4. Notwithstanding the above minimum length of vertical curve, the actual length of vertical curve shall be based on the formula \( L = KA \); where "L" is the minimum length of curve in feet, "K" is the length of vertical curve per
percent change in "A", and "A" is the algebraic difference in grade (in percent). Values for "K" shall be based on the following criteria:

<table>
<thead>
<tr>
<th>Design Speed (in miles per hour)</th>
<th>&quot;K&quot; Crest Vertical Curves</th>
<th>&quot;K&quot; Sag Vertical Curves</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>25</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>30</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>35</td>
<td>45</td>
<td>50</td>
</tr>
<tr>
<td>40</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>45</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>50</td>
<td>150</td>
<td>110</td>
</tr>
<tr>
<td>55</td>
<td>220</td>
<td>130</td>
</tr>
</tbody>
</table>

D. Cul-de-sacs.

1. The centerline distance of permanent cul-de-sac streets shall be greater than two hundred fifty (250) feet in length and shall not exceed one thousand five hundred (1,500) feet in length. Cul-de-sacs also shall serve a maximum of twelve (12) lots or dwelling units. The length of the cul-de-sac street shall be measured from the centerline intersection of the intersecting street to the center of the cul-de-sac turn-around. Permanent cul-de-sac streets must be provided with a paved turn-around with a minimum diameter of one hundred (100) feet to the outside curb and of one hundred twenty (120) feet to the street right-of-way.

2. Unless future extension is clearly impractical or undesirable, the turn-around right-of-way shall be placed adjacent to the tract boundary with sufficient additional width provided along the boundary line to permit extension of the street at full width.

3. Temporary cul-de-sac streets shall not exceed two thousand (2,000) feet in length.

4. Where an adjacent stub street in an existing development is not proposed for extension as a through street, a cul-de-sac shall be constructed in compliance with Borough standards.

5. Drainage of cul-de-sac streets shall preferably be toward the open end. If drainage is toward the closed end, water shall be conveyed away in an underground storm sewer or by other means approved by the Borough. The minimum grade on cul-de-sacs shall be designed to ensure a minimum of one (1) percent along the curb line to the designed low points.

6. Temporary cul-de-sacs shall be constructed within the right-of-way for a future street extension.
7. All permanent cul-de-sacs shall be designed with a snow removal easement at the terminus. The easement shall extend outward from the street right-of-way and be a minimum of fifty (50) feet in width and ten (10) feet in depth. The easement shall be centered on the projected centerline of the street. The final plan shall contain a note stating that the easement shall be maintained as open space and no improvements or obstructions such as driveways, mailboxes, fences, hydrants or landscaping shall be permitted.

8. Cul-de-sacs shall also be designed to accommodate the future extension of water and sewer lines.

E. Street Intersections.

1. Intersections involving the junction of more than two (2) streets are prohibited.

2. The centerline of streets opening onto the opposite sides of existing or proposed streets shall be directly opposite from each other. When this is physically impossible, the distance between centerlines shall be no less than one hundred and fifty (150) feet between centerlines, measured along the centerline of the street being intersected.

3. Intersections with arterial or collector streets shall be located not closer than one thousand (1,000) feet, measured from centerline to centerline, along the centerline of the arterial or collector street being intersected.

4. Streets shall be designed to intersect as nearly as possible at right angles (90 degrees). No street shall intersect another at less than 75 degrees. An oblique street should be curbed approaching an intersection and should be at right angles for at least 100 feet there from.

5. The cartway edge at street intersections shall be rounded by a tangential arc with a minimum radius of twenty (20) feet for local streets or lanes and thirty (30) feet for intersections involving arterial and collector streets. The right-of-way radii at intersections shall be substantially concentric with the edge of the cartway. The Borough may require larger radii based on the largest design vehicle using the intersection.

6. All streets intersecting a state highway shall be subject to the approval of Penn DOT. A Penn DOT Highway Occupancy Permit will be required prior to any construction involving a Penn DOT right-of-way.

7. There shall be provided and maintained at all intersections a clear sight triangle with a line of sight between points of one hundred (100) feet from the intersection of the centerlines for collectors and seventy five (75) feet for local roads. Clear sight triangles shall be indicated on all plans. No building
or other obstruction that would obscure the vision of a motorist shall be permitted within these areas.

8. Proper safe stopping sight distance shall be provided with respect to both horizontal and vertical road alignments at all intersections. Sight distance at street intersections shall be such to provide the sight distance in accordance with current Penn DOT criteria.

a. Appendix No. 20 depicts stopping sight distance for selected speeds. The sight distances in Appendix No. 20 apply for roadway grades in whole numbers from +13% to -13% along with speeds from fifteen (15) to sixty (60) miles per hour in increments of five (5) miles per hour. The designer may use this table in lieu of the above formula.

b. Inadequate Sight Distance Remedies. If it is impossible to achieve required safe stopping sight distance in both directions the Borough may:

(1) Prohibit left turns by entering or exiting vehicles;

(2) Require alteration of the horizontal or vertical geometry of the roadway or access; all such work shall be at the expense of the applicant;

(3) Require removal of physical obstruction from the line of sight, at the expense of the applicant;

(4) Require installation of a separate left turn standby lane; or

(5) Deny access to the roadway.


1. Future rights-of-way are rights-of-way reserved for future street extension into adjoining tracts. They shall be designed in conformance with the design requirements of a street, and the contiguous parcels must contain proper setbacks and sight distances.

a. The area within the future right-of-way shall be included within the deeds to the abutting lots with an easement in favor of the Borough and land owners of the land into which the future right-of-way will extend to permit the use of the future right-of-way for public street purposes should the adjoining lands be developed. Reserved rights-of-way are permitted only when they will be no longer than the depth of one (1) lot. For lengths longer than one (1) lot a fully constructed stub street and temporary cul-de-sac will be required.
b. The landowners of the lots in which the future right-of-way is included shall have the duty to maintain the area included within the future right-of-way and this duty shall be indicated in a note on the final plan and in all deeds to such lots.

c. The landowners of the lots in which the future right-of-way is included shall have no obligation concerning the improvement of such future right-of-way for street purposes.

d. Landowners adjacent to rights-of-way reserved for future use shall not provide primary access to their property from the future right-of-way. Structure frontage and primary access shall be from the adjacent street.

G. Right-of-Way and Cartway Widths.

1. The minimum street rights-of-way and cartway widths for new streets shall be as follows:

<table>
<thead>
<tr>
<th>STREET CLASSIFICATION</th>
<th>RIGHT-OF-WAY WIDTH</th>
<th>STREETS W/O CURBS (allowed by waiver only)</th>
<th>STREET WIDTH WITH CURBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial Streets</td>
<td>Subject to Penn DOT requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collector Streets</td>
<td>60'</td>
<td>34'</td>
<td>8'</td>
</tr>
<tr>
<td>Local Streets*</td>
<td>50'</td>
<td>26'</td>
<td>4'</td>
</tr>
<tr>
<td>Cul-de-Sac Streets**</td>
<td>50' (120' at turnaround)</td>
<td>26' (100' at turnaround)</td>
<td>4'</td>
</tr>
<tr>
<td>Alleys**</td>
<td>18'</td>
<td>12'</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Pavement width shall be increased where on-street parking is planned or lots average 80' or less in width
** Cartway width dependent on one or two-way traffic

H. Private Streets. Private streets shall meet all the design standards for public streets as required by this Ordinance. Applications that propose a private street shall be by an agreement that shall be recorded with the Recorder of Deeds as part of the
final plan. This agreement shall establish the conditions under which the street will be constructed and maintained, as well as conditions controlling an offer of dedication, and shall stipulate:

1. That the street shall be constructed and maintained to conform to the provisions of this Ordinance.

2. The method of assessing maintenance and repair costs.

3. That an offer for dedication of the street shall be made only for the street as a whole.

4. That the owners of the abutting lots will include with any offer of dedication sufficient funds, as estimated by the Borough, to restore the street to the prevailing standards.

5. That an agreement by the owners of fifty-one (51) percent of the front footage thereon shall be binding on the owners of the remaining lots.

I. Driveways.

1. Driveways shall be located as to provide minimum safe stopping sight distance at intersections with streets and shall not be located within any required clear sight triangle in accordance with Section 510.E. Access shall be provided to the street of lesser classification when there is more than one street classification involved. Driveways shall not interfere with the normal traffic movement or be inconsistent with the design, maintenance and drainage of the street. Driveway locations shall be delineated on all plans.

2. Single-family residential driveways shall have a minimum width at the street right-of-way of ten (10) feet and a maximum width at the street right-of-way of twenty (20) feet. The number of driveway entrances per dwelling shall be one (1). The Borough Council may grant additional driveway entrances if severe topographic conditions exist and the width of the lot exceeds one hundred fifty (150) feet at the street right-of-way.

3. Common driveways cannot be proposed in a plan.

4. When a proposed driveway has access to an arterial or collector street, the Borough may require the use of a turn-around area to prevent vehicles from backing onto the street.

5. All private driveways shall have, for a distance of thirty (30) feet from the street right-of-way, a maximum gradient of eight percent (8%).
6. Driveway grades shall not exceed 15% slope. The Planning and Zoning Commission may require paving of driveways exceeding 10% slope to minimize erosion.

J. Access Drives.

1. The cartway of all access drives shall be constructed in accordance with Sections 510.N.6. and 511.A.9.

2. Access drives do not require a specific right-of-way; however, the following standards for cartway width shall apply:

<table>
<thead>
<tr>
<th>Number of Lanes</th>
<th>Cartway Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three (3) lanes</td>
<td>36 feet</td>
</tr>
<tr>
<td>Two (2) lanes</td>
<td>24 feet</td>
</tr>
<tr>
<td>One (1) lane</td>
<td>12 feet</td>
</tr>
</tbody>
</table>

3. The vertical and horizontal alignments of access drives shall conform to Sections 510.B and 510.C, respectively.

4. Access drive intersections shall conform to the specifications for streets as stated in Section 510.E.

5. Access drives shall be located a minimum of ten (10) feet from side or rear property lines and a minimum of twenty (20) feet from buildings/structures.

6. Access drives shall be subject to the identical maintenance related items as outlined for alleys in Section 510.K.

K. Alleys.

1. Alleys shall have the following characteristics:

a. A property that utilizes an alley shall maintain frontage along a public or private street.

b. An application that proposes alleys shall be accompanied by an agreement which shall be recorded with the final plan and which shall establish the conditions under which the alleys will be maintained.

c. The final plan, for recordation with the Recorder of Deeds shall include a plan note that identifies (1) the specific alleys (2) the recorded maintenance agreement, and (3) a notification that the alleys do not qualify for dedication to the Borough and that the Borough will not assume any responsibility for their maintenance.
2. The cartway of all alleys shall be constructed in accordance with Section 510.N.6. of this Ordinance.

a. The vertical and horizontal alignments of alley shall conform to the specifications for local streets as stated in Sections 510.B and 510.C, respectively.

b. Alleys and their intersections shall conform to the specifications for local streets as stated in Sections 510.E and 510.G.

c. Alleys that form a cul-de-sac shall not exceed four hundred (400) feet in length, measured from the centerline intersection of a street or private street that is not a cul-de-sac. Alley cul-de-sacs that do not terminate in a parking compound shall be provided at the terminus with a fully paved turn-around. The turn-around shall be designed in accordance with one of the following methods:

   (1) An eighty (80) foot paved diameter.

   (2) T-shaped turn-around with a twelve (12) foot width and the flared portions rounded by minimum radii of twenty (20) feet.

d. All alleys shall be privately maintained. The plan shall contain a note that shall state that the alley shall not be offered for dedication and shall be privately maintained.

   (1) If an alley is to be for the common use of two (2) or more properties, the applicant shall provide for the maintenance of such alley. The applicant shall provide for private maintenance through the formation of a homeowners' association or through the setting forth of the maintenance responsibilities in easements in the deeds to the lots that have the right to use the alley. If a homeowners' association is formed, a document setting forth the maintenance responsibilities of such association and the right of such association to assess lots within the development shall be recorded at the same time as the final plan is recorded. All such documents shall be in a form acceptable to the Borough Solicitor.

   (2) All persons who shall purchase a lot abutting or having the right to use an alley shall be given a copy of the final plan, and, if a homeowners' association has been formed, shall be given a copy of all such documents relating to the maintenance responsibilities of such homeowners' association.
e. All alleys and associated parking areas shall be located outside the minimum required rear yard and side yard setbacks.

L. Emergency Access Requirements. All subdivisions or land developments contributing more than three hundred (300) vehicle trips per day – either initially or cumulatively - shall be provided with at least two (2) separate and distinct means of access to the subdivision or land development.

1. Access may be provided through the location of two (2) or more streets each of which intersects with an existing public street. Such streets shall meet all the requirements of this Ordinance concerning design and construction.

2. Access for a land development may be provided through two (2) or more access drives into the land development. Such access drives shall be separated by a distance of at least one hundred fifty (150) feet and shall comply with all requirements of this Ordinance and the Zoning Ordinance.

3. If the applicant is unable to provide access to the subdivision or land development through two (2) or more streets or access drives, an emergency access shall be provided.

   a. The emergency access shall be improved so that emergency vehicles may safely transverse it and shall be indicated on the plans.

   b. The emergency access shall be acceptable to the providers of emergency services within the Borough. Applicants proposing to provide emergency access shall submit evidence of such approval.

   c. The emergency access may be located so that access to the subdivision or land development is gained from a public street at a location unsuitable for regular access with an existing public street.

   d. The emergency access may be located so that access is gained from an adjacent tract. For example, a subdivision or land development adjoining a parking lot of another use may provide emergency access through a point with a break chain. Applicants with plans indicating emergency access through an adjoining private tract shall provide evidence that the adjoining property owner has consented to such emergency access location.

M. Street Lights.

Poles or standards for street lights, with underground "parkway cable" service lines shall be installed by the subdivider, when required by the Borough Council, located in the right-of-way and shall be approved by the Borough Council as to type and
location along each right-of-way not more than two hundred fifty (250) feet apart and at all intersections.

N. **Street Construction Standards** – Streets and rights-of-way shall be improved to meet Borough standards. The requirements contained herein are provided as said standards.

It shall be the developer's responsibility to satisfy all applicable municipal construction requirements and design standards, or in lieu thereof, deposit a security in compliance with Chapter 6 of this Ordinance and established Borough policies. All public and private streets shall meet the following standards:

1. Adequate surface and subsurface drainage shall be provided.

2. All topsoil shall be removed from the area to be paved.

3. There shall be installed a base to consist of six (6) inches of rolled stone or, on the alternate, an eight (8) inch base of rolled shale, under the paved surface of the carway and a minimum of four (4) inches of compacted shale or stone shall be installed on the shoulder of the road which shall extend four (4) feet minimum on both sides of the cartway.

4. The base course shall be constructed of minimum two and one-half (2½) inches ID-2 Binder Course (or three inches of ID-3, at the discretion of Borough Council) in accordance with the Commonwealth of Pennsylvania, Department of Transportation Manual Form 408. The base binder course being constructed with #2B stone with the specified bituminous residues on the aggregate shall conform to the Form 408 specifications.

5. The surface course shall be constructed of minimum one and one-half inches (1½") ID-2 Wearing Course in accordance with the Commonwealth of Pennsylvania, Department of Transportation Manual Form 408. The surface or wearing course being constructed with #1B stone with the specified bituminous residues on the aggregate shall conform to the Form 408 Specifications.

6. **Alley and Access Drive Construction.**

All alleys and all portions of access drives located within any street right-of-way shall be constructed to meet the following minimum standards:

a. Crushed aggregate base course with a minimum thickness of six (6) inches, as specified in Penn DOT Specifications, Form 408, and its latest revisions.
b. The bituminous surface shall consist of a minimum of one and one-half (1-1/2) inches of ID-2 binder course and one (1) inch ID-2 wearing course. Material shall be equal or superior to Penn DOT Specifications Publication 408/90, as amended, and shall be applied in accordance with those same specifications.

SECTION 511 VEHICULAR PARKING FACILITIES, SIDEWALKS AND CURBS

A. Parking Areas. Off-street vehicular parking facilities shall be provided in accordance with the Borough Zoning Ordinance.

1. Parking compound dimensions shall be no less than those listed in Appendix No. 19.

2. Buffer planting shall be provided for parking compounds and access drives which are adjacent to residential properties and public right-of-ways. The buffer planting area shall be at least fifteen (15) feet wide. Buffer planting shall be installed in accordance with Section 515. Buffer plantings shall not restrict sight distances.

3. Where parking compounds are designed for more than ten (10) spaces, no less than five (5) percent of the total area must be landscaped and continually maintained. Planting along the perimeter of a parking compound, whether for required screening or general beautification, will not be considered as part of the five (5) percent parking area landscaping. The internal planting areas shall contain appropriate natural ground cover and a minimum of one (1) tree, as specified in Section 515, for each ten (10) parking spaces, or portion thereof. The Borough Council may reduce the required minimum internal planting area where the proposed overall landscape contains additional perimeter and/or internal trees.

4. No portion of a parking compound will be permitted within ten (10) feet of side or rear property lines and twenty (20) feet from street right-of-way lines.

5. Not less than five (5) foot radius of curvature shall be permitted for horizontal curves in parking areas.

6. All dead-end parking lots shall be designed to provide sufficient back-up area for all end stalls.

7. Painted lines, arrows and dividers shall be provided and maintained to control parking when necessary to direct vehicular circulation.
8. **Lighting** - Adequate lighting shall be provided if the parking lot is to be used at night. The lighting shall conform to the requirements of the Cornwall Borough Outdoor Lighting Ordinance.

9. All parking compounds and portions of access drives not located within street rights-of-way shall be paved to meet the following minimum standards.
   
a. Crushed aggregate base course with a minimum thickness of six (6) inches, as specified in Penn DOT Specifications, Form 408, and its latest revisions.
   
b. A bituminous surface consisting of no less than two (2) inches of ID-2 Material shall be equal or superior to Penn DOT Specifications Publication 408/90, as amended, and shall be applied in accordance with those same specifications.

B. **Sidewalks.**

1. The Borough shall require installation of curbs and sidewalks in any subdivision and land development as provided herein. Sidewalks are required to provide access to and/or within a commercial, industrial or community facility. Sidewalks that are provided as part of such nonresidential facilities shall be designed and constructed to service the projected pedestrian needs. All public areas shall be designed barrier free in accordance with applicable federal and state standards, including but not limited to, the Americans with Disabilities Act. Appropriate details shall be provided on the plans.

2. Sidewalks shall be installed on both sides of all streets in residential and nonresidential subdivisions and land developments as herein specified. Sidewalks shall be located, if possible, within the street right-of-way line.

3. Sidewalks shall comply with the Borough's specifications for curb and sidewalks, as amended. (See Appendix No. 18).

C. **Curbs.**

1. Curbs shall be required along all proposed streets in subdivisions; along all proposed streets and alleys in land developments; and along all existing streets in and abutting both subdivisions and land developments. The developer shall submit the location and grade of all curbs to the Borough for consideration.
2. Curbs shall be installed to the dimensions and construction standards of the Borough's specifications for curb and sidewalks, as amended. (See Appendix No. 18).

3. Standard straight curb shall be required along all state highways and along all Borough streets. Other types of curbing are not permitted unless matching an existing condition or a waiver is requested and granted by Borough Council.

SECTION 512 SURVEY MONUMENTS AND MARKERS

A. Permanent concrete monuments shall be accurately placed along at least one (1) side of each street at the beginning and end of all curves and at all angles.

B. At least one (1) monument shall be placed for every two (2) lots or every two hundred (200) feet of streets, whichever requirement is less.

C. Markers shall be set at the points where lot lines intersect curves and/or other property lines.

D. Monuments shall be of concrete, with a flat top having a minimum width or diameter of four (4) inches and a minimum length of thirty (30) inches. Cast-in-place or pre-cast concrete monuments shall be marked with center punch mark in a three-quarter (3/4) inch copper or brass dowel. Metallic markers shall consist of Copperweld bars at least thirty (30) inches along and not less than three-quarters (3/4) inch in diameter. Alternative monumentation methods will be at the discretion of the Borough Engineer. All monuments shall be inscribed with a proper inscription indicating the name of the surveyor responsible for the survey.

E. All monuments and markers shall be placed by a registered engineer or surveyor so that the scored or marked point shall coincide exactly with the point of intersection of the lines being monumented or marked.

F. All existing and proposed monuments and lot line markers shall be delineated on the final plan.

SECTION 513 OTHER UTILITIES

A. All other utility lines including, but not limited to electric, gas, street light supply, cable television, and telephone shall be placed underground. Installation of all utilities shall be in strict accordance with the engineering standards and specifications of the public utility concerned.
B. In accordance with the provisions of Act 178, all developers, contractors, etc., shall contact all applicable utilities and accurately determine the locations and depth of all underground utilities within the boundaries of the tract proposed for development, prior to excavation. A list of the applicable utilities and their telephone numbers shall appear on the plans submitted for review.

C. There shall be a minimum distance of fifty (50) feet, measured in the shortest distance, between any proposed dwelling unit and any petroleum, petroleum products or natural gas transmission line that traverses the subdivision/land development.

D. Petroleum products or natural gas transmission lines shall be located in a fifty (50) foot minimum right-of-way. Unless the pipeline company requires a greater width, the subdivider/developer shall provide a fifty (50)-foot right-of-way for all such existing transmission lines within the subdivision/land development.

SECTION 514 EASEMENTS AND RIGHT-OF-WAYS

Easements with a minimum width of twenty (20) feet with five (5) feet additional added per utility use shall be provided for poles, wires, conduits, storm and sanitary sewers, gas, water and heat main and/or other utility lines intended to service the abutting lots. No structures or trees shall be placed within such easements. Easements and right-of-ways shall meet the following standards:

A. To the fullest extent possible, easements shall be adjacent to property lines.

B. Easements shall be centered on or adjacent to rear or side lot lines.

C. Nothing shall be placed, planted, set, or put within the area of an easement that would adversely affect the function of the easement or conflict with the easement agreement. This requirement shall be noted on the final plan and shall be included in all deeds for lots that contain an easement.

D. Pedestrian walkways shall have a minimum right-of-way width of ten (10) feet, and contain sidewalk in accordance with Section 511.B of this Ordinance.

E. Utility easements shall have a minimum width of twenty (20) feet, and all utility companies are encouraged to use common easements. Plans shall include, by reference or detailed description, provisions to ensure compliance with all Authority or Utility Company restrictions.

F. The applicant shall reserve easements where storm water or surface water drainage facilities are existing or proposed, whether located within or beyond the boundaries of the property. Easements shall have a minimum width of twenty (20) feet and shall be adequately designed to provide area for (a) the collection and
discharge of water, (b) the maintenance, repair and reconstruction of the drainage facilities, and (c) the passage of machinery for such work. The easements shall clearly identify who has the right-of-access and responsibility of maintenance. This requirement shall be noted on the final plan and shall be included in all deeds for lots that contain an easement.

G. Where any petroleum or petroleum product transmission line traverses a subdivision or land development, the applicant shall confer with the applicable transmission or distribution company to determine the minimum distance that shall be required between each structure and the centerline of such petroleum or petroleum product transmission line. Additionally, the Borough will require, with the final plan application, a letter from the owner of the transmission line stating any conditions on the use of the tract that shall contain the above.

H. Where a subdivision or land development is adjacent to or traversed by a water course, drainageway, channel, or stream, there shall be provided a drainage easement conforming substantially to the line of such water course, drainageway, channel, or stream of such width as will be adequate to preserve the unimpeded flow from a one hundred (100) year design rainfall.

I. When a subdivision proposes multi-family attached dwellings, such as townhouses, the plans shall include an access easement along the front and rear property lines of all units, and side property lines of the end units, to allow all lot owners within the unit access to front and rear yards. The access easement shall have a minimum width of six (6) feet. This requirement shall be noted on the final plan and shall be included in all deeds for lots that contain the easement.

J. Field delineated wetlands shall be provided with an easement.

K. Replacement locations for on-site sewage disposal systems shall be provided with an easement.

**SECTION 515  LANDSCAPING AND SCREENING**

A. **Landscaping.**

1. Any part or portion of a non-agricultural site where landscaping is required and which is not used for buildings or other structures, loading and parking spaces and aisles, sidewalks and designated storage areas shall be planted and maintained with landscaping.

2. Except for agricultural uses and single-family detached, single-family semi-detached, two-family detached dwellings and two-family semi-detached dwellings, any part or portion of a site which is not used for buildings or other structures, loading and parking spaces and aisles,
sidewalks and designated storage areas shall be landscaped according to an overall plan, prepared and approved as part of a Land Development Plan required under this Ordinance.

B. **Ground Cover.** Ground cover shall be provided on all areas of the project to prevent soil erosion. All areas that are not covered by paving, stone or other solid material shall be protected with a maintained vegetative growth. Ground cover shall conform to the standards and recommendations of the American Association of Nursery Men, Inc. in the American Standard for Nursery Stock, as amended.

C. **Planting Strip.** All commercial, industrial and nonresidential uses, but excluding agricultural uses, shall be separated from all side and rear property lines and all street right-of-way lines by a planting strip. The planting strip may be included in the required yard space and shall be based on the following criteria:

1. The planting strip shall be a minimum of ten (10) feet wide, measured from the property line or street right-of-way line.

2. Said planting strip shall be planted in grass, shrubbery, trees, or other plant material, but in no case shall these areas be paved or covered by an impervious surface.

3. Said planting strip shall only be broken by approved entrances or exits.

4. Accessory buildings or structure shall be permitted within a planting strip provided they conform to the specific requirements of this Ordinance.

5. **Exceptions.**
   a. No planting strip is required along a rear property line when the rear property line abuts a public alley.
   b. No planting strip is required along a side and/or rear property line where the adjacent owners have a written agreement, suitable to the Borough Council, waiving the side and/or rear yard setbacks relating to parking facilities along their abutting property line(s).
   c. No planting strips are required on lands in agricultural production.

D. **Screening**

1. Screening requirements shall be applicable under the following circumstances:
   a. Where a proposed commercial, industrial, or institutional use abuts an existing residential use or residential district.
b. Where any proposed multi-family residential use abuts an existing single-family detached, single-family semi-detached, two-family detached or two-family semi-detached dwelling.

c. Any other instances where screening is required by this Ordinance or by the Borough.

2. Screening shall comply with the following requirements:

a. Trees and shrubs used for screening shall consist of at least seventy-five (75) percent evergreen trees and shrubs and shall be so arranged as to provide an immediate visual screen of fifty (50) percent.

b. Plant materials used in the screen planting shall be at least six (6) feet in height when planted and be of a species that will produce a complete visual screen of at least eight (8) feet in height at maturity.

c. All trees shall have a minimum trunk diameter of two and one-half (2.5) inches at a height of six (6) inches above finished grade.

d. No plantings shall be placed with their center closer than five (5) feet from the property line of the tract.

e. All existing trees within the required planting strip above three (3) inches in caliper and/or eight (8) feet in height shall be preserved wherever possible.

f. When additional height is deemed necessary, an additional row of deciduous trees with calipers of not less than two and one-half (2.5) inches shall be planted within the screening area at intervals of not more than forty (40) feet on center.

g. Vegetative screening shall incorporate earthen mounds or berms, wherever possible, to improve sound as well as visual buffering, and shall be broken at points of vehicular or pedestrian access.

h. Screening design, including the type of plant materials used, spacing of plant materials, and the use and location of earthen berms, shall be subject to review and approval by the appropriate reviewing agency.

i. Vegetative screens shall be perpetually maintained during the period the principal use causing the need for screening is in operation. Any plant material that does not survive shall be replaced within six (6) months.
j. Walls, ornamental structures, fences and berms, or a combination of these, not less than five (5) feet in height may be used in combination with appropriate plant material subject to the specific land use areas involved and as approved by the appropriate reviewing agency.

k. Innovative means of screening are encouraged; however, as a guideline to quantity of materials required, there shall be a minimum of one (1) tree for each twelve (12) lineal feet of property line.

l. Screening shall be designed so as to not obstruct the clear-sight triangles at intersections.

3. Exceptions.
   a. No screening along a rear property line is required when the rear property line abuts a public alley.
   b. No screening is required along a side and/or rear property line where the adjacent owners have a written agreement, suitable to the Borough Council, waiving the side and/or rear yard setbacks relating to parking facilities along their abutting property line(s).

E. Off-Street Parking Areas. Except as modified elsewhere in this Ordinance, the following shall apply to the landscaping and screening of off-street parking areas:

1. Any off-street parking lot perpendicular to and within one hundred (100) feet of a public street or intersection shall be screened with a hedge, berm or other measure to prevent distraction or confusion from parking car's headlights.

2. No parking lot shall be located closer to a building than ten (10) feet to allow adequate room for landscaping.

3. No more than twenty-five (25) parking spaces shall be placed in a continuous row without an intervening planting island of at least ten (10) feet in width and the length of the parking stall.

4. A minimum of ten (10) percent of any parking lot facility over 2,000 square feet in gross area (measured from the outside edge of paving to outside edge of paving) shall be devoted to landscaping. This landscaping shall include a minimum of one tree per twenty (20) parking spaces and all planting beds within a parking lot shall be surfaced in lawn or ground cover planting.
5. For any land use where the total number of parking spaces exceeds 100 stalls, the parking area shall be divided by continuous islands perpendicular to the spaces every 130 feet (130 feet assumes four (4) rows of parking at 20’ length and two (2) aisles at 22” width). These divider islands shall be a minimum of ten (10) feet wide.

6. Wherever a parking area of over five (5) spaces abuts or is within fifteen (15) feet of the side or rear lot line of a lot in any Residential District, the said parking lot shall be screened from such adjoining lot by a wall, fence, or hedge. Such screening shall be not less than three (3) or more than eight (8) feet in height.

7. Whenever a parking area of over five (5) spaces is located across the street from other land in any Residential District, it shall be screened from the view of such land by a hedge, wall, or fence located along a line drawn parallel to the street and a distance of twenty (20) feet there from; such screening to be interrupted only at points of ingress and egress. Such screening shall be not less than three (3) feet or more than eight (8) feet in height. The open area between such screening and the street shall be landscaped in harmony with the landscaping prevailing on neighboring properties fronting on the same street.

F. Service, Loading and Trash Disposal Areas.

1. All service, delivery, loading and outdoor storage and trash disposal areas shall be screened from all residential districts, public streets, parking lots and pedestrian walkways.

2. These areas shall be totally screened from the above-listed places by the use of fences, walls, berms, evergreen plant material, or a combination of these, not less than six (6) feet in height.

G. All mechanical equipment not enclosed in a structure shall be fully and completely screened in a matter compatible with the architectural and landscaping style of the remainder of the lot.

H. Buffer Planting for Reverse Frontage Lots. Buffer planting shall be provided along the rear of reverse frontage lots. Parking and building are prohibited within the buffer area. The use of the buffer area for accessways shall be limited. Buffer areas shall include a suitable and uninterrupted evergreen planting of a minimum height of thirty-six (36) inches (at the time of planting) and sufficient density to give maximum screening. Such screening shall be permanently maintained and replaced where necessary to present an attractive appearance.

I. Shade Trees. Shade trees shall be required by the Borough with the following standards:
1. The trees shall be nursery grown in a climate similar to that of the locality of the project. Varieties of trees shall be subject to the approval of the Borough.

2. All trees shall have a normal habit of growth and shall be sound, healthy and vigorous; they shall be free from disease, insects, insect eggs, and larvae.

3. The caliper of the trunk, measured at a height of six (6) inches above finished grade, shall be a minimum of two (2) inches.

4. Trees shall be planted between the street right-of-way line and the building setback line except where the Borough has authorized placement of trees within the street right-of-way. The tree growth shall not interfere with the street cartway, sidewalk or utility line.

5. All planting shall be performed in conformance with good nursery and landscape practice including proper guying and staking.


7. Street trees shall be provided with each subdivision and/or land development plan and spaced not less than forty (40) feet or more than sixty (60) feet apart along each street frontage.

8. Street trees shall be subject to the review and approval of the Borough of Cornwall.

9. Street trees shall be selected from the following species, or equivalent with Borough approval:

   - Acer rubrum cultivars  
   - Aesculus x cornea  
   - Cladrastus lutea  
   - Fraximus pennsylvania cultivars  
   - Ginkgo biloba (males only)  
   - Gleditsia triancanthos inermis cultivars  
   - Liquidambar styraciflua  
   - Nyssa sylvatica  
   - Quercus acutissima  
   - Quercus phellos  
   - Quercus rubra  

   Red Maple  
   Red Horsechestnut  
   American Yellowwood  
   Green Ash  
   Ginkgo  
   Thornless Honey  
   Locust  
   Sweet Gum  
   Black Tupelo  
   Sawtooth Oak  
   Willow Oak  
   Red Oak
Sophora japonica
Tilia cordata
Tilia x euchlora
Tilia tomentosa
Zelkova serrata cultivar
Pyrus calleryana Redspire

Japanese Pagoda Tree
Littleleaf Linden
Crimean Linden
Silver Linden
Japanese Zelkova
Redspire Pear

SECTION 516 REFUSE COLLECTION (DUMPSTER) STATIONS

A. Outdoor collection stations shall be provided for garbage and trash removal when individual collection is not made and indoor storage is not provided.

B. Collection stations shall be located so as to be separated adequately from habitable buildings to avoid being offensive, but at the same time be convenient for both collectors and residents and shall be screened and/or landscaped adequately so as to continue the aesthetic characteristics of the surrounding neighborhood. The Borough shall determine if the proposed screening is adequate.

C. Collection stations shall be so constructed as to prevent the escape of refuse by wind, water or other natural elements and prevent animals, rodents, etc. from entering.

SECTION 517 STRIPPING, PILING, REPLACEMENT, OR REMOVAL OF TOPSOIL

A. Initial construction on the subdivision or land development site shall consist of stripping and piling of topsoil from all areas planned to be disturbed. Upon completion of other construction, the entire amount of topsoil stripped shall be replaced on the subdivision or land development site. No topsoil shall be disposed of, by sale or otherwise, off the site of the subdivision or land development without approval of the Borough Engineer. Subsoil may be disposed at the option of the subdivider/developer.

SECTION 518 PUBLIC DEDICATION OF PARK AND OPEN SPACE LAND

Each subdivision and land development plan shall include the mandatory dedication of park and open space land, consistent with the provisions of this section.

A. Consistent with the standards of the Cornwall Borough Recreation, Park and Open Space Plan, the amount of park and open space land required to be dedicated shall equal at least 10 acres of park land per 1,000 residents, or .026 acres of land per residential lot or equivalent residential dwelling shall be dedicated under this part.
B. The land reserved and dedicated to the Borough for park and open space usage shall be a single lot, which shall comply with the requirements of this ordinance, the Cornwall Borough Zoning Ordinance, and the following specific requirements:

1. The land must be a minimum of 5 acres in size (unless the intended use is for a special use park or linear park development).

2. The land, where feasible, shall be in such a location that additional adjacent land abutting two or more boundary lines shall be undeveloped, and available for purchase by the Borough for the expansion of the recreation area, and of such character (terrain, topography, physical features, etc.) that the adjacent land can reasonably be developed into a park or recreational land which assessment and determination shall be made by the Borough Council.

3. The land shall be easily and safely accessible for vehicles, pedestrians, and/or bicycles.

4. A maximum of 15% of the tract may consist of floodplain, wetland, steep slopes, utility easements or rights-of-way, or other features that otherwise render the lots undevelopable for its intended recreation use.

5. The tract shall have accessibility to utilities including water, sewer and power, unless deemed unnecessary by the Borough for the intended park facility development such as a greenway/linear park development.

6. The tract shall not contain storm water facilities designed to detain or retain storm water for another site.

C. Where Borough Council determines that because of size, shape, location, access, topography or other physical features of the land, that it is impractical to dedicate land to the Borough or set aside a recreation area as required by Section 502.O.2. above, the Borough Council shall require a payment of a fee-in-lieu of such land which shall be payable to the Borough prior to the recording of each final plan and shall be in an amount equal to the percentage of the total number of dwelling units for each phase. The initial fee-in-lieu of land shall be set at $750 per residential lot or equivalent residential dwelling unit. This fee may be adjusted from time to time by resolution of Borough Council. The fees collected hereunder shall be utilized by the Borough for recreational purposes and shall be administered in accordance with Section 503(11) of the Pennsylvania Municipalities Planning Code, 53 P.S. §10503(11).

D. A fee authorized under this Section shall, upon its receipt by the Borough, be deposited in an interest bearing account. Interest earned on such an account
shall become funds in that account. Funds from such accounts shall be expended to acquire land and/or design and construct recreation facilities.

E. Upon agreement by the developer, the Borough may accept the construction of recreational facilities, the payment of fees-in-lieu thereof, the private reservation of land for recreational purposes, the dedication of land located in other areas of the Borough, or a combination of the above.

F. If the developer proposes the private reservation of land, through either the inclusion of such land as common elements of a condominium or planned community as contained in the Pennsylvania Uniform Condominium Act, 68 Pa.C.S. §3101 et seq. or the Pennsylvania Uniform Planned Community Act, 68 Pa.C.S. §5101 et seq., then such documentation shall be recorded, and shall provide that the land cannot be further developed. Furthermore, the Borough shall be granted the rights to maintain the land as set forth in Article VII of the Municipalities Planning Code dealing with the maintenance of common open space in planned residential developments. Notwithstanding the foregoing, the developer may request that the Borough Council approve a transfer of the land to an organization dedicated to the conservation of natural resources with deed restrictions preventing further development acceptable to the Borough Solicitor.

G. The landowner shall enter into an agreement with the Borough setting forth the fees to be paid, the facilities to be constructed, or the land to be privately reserved and the method of its maintenance. All such agreements shall be executed prior to final plan approval.
CHAPTER 6
CONSTRUCTION OF REQUIRED IMPROVEMENTS AND DEDICATION

SECTION 601 COMPLETION OF IMPROVEMENTS OR GUARANTEE THEREOF
PREREQUISITE TO FINAL PLAN APPROVAL

A. No plan shall be finally approved unless the streets shown on such plan have been improved to a mud-free or otherwise permanently passable condition, or improved as may be required by this Ordinance and any walkways, curbs, gutters, street lights, fire hydrants, shade trees, water mains, sanitary sewers, storm sewers and other improvements as may be required by this or other Borough Ordinances have been installed in accordance with such ordinances. In lieu of the completion of any improvements required as a condition for the final approval of a plan, including improvements or fees required pursuant to Section 601 I., the applicant or developer may deposit with the Borough financial security in an amount sufficient to cover the costs of such improvements or common amenities including, but not limited to, roads, storm water detention and/or retention basins and other related drainage facilities, recreational facilities, open space improvements, or buffer or screen plantings which may be required. The applicant shall not be required to provide financial security for the costs of any improvements for which financial security is required by and provided to the Department of Transportation in connection with the issuance of a highway occupancy permit pursuant to section 420 of the act of June 1, 1945 (P.L.1242, No.428) known as the “State Highway Law.”

B. When requested by the developer, in order to facilitate financing, the Borough Council shall furnish the developer with a signed copy of a resolution indicating approval of the final plan contingent upon the developer obtaining a satisfactory financial security. The final plan or record plan shall not be signed nor recorded until the financial improvements agreement is executed. The resolution or letter of contingent approval shall expire and be deemed to be revoked if the financial security agreement is not executed within 90 days unless a written extension is granted by the Borough Council; such extension shall not be unreasonably withheld and shall be placed in writing at the request of the developer.

C. Without limitation as to other types of financial security which the Borough may approve, which approval shall not be unreasonably withheld, Federal or Commonwealth chartered lending institution irrevocable letters of credit and restrictive or escrow accounts in such lending institutions shall be deemed acceptable financial security for the purposes of this section.

D. Such financial security shall be posted with a bonding company or Federal or Commonwealth chartered lending institution chosen by the party posting the financial security, provided said bonding company or lending institution is authorized to conduct such business within the Commonwealth.
E. Such bond or other security shall provide for, and secure to the public, the completion of any improvements which may be required on or before the date fixed in the formal action of approval or accompanying agreement for completion of the improvements.

F. The amount of financial security to be posted for the completion of the required improvements shall be equal to 110% of the cost of completion estimated as of 90 days following the date scheduled for completion by the developer. Annually, the Borough may adjust the amount of the financial security by comparing the actual cost of the improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the 90th day after either the original date scheduled for completion or a rescheduled date of completion. Subsequent to said adjustment, the Borough may require the developer to post additional security in order to assure that the financial security equals said 110%. Any additional security shall be posted by the developer in accordance with this subsection.

G. The amount of financial security required shall be based upon an estimate of the cost of completion of the required improvements, submitted by an applicant or developer and prepared by a professional engineer licensed as such in this Commonwealth and certified by such engineer to be a fair and reasonable estimate of such cost. The Borough, upon the recommendation of the Borough engineer, may refuse to accept such estimate for good cause shown. If the applicant or developer and the Borough are unable to agree upon an estimate, then the estimate shall be recalculated and recertified by another professional engineer licensed as such in this Commonwealth and chosen mutually by the Borough and the applicant or developer. The estimate certified by the third engineer shall be presumed fair and reasonable and shall be the final estimate. In the event that a third engineer is so chosen, fees for the services of said engineer shall be paid equally by the Borough and the applicant or developer.

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

I. In the case where development is projected over a period of years, the Borough Council may authorize submission of final plan by section or stages of development subject to such requirements or guarantees as to improvements in future sections or stages of development as it finds essential for the protection of any finally approved section of the development.
J. As the work of installing the required improvements proceeds, the party posting the financial security may request the Borough Council to release or authorize the release, from time to time, such portions of the financial security necessary for payment to the contractor or contractors performing the work. Any such requests shall be in writing addressed to the Borough Council, and the Borough Council shall have 45 days from receipt of such request within which to allow the Borough Engineer to certify, in writing, to the Borough Council that such portion of the work upon the improvements has been competed in accordance with the approved plan. Upon such certification the Borough Council shall authorize release by the bonding company or lending institution of an amount as estimated by the Borough Engineer fairly representing the value of the improvements completed or, if the Borough Council fails to act within said 45-day period, the Borough Council shall be deemed to have approved the release of funds as requested. The Borough Council 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.

K. Where the Borough Council accepts dedication of all or some of the required improvements following completion, the Borough Council 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 plan 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.

1. If at the time the surface courses of streets in the subdivision or land development are completed, ninety (90) percent of the lots are not improved, the developer must post with the Borough financial security in an amount equal to fifteen (15) percent of the reasonable cost of the surface course as security to guarantee that damages to the road or street will not occur during the completion of the improvements on the unimproved lots in such developer's subdivision or land development. For the purpose of this section, an improved lot shall be considered completed when all building construction and site improvements are finished to the point that in the opinion of the Borough, a Certificate of Occupancy could be issued. The Borough shall hold such financial security and utilize it to pay for the repair of any damage occurring to the street(s) during the period between the commencement of improvements on any particular unimproved lot and the completion of such improvements irrespective of whether or not it can be established that the damage to the road was caused by contractors or other persons working in and about the construction of such improvements. The financial security shall be in a form acceptable to the Borough.
L. If water mains or sanitary sewer lines, or both, along with apparatus or facilities related thereto, are to be installed under the jurisdiction and pursuant to the rules and regulations of a public utility or municipal authority separate and distinct from the Borough, financial security to assure proper completion and maintenance thereof shall be posted in accordance with the regulations of the controlling public utility or municipal authority and shall not be included within the financial security as otherwise required by this section.

M. If financial security has been provided in lieu of the completion of improvements required as a condition for the final approval of a plan as set forth in this section, the Borough shall not condition the issuance of building, grading or other permits relating to the erection or placement of improvements, including buildings, upon the lots or land as depicted upon the final plan upon actual completion of the improvements depicted upon the approved final plan. Moreover, if said financial security has been provided, occupancy permits for any building or buildings to be erected shall not be withheld following: the improvement of the streets providing access to and from existing public roads to such building or buildings to a mud-free or otherwise permanently passable condition, as well as the completion of all other improvements as depicted upon the approved plan, either upon the lot or lots or beyond the lot or lots in question if such improvements are necessary for the reasonable use of or occupancy of the building or buildings. Any ordinance or statute inconsistent herewith is hereby expressly repealed.

SECTION 602 EFFECT OF PLAN RECORDING ON DEDICATION AND RESERVATIONS

Recording of the final plan after approval of the Borough Council has the effect of an irrevocable offer to:

A. Dedicate all streets and other public ways to public use, unless such streets are indicated on said plan as private streets.

B. Dedicate all neighborhood parks and all areas shown on the plan as being local recreation sites to public use.

SECTION 603 RELEASE FROM FINANCIAL SECURITY

A. When the developer has completed all of the improvements as shown on the final plans, the developer shall notify the Borough Council, in writing, by certified or registered mail, of the completion of the aforesaid improvements, enclosing therewith certification by the engineer responsible for the design of the improvements that they have been installed as designed, and shall send copies of the notice and certification to the Borough Engineer. The Borough Council shall, within ten (10) days after receipt of such notice, direct and authorize the Borough
Engineer to inspect all of the aforesaid improvements. The Borough Engineer shall thereupon file a report, in writing, with the Borough Council and shall promptly mail a copy of the same to the developer by certified or registered mail. The report shall be made and mailed within thirty (30) days after receipt by the Borough Engineer of the aforesaid authorization from the Borough Council, 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 Borough Engineer, said report shall contain a statement of the reasons for such non-approval or rejection. Improvements shall not be considered completed unless the developer can demonstrate compliance with the requirements of this Ordinance, and all other applicable ordinances, statutes and regulations. Improvements shall also not be considered complete until as-built plans of all improvements to be dedicated to the Borough and of all streets, whether or not such streets shall be dedicated, have been submitted to the Borough.

B. The Borough Council shall notify the developer within fifteen (15) days of receipt of the engineer's report, in writing by certified or registered mail, of its action with relation thereto. If the Borough Council or Borough Engineer fails to comply with the time limitation provisions contained herein, or such time limitations as contained in the Municipalities Planning Code, whichever requirements shall contain a longer time period for action by the Borough, all improvements will be deemed to have been approved and the developer's posted financial security shall be released.

C. If any portion of the said improvements shall not be approved or shall be rejected by the Borough Council, the developer shall proceed to complete the same and, upon completion, the same procedure of notification, as outlined herein, shall be followed.

D. Nothing herein, however, shall be construed in limitation of the developer's right to contest or question by legal proceedings or otherwise any determination of the Borough Council or Borough Engineer.

SECTION 604 REMEDIES TO EFFECT COMPLETION OF IMPROVEMENTS

In the event that any improvements which may be required have not been installed as provided in this Ordinance or in accordance with the approved final plan, the Borough Council may enforce any letter of credit or other financial security by appropriate legal and equitable remedies. If proceeds of such financial security are insufficient to pay the cost of installing or making repairs or corrections to all the improvements covered by said security, the Borough Council may, at its option, install such improvements in all or part of the subdivision or land development and may institute appropriate legal or equitable action or recover the monies necessary to complete the remainder of the improvements. All the proceeds, whether resulting from the financial security or from any legal or equitable action brought against the developer, or both, shall be used solely for the installation of the improvements covered by such security, and not for any other Borough purpose.
SECTION 605  INSPECTION DURING CONSTRUCTION

The Borough shall inspect the improvements during construction. The developer shall pay the cost of any such inspection in accordance with the provisions of Article V of the Municipalities Planning Code. 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 shall be requested, in writing, at least forty-eight (48) hours in advance of the inspection time and date.

It is generally required that the following phases of site construction have mandatory inspection. This general list of phases may be amended by mutual agreement of the Borough and developer when the site requires special construction procedures. The inspection schedule must be recorded with the final plan or shown on the approved improvement construction plan.

A. General Site Construction.

1. Upon completion of preliminary site preparation including stripping of vegetation, stockpiling of topsoil and construction of temporary erosion and sedimentation control devices.

2. Upon completion of rough grading, but prior to placing topsoil, permanent drainage, or other site development improvements and ground covers.

3. During the construction of permanent storm water management and BMP facilities. All storm sewers, culverts, etc. must be inspected prior to backfilling.

4. During construction of sanitary sewers and appurtenances, all sanitary sewers must be constructed and inspected in accordance with Borough specifications.

5. Upon the final completion of permanent storm water management and BMP facilities, including the establishment of ground covers and plantings.

6. After review of the as-built drawings, required by Section 607 of this Ordinance, but prior to final release of the financial guarantee for completion of final grading, vegetative controls required by the BMP standards, or other site restoration work.

B. Street Construction.

1. 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. It is recommended that a developer’s/contractor’s representative accompanies the observer when the crown and grade are checked. Proof
rolling should be performed with a fully loaded, tandem-axle dump truck. This inspection must occur prior to any stone subbase being placed.

2. 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 the crown and grade should be checked again. This inspection must occur prior to any binder or base course being placed.

3. Placement and Compaction of the Binder/Base Course. At the time of this inspection, the depth of the binder/base course should be checked, ambient temperature should be monitored (this is important in early spring and late fall days when the temperature can go below acceptable limits, in accordance with Penn DOT specifications, Form 408, as amended), the temperature of the bituminous material should be checked (if possible), and it is recommended that copies of the weight slips for each truckload are obtained. The crown and grade should also be checked again. This inspection must occur prior to the wearing course being placed.

4. Placement and Compaction of the Wearing Course. At the time of this inspection, the guidelines for the placement and compaction of the binder/base course should be followed.

C. In addition to the above outlined inspections, additional inspections will be made at the request of the developer for reduction of financial securities. Random inspections should be made at the frequency desired by the municipality. At the time of any of the above listed inspections, all ongoing construction (i.e. storm drainage, sanitary sewer, water, erosion control, etc.) should also be checked for compliance with the approved plans and the findings reported. Since the above inspections are mandatory, it is recommended that requests for reduction of financial guarantee be submitted to coincide with the above inspections.

SECTION 606 CONSTRUCTION IN ACCORDANCE WITH PLANS

All roads and drainage facilities shall be constructed in strict accordance with the approved plans and no changes shall be effected unless the same receive the written authorization of the Borough. Notwithstanding the provisions of this Section, the Borough may require changes during the construction stage where onsite conditions, in the opinion of the Borough, or its duly designated representative, indicates that the adverse effect of stormwater runoff and/or the adverse effect to the roadbed and/or road surface may be minimized by such changes.
SECTION 607  AS-BUILT PLAN

At such time as the construction of the road is found to meet all requirements of this Ordinance and the approved plans, as modified, the Developer, prior to offering the road for dedication, shall submit to the Borough a mylar as-built plan of the road and any stormwater drainage facilities which shall form a part of the permanent records of the Borough. The plan shall be prepared by using the approved Final Plan as a base plan and shall be made available to the Borough prior to the final inspection of the project. As-built plans shall show the following:

A. Actual location of all concrete monuments that were set at all angle breaks, points of curvature and tangents around the perimeter of the total tract. When the outside perimeter of a tract falls within or along an existing road right-of-way, then the right-of-way of that roadway shall be monumented at the above referenced points.

B. Actual location of all iron pins or drill holes in curbs for all individual lot lines.

C. Actual cul-de-sac radius.

D. Actual location of cartway centerline versus right-of-way centerline.

E. Actual location of floodplain by elevation and dimension from property line.

F. Actual location and cross section of swales and accompanying easements.

G. Actual horizontal and vertical location of storm water management sanitary sewer and waterline facilities including type and size of storm drainage sanitary and waterline pipes.

H. Detention basin:
   1. Actual contours of the detention basin.
   2. Actual outlet structure details including type, size and inverts of outlet pipes.
   3. Actual elevation of the embankment and emergency spillway.
   4. A table showing the stage/storage/discharge curve for the constructed conditions.

SECTION 608  DEDICATION

The Developer may offer the Borough a deed of dedication, accompanied by a fee to cover recording costs and costs of preparing the Resolution of Acceptance and recording of the same, for a street(s) in the developer's subdivision/land development. If the deed is
found to be in proper order and there are no violations of any provision of this Ordinance, the Borough Council, may at its sole discretion, adopt a Resolution accepting the street and, in applicable cases, drainage facility. No street, or in applicable cases, drainage facility, shall be considered finally accepted by the Borough until the deed has been recorded and filed with the applicable offices for filing for Lebanon County, Pennsylvania. Notwithstanding final acceptance of the road or drainage facility, the developer shall remain responsible for maintenance of the same, snow removal excepted, for a period of eighteen (18) months from the date of final acceptance. Borough Council will accept streets for dedication only during the period between March 1 and September 1 of each calendar year.

SECTION 609 DEVELOPMENT AGREEMENT

Plan approval may, at the sole discretion of Borough Council, be subject to the signing of a Development Agreement prepared by the Borough Solicitor pertaining to the laying out of roads, streets, lanes, or alleys and the construction of all improvements including necessary grading, paving, curbs, erosion and sediment control, gutters, sidewalks, street lights, fire hydrants, water mains, underground electric facilities, landscaping, and traffic control devices, in accordance with the approved plans, where such (or some of them) improvements are required as a condition of the approval of the plan by the Borough Council, within the time or times specified in the approval. The agreement may include any other specified conditions or requirements agreed to by the Borough Council and developer and/or owner.

The developer and/or owner shall reimburse the Borough for the legal fee and filing cost incurred for the preparation and recording of this agreement (or memorandum thereof).
CHAPTER 7
FLOOD PLAIN MANAGEMENT

SECTION 701  INTENT

The purpose of the regulations set forth in this Chapter is to monitor the subdivision and/or development of flood plain areas in order to promote and protect the general health, welfare, and safety of the community; to require that each subdivision lot in flood plain areas be provided with a safe building site with adequate access; to insure that public facilities which serve such lots or development be designed and installed to preclude flood damage; and to protect individuals from purchasing lands which are unsuitable for development because of flooding. The subsequent sections shall be considered requirements supplemental to those procedures and standards specified elsewhere in this Ordinance, Borough Zoning Ordinances, the Lebanon County Floodproofing Building Code, and any other applicable ordinances and codes.

SECTION 702  DEFINITIONS OF TERMS UTILIZED IN THIS CHAPTER

A. Base Flood - The flood, also known as the 100 Year Flood, which has a one percent (1%) chance of being equaled or exceeded in any given year; the flood, which has been selected to serve as the basis upon which the flood plain management provisions of this and other ordinances have been prepared.

B. Base Flood Elevation - The determination by the Federal Insurance Administrator of the water surface elevation of the Base Flood, that is, the flood level that has a one percent (1%) or greater chance of occurrence in any given year.

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

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

E. Development - Any man-made change to improved or unimproved real estate, including but not limited to buildings, manufactured homes, or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations or the storage of equipment or materials.
F. **Flood** - A general and temporary inundation of normally dry land areas by water from waterway overflows or the unusual and rapid accumulation or runoff of surface waters from any source.

G. **Flood Plain** - (1) A relatively flat or low land area adjoining a river, stream, or watercourse, which is subject to partial or complete inundation by water; (2) an area subject to the unusual and rapid accumulation runoff of surface water from any source. For the purposes of this Ordinance, the flood plain shall be considered to be the One Hundred (100) Year Flood Plain which is a flood plain having a one percent (1%) chance of being subject to the above conditions during any given year.

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

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

J. **Manufactured Home Park and/or Subdivision** - A lot or area which is a planned development and designated to contain two or more manufactured homes for rent or for sale. Any lot or area proposed to utilize such design where individual manufactured home sites are proposed for sale shall be known as a manufactured home subdivision.

K. **One Hundred (100) Year Flood (Base Flood)** - A flood selected as the Base Flood, that has a one percent (1%) or greater chance of occurring in any given year.

L. **Structure** - A walled or roofed building, including a gas or liquid storage tank (principally above ground), a manufactured home, or any other man-made object usually assembled of interdependent parts or components which is designed to have a more or less fixed location, whether or not permanently attached at that location.
SECTION 703  APPLICATIONS PROCEDURES AND PLAN REQUIREMENTS

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

A. Pre-Application Procedures

1. It is suggested that prospective developers consult the Pennsylvania Department of Environmental Protection and the Borough Sewage Enforcement Officer concerning soil suitability when on-site sewage disposal facilities are proposed.

2. Prospective developers shall consult the County Conservation District representative concerning erosion and sediment control and the probable effect of geologic conditions on the proposed development. Concurrently, a determination should be made as to whether or not any flood hazards either exist or will be created as a result of the proposed subdivision or development.

B. Preliminary Plan Requirements

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

1. A map illustrating the location of the proposed subdivision or land development with respect to the Borough's flood plain areas including information on, but not limited to, Base Flood Elevations, boundaries of flood plain areas, proposed lots and sites, fill, and flood or erosion protective facilities.

2. All subdivision proposals and other proposed new developments shall provide base flood delineations; however, subdivision proposals and other proposed new development greater than 50 lots or 5 acres, whichever is lesser, shall include actual base flood elevation data. It shall be the responsibility of the developer to provide the required base flood elevation data, in a form comparable to HEC-2, which will be certified as accurate by a Registered Professional Engineer.

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

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

1. All information required for submission of the Preliminary Plan plus any changes required by the Borough.

2. A map showing the exact location and elevation of all proposed buildings, structures, roads, and public utilities to be constructed in flood plain areas. All such maps shall show contours at intervals of two (2) feet and identify accurately the boundaries of the flood plain area.

SECTION 704 DESIGN STANDARDS AND IMPROVEMENTS

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

A. General

1. Where not prohibited by this or any other laws or ordinances, land located in flood plain areas may be platted for development with the provision that the developer construct all buildings and structures to preclude flood damage in accordance with this and any other laws and ordinances regulating such development.

2. Building sites for residences or any other type of dwellings or accommodations and building sites for structures or buildings other than residential uses shall be permitted in the flood plain only when in compliance with the Borough Zoning Ordinance, the Lebanon County Floodproofing Building Code, and any other applicable regulations.

3. If the Borough determines that only a part of a proposed plan can be safely developed, they shall limit development to that part and shall require that development proceed consistent with this determination.

4. When a developer does not intend to develop the plan himself and the Borough determines that additional controls are required to insure safe development, they may require the developer to impose appropriate deed restrictions on the land. Such deed restrictions shall be inserted in every deed and noted on every recorded plan.

5. Whenever a developer intends to alter or relocate a watercourse within the designated flood plain, the developer shall notify, in writing by certified mail, all adjacent communities and the Penna. Department of Community & Economic Development (or its successor agency) of all such intended
activities prior to any alteration or relocation of the watercourse. Copies of such notification shall be submitted to the Federal Insurance Administrator. The developer shall also assure the Borough in writing that the flood carrying capacity within the altered or relocated portion of the watercourse in question will be maintained.

6. No new construction or development shall be located within a designated floodway. Where the floodway has not been specifically identified for a stream or waterway, no new construction or development shall be permitted within the stream channel (from top of bank to top of bank). Furthermore, construction or development outside the stream banks but within the flood plain district shall be permitted only when in compliance with this Ordinance and Penna. Department of Environmental Protection permit requirements.

7. Lots which are within the flood plain shall be subject to the following:
   a. Any lots created or revised shall have not more than 50% of their area within the flood plain, except that large lots may be exempted provided a minimum 1 acre area of said lot is outside the flood plain.
   b. Lot access to a public road shall not be restricted or prevented by flood plain areas.

B. Excavation, Grading and Use of Fill

Any excavation activities, grading and use of fill shall be in compliance with all applicable terms of the Borough Zoning Ordinance and the Lebanon County Floodproofing Building Code. Furthermore, where excavation or grading is proposed or where any existing trees, shrubs or other vegetative cover will be removed, the developer shall consult the County Conservation District representative concerning plans for erosion and sediment control and to also obtain a report on the soil characteristics of the site so that determination can be made as to the type and degree of development the site may accommodate. Before undertaking any excavation or grading, the developer shall obtain an Earth Disturbance Permit from the Borough.

C. Drainage Facilities

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

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

D. Streets

The finished excavation of proposed streets shall be no more than two (2) feet below the Base Flood Elevation. The Borough may require, where necessary, profiles and elevations of streets to determine compliance with this requirement. Drainage and bridge openings shall be sufficient to discharge flood flows without unduly increasing flood heights.

E. Sewer Facilities

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

1. The Borough may prohibit installation of sewage disposal facilities requiring soil absorption systems where such systems will not function due to high ground water, flooding, or unsuitable soil characteristics. The Borough may require that the developer note on the face of the plan and in any deed of conveyance that soil absorption fields are prohibited in designated areas.

2. The Borough may prescribe adequate methods for waste disposal. If a sanitary sewer system is located on or within 1000 feet of the proposed subdivision and/or land development, the Borough shall require the developer to provide sewage facilities to connect to this system where practical, and shall prescribe the procedures to be followed by the developer in connecting to the system.

F. Water Facilities

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

G. Other Public and/or Private Utilities and Facilities

All other public and/or private utilities and facilities shall be elevated or floodproofed to a point two (2) feet above the Base Flood Elevation.
SECTION 705 PERFORMANCE GUARANTEE

No final plan shall be approved by the Borough until the improvements required by this Ordinance are completed in a satisfactory manner and approved by the Borough. In lieu of such construction, approval may be granted prior to completion providing:

A. The developer enters into an agreement with the Borough guaranteeing that improvements will be installed in accordance with the plans, specifications, and schedules approved by the Borough prior to plan approval. This agreement shall also guarantee that no lot will be sold or building constructed in any flood plain area prior to completion of all protective works or measures planned for such lot and necessary access to facilities; and

B. The developer provides financial security to guarantee performance of this agreement and completion of the improvements as planned. The financial security may include a certified check, escrow account, irrevocable letter of credit or other bond acceptable to the Borough. The procedural requirements of Chapter 6 of this Ordinance shall apply to any such bonding proposal.

SECTION 706 MUNICIPAL LIABILITY

The grant of a permit or approval of a subdivision and/or land development plan in the identified flood plain area shall not constitute a representation, guarantee or warranty of any kind by the Borough or by any official or employee thereof of the practicability or safety of the proposed use, and shall create no liability upon the Borough, its officials or employees.
CHAPTER 8
ADMINISTRATION, ENFORCEMENT AND PENALTIES

SECTION 801 FEES

A. Fee Resolution

1. The Borough Council shall establish by resolution a collection procedure and schedule of fees to be paid by the applicant at the time of submission of all plans.

2. Fees for all other permits required for and by the Borough shall be established by the resolution.

3. Said schedule of fees shall be posted in the Borough Office.

B. Engineering Fees.

1. Engineering fees required to be paid in accordance with this Ordinance shall be paid to the Borough by the applicant for the below listed services:

   a. Reviewing all information submitted in conformance with provisions of this Ordinance. This includes all originally submitted and revised plans, reports and specification.

   b. Inspecting the layout of the site for conformance to the submitted survey, plan and specifications.

   c. Reviewing planning modules for land development.

   d. Reviewing cost estimates of required improvements as submitted by the developer.

   e. Inspecting required improvements during construction.

   f. Final inspections of completion of installation of the required improvements.

   g. Such other technical services as deemed necessary or required by the Borough.
C. Legal Fees.

Legal fees incurred by the Borough for the review of all information submitted for conformance with provisions of this Ordinance, or other similar services, shall be paid to the Borough by the applicant.

SECTION 802 WAIVERS

The provisions of these regulations are intended as a minimum standard for the protection of the public health, safety and welfare. If the literal compliance with any mandatory provision of these regulations is shown by the applicant to the satisfaction of the Borough Council present at a public meeting to be unreasonable and to cause undue hardship as it applies to the particular property, the Borough Council may grant a waiver from such mandatory provision so that substantial justice may be done and the public interest secured while permitting the reasonable utilization of the property. However, the granting of a waiver shall not have the effect of making null and void the intent and purpose of this Ordinance.

SECTION 803 APPLICATION REQUIREMENTS

A. All requests for waivers shall be made in accordance with the provisions of Section 308 of this Ordinance.

B. Should a revision to a submitted plan require a waiver that was not apparent at the time of the initial plan submission, the request for a waiver shall be submitted in accordance with Section 308 of this Ordinance.

SECTION 804 ACTION ON WAIVER APPLICATIONS

At a public meeting, the Borough Council shall review the request to determine if the literal compliance with any mandatory provision of this Ordinance is demonstrated by the applicant to exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modification will not be contrary to the public interest and that the purpose and intent of this Ordinance is observed. The applicant shall demonstrate that an alternative proposal will allow for equal or better results and represents the minimum modification necessary. If the Borough Council determines that the applicant has met his burden, it may grant a waiver from the literal compliance with the terms of this Ordinance. In granting waivers, the Borough Council may impose such conditions as will, in its judgment, secure the objectives and purposes of this Ordinance. When a waiver is granted with conditions, a statement of the approved waiver including the imposed condition(s) shall be provided on the final plan.
SECTION 805 ENFORCEMENT

It shall be the duty of the Borough Council and/or their duly authorized representatives to enforce the provisions of this Ordinance. For the purposes of this Section, the President and Vice-President of Borough Council and the Chairman and Vice-Chairman of the Borough Planning and Zoning Commission shall be authorized to investigate alleged violations. Such investigations shall include at least one authorized member each of the Borough Council and Borough Planning and Zoning Commission. The authorized representatives have the power to initiate enforcement action – subject to Borough Council ratification.

The Zoning Officer shall require that the application for a zoning permit contain all information necessary to ascertain whether the proposed building, alteration, or use is located in an approved subdivision or land development. No zoning permit shall be issued until the Borough has determined that the site for the proposed building, alteration or use complies with all the provisions of this Ordinance and conforms to the site description as indicated on the approved and recorded final plan.

SECTION 806 VIOLATIONS, PENALTIES AND PREVENTIVE REMEDIES

A. Violations.

1. Any person, partnership, corporation or the members of such partnership or the officers of such corporation, who or which, being the owner or agent of the owner of any lot, tract or parcel of land, commits a violation of this Ordinance by the following actions:

a. lay out, construct, open and/or dedicate any street, sanitary sewer, storm sewer, water main or other improvement for public use, travel or other purposes or for the common use of occupants of buildings abutting thereon, prior to approval of a final subdivision or land development plan; or

b. sell or transfer any land in a subdivision or land development, whether by reference to or by use of a plan of such subdivision or land development or otherwise, prior to approval of a final subdivision or land development plan; or

c. erect any building or buildings which constitute a land development thereon, prior to approval of a final subdivision or land development plan; or

d. fail to maintain, alter in a manner which impairs proper functioning, or remove improvements required to be installed by this Ordinance or by the provisions of any subdivision and land development ordinance previously in effect in the Borough in accordance with the...
requirements of this Ordinance, or such previously in effect ordinance.

2. Any person, partnership or corporation, or the members of such partnership or the officers of such corporation, who or which, being the owner or agent of the owner of any lot, tract or parcel of land, shall construct or permit the construction of any improvement or develop or permit the development of any property in a manner which does not fully comply with the approved final plan, as applicable, commits a violation of this Ordinance.

3. Any person, partnership or corporation, or the members of such partnership or the officers of such corporation, who or which, being the owner or agent of the owner of any lot, tract or parcel of land, shall knowingly provide false information on any plan, report, certification or other document required to be submitted by this Ordinance commits a violation of this Ordinance.

4. Any person, partnership or corporation, or the members of such partnership or the officers of such corporation, who or which, being the owner or agent of the owner of any lot, tract or parcel of land, in any other way takes action or permits another to take action not authorized by this Ordinance or contrary to the provisions of this Ordinance commits a violation of this Ordinance.

B. Penalties for Violation.

Any person who shall violate any of the provisions of this Ordinance in conjunction with or related to an activity constituting a subdivision or land development (whether or not Borough Council has required the filing of a subdivision or land development plan), shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Borough, pay a judgment of not more than five hundred dollars ($500.00) plus all court costs, including reasonable attorney's fees incurred by the Borough as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of a violation by a district justice. If the defendant neither pays nor timely appeals the judgment, the Borough may enforce the judgment pursuant to the applicable Rules of Civil Procedure. Each day that a violation continues shall constitute a separate violation unless the district justice, determining that there has been a violation, further determines that there was a good faith basis for the person, partnership or corporation violating this Ordinance to have believed that there was no such violation. If the district justice makes a determination of good faith, there shall be deemed to have been only one such violation until the fifth (5th) 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.
C. Remedies.

1. The Borough may institute and maintain actions at law or in equity to restrain, correct or abate violations of this Ordinance, to prevent unlawful construction, to recover damages and/or prevent illegal occupancy of a building, structure or premises.

2. The Borough may refuse to issue any permit or grant any approval necessary to further improve or develop any real property which has been developed or which has resulted from a subdivision or land development of real property in violation of this Ordinance. The authority to deny such permit or approval shall apply to any of the following applicants:
   a. The owner of record at the time of such violation.
   b. The vendee or lessee of the owner of record at the time of such violation without regard to whether such vendee or lessee had actual or constructive knowledge of the violation.
   c. The current owner of record who acquired the property subsequent to the time of the violation without regard as to whether such current owner had actual or constructive knowledge of the violation.
   d. The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such vendee or lessee had actual constructive knowledge of the violation.

3. As an additional condition for the issuance of a permit or the granting of an approval to any such owner, current owner, vendee or lessee for the development of any such real property, the Borough may require compliance with the conditions that would have been applicable to the property at the time the applicant acquired an interest in such real estate.
CHAPTER 9
APPEALS, INTERPRETATION AND EFFECTIVE DATE

SECTION 901 APPEALS

All appeals from decisions of the Borough Council in the administration of this Ordinance shall be made in accordance with the provisions of the Municipalities Planning Code.

SECTION 902 INTERPRETATION AND APPLICATION OF PROVISIONS

In the interpretation and application of the provisions of this Ordinance, said provisions shall be deemed to be the minimum requirements necessary for the promotion and protection of the public health, safety and welfare. Where the provisions of this Ordinance and all standards and specifications implementing it impose greater restrictions upon subdivision or land development than those of any other Borough Ordinance or any regulation or any applicable land development agreement, the provisions of this Ordinance and its standards and specifications shall be controlling. Where the provisions of any statute, regulation, other Borough Ordinance or applicable land development agreement impose greater restrictions upon subdivision or land development than this Ordinance, the provisions of such statute, regulation, other Ordinance, or applicable land development agreement shall be controlling.

SECTION 903 APPLICATION OF ORDINANCE

With the exception of Sections 903. A and B, the provisions of this Ordinance shall apply to and control all subdivisions and/or land developments whose plans have not been recorded in the Office of the Recorder of Deeds prior to the effective date of these regulations.

A. The provisions of this Ordinance shall not adversely affect an application for approval of a preliminary or final plan which was duly filed with the Borough and is pending action at the time of the effective date of this Ordinance, and in which case the applicant shall be entitled to a decision in accordance with the provisions of the governing ordinances or plans as they stood at the time the application had been duly filed. When a preliminary plan has been duly approved, the applicant shall be entitled to final plan approval in accordance with the terms of the approved preliminary plan. However, if an application is properly and finally denied, any subsequent application shall be subject to the provisions of this Ordinance.

B. If an applicant has received approval of a preliminary or final plan prior to the effective date of this Ordinance, the provisions of Section 310 of this Ordinance shall apply.
SECTION 904  ORDINANCE CONSTRUCTION

Nothing in this Ordinance shall be construed to affect any suit or proceeding pending in any court, or any rights or liability incurred, or any permit issued, or any approval granted, or any cause or causes of action existing prior to the enactment of this Ordinance.

SECTION 905  SEVERABILITY

The provisions of this Ordinance are severable, and if any section, sentence, clause, part, or provision hereof shall be held illegal, invalid or unconstitutional by any court of competent jurisdiction, such decision of the court shall not affect or impair the remaining sections, sentences, clauses, parts, or provisions of this Ordinance. It is hereby declared to be the intent of the Borough Council that this Ordinance would have been enacted if such illegal, invalid or unconstitutional section, sentence, clause, part, or provision had not been included herein.

SECTION 906  EFFECTIVE DATE

This Ordinance shall become effective upon enactment.

Ordained and enacted into law this 14th day of JANUARY, 2002.

Borough Council
Borough of Cornwall

ATTEST:  
Borough Secretary

Approved this 14th day of JANUARY, 2002.

Mayor
APPENDICES

1. Certificate of Accuracy (Plan)
2. Certification of Accuracy (Survey)
3. Storm Water Management Certification
4. Certificate of Ownership, Acknowledgment of Plan Offer and Dedication
5. Cornwall Borough Preliminary Plan Approval Certificate
6. Cornwall Borough Final Plan Approval
7. Cornwall Borough Approval Certificate for a Lot Annexation Plan
8. Cornwall Borough Planning and Zoning Commission Review Certificate
9. Application for Consideration of a Pre-Application Review (Sketch Plan)
10. Application for Consideration of a Subdivision and/or Land Development Plan
11. Application for Consideration of a Modification
12. Request for Review of a Subdivision of Land Development Plan by the Lebanon County Planning Department
13. Notice of Acceptance of an Improvement Guarantee
14. Required Improvements Listing (form)
15. Notice of Completion and Approval of Improvements
16. Lot Annexation Plan Notation
17. Water Use Requirements
18. Standard Street Section and Curb and Sidewalk Details
19. Standard Parking Compound Details
20. Determination of Sight Distances
21. Rainfall Intensity-Duration-Frequency Chart
22. Runoff Coefficients “C” for Rational Formula
23. Runoff Curve Numbers “CN” for SCS Method
24. Time of Concentration Nomograph
APPENDIX NO. 1
CERTIFICATION OF ACCURACY (PLAN)

I hereby certify that, to the best of my knowledge, the plan shown and described hereon is true and correct to the accuracy required by the Cornwall Borough Subdivision and Land Development Ordinance.

_____________________, 20__  * ____________________________

*Signature and seal of a professional registered in the Commonwealth of Pennsylvania qualified to perform such duties and responsible for the preparation of the plan.

APPENDIX NO. 2
CERTIFICATION OF ACCURACY (SURVEY)

I hereby certify that, to the best of my knowledge, the survey shown and described hereon is true and correct to the accuracy required by the Cornwall Borough Subdivision and Land Development Ordinance.

_____________________, 20__  * ____________________________

*Signature and seal of a professional registered in the Commonwealth of Pennsylvania qualified to perform such duties and responsible for the preparation of the plan.
I hereby certify that, to the best of my knowledge, the storm drainage facilities shown and described hereon are designed in conformance with the storm water management requirements of Cornwall Borough.

____________________, 20__

*Signature and seal of a professional registered in the Commonwealth of Pennsylvania qualified to perform such duties and responsible for the preparation of the storm drainage plan.
APPENDIX NO. 4
CERTIFICATE OF OWNERSHIP, ACKNOWLEDGMENT OF PLAN
AND OFFER OF DEDICATION
INDIVIDUAL

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LEBANON

On this, the _____ day of ______________, 20___, before me, the undersigned officer, personally appeared __________________________, who being duly sworn according to law, deposes and says that he is the * __________________________ of the property shown on this plan, that the plan thereof was made at his direction, that he acknowledges the same to be his act and plan, that he desires the same to be recorded, and that all streets and other property identified as proposed public property (excepting those areas labeled "NOT FOR DEDICATION") are hereby dedicated to the public use. He also hereby acknowledges that this proposed subdivision or land development may be subject to the requirements of additional Borough, State and Federal regulations.

**

***

My Commission Expires _____________________, 20_______

* Identify Ownership or Equitable Ownership
** Signature of the Individual
*** Signature and Seal of Notary Public or Other Authorized to Acknowledge Deeds.
COPARTNERSHIP

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LEBANON

On this, the ___ day of _____________, 20 ___, before me, the undersigned officer, personally appeared __________________________, being the members of the firm of __________________________, who being duly sworn according to law, deposes and says that the copartnership is the ___________ of the property shown on this plan, that the plan thereof was made at its direction, that it acknowledges the same to be its act and plan and desires the same to be recorded, and that all streets and other property identified as proposed public property (excepting those areas labeled "NOT FOR DEDICATION") are hereby dedicated to the public use.

____________________________________

____________________________________

My Commission Expires ________________, 20 ___

* Identify Ownership or Equitable Ownership
** Signature of the Individual
*** Signature and Seal of Notary Public or Other Officer Authorized to Acknowledge Deeds.
APPENDIX NO. 4

CERTIFICATE OF OWNERSHIP, ACKNOWLEDGMENT OF PLAN
AND OFFER OF DEDICATION

CORPORATE

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF LEBANON

On this, the __________ day of ______________, 20 ___, before me, the undersigned officer, personally appeared ____________________________, being * __________________________ of ** __________________________, who being duly sworn according to law, deposes and says that the corporation is the *** __________________________ of the property shown on this plan, that he is authorized to execute said plan on behalf of the corporation, that the plan is the act and deed of the corporation, that the corporation desires the same to be recorded and on behalf of the corporation further acknowledges, that all streets and other property identified as proposed public property (excepting those areas labeled "NOT FOR DEDICATION") are hereby dedicated to the public use.

****

*****

******

My Commission Expires ____________________, 20 ______

* Individual's Title
** Name of Corporation
*** Identify Ownership or Equitable Ownership
**** Signature of Individual
***** Corporate Seal
****** Signature and Seal of Notary Public or Other Officer Authorized to Acknowledge Deeds.
APPENDIX NO. 5

CORNWALL BOROUGH COUNCIL
PRELIMINARY PLAN APPROVAL CERTIFICATE

At a meeting on __________________, 20____, the Cornwall Borough Council granted PRELIMINARY PLAN APPROVAL of this project, including the complete set of plans marked sheet(s) ______ through ______ which form a part of the application dated __________________, last revised __________________, and bearing Cornwall Borough File No. ________________. This plan may not be recorded in the office of the Lebanon County Recorder of Deeds.

* ___________________________________________ *

*Signatures of the President and Vice President or their designees.

APPENDIX NO. 6

CORNWALL BOROUGH COUNCIL
FINAL PLAN APPROVAL CERTIFICATE

At a meeting held on __________________, 20____, the Cornwall Borough Council approved this project including the complete set of plans and information that are filed with the Borough Council in File No. ________________, based upon its conformity with the standards of the Cornwall Borough Subdivision and Land Development Ordinance.

* ___________________________________________ *

*Signatures of the President and Vice President or their designees.
APPENDIX NO. 7

CORNWALL BOROUGH COUNCIL

APPROVAL CERTIFICATE FOR A (LOT ANNEXATION)/NATURAL SUBDIVISION) PLAN

This (lot annexation plan) / (natural subdivision plan), bearing Cornwall Borough File No.___, approved by the Cornwall Borough Council this ___ day of ____________, 20___.

* ____________________________  * ____________________________

*Signatures of the President and Vice President or their designees.

APPENDIX NO. 8

CORNWALL BOROUGH PLANNING AND ZONING COMMISSION

REVIEW CERTIFICATE

At a meeting held on ________________, 20___, the Cornwall Borough Planning and Zoning Commission reviewed this plan and a copy of the review comments is on file in the Borough office.

* ____________________________  * ____________________________

*Signatures of the Chairman and Secretary or their designees.
APPENDIX NO. 9

APPLICATION FOR CONSIDERATION FOR A PRE-APPLICATION REVIEW (SKETCH PLAN)

BOROUGH FILE NO.________________________

DATE OF RECEIPT/FILING____________________
(FOR BOROUGH USE ONLY)

The undersigned hereby applies for informal review under the Cornwall Borough Subdivision and Land Development Ordinance of 2002 for the (Subdivision) (Land Development) Plan submitted herewith and described below:

1. **Plan Name:** __________________________________________________________
   
   **Plan No.:** _______ **Plan Date:** ________________________________

2. **Project Location:** ______________________________________________________

3. **Name** of **Property** **Owner(s):**

   __________________________________________________________
   
   **Address:**
   
   __________________________________________________________
   
   **Phone No.:** ______________________

4. **Proposed Land Use and Number of Lots and/or Units (indicate answer by number):**
   
   _____ Single-Family (Detached) _____ Commercial
   
   _____ Multi-Family (Attached-Sale) _____ Industrial
   
   _____ Multi-Family (Attached-Rent) _____ Institutional

5. **Total Acreage:** ______________________

6. **Name of Applicant (if other than owner):** ________________________________

   __________________________________________________________
   
   **Address:**
   
   __________________________________________________________
   
   **Phone No.:** ______________________

7. **Lebanon County Assessment Office Map and Parcel Numbers:** ________________

Cornwall Borough Subdivision and Land Development Ordinance
8. Firm Which Prepared Plan: ________________________________
   Address: ____________________________________________
   Phone No.: ____________________
   Person Responsible for Plan: _____________________________________

9. Type of water supply proposed:
   _____ Community
   _____ Individual

10. Type of sanitary sewer disposal proposed:
    _____ Community
        _____ Individual

11. Approximate Lineal feet of new street _______________________

12. Acreage proposed for park or other public use:
    _______________________________________

I am aware that I cannot commence development of the property until a final plan has been recorded in the office of the Recorder of Deeds.

__________________________  __________________________
Date                         Signature of Landowner or Applicant
APPENDIX NO. 10

APPLICATION FOR CONSIDERATION FOR A SUBDIVISION
AND/OR LAND DEVELOPMENT PLAN

BOROUGH FILE NO.__________________________

DATE OF RECEIPT/FILING ___________________
(FOREBOROUGH USE ONLY)

The undersigned hereby applies for approval under the Cornwall Borough Subdivision and
Land Development Ordinance of 2002 for the (Subdivision) (Land Development) Plan submitted
herewith and described below:

1. Plan Name: _____________________________________________________________
   Plan No.: _______  Plan Date: _____________________________________________

2. Project Location: _______________________________________________________

3. Name of Property Owner(s): _____________________________________________
   Address:________________________________________________________________
   Phone No.: ______________________________

4. Land Use and Number of Lots and/or Units (indicate answer by number):
   _____ Single-Family (Detached)      _____ Commercial
   _____ Multi-Family (Attached-Sale)  _____ Industrial
   _____ Multi-Family (Attached-Rent)  _____ Institutional

5. Total Acreage: ______________

6. Application Classification: (Check One)
   _____ Preliminary Plan      _____ Final Plan
   _____ Lot Annexation Plan    _____ Natural Subdivision Plan
   _____ Revised Subdivision and/or Land Development Plan

7. Lebanon County Assessment Office Map and Parcel Numbers: ____________________________

______________________________
Cornwall Borough Subdivision and Land Development Ordinance
8. Name of Applicant (if other than owner): ____________________________________________

Address: _______________________________________________________________________

Phone No.: ___________________________________________________________________


Address: _______________________________________________________________________

Phone No.: ___________________________________________________________________

Person Responsible for Plan: ____________________________________________________________

10. Have all zoning approvals been obtained in accordance with Section 309 (special exception, conditional use, variance, zoning amendment)? Please specify approvals: ____________________________________________________________

11. Type of water supply proposed:

   ____ Public
   ____ Community
   ____ Individual

12. Type of sanitary sewer disposal proposed:

   ____ Public            ____ Live
   ____ Community        ____ Capped
   ____ Individual

13. Lineal feet of new street: ____________________________________________

    Identify all street(s) not proposed for dedication:

    _______________________________________________________________________ 

    _______________________________________________________________________

14. Acreage proposed for park or other public use:

    _______________________________________________________________________

Cornwall Borough Subdivision and Land Development Ordinance
15. Have plans been submitted to the Lebanon County Planning Department? __________

Date: __________________________

I am aware that I cannot commence development of the property until a plan has been recorded in the office of the Recorder of Deeds. By signing this application, I certify that all facts in the application and all accompanying documentation are true and correct. This application is being made by me to induce official action on the part of Cornwall Borough, and I understand that any false statements made herein are being made subject to the penalties of 18 Pa. C.S. Section 4904 relating to unsworn falsification to authorities.

Date________________________________ Signature of Landowner or Applicant
APPENDIX NO. 11
APPLICATION FOR CONSIDERATION OF A MODIFICATION

BOROUGH FILE NO.________________________

DATE OF RECEIPT/FILING____________________
(FOR BOROUGH USE ONLY)

The undersigned hereby applies for approval of modification, submitted herewith and described below:

1. Name of Project: ________________________________

2. Project Location: ________________________________

3. Name of Property Owner(s): ________________________________
   Address: _______________________________________________
   Phone No.: __________________

4. Name of Applicant (if other than owner): ________________________________
   Address: _______________________________________________
   Phone No.: __________________

5. Specify section(s) of the Cornwall Borough Subdivision and Land Development
   Ordinance for which modification is requested: ________________________________
   _______________________________________________
   _______________________________________________
   _______________________________________________

6. The proposed alternative to the requirement: ________________________________
   _______________________________________________
   _______________________________________________
   _______________________________________________
7. Justification for the modification (See Ordinance Section 308):

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

8. Identification of plans, reports or supplementary data that is part of the application:

________________________________________________________________________

The undersigned hereby represents that, to the best of his knowledge and belief, all information listed above is true, correct and complete.

Date ___________________________ Signature ___________________________
APPENDIX NO. 12

TO: Lebanon County Planning Department
    Municipal Building
    400 S. Eighth Street
    Lebanon, Pennsylvania 17042

FROM: Cornwall Borough

SUBJECT: Request for Review of a Subdivision or Land Development Plan

We do hereby request the Lebanon County Planning Department to review the enclosed subdivision or land development plan in accordance with the Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended, Article V, Section 502.

Plan Identification (check or complete the following items):

Municipal Plan No. (if any) __________________

Plan Name: _______________________________________________________

____ Preliminary Plan

____ Final Plan

____ Other (specify) ____________________________

Name of Landowner(s): _____________________________________________

Address: _________________________________________________________

Additional Comments: _____________________________________________

Fee: Check #: ___________ Amount: ____________________________

_______________________________________________________________
Signature

_______________________________________________________________
Print Full Name

_______________________________________________________________
Title

Cornwall Borough
36 Burd Coleman Road
Cornwall, PA 17016
(717) 274-3436

Cornwall Borough Subdivision and Land Development Ordinance
NOTICE OF ACCEPTANCE OF AN IMPROVEMENT GUARANTEE

DATE: ______________________

Cornwall Borough Council
36 Burd Coleman Road
Cornwall, PA 17016

SUBJECT: Acceptance of Improvement Guarantee

Dear Supervisors:

The developer of the project known as ______________ to assure the proper installation of the following improvements:

- ___ Street Construction
- ___ Curbs
- ___ Storm Sewer Facilities
- ___ Water Supply Facilities
- ___ Survey Monuments
- ___ Street Trees
- ___ Other (specify)
- ___ Street Signs
- ___ Sidewalks
- ___ Sanitary Sewer Facilities
- ___ Fire Hydrants
- ___ Buffer Planting
- ___ Traffic Control
- ___ Other (specify)

This form of improvement guarantee was accepted by formal action of the Board at a meeting on ______________, 20__.

Authorized Signature

Cornwall Borough Subdivision and Land Development Ordinance
APPENDIX NO. 14
REQUIRED IMPROVEMENTS LISTING

Plan Name: _____________________________
Plan Location: ___________________________

The undersigned developer hereby agrees to provide throughout his development, as shown on the plan of _____________________________, dated ____________ the following improvements:

<table>
<thead>
<tr>
<th>Improvements</th>
<th>Quantity</th>
<th>Units</th>
<th>Price Per Unit</th>
<th>Construction Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Grading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street Base</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street Paving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street Signs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curbs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidewalks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storm Sewer Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitary Sewer Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Supply Facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Hydrants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey Monuments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buffer Planting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Street Trees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traffic Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ESTIMATED COST: $__________
CONTINGENCIES (10%): $__________
INSPECTION FEE DEPOSIT (5%): $__________
REQUIRED ESCROW: $__________

SIGNATURE OF DEVELOPER _____________________________

Cornwall Borough Subdivision and Land Development Ordinance
APPENDIX NO. 15

NOTICE OF COMPLETION AND APPROVAL OF IMPROVEMENTS

DATE: ____________________________

Cornwall Borough Council
36 Burd Coleman Road
Cornwall, PA 17016

SUBJECT: Approval of Improvements

Dear Borough Council:

The developer of the project known as __________________________ has completed the installation of the following improvements in accordance with the improvement construction plan:

_____ Sanitary Sewer Facilities
_____ Water Supply Facilities
_____ Fire Hydrants
_____ Other (specify)

Authorized Signature

________________________________________
Print Full Name

________________________________________
Title

________________________________________
Approval Authority

________________________________________
Address

________________________________________
Phone No.
NOTE PROHIBITING SEPARATE CONVEYANCE OF LOT A:

By executing this Plan, all landowners agree, for landowners and the personal representatives, heirs, successors and assigns of landowners, that the lot identified as (Lot A) on the Plan may not be separately conveyed to any person other than to the adjoining landowner identified on this Plan. Any other conveyance of (Lot A) on the Plan shall be considered a violation of the applicable Subdivision and Land Development Ordinance and shall be subject to all penalties and remedies authorized by the Pennsylvania Municipalities Planning Code and the applicable Subdivision and Land Development Ordinance. All landowners agree, for landowners and the personal representatives, heirs, successors and assigns of landowners, that Cornwall Borough shall not be required to issue any zoning permits or any building permits or any other permit or approval to authorize erection of any structure or structures upon (Lot A) until such time as the landowner or the personal representatives, heirs, successors and assigns of the landowner of such Lot has received all approvals required for the installation of sewage disposal facilities on such Lot and has received any subdivision or land development approval necessary for the separation of such Lot or the erection of more than one principal structure. Landowners and/or the personal representatives, heirs, successors and assigns of landowners shall bear all costs of obtaining any approvals required for development proposed and shall bear all risks that such approvals may not be able to be obtained. Lots and/or Units (indicate answer by number):
The flow figures in these tables are peak daily flows for the design of community on lot sewage systems. These flow figures are not intended to be used for the calculation of flows for the design of community sewerage systems or for the allocation of flows related to community sewerage systems. Design and permit sewage flows for a community sewerage system are to be calculated using the procedures established in the Department's "Domestic Wastewater Facilities Manual."

### Type of Establishment

#### Residential

<table>
<thead>
<tr>
<th>Establishment</th>
<th>Gallons/Unit/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotels and motels</td>
<td>100</td>
</tr>
<tr>
<td>Multiple family dwellings and apartments, including</td>
<td>400</td>
</tr>
<tr>
<td>townhouses, duplexes and condominiums</td>
<td></td>
</tr>
<tr>
<td>Rooming houses (per unit)</td>
<td>200</td>
</tr>
<tr>
<td>Single family residences</td>
<td>400*</td>
</tr>
</tbody>
</table>

*For units of 3 bedrooms or less; for each bedroom over 3, add 100 gallons.

#### Commercial

<table>
<thead>
<tr>
<th>Establishment</th>
<th>Gallons/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airline catering (per meal served)</td>
<td>3</td>
</tr>
<tr>
<td>Airports (per passenger—not including food)</td>
<td>5</td>
</tr>
<tr>
<td>Airports (per employee)</td>
<td>10</td>
</tr>
<tr>
<td>One licensed operator Beauty shops</td>
<td>200</td>
</tr>
<tr>
<td>Bus service areas not including food (per patron and employee)</td>
<td>5</td>
</tr>
<tr>
<td>Country clubs not including food (per patron and employee)</td>
<td>30</td>
</tr>
<tr>
<td>Drive-in theaters (not including food—per space)</td>
<td>10</td>
</tr>
<tr>
<td>Factories and plants exclusive of industrial wastes (per employee)</td>
<td>35</td>
</tr>
<tr>
<td>Laundries, self-service (gallons/washer)</td>
<td>400</td>
</tr>
<tr>
<td>Mobile home parks, independent (per space)</td>
<td>400</td>
</tr>
<tr>
<td>Movie theaters (not including food, per auditorium seat)</td>
<td>5</td>
</tr>
<tr>
<td>Offices (per employee)</td>
<td>10</td>
</tr>
<tr>
<td>Restaurants (toilet and kitchen wastes per patron)</td>
<td>10</td>
</tr>
<tr>
<td>(Additional for bars and cocktail lounges)</td>
<td>2</td>
</tr>
<tr>
<td>Restaurants (kitchen and toilet wastes, single-service utensils/person)</td>
<td>8.5</td>
</tr>
<tr>
<td>Restaurants (kitchen waste only, single-service utensils/patron)</td>
<td>3</td>
</tr>
</tbody>
</table>

Cornwall Borough Subdivision and Land Development Ordinance
### Commercial

<table>
<thead>
<tr>
<th>Description</th>
<th>Gallons/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stores (per public toilet)</td>
<td>400</td>
</tr>
<tr>
<td>Warehouses (per employee)</td>
<td>35</td>
</tr>
<tr>
<td>Work or construction camps (semi permanent) with flush toilets (per employee)</td>
<td>50</td>
</tr>
<tr>
<td>Work or construction camps (semi permanent) without flush toilets (per employee)</td>
<td>35</td>
</tr>
</tbody>
</table>

### Institutional

<table>
<thead>
<tr>
<th>Description</th>
<th>Gallons/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Churches (per seat)</td>
<td>3</td>
</tr>
<tr>
<td>Churches (additional kitchen waste per meal served)</td>
<td>3</td>
</tr>
<tr>
<td>Churches (additional with paper service per meal served)</td>
<td>1.5</td>
</tr>
<tr>
<td>Hospitals (per bed space, with laundry)</td>
<td>300</td>
</tr>
<tr>
<td>Hospitals (per bed space, without laundry)</td>
<td>220</td>
</tr>
<tr>
<td>Institutional food service (per meal)</td>
<td>20</td>
</tr>
<tr>
<td>Institutions other than hospitals (per bed space)</td>
<td>125</td>
</tr>
<tr>
<td>Schools, boarding (per resident)</td>
<td>100</td>
</tr>
<tr>
<td>Schools, day (without cafeterias, gyms or showers per student and employee)</td>
<td>15</td>
</tr>
<tr>
<td>Schools, day (with cafeterias, but no gym or showers per student and employee)</td>
<td>20</td>
</tr>
<tr>
<td>Schools, day (with cafeterias, gym and showers per student and employee)</td>
<td>25</td>
</tr>
</tbody>
</table>

### Recreational and Seasonal

<table>
<thead>
<tr>
<th>Description</th>
<th>Gallons/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camps, day (no meals served)</td>
<td>10</td>
</tr>
<tr>
<td>Camps, hunting and summer residential (night and day) with limited plumbing including water-carried toilet wastes (per person)</td>
<td>50</td>
</tr>
<tr>
<td>Campgrounds, with individual sewer and water hookup (per space)</td>
<td>100</td>
</tr>
<tr>
<td>Campgrounds with water hookup only and/or central comfort station which includes water-carried toilet wastes (per space)</td>
<td>50</td>
</tr>
<tr>
<td>Fairgrounds and parks, picnic—with bathhouses, showers, and flush toilets (per person)</td>
<td>15</td>
</tr>
<tr>
<td>Fairgrounds and parks, picnic (toilet wastes only, per person)</td>
<td>5</td>
</tr>
<tr>
<td>Swimming pools and bathhouses (per person)</td>
<td>10</td>
</tr>
</tbody>
</table>

APPENDIX NO. 18
STANDARD STREET SECTION AND CURB AND SIDEWALK DETAILS

Cornwall Borough Subdivision and Land Development Ordinance
COLLECTOR STREET CROSS SECTION
NOT TO SCALE

TYPICAL LOCAL STREET CROSS SECTION
NOT TO SCALE
CURB LINE
(DIMENSION REFERENCE)

FINISHED GRADE

1/4" R

3/4" RADIUS

18"

PAVING SECTION

CLASS A CEMENT CONCRETE

4" COURSE AGGREGATE
2A MATERIAL

VERTICAL CURB DETAIL
NOT TO SCALE

BROOM FINISH

6"X6" W2.9XW2.9 WWF
(At Driveways)

CLASS A CEMENT CONCRETE
(See Note Below)

2" MIN. CLEARANCE

COMPACTED SUBGRADE

4" COURSE AGGREGATE
2A MATERIAL
(6" At Driveways)

NOTE:
SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 4" WHERE USED SOLELY FOR PEDESTRIAN TRAFFIC AND A MINIMUM THICKNESS OF 6" AT ALL DRIVEWAYS.

CONCRETE WALK DETAIL
NOT TO SCALE
NOTES:

1. DEPRESSED CURB LOCATIONS TO BE CORRELATED TO EXISTING DRIVEWAYS AND AS REQUESTED BY PROPERTY OWNERS.

2. EXPANSION MATERIAL SHALL BE PLACED EVERY 20'.

3. WELDED WIRE FABRIC 6 X 6 — W2.9 X W2.9 SHALL BE PLACED IN THE SIDEWALK AT DRIVEWAY LOCATIONS AND THE DEPTH OF SIDEWALK INCREASED TO SIX INCHES (6').

TYPICAL DRIVEWAY DEPRESSED CURB
NOTES:
1. MIN. 4'-0" WIDE SIDEWALK
2. SIDEWALK SLOPE NOT TO EXCEED 1/4" PER FT.
3. PROVIDE DEPRESSED CURBS AT INTERSECTION
4. BROOMED NON-SKID SURFACE ON RAMP

HANDICAP RAMP DETAIL
HANDICAP RAMP CROSS SECTION

NOTE:
BROOED NON-SKID SURFACE ON RAMPs
APPENDIX NO. 19
STANDARD PARKING COMPOUND DETAILS

Cornwall Borough Subdivision and Land Development Ordinance
### FORMULA SIGHT DISTANCES (WHOLE FEET)

<table>
<thead>
<tr>
<th>Speed (V) (Miles Per Hour)</th>
<th>Grade (G) (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>147 146 144 143 142 141 140 139 138 137 136</td>
</tr>
<tr>
<td>30</td>
<td>196 194 192 190 188 186 184 182 180 179 177</td>
</tr>
<tr>
<td>35</td>
<td>249 246 243 239 237 234 231 229 226 224 222</td>
</tr>
<tr>
<td>40</td>
<td>314 309 304 300 296 292 288 284 281 278 274</td>
</tr>
<tr>
<td>45</td>
<td>384 377 370 364 359 353 348 343 339 335 330</td>
</tr>
<tr>
<td>50</td>
<td>462 453 445 437 429 422 416 409 403 398 393</td>
</tr>
<tr>
<td>55</td>
<td>539 528 519 508 499 491 483 475 468 461 455</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speed (V) (Miles Per Hour)</th>
<th>Grade (G) (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>147 149 150 152 154 155 157 160 162 164 167</td>
</tr>
<tr>
<td>30</td>
<td>196 199 202 204 207 211 214 218 222 226 231</td>
</tr>
<tr>
<td>35</td>
<td>249 253 257 261 255 270 275 280 286 292 299</td>
</tr>
<tr>
<td>40</td>
<td>314 319 325 331 338 345 353 361 370 379 390</td>
</tr>
<tr>
<td>45</td>
<td>384 381 399 407 416 425 436 447 459 473 487</td>
</tr>
<tr>
<td>50</td>
<td>462 472 482 493 505 518 531 547 563 581 601</td>
</tr>
<tr>
<td>55</td>
<td>539 550 563 576 590 606 623 641 661 683 707</td>
</tr>
</tbody>
</table>

Cornwall Borough Subdivision and Land Development Ordinance
APPENDIX NO. 21
RAINFALL INTENSITY-DURATION-FREQUENCY CHART
PA Region 4

<table>
<thead>
<tr>
<th>Storm Event</th>
<th>1-Yr</th>
<th>2-Yr</th>
<th>5-Yr</th>
<th>10-Yr</th>
<th>25-Yr</th>
<th>50-Yr</th>
<th>100-Yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time of Concentration (Minutes)</td>
<td>Rainfall Intensity (Inches/Hour)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5.21</td>
<td>5.80</td>
<td>6.39</td>
<td>6.90</td>
<td>7.60</td>
<td>8.20</td>
<td>9.00</td>
</tr>
<tr>
<td>2</td>
<td>4.66</td>
<td>5.27</td>
<td>5.92</td>
<td>6.43</td>
<td>7.10</td>
<td>7.81</td>
<td>8.61</td>
</tr>
<tr>
<td>3</td>
<td>4.24</td>
<td>4.83</td>
<td>5.52</td>
<td>6.04</td>
<td>6.68</td>
<td>7.37</td>
<td>8.15</td>
</tr>
<tr>
<td>4</td>
<td>3.91</td>
<td>4.48</td>
<td>5.18</td>
<td>5.70</td>
<td>6.31</td>
<td>6.97</td>
<td>7.71</td>
</tr>
<tr>
<td>5</td>
<td>3.65</td>
<td>4.19</td>
<td>4.89</td>
<td>5.41</td>
<td>5.99</td>
<td>6.61</td>
<td>7.32</td>
</tr>
<tr>
<td>6</td>
<td>3.42</td>
<td>3.94</td>
<td>4.63</td>
<td>5.15</td>
<td>5.71</td>
<td>6.29</td>
<td>6.97</td>
</tr>
<tr>
<td>7</td>
<td>3.23</td>
<td>3.73</td>
<td>4.40</td>
<td>4.92</td>
<td>5.46</td>
<td>6.00</td>
<td>6.66</td>
</tr>
<tr>
<td>8</td>
<td>3.06</td>
<td>3.55</td>
<td>4.19</td>
<td>4.72</td>
<td>5.23</td>
<td>5.75</td>
<td>6.38</td>
</tr>
<tr>
<td>9</td>
<td>2.92</td>
<td>3.38</td>
<td>4.01</td>
<td>4.53</td>
<td>5.02</td>
<td>5.52</td>
<td>6.13</td>
</tr>
<tr>
<td>10</td>
<td>2.79</td>
<td>3.24</td>
<td>3.84</td>
<td>4.36</td>
<td>4.84</td>
<td>5.31</td>
<td>5.90</td>
</tr>
<tr>
<td>11</td>
<td>2.67</td>
<td>3.11</td>
<td>3.69</td>
<td>4.21</td>
<td>4.67</td>
<td>5.12</td>
<td>5.69</td>
</tr>
<tr>
<td>12</td>
<td>2.56</td>
<td>2.99</td>
<td>3.56</td>
<td>4.07</td>
<td>4.51</td>
<td>4.95</td>
<td>5.50</td>
</tr>
<tr>
<td>13</td>
<td>2.47</td>
<td>2.89</td>
<td>3.43</td>
<td>3.94</td>
<td>4.36</td>
<td>4.79</td>
<td>5.33</td>
</tr>
<tr>
<td>14</td>
<td>2.38</td>
<td>2.79</td>
<td>3.32</td>
<td>3.81</td>
<td>4.23</td>
<td>4.64</td>
<td>5.16</td>
</tr>
<tr>
<td>15</td>
<td>2.30</td>
<td>2.70</td>
<td>3.21</td>
<td>3.70</td>
<td>4.10</td>
<td>4.51</td>
<td>5.01</td>
</tr>
<tr>
<td>16</td>
<td>2.23</td>
<td>2.62</td>
<td>3.11</td>
<td>3.60</td>
<td>3.99</td>
<td>4.38</td>
<td>4.87</td>
</tr>
<tr>
<td>17</td>
<td>2.16</td>
<td>2.54</td>
<td>3.02</td>
<td>3.50</td>
<td>3.88</td>
<td>4.26</td>
<td>4.74</td>
</tr>
<tr>
<td>18</td>
<td>2.09</td>
<td>2.47</td>
<td>2.94</td>
<td>3.41</td>
<td>3.77</td>
<td>4.15</td>
<td>4.62</td>
</tr>
<tr>
<td>19</td>
<td>2.03</td>
<td>2.40</td>
<td>2.86</td>
<td>3.32</td>
<td>3.68</td>
<td>4.05</td>
<td>4.50</td>
</tr>
<tr>
<td>20</td>
<td>1.98</td>
<td>2.34</td>
<td>2.78</td>
<td>3.24</td>
<td>3.59</td>
<td>3.95</td>
<td>4.39</td>
</tr>
<tr>
<td>21</td>
<td>1.93</td>
<td>2.28</td>
<td>2.71</td>
<td>3.16</td>
<td>3.50</td>
<td>3.86</td>
<td>4.29</td>
</tr>
<tr>
<td>22</td>
<td>1.88</td>
<td>2.22</td>
<td>2.65</td>
<td>3.08</td>
<td>3.42</td>
<td>3.77</td>
<td>4.19</td>
</tr>
<tr>
<td>23</td>
<td>1.83</td>
<td>2.17</td>
<td>2.59</td>
<td>3.01</td>
<td>3.34</td>
<td>3.69</td>
<td>4.10</td>
</tr>
<tr>
<td>24</td>
<td>1.79</td>
<td>2.12</td>
<td>2.53</td>
<td>2.95</td>
<td>3.27</td>
<td>3.61</td>
<td>4.02</td>
</tr>
<tr>
<td>25</td>
<td>1.74</td>
<td>2.06</td>
<td>2.47</td>
<td>2.89</td>
<td>3.20</td>
<td>3.53</td>
<td>3.93</td>
</tr>
<tr>
<td>26</td>
<td>1.71</td>
<td>2.03</td>
<td>2.42</td>
<td>2.83</td>
<td>3.13</td>
<td>3.46</td>
<td>3.85</td>
</tr>
<tr>
<td>27</td>
<td>1.67</td>
<td>1.99</td>
<td>2.37</td>
<td>2.77</td>
<td>3.07</td>
<td>3.40</td>
<td>3.78</td>
</tr>
<tr>
<td>28</td>
<td>1.63</td>
<td>1.95</td>
<td>2.32</td>
<td>2.71</td>
<td>3.01</td>
<td>3.33</td>
<td>3.71</td>
</tr>
<tr>
<td>29</td>
<td>1.60</td>
<td>1.91</td>
<td>2.28</td>
<td>2.66</td>
<td>2.95</td>
<td>3.27</td>
<td>3.64</td>
</tr>
<tr>
<td>30</td>
<td>1.57</td>
<td>1.87</td>
<td>2.24</td>
<td>2.61</td>
<td>2.90</td>
<td>3.21</td>
<td>3.58</td>
</tr>
<tr>
<td>31</td>
<td>1.54</td>
<td>1.84</td>
<td>2.20</td>
<td>2.56</td>
<td>2.85</td>
<td>3.16</td>
<td>3.51</td>
</tr>
<tr>
<td>32</td>
<td>1.51</td>
<td>1.80</td>
<td>2.16</td>
<td>2.52</td>
<td>2.80</td>
<td>3.10</td>
<td>3.45</td>
</tr>
<tr>
<td>33</td>
<td>1.48</td>
<td>1.77</td>
<td>2.12</td>
<td>2.47</td>
<td>2.75</td>
<td>3.05</td>
<td>3.40</td>
</tr>
<tr>
<td>34</td>
<td>1.45</td>
<td>1.74</td>
<td>2.08</td>
<td>2.43</td>
<td>2.70</td>
<td>3.00</td>
<td>3.34</td>
</tr>
<tr>
<td>35</td>
<td>1.43</td>
<td>1.71</td>
<td>2.05</td>
<td>2.39</td>
<td>2.66</td>
<td>2.95</td>
<td>3.29</td>
</tr>
<tr>
<td>36</td>
<td>1.40</td>
<td>1.68</td>
<td>2.02</td>
<td>2.35</td>
<td>2.61</td>
<td>2.91</td>
<td>3.24</td>
</tr>
<tr>
<td>37</td>
<td>1.38</td>
<td>1.66</td>
<td>1.98</td>
<td>2.31</td>
<td>2.57</td>
<td>2.86</td>
<td>3.19</td>
</tr>
<tr>
<td>38</td>
<td>1.36</td>
<td>1.63</td>
<td>1.95</td>
<td>2.27</td>
<td>2.53</td>
<td>2.82</td>
<td>3.14</td>
</tr>
<tr>
<td>39</td>
<td>1.33</td>
<td>1.60</td>
<td>1.92</td>
<td>2.24</td>
<td>2.49</td>
<td>2.78</td>
<td>3.10</td>
</tr>
<tr>
<td>40</td>
<td>1.31</td>
<td>1.58</td>
<td>1.90</td>
<td>2.20</td>
<td>2.45</td>
<td>2.74</td>
<td>3.05</td>
</tr>
<tr>
<td>41</td>
<td>1.29</td>
<td>1.56</td>
<td>1.87</td>
<td>2.17</td>
<td>2.42</td>
<td>2.70</td>
<td>3.01</td>
</tr>
<tr>
<td>42</td>
<td>1.27</td>
<td>1.53</td>
<td>1.84</td>
<td>2.14</td>
<td>2.38</td>
<td>2.66</td>
<td>2.97</td>
</tr>
<tr>
<td></td>
<td>1.02</td>
<td>1.04</td>
<td>1.06</td>
<td>1.08</td>
<td>1.10</td>
<td>1.12</td>
<td>1.14</td>
</tr>
<tr>
<td>-----</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>43</td>
<td>1.25</td>
<td>1.51</td>
<td>1.82</td>
<td>2.11</td>
<td>2.35</td>
<td>2.63</td>
<td>2.93</td>
</tr>
<tr>
<td>44</td>
<td>1.23</td>
<td>1.49</td>
<td>1.79</td>
<td>2.08</td>
<td>2.32</td>
<td>2.59</td>
<td>2.89</td>
</tr>
<tr>
<td>45</td>
<td>1.22</td>
<td>1.47</td>
<td>1.77</td>
<td>2.05</td>
<td>2.29</td>
<td>2.56</td>
<td>2.85</td>
</tr>
<tr>
<td>46</td>
<td>1.20</td>
<td>1.45</td>
<td>1.74</td>
<td>2.02</td>
<td>2.25</td>
<td>2.53</td>
<td>2.82</td>
</tr>
<tr>
<td>47</td>
<td>1.18</td>
<td>1.43</td>
<td>1.72</td>
<td>1.99</td>
<td>2.23</td>
<td>2.50</td>
<td>2.78</td>
</tr>
<tr>
<td>48</td>
<td>1.17</td>
<td>1.41</td>
<td>1.70</td>
<td>1.96</td>
<td>2.20</td>
<td>2.46</td>
<td>2.75</td>
</tr>
<tr>
<td>49</td>
<td>1.15</td>
<td>1.39</td>
<td>1.68</td>
<td>1.94</td>
<td>2.17</td>
<td>2.44</td>
<td>2.72</td>
</tr>
<tr>
<td>50</td>
<td>1.14</td>
<td>1.37</td>
<td>1.66</td>
<td>1.91</td>
<td>2.14</td>
<td>2.41</td>
<td>2.69</td>
</tr>
<tr>
<td>51</td>
<td>1.12</td>
<td>1.36</td>
<td>1.64</td>
<td>1.89</td>
<td>2.12</td>
<td>2.38</td>
<td>2.65</td>
</tr>
<tr>
<td>52</td>
<td>1.11</td>
<td>1.34</td>
<td>1.62</td>
<td>1.86</td>
<td>2.09</td>
<td>2.35</td>
<td>2.62</td>
</tr>
<tr>
<td>53</td>
<td>1.09</td>
<td>1.32</td>
<td>1.60</td>
<td>1.84</td>
<td>2.06</td>
<td>2.32</td>
<td>2.60</td>
</tr>
<tr>
<td>54</td>
<td>1.08</td>
<td>1.31</td>
<td>1.58</td>
<td>1.82</td>
<td>2.04</td>
<td>2.30</td>
<td>2.57</td>
</tr>
<tr>
<td>55</td>
<td>1.07</td>
<td>1.29</td>
<td>1.56</td>
<td>1.80</td>
<td>2.02</td>
<td>2.27</td>
<td>2.54</td>
</tr>
<tr>
<td>56</td>
<td>1.05</td>
<td>1.26</td>
<td>1.55</td>
<td>1.78</td>
<td>1.99</td>
<td>2.25</td>
<td>2.51</td>
</tr>
<tr>
<td>57</td>
<td>1.04</td>
<td>1.23</td>
<td>1.53</td>
<td>1.75</td>
<td>1.97</td>
<td>2.23</td>
<td>2.49</td>
</tr>
<tr>
<td>58</td>
<td>1.03</td>
<td>1.21</td>
<td>1.51</td>
<td>1.73</td>
<td>1.95</td>
<td>2.20</td>
<td>2.46</td>
</tr>
<tr>
<td>59</td>
<td>1.02</td>
<td>1.20</td>
<td>1.50</td>
<td>1.72</td>
<td>1.93</td>
<td>2.18</td>
<td>2.44</td>
</tr>
<tr>
<td>60</td>
<td>1.01</td>
<td>1.19</td>
<td>1.48</td>
<td>1.70</td>
<td>1.91</td>
<td>2.16</td>
<td>2.41</td>
</tr>
<tr>
<td>75</td>
<td>0.86</td>
<td>1.05</td>
<td>1.28</td>
<td>1.46</td>
<td>1.65</td>
<td>1.88</td>
<td>2.11</td>
</tr>
<tr>
<td>90</td>
<td>0.76</td>
<td>0.92</td>
<td>1.12</td>
<td>1.30</td>
<td>1.48</td>
<td>1.68</td>
<td>1.89</td>
</tr>
<tr>
<td>120</td>
<td>0.62</td>
<td>0.75</td>
<td>0.92</td>
<td>1.07</td>
<td>1.23</td>
<td>1.40</td>
<td>1.59</td>
</tr>
<tr>
<td>180</td>
<td>0.46</td>
<td>0.57</td>
<td>0.70</td>
<td>0.81</td>
<td>0.94</td>
<td>1.08</td>
<td>1.23</td>
</tr>
<tr>
<td>240</td>
<td>0.38</td>
<td>0.46</td>
<td>0.57</td>
<td>0.67</td>
<td>0.78</td>
<td>0.90</td>
<td>1.03</td>
</tr>
<tr>
<td>360</td>
<td>0.28</td>
<td>0.34</td>
<td>0.42</td>
<td>0.51</td>
<td>0.60</td>
<td>0.69</td>
<td>0.79</td>
</tr>
<tr>
<td>480</td>
<td>0.23</td>
<td>0.28</td>
<td>0.34</td>
<td>0.42</td>
<td>0.50</td>
<td>0.57</td>
<td>0.65</td>
</tr>
<tr>
<td>720</td>
<td>0.17</td>
<td>0.21</td>
<td>0.25</td>
<td>0.32</td>
<td>0.38</td>
<td>0.43</td>
<td>0.50</td>
</tr>
<tr>
<td>1080</td>
<td>0.12</td>
<td>0.15</td>
<td>0.19</td>
<td>0.24</td>
<td>0.29</td>
<td>0.33</td>
<td>0.38</td>
</tr>
<tr>
<td>1440</td>
<td>0.10</td>
<td>0.12</td>
<td>0.15</td>
<td>0.19</td>
<td>0.24</td>
<td>0.27</td>
<td>0.31</td>
</tr>
</tbody>
</table>
### Runoff Coefficients "C" for Rational Formula

<table>
<thead>
<tr>
<th>Soil Group</th>
<th>Land Use</th>
<th>Slope 0-2%</th>
<th>Slope 2-6%</th>
<th>Slope 6%+</th>
<th>Slope 0-2%</th>
<th>Slope 2-6%</th>
<th>Slope 6%+</th>
<th>Slope 0-2%</th>
<th>Slope 2-6%</th>
<th>Slope 6%+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultivated Land</td>
<td>winter conditions</td>
<td>.14</td>
<td>.23</td>
<td>.34</td>
<td>.21</td>
<td>.32</td>
<td>.41</td>
<td>.27</td>
<td>.37</td>
<td>.48</td>
</tr>
<tr>
<td></td>
<td>summer conditions</td>
<td>.10</td>
<td>.16</td>
<td>.22</td>
<td>.14</td>
<td>.20</td>
<td>.28</td>
<td>.19</td>
<td>.26</td>
<td>.33</td>
</tr>
<tr>
<td>Fallowed Fields</td>
<td>poor conditions</td>
<td>.12</td>
<td>.19</td>
<td>.28</td>
<td>.17</td>
<td>.25</td>
<td>.34</td>
<td>.23</td>
<td>.33</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>good conditions</td>
<td>.08</td>
<td>.13</td>
<td>.16</td>
<td>.11</td>
<td>.15</td>
<td>.21</td>
<td>.14</td>
<td>.19</td>
<td>.26</td>
</tr>
<tr>
<td>Forest/Woodland</td>
<td></td>
<td>.08</td>
<td>.11</td>
<td>.14</td>
<td>.10</td>
<td>.14</td>
<td>.18</td>
<td>.12</td>
<td>.16</td>
<td>.20</td>
</tr>
<tr>
<td>Grass Areas</td>
<td>good conditions</td>
<td>.10</td>
<td>.16</td>
<td>.20</td>
<td>.14</td>
<td>.19</td>
<td>.26</td>
<td>.18</td>
<td>.22</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>average conditions</td>
<td>.12</td>
<td>.18</td>
<td>.22</td>
<td>.16</td>
<td>.21</td>
<td>.28</td>
<td>.20</td>
<td>.25</td>
<td>.34</td>
</tr>
<tr>
<td></td>
<td>poor conditions</td>
<td>.14</td>
<td>.21</td>
<td>.30</td>
<td>.18</td>
<td>.28</td>
<td>.37</td>
<td>.25</td>
<td>.35</td>
<td>.44</td>
</tr>
<tr>
<td>Impervious Areas</td>
<td></td>
<td>.90</td>
<td>.91</td>
<td>.92</td>
<td>.91</td>
<td>.92</td>
<td>.93</td>
<td>.92</td>
<td>.93</td>
<td>.94</td>
</tr>
<tr>
<td>Weighted Residential</td>
<td>Lot size 1/8 acre</td>
<td>.29</td>
<td>.33</td>
<td>.36</td>
<td>.31</td>
<td>.35</td>
<td>.40</td>
<td>.34</td>
<td>.38</td>
<td>.44</td>
</tr>
<tr>
<td></td>
<td>Lot size 1/4 acre</td>
<td>.26</td>
<td>.30</td>
<td>.34</td>
<td>.29</td>
<td>.33</td>
<td>.38</td>
<td>.32</td>
<td>.36</td>
<td>.42</td>
</tr>
<tr>
<td></td>
<td>Lot size 1/3 acre</td>
<td>.24</td>
<td>.28</td>
<td>.31</td>
<td>.26</td>
<td>.32</td>
<td>.35</td>
<td>.29</td>
<td>.35</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>Lot size 1/2 acre</td>
<td>.21</td>
<td>.25</td>
<td>.28</td>
<td>.24</td>
<td>.27</td>
<td>.32</td>
<td>.27</td>
<td>.31</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>Lot size 1 acre</td>
<td>.18</td>
<td>.23</td>
<td>.26</td>
<td>.21</td>
<td>.24</td>
<td>.30</td>
<td>.24</td>
<td>.29</td>
<td>.36</td>
</tr>
</tbody>
</table>

Cornwall Borough Subdivision and Land Development Ordinance
### Runoff Curve Numbers "CN" for SCS Method

<table>
<thead>
<tr>
<th>Soil Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Slope 0-2% 2-6% 6%+</td>
<td>Slope 0-2% 2-6% 6%+</td>
<td>Slope 0-2% 2-6% 6%+</td>
<td>Slope 0-2% 2-6% 6%+</td>
</tr>
<tr>
<td>Cultivated Land</td>
<td>Winter conditions</td>
<td>Summer conditions</td>
<td>Fallowed Fields</td>
<td>Forest/Woodland</td>
</tr>
<tr>
<td></td>
<td>48 60 75</td>
<td>62 73 82</td>
<td>64 74 81</td>
<td>56 59 73</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>35 51 58</td>
<td>48 55 65</td>
<td>57 65 73</td>
<td>64 69 79</td>
</tr>
<tr>
<td>2-6%</td>
<td>45 54 65</td>
<td>56 63 73</td>
<td>64 74 81</td>
<td>69 77 87</td>
</tr>
<tr>
<td>6%+</td>
<td>30 40 43</td>
<td>42 46 50</td>
<td>45 50 53</td>
<td>62 63 79</td>
</tr>
<tr>
<td>Fallowed Fields</td>
<td>Poor conditions</td>
<td>Good conditions</td>
<td>Average conditions</td>
<td>Poor conditions</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>45 53 58</td>
<td>48 54 63</td>
<td>56 59 73</td>
<td>62 63 79</td>
</tr>
<tr>
<td>2-6%</td>
<td>35 51 53</td>
<td>48 54 63</td>
<td>56 59 73</td>
<td>62 63 79</td>
</tr>
<tr>
<td>6%+</td>
<td>45 53 58</td>
<td>56 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>Fallowing Fields</td>
<td>Poor conditions</td>
<td>Good conditions</td>
<td>Average conditions</td>
<td>Poor conditions</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>45 53 58</td>
<td>56 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>2-6%</td>
<td>35 51 53</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>6%+</td>
<td>45 53 58</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>Forest/Woodland</td>
<td>Poor conditions</td>
<td>Good conditions</td>
<td>Average conditions</td>
<td>Poor conditions</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>45 53 58</td>
<td>56 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>2-6%</td>
<td>35 51 53</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>6%+</td>
<td>45 53 58</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>Grass Areas</td>
<td>Poor conditions</td>
<td>Good conditions</td>
<td>Average conditions</td>
<td>Poor conditions</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>45 53 58</td>
<td>56 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>2-6%</td>
<td>35 51 53</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>6%+</td>
<td>45 53 58</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>Impervious Areas</td>
<td>Poor conditions</td>
<td>Good conditions</td>
<td>Average conditions</td>
<td>Poor conditions</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>45 53 58</td>
<td>56 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>2-6%</td>
<td>35 51 53</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>6%+</td>
<td>45 53 58</td>
<td>60 67 77</td>
<td>66 74 85</td>
<td>73 81 90</td>
</tr>
<tr>
<td>Weighted Residential</td>
<td>Lot size 1/8 acre</td>
<td>Lot size 1/4 acre</td>
<td>Lot size 1/3 acre</td>
<td>Lot size 1/2 acre</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>71 75 78</td>
<td>74 76 82</td>
<td>78 80 87</td>
<td>81 83 90</td>
</tr>
<tr>
<td>2-6%</td>
<td>62 67 71</td>
<td>66 69 76</td>
<td>67 69 76</td>
<td>75 78 88</td>
</tr>
<tr>
<td>6%+</td>
<td>59 65 69</td>
<td>64 66 74</td>
<td>65 66 75</td>
<td>74 77 87</td>
</tr>
<tr>
<td>Slope 0-2%</td>
<td>57 63 68</td>
<td>62 64 73</td>
<td>63 65 73</td>
<td>72 76 86</td>
</tr>
<tr>
<td>2-6%</td>
<td>55 62 67</td>
<td>61 63 72</td>
<td>61 64 72</td>
<td>71 75 85</td>
</tr>
</tbody>
</table>
APPENDIX NO. 24
TIME OF CONCENTRATION NOMOGRAPH
(for use with the Rational Method)
APPENDIX NO. 25
BEST MANAGEMENT PRACTICES (BMP) DESIGN DETAILS
CHART A

STORAGE REQUIREMENTS

% IMPERVIOUS

STORAGE REQUIREMENT (CF per acre)
CHART B

STORAGE REQUIREMENT ADJUSTMENT FOR FILTER STRIP/GRASS SWALE EFFECTIVENESS

EXAMPLE:
100' Filter Strip
Reduction 40%

FLOW LENGTH (FILTER STRIP/SWALE FLOW)

RESIDENTIAL/AGRICULTURAL USES

COMMERCIAL/INDUSTRY USES
FILTER STRIP/GRASS SWALE

Filter Strip must be contiguous to impervious area.
GRASSED SWALE

INfiltration Trench

INFILTRATION BASIN

Figure 4.2-3: Schematic of extended detention pond with marsh


EXTENDED DRY DETENTION POND

WET POND

DRY WELL

WATER QUALITY INLET