

**CASCADE TOWNSHIP  
LYCOMING COUNTY, PENNSYLVANIA**

**SUBDIVISION AND LAND DEVELOPMENT  
ORDINANCE**

#22

Prepared by the  
**Cascade Township Planning Commission**

For Submission to the  
**Cascade Township Board of Supervisors**

With the Assistance of  
**LANDPLAN, INC.**  
Professional Planning & Development Consultant



**CASCADE TOWNSHIP**  
**SUBDIVISION AND LAND DEVELOPMENT ORDINANCE**

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## ARTICLE 1

### SHORT TITLE, AUTHORITY & PURPOSE

#### 100 SHORT TITLE

This Ordinance shall be known and cited as the "Cascade Township Subdivision and Land Development Ordinance of 2008" and is intended to serve as a comprehensive revision to the Cascade Township Subdivision and Land Development Ordinance enacted September 4, 1970, and as may have been subsequently amended.

#### 101 GENERAL LEGISLATIVE AUTHORITY

Section 501 of the PA Municipalities Planning Code (P.L. 1329, Act 170, as reenacted December 21, 1988, and as subsequently amended), provides that the governing body of a municipality may regulate subdivisions and land development within that municipality by enacting a subdivision and land development ordinance.

The Supervisors of Cascade Township, Lycoming County, PA, under the authority cited above do hereby ordain that this Ordinance was enacted to regulate subdivisions and land developments occurring within the Township in order to promote and protect the health, safety, and general welfare of the residents of the municipality, and to implement the purposes outlined in Section 104 of this Ordinance.

#### 102 ACTIVITIES TO BE REGULATED

Activities to be governed by this Subdivision and Land Development Ordinance shall be defined as follows:

A. "Subdivision" is defined as the division or redivision of a lot, tract, or parcel of land by any means into two or more lots, tracts, or 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 agricultural purposes into parcels of more than 10 acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

B. "Land Development" is defined as any of the following activities:

1. The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:

a. a group of two or more residential or nonresidential buildings, whether



proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or

- b. the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.

2. A subdivision of land.

### **103 EXEMPTIONS FROM REQUIREMENTS**

- A. Where small portions of existing lots, tracts or parcels of land are being acquired by governmental units for use in road improvements, these divisions of land may be exempt from the requirements of this Ordinance.
- B. Where a new deed is to be filed to correct an existing inaccurate parcel description, such revised deed shall be exempt from the requirements of this Ordinance, so long as the original inaccuracy was inadvertent and the correction does not significantly alter the legal descriptions of other properties in the vicinity.
- C. As established by Section 503 (1.1) of the PA Municipalities Planning Code, or as may hereafter be amended, the following activities shall be exempt from the land development requirements of this Ordinance.
  - 1. The conversion of an existing single-family detached dwelling or single-family semi-detached dwelling into not more than three (3) residential units, unless such units are intended to be a condominium;
  - 2. The addition of an accessory building, including farm buildings, on a lot(s) subordinate to an existing principal building; or
  - 3. The addition or conversion of buildings or rides within the confines of an enterprise which would be considered an amusement park. For purposes of this Sub-Section, an amusement park is defined as a tract or area used principally as a location for permanent amusement structures or rides. This exclusion shall not apply to newly acquired acreage by an amusement park until plans for the expanded area have been approved by proper authorities.
- D. Additional exceptions to the land development requirements are set forth in Section 601 B. of this Ordinance.

### **104 PURPOSE**

The Cascade Township Board of Supervisors hereby cite the following as the specific purposes for which this Ordinance was enacted.

- A. To accomplish orderly, efficient, and harmonious development of the Township.
- B. To protect and promote the health, safety, and general welfare of the citizens of the Township.
- C. To ensure coordination of subdivision and land development proposals with municipal public improvement plans and programs.
- D. To secure the protection of soil and water resources and natural drainageways.
- E. To facilitate the safe and efficient movement of people and goods through the Township.
- F. To ensure equitable processing of all subdivision and land development plans by providing uniform standards and procedures.
- G. To encourage the utilization of flood hazard areas in a manner that will not increase the flood hazard.

#### **105 APPLICABILITY AND JURISDICTION**

Any person, partnership or corporation intending to subdivide or develop property in Cascade Township shall prepare plans in accordance with the standards contained in this Ordinance. Such plans and all required documentation shall be submitted to the Cascade Township Planning Commission for review and to the Township Supervisors for approval or disapproval, as per the requirements of this Ordinance. The Supervisors shall consider all review comments and recommendations received prior to taking action on a proposed subdivision or land development. The Supervisors shall however, have full authority to approve or disapprove all such plans or proposals. (See also Section 402 of this Ordinance for specific plan processing details.)

#### **106 AUTHORITY OF COUNTY PLANNING COMMISSION**

Copies of all subdivision and land development plans for proposals to be located within Cascade Township shall be forwarded or delivered, upon receipt by the municipality, to the Lycoming County Planning Commission for review and comment. The Supervisors shall not act on such proposal until receipt of the County's comments or until the expiration of 30 days from the date such proposal was forwarded or delivered to the County Planning Commission. (See also Section 402 B.2 of this Ordinance for additional procedural details of this process.)

#### **107 INTERPRETATION**

The provisions of this Ordinance shall be held to be minimum requirements to meet the purposes stated herein. Where the provisions of this Ordinance impose greater restrictions than those of any statute, other ordinance or regulation (i.e. State enabling statutes, local zoning or building codes, etc.), the provisions of this

Ordinance shall prevail. Where the provisions of any statute, other ordinance or regulation impose greater restrictions than those of this Ordinance, the provisions of such statute, ordinance or regulation shall prevail.

**108 EFFECT**

No subdivision or land development of any lot, tract or parcel of land shall be made, no street, sanitary sewer, storm sewer, water main or other improvements in connection therewith shall be opened or dedicated for public use or travel, or for the common use of occupants of buildings abutting thereon, unless and until a final plat has been prepared in full compliance with the provisions of this Ordinance and such has been finally approved and recorded as provided and required herein.

**109 DISCLAIMER OF MUNICIPAL LIABILITY**

The grant of approval of a subdivision or land development plan or of any improvement installed as a condition thereof, shall not constitute a representation, guarantee, or warranty of any kind by Cascade Township nor by any official, employee or appointee thereof as to the practicability or safety of the proposed use, and shall create no liability upon the Township nor any of their officials, employees or appointees for any damage that may result pursuant thereto. The applicant shall in all cases rely on accepted engineering methods or building practices when designing a subdivision or land development or installing any required improvement. In addition, no such approval shall guarantee the accuracy of any survey or subdivision or land development plans prepared by a registered professional land surveyor, PA-licensed engineer or architect, as applicable.

## ARTICLE 2

### DEFINITIONS

#### 200 GENERAL INTERPRETATIONS

Unless the context requires otherwise, the following definitions shall be used in the interpretation of this Ordinance. In addition, the word "lot" includes the words "plot" and "parcel"; words in the present tense shall include the future; the singular shall include the plural and the plural the singular; the male gender shall include the female; the word "person" shall include a partnership or corporation, as well as an individual; and the terms "shall" and "will" are mandatory, the words "may" & "should" permissive.

#### 201 DEFINITIONS

ABUT: To physically touch or border upon; to share a common property line; or to be contiguous. The term "abut" implies a closer proximity than the term "adjacent".

ACCESS DRIVE: A means, other than a street, which provides vehicular access from a street to a lot or property; i.e. a driveway or private right-of-way.

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

AGENT: Any person, other than the landowner, who, acting under specific authorization of the landowner, submits subdivision or land development plans, data and/or applications to Cascade Township for the purpose of obtaining approval thereof. (See also APPLICANT and DEVELOPER.)

AGRICULTURAL BUILDING: A detached accessory structure, whether fully or partially enclosed, intended to provide housing, shelter, enclosure or support for animals, farm equipment, farm supplies or produce, grain, feed, etc. Such building shall be incidental and accessory to the type of farming activities conducted upon the property containing the building or on other properties owned or leased by the same farmer, and shall not be used for residential purposes.

AGRICULTURAL PURPOSES: The use of land for the purpose of producing agricultural commodities, which shall include but not be limited to: growing grains, fruits, vegetables, nursery plants, Christmas trees, or timber; raising poultry or livestock; or producing agricultural commodities through greenhouse production. In some instances the use of land for agricultural purposes may involve the construction of barns, silos, feed lots and/or farm-related accessory buildings.

AGRICULTURE: The use of land for agricultural purposes, including crop farming, dairying, pasturage, apiculture, horticulture, floriculture, viticulture, aquaculture, forestry, animal and poultry husbandry, and the accessory buildings or structures

used for packing, treating, or storing that which is produced; provided however, that the operation of any such accessory use shall be secondary to that of the normal agricultural activities.

**APPLICANT:** A landowner, subdivider, or developer, as hereinafter defined, who has filed an application for subdivision or land development, including his heirs, successors and assigns.

**APPLICATION:** The application form and all accompanying documentation required of an applicant by the requirements of this Ordinance for review and approval of a subdivision or land development proposal, whether preliminary or final in nature.

**AREA:** The surface included within a set of lines.

- a. **Area, Lot:** The area contained within the property lines of individual parcels of land shown on a subdivision or land development plan, excluding any area within a street right-of-way, but including the area of any easement.
- b. **Area, Site:** The total area of a proposed subdivision or land development, regardless of interior lot lines or proposed lots, streets or easements.

**AS-BUILT PLAN:** See PLAN, AS-BUILT.

**BERM:** See SHOULDER.

**BEST MANAGEMENT PRACTICES:** For the purposes of this Ordinance, best management practices (BMP's) shall be defined as the best, accepted technologies available to manage stormwater runoff, including traditional and non-traditional approaches.

**BLOCK:** An unit of land bounded by streets or a combination of streets & public land, rights-of-way, waterways or other barrier to the continuity of development, which area is normally somewhat square or rectangular in shape.

**BUFFER YARD:** Land area or yard space, either landscaped or planted, used to visibly separate one use from another or to shield or block noise, light, or other potential nuisance.

**BUILDING:** A structure, or part thereof, having walls and a roof which is used or intended to be used for the shelter, housing or enclosure of persons, animals or property. Included shall be all mobile or manufactured homes and trailers to be used for human habitation.

- a. **Building, Accessory:** A detached, subordinate building located on the same lot as the principal building, serving a purpose customarily incidental to the use of the principal building.



- b. Building, Principal: The main structure on a given lot, in which the primary use of the site is conducted.
- c. Building, Temporary: A building erected or placed for a fixed period of time or for the duration of a specific activity, where such building is removed at the end of that period or conclusion of the specified activity.

BUILDING SETBACK LINE: The line established by the required minimum front yard setback from the street right-of-way or front lot line for buildings or structures. The building setback line shall be the point at which minimum lot width is measured.

CAMPGROUND: A tract or tracts of land, or any portion thereof, used or intended to be used for the purpose of providing two or more spaces for recreational vehicles or tents for camping purposes, regardless of whether a fee charged for the leasing, renting or occupancy of such space. The term "campground" shall also include recreational vehicle parks.

CARTWAY: The surface of a street or alley available for vehicular traffic, including travelled lanes and on-street parking spaces, but excluding shoulders, curbs, sidewalks or drainage swales.

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

CHAIRMAN: The Chairman of the Cascade Township Supervisors or Township Planning Commission, as indicated.

CLEAR SIGHT TRIANGLE: An area of unobstructed vision at street or driveway intersections defined by lines of sight between points at a given distance from the intersection of the street and/or driveway centerlines.

COMMISSION OR PLANNING COMMISSION: The Cascade Township Planning Commission, unless specified otherwise.

CONDOMINIUM: 1) A building, or group of buildings, in which units are owned individually, and the structure, common areas and facilities are owned by all the owners on a proportional, undivided basis; or 2) A form of property ownership providing for individual ownership of a specific dwelling unit(s), together with an undivided, proportional interest in the land or other parts of the structure in common with other owners.

CONSERVATION DISTRICT: The Lycoming County Conservation District, unless specified otherwise.

CONTOUR: A line that connects the points on a land surface that have the same elevation.

COUNTY: Lycoming County, PA, unless specified otherwise.

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

CURB: A barrier, made of either concrete or bituminous material, marking the edge of a roadway or paved area of the cartway.

CUT: An excavation or material removed in excavation; also, the difference between a point on the original ground and a designated point of lower elevation on the final grade.

DEDICATION: The deliberate appropriation or donation of land or property by its owner for any general and public uses, reserving to himself no other rights than are compatible with the full exercise and enjoyment of the public uses to which the property has been designated. Acceptance of any such dedication by the Township is at the complete discretion of the Township Supervisors.

DEED: A legal document conveying ownership of real property.

DEED RESTRICTION: A restriction on the use of land set forth in the deed or instrument of conveyance. Said restriction usually runs with the title of the land and is binding upon subsequent owners of the property. It shall not be the responsibility of Cascade Township to enforce deed restrictions, unless the restriction(s) resulted as a condition or stipulation of subdivision or land development approval.

DENSITY: The number of families, individuals, dwelling units, or housing structures permitted to be constructed or situated on a specific unit of land.

DEP: The PA Department of Environmental Protection.

DETENTION BASIN: A basin or pond designed to retard storm water runoff by temporarily storing the runoff and releasing it at a predetermined rate.

DEVELOPER: Any landowner, agent of such landowner, or tenant with the permission of such landowner, who makes or causes to be made a subdivision of land or a land development. (See also AGENT and SUBDIVIDER.)

DEVELOPMENT: Any man-made change to improved or unimproved real estate, including but not limited to the construction, reconstruction, renovation, repair, expansion or alteration of buildings or other structures; the placement of mobile homes or manufactured housing; streets, or other paving; utilities; filling, grading, and excavation; mining; dredging; drilling operations; storage of equipment or materials; and the subdivision of land. (See also LAND DEVELOPMENT.)

DISTURBANCE ACTIVITY: Any activity that could effect earth resources, including the creation of impervious surfaces, earth disturbances (grading, filling, etc.), or timber harvesting.

**DRAINAGE:** 1) Surface water runoff; or 2) The removal of surface water or ground water from lands by drains, grading or other means which include runoff controls designed to minimize erosion and sedimentation during and after construction or development, preserve the water supply, or prevent or alleviate flooding.

**DRAINAGE AREA:** The entire region or area in which all of the surface and/or sub-surface runoff concentrates at a selected point or into a particular stream. (See also WATERSHED AREA.)

**DRAINAGE EASEMENT:** An easement required for the installation of stormwater management facilities or drainage swales, and/or required for the preservation or management of a natural stream or watercourse or other drainage facility.

**DRAINAGE FACILITY:** Any ditch, gutter, swale, pipe, culvert, storm sewer or other structure or facility designed, intended or constructed for the purpose of diverting surface waters from or carrying surface waters off streets, public rights-of-way, parks, recreation areas, or any part of any subdivision or land development. (See also STORMWATER MANAGEMENT FACILITY.)

**DRAINAGEWAY:** Any natural or artificial watercourse, trench, ditch, swale or similar depression into which surface water flows.

**DRIVEWAY:** A minor vehicular accessway providing access between a public or private street and a parking area or garage on a lot or property.

**DWELLING:** A building, structure, or other shelter designed for or occupied exclusively as the residence or sleeping place of one (1) or more persons.

- a. **Dwelling, Single-Family Attached:** A single dwelling unit from ground to roof with independent outside access and a portion on one (1) or two (2) walls in common with an adjoining dwelling unit(s); i.e. a townhouse unit. For the purposes of this Ordinance, a single-family attached dwelling structure shall contain a minimum of three (3) dwelling units.
- b. **Dwelling, Single-Family Detached:** A dwelling structure containing one (1) dwelling unit from ground to roof, having independent outside access and open space on all sides, including a mobile home as defined herein.
- c. **Dwelling, Two-Family:** A dwelling structure containing two (2) independent dwelling units which are entirely separated by vertical walls or horizontal floors, unpierced except for access to the outside or a common basement or cellar; i.e. a duplex.
- d. **Dwelling, Multi-Family:** A dwelling structure containing three (3) or more dwelling units, with or without independent access, excluding single-family attached dwelling structures as defined above, i.e. an apartment building. (See also MULTI-FAMILY HOUSING DEVELOPMENT.

DWELLING UNIT: One or more rooms in a dwelling structure designed for the use by one (1) or more individuals living together as a single housekeeping unit, with cooking, living, sanitary and sleeping facilities. Recreational vehicles, lodging facilities, rooming or boarding houses, or personal care or nursing homes shall not be considered as dwelling units for the purpose of this Ordinance.

EASEMENT: A defined right of use or privilege granted for a limited use of land, usually for a public or quasi-public purpose.

ELEVATION: 1) A vertical distance above or below a fixed reference level; or 2) A flat scale drawing of the front, rear or side of a building.

ENGINEER: 1) A professional engineer licensed in the Commonwealth of Pennsylvania; or 2) The professional engineer duly appointed as the engineer for Cascade Township as determined appropriate on a case-by-case basis.

EROSION: The removal of surface materials by the action of natural elements.

EROSION AND SEDIMENTATION CONTROL: Temporary and permanent actions or measures taken to reduce erosion and sedimentation and to control stormwater runoff during and after development activities, generally carried out as part of a plan developed prior to the initiation of the earth moving activity. (See also EROSION AND SEDIMENTATION CONTROL PLAN.)

EROSION AND SEDIMENTATION CONTROL PLAN: A plan that indicates necessary land treatment measures, including a schedule for installation, which will effectively minimize soil erosion and sedimentation.

EXCAVATION: Removal or recovery by means whatsoever of soil, rock, minerals, mineral substances or organic substances other than vegetation, from water or land on or beneath the surface thereof, or beneath the land surface, whether exposed or submerged.

FARM BUILDING: See AGRICULTURAL BUILDING.

FILL: 1) Any act by which earth, sand, gravel, rock or other material is placed, pushed, dumped, pulled, transported or moved to a new location above the natural surface of the ground or on top of the stripped surface and shall include the conditions resulting therefrom; 2) The difference in elevation between a point on the original ground and a designated point of higher elevation on the final grade; or 3) The material used to make a fill.

FINANCIAL SECURITY: A bond, certified check, irrevocable letter of credit, special savings or escrow account, or other form of monetary guarantee satisfactory to the Township which is intended to ensure that the developer installs all improvements required as a condition of final subdivision or land development plan approval or which is intended to guarantee the structural integrity of completed improvements. (See also IMPROVEMENT GUARANTEE.)

**FLOOD:** A temporary inundation of normally dry land areas.

- a. **Flood, One Hundred Year:** A flood that, on the average, is likely to occur once every 100 years, i.e. that has a one percent chance of occurring in any given year; for the purposes of this Ordinance, the Regulatory Flood.
- b. **Flood, Regulatory:** The flood that has been selected to serve as the basis upon which the floodplain management provisions of this Ordinance have been based; the 100 year flood.

**FLOOD FRINGE:** That portion of the 100 year floodplain outside the floodway, excluding areas shown as approximate 100 year flood zones on the Township's Official Flood Maps.

**FLOODPLAIN:** 1) A relatively flat or low land area adjoining a stream, river, or watercourse, which is subject to partial or complete inundation; or 2) An area subject to the unusual and rapid accumulation or runoff of surface waters from any source. The boundary of this area shall coincide with the boundary of the 100 year flood.

**FLOODPROOFING:** Any combination of structural and non-structural modifications or other changes or adjustments to buildings or their contents, undertaken to reduce or eliminate flood damage.

**FLOODWAY:** The designated area of a floodplain required to carry and discharge the flood waters of a 100 year flood.

**FULL-TIME RESIDENTIAL OCCUPANCY:** For the purposes of this Ordinance, full-time residential occupancy shall be defined as the continuous use of a lot or parcel for residential purposes. In general, uninterrupted occupancy of a lot or parcel for a period of more than one (1) month at any given time during a year shall be considered continuous use of the lot or parcel. (See also INTERMITTENT RECREATIONAL USE.)

**GENERAL FLOODPLAIN:** That portion of the floodplain for which no specific flood profiles exist and which is designated as approximated 100 year floodplain area on the Township's Official Flood Maps.

**GOVERNING BODY:** The Board of Supervisors of Cascade Township; the elected officials.

**GRADE:** The degree of rise or descent of a sloping surface.

- a. **Grade, Street:** The elevation of the centerline of an existing or proposed street; the percentage of slope.
- b. **Grade, Finished:** The final elevation of the ground surface after development.



**IDENTIFIED FLOODPLAIN AREA:** Those floodplain areas specifically identified on the official Flood Maps of Cascade Township as being inundated by the 100 year flood, including areas identified as Floodway, Flood Fringe and General Floodplain.

**IMPERVIOUS SURFACE:** 1) Any surface which reduces or prevents absorption of stormwater into previously undeveloped land; 2) The percentage of a lot that does not absorb precipitation. For the purposes of this Ordinance, all buildings, structures, parking areas, driveways, roads, sidewalks, and any areas in concrete, asphalt, or similar materials shall be considered impervious surfaces.

**IMPROVEMENT AGREEMENT:** A formal agreement executed by the developer and the Cascade Township Supervisors guaranteeing that the developer will install all improvements required as a condition of final approval of his subdivision or land development plans, and including financial security in an amount and form acceptable to the Township. (See Section 404 B.)

**IMPROVEMENT GUARANTEE:** Financial security filed by a developer with the Cascade Township Supervisors in an amount and form acceptable to the Township intended to guarantee the installation of any improvements required as a condition of final subdivision or land development plan approval. (See Section 404 C.)

**IMPROVEMENTS:** Those physical additions, installations or changes made to the land which are necessary to produce usable and desirable lots, including but not limited to, streets, curbs, sidewalks, street lights, water mains, sewer lines, fire hydrants, drainage and/or stormwater management facilities, bridges and culverts.

**INTERMITTENT RECREATIONAL USE:** For the purposes of this Ordinance, intermittent recreational use shall be defined as the use of a lot or parcel for other than full-time occupancy, for seasonal, leisure, or other recreational purposes. (See also FULL-TIME RESIDENTIAL OCCUPANCY.)

**LAND DEVELOPMENT:** Any of the following activities:

- a. The improvement of one (1) lot or two (2) or more contiguous lots, tracts or parcels of land for any purpose involving:
  - 1) a group of two or more residential or non-residential buildings, whether proposed initially or cumulatively, or a single non-residential building on a lot or lots regardless of the number of occupants or tenure; or
  - 2) the division or allocation of land or space, whether initially or cumulatively, between or among two (2) or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features; or
- b. a subdivision of land.

Provided however, that those activities specified listed in Section 503 (1.1) of the

PA Municipalities Planning Code and Section 103 C. of this Ordinance shall be exempted.

LAND DEVELOPMENT, COMMERCIAL: The subdivision or development of a tract of land into lots or spaces which are designed or intended for commercial purposes, including, but not limited to restaurants, shopping centers, motels, and other similar types of activities or services which generate revenue, whether or not for profit.

LAND DEVELOPMENT, INDUSTRIAL: The subdivision or development of a tract of land into lots or spaces which are designed or intended for industrial purposes, including, but not limited to industrial parks, multi-tenant buildings, and other similar types of development.

LAND DEVELOPMENT, INSTITUTIONAL: The subdivision or development of a tract of land into lots or spaces which are designed or intended for institutional purposes, including, but not limited to schools, hospitals, nursing or personal care homes, municipal buildings, or other similar types of development.

LAND DEVELOPMENT, RECREATIONAL: The subdivision or development of a tract of land into lots or spaces which are designed or intended for intermittent recreational purposes, including, but not limited to campgrounds, vacation home developments, private or public parks or playgrounds, or other similar types of development.

LAND DEVELOPMENT, RESIDENTIAL: The subdivision or development of a tract of land into lots or dwelling units which are designed or intended for full-time residential occupancy, including, but not limited to cluster developments, apartment buildings, townhouse structures, multi-family housing developments, or mobile home parks.

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

LEASE: A contract or agreement by which one conveys real estate for a specific term, for a specified rent.

LEVELING AREA: A safe stopping area at the intersection of streets or the intersection of a driveway and a street which is designed in accordance with the standards of this Ordinance.

LOADING SPACE: An off-street space, accessible from a street or alley, in a building or on a lot, designed or intended for the temporary parking of a commercial vehicle while loading or unloading merchandise or materials.

LOCATION MAP: A map sketch or diagram included on a subdivision or land

development plan showing the relation of the site to all road and highway systems and municipal boundaries in the area surrounding the proposed subdivision or development.

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

- a. Lot, Add-on: A parcel of ground located immediately adjacent to other property owned by the intended grantee, that is being added to the grantee's existing lot-of-record. Said lots shall not be subject to the minimum area or soils testing requirements of this Ordinance provided that the grantee is willing to combine both parcels into one description in a new deed OR indicate therein that both parcels are to be considered as one for subdivision purposes. (See Section 501 B.6.)
- b. Lot, Area: See AREA.
- c. Lot, Corner: A lot with two (2) adjacent sides abutting on public or private streets, or upon two (2) parts of the same street forming an interior angle of less than 135 degrees.
- d. Lot, Depth: The mean horizontal distance measured from the front lot line of a lot to its opposite rear lot line.
- e. Lot, Double Frontage: A lot which extends from one street along its front lot line to another street along its rear lot line, with frontage on both streets.
- f. Lot, Frontage: The length of the front lot line measured at the street right-of-way line.
- g. Lot, Interior: A lot other than a corner lot.
- h. Lot, Reverse Frontage: A double frontage lot extending between and having frontage on an arterial or collector street and on a local street, with vehicular access restricted to the latter, usually due to topographic constraints or safety considerations.
- i. Lot, Width: The horizontal distance measured between the side lot lines at the required front building setback line; in a case where there is only one side lot line, between such lot line and the opposite lot line.

LOT LINES: The property lines bounding the lot.

- a. Lot Line, Front: The line separating the lot from a street right-of-way; or where a lot has no road frontage, the line opposite the rear lot line.
- b. Lot Line, Rear: The lot line opposite and most distant from the front lot line.

c. Lot Line, Side: Any lot line other than a front or rear lot line.

LOT MARKER: See MARKER.

LOT OF RECORD: Any lot which individually or as a part of a subdivision has been recorded in the Office of the Recorder of Deeds of Lycoming County, PA.

MARKER: An iron rod or iron or steel bar set by a registered professional land surveyor to permanently mark the beginning and end of curves along property lines, angles in property lines, and lot corners.

MEDIATION: A voluntary negotiating process in which parties in a dispute mutually select a neutral mediator to assist them in jointly exploring and settling their differences, culminating in a written agreement which the parties themselves create and consider acceptable.

MOBILE HOME: A transportable, single family dwelling intended for permanent occupancy, contained in one (1) unit, or in two (2) or more units designed to be joined into one (1) 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 is constructed so that it may be used without a permanent foundation. For floodplain management purposes, the term shall also include manufactured housing, and park trailers, travel trailers, recreational vehicles and other similar units which are placed on a site for a period of time exceeding 180 consecutive days.

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

MOBILE HOME PAD: The part of an individual mobile home lot which has been reserved for the placement of the mobile home, appurtenant structures and connections.

MOBILE HOME PARK: A parcel or contiguous parcels of land which has been so designated and improved that it contains two (2) or more mobile home lots for the placement thereon of mobile homes. For floodplain management purposes, the term shall also include facilities for the placement of two (2) or more manufactured homes, or park trailers, travel trailers, recreational vehicles, or other similar units for a period of time exceeding 180 consecutive days. (See Article 7 of this Ordinance for specific mobile home park regulations.)

MODIFICATION: See WAIVER.

MULTI-FAMILY DWELLING: See DWELLING, MULTI-FAMILY.

MULTI-FAMILY HOUSING DEVELOPMENT: For the purposes of this Ordinance, a multi-family housing development shall be defined as a residential development

containing more than one (1) single-family attached dwelling structure or more than one (1) multi-family dwelling structure, or a combination thereof, on a single tract of ground.

MUNICIPALITY: Cascade Township, Lycoming County, PA.

OFF-STREET LOADING: See LOADING SPACE.

OFF-STREET PARKING: See PARKING AREA and PARKING SPACE.

OPEN SPACE: Space not occupied by a structure, open to the sky, and on the same lot with a building or structure.

- a. Open Space, Common: A parcel or parcels of land or an area of water, or a combination of land and water within a development site which is designed and intended for the use or enjoyment of the residents of the development, not including streets, off-street parking areas, and areas set aside for public or community facilities or use.
- b. Open Space, Public: Any land area set aside, dedicated, designated or reserved for public enjoyment.

PA DEP: The Pennsylvania Department of Environmental Protection.

PARCEL: A lot, plot, or tract of land.

PARKING AREA: Any public or private land area designated and used for parking of vehicles including parking lots, garages, private driveways and legally designated areas of public streets.

PARKING SPACE: An off-street area on a lot or in a parking area, designed or intended to be used for the parking of one (1) vehicle having direct, useable access to a street or road.

PAVEMENT: A sub-base, base, or surface course placed on a sub-grade to support traffic load.

PEDESTRIAN WALKWAY: A specified easement, walkway, path, sidewalk or other reservation which is designed and used exclusively by pedestrians.

PennDOT: The Pennsylvania Department of Transportation.

PERSON: An individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility or any legal entity whatsoever, which is recognized by law as the subject of rights and duties.

PLAN: A map or plat of a subdivision or land development, whether sketch, preliminary or final. (See also SUBDIVISION PLAN.) *(Continued on next page.)*



- a. Plan, Sketch: An informal plan, not necessarily to exact scale, indicating salient existing features of a tract and its surroundings and the general layout of a proposed subdivision or land development.
- b. Plan, Preliminary: A general subdivision or land development plan indicating the approximate proposed layout of a subdivision or land development as a basis for consideration prior to preparation of the final plan.
- c. Plan, Final: A complete and exact subdivision or land development plan prepared for official approval and recording as required by statute.

PLAN, AS-BUILT: A drawing(s), provided by the developer and attested or certified by a registered professional engineer and/or the Township Engineer, illustrating actual construction details for various development improvements, including the installation of streets or roads, sewer or water lines, stormwater management facilities, etc.

PLANNING COMMISSION: The Cascade Township Planning Commission, unless designated otherwise.

PLAT: The map or plan of a subdivision or land development, whether preliminary or final. (See also PLAN.)

PLOT: A parcel of land that can be identified and referenced to a recorded plat or map.

PRIVATE: Something owned, operated and supported by private individuals or a private corporation, rather than a government.

PROFESSIONAL CONSULTANTS: Persons who provide expert or professional advice, including, but not limited to architects, attorneys, certified public accountants, engineers, geologists, land surveyors, landscape architects, or planners.

PUBLIC: Something owned, operated and controlled by a government agency (Federal, State or local), including a corporation created by law for the performance of certain specialized governmental functions.

PUBLIC HEARING: A formal meeting held pursuant to public notice by any of the Township Supervisors, Township Planning Commission, or Township Zoning Hearing Board, intended to inform and obtain public comment, prior to taking certain actions as required by the PA Municipalities Planning Code.

PUBLIC MEETING: A forum held pursuant to notice under the act of July 3, 1986 (P.L. 388, No. 84), known as the Sunshine Act.

PUBLIC NOTICE: Notice published once each week for two (2) successive weeks in a newspaper of general circulation in the municipality. Such notice shall state

the date, time, and place of the hearing and the particular nature of the matter to be considered. The first publication shall not be more than 30 days and the second publication shall not be less than seven (7) days prior to the hearing date.

**RECREATIONAL VEHICLE:** A vehicle which is: i) built on a single chassis; ii) not more than 400 square feet, measured at the largest horizontal projections; iii) designed to be self-propelled or permanently towable by a light-duty truck; iv) is not designed for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

**RECREATIONAL VEHICLE PARK:** Any site upon which two (2) or more recreational vehicles are, or are intended to be, located. (See also CAMPGROUND.)

**RECREATION AREA:** Undeveloped land within a subdivision or development which is set aside or reserved for recreational use in accordance with the requirements of this Ordinance. (See Section 503.)

**REGULATORY FLOOD ELEVATION:** The 100 year flood elevation.

**RESIDENTIAL CLUSTER DEVELOPMENT:** A large-scale residential development in which individual dwelling units or buildings are grouped together rather than spread out on conventional lots. Modification or reduction of the minimum yard and lot size requirements are permitted in exchange for an equivalent amount of land in open space to be preserved for scenic, recreation, or conservation purposes. (See Section 603 B.)

**RESIDUAL PROPERTY:** The lot or parcel created through subdivision which is the remaining portion of the parent tract. The residual property shall be considered as an integral part of the proposed subdivision and shall be required to meet the standards of this Ordinance, where determined appropriate or necessary by the Township Planning Commission or Supervisors.

**RETENTION BASIN:** A pond, pool or basin used for the permanent storage of stormwater runoff.

**RIGHT-OF-WAY:** 1) A specific type of easement being limited to use for passage over another person's land; i.e. an easement for vehicular or public utility passage; or 2) A strip of land acquired by reservation, dedication, prescription, or condemnation which is occupied or intended to be occupied by a road, crosswalk, railroad, electric transmission line, oil or gas pipeline, water lines, sanitary sewer or storm sewer lines or other similar use.

**ROAD:** See STREET.

**RUNOFF:** The surface water discharge or rate of discharge of a given watershed after a rainfall or snowfall that does not enter the soil but runs off the surface of the land.

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

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

**SCREEN PLANTING:** The use of vegetative plants, such as trees or shrubs, as a barrier to visibility, glare, and noise between adjacent properties. Such plantings shall be of such species as will produce the desired visual screen and be of such density as is necessary to achieve the intended purpose.

**SEDIMENT:** Deposited silt that is being or has been moved by water or ice, wind, gravity or other means of erosion.

**SEDIMENTATION:** The process by which mineral or organic matter is accumulated or deposited by moving wind, water or gravity.

**SETBACK:** The horizontal distance between a structure and a street line or property line. (See also BUILDING SETBACK LINE.)

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

**SEWAGE FACILITY:** A system of sewage collection, conveyance, treatment and disposal which will prevent the discharge of untreated or inadequately treated sewage or other waste into waters of the Commonwealth or otherwise provide for the safe and sanitary treatment and disposal of sewage or other waste.

**SEWAGE SYSTEM, COMMUNITY:** A sewage facility, whether publicly or privately owned, for the collection of sewage from two (2) or more lots, or two (2) or more equivalent dwelling units and the treatment or disposal, or both, of the sewage on one (1) or more of the lots or at another site.

- a. **Sewage System, Community On-Lot:** A community sewage system which uses a system of piping, tanks or other facilities for collecting, treating and disposing of sewage into a subsurface soil absorption area or retaining tank.
- b. **Sewage System, Community Sewerage:** A community sewage system which uses a method of sewage collection, conveyance, treatment and disposal other than renovation in a subsurface absorption area, or retention in a retaining tank.

**SEWAGE SYSTEM, INDIVIDUAL:** A sewage facility, whether publicly or privately owned, located on a single lot and serving one (1) equivalent dwelling unit and collecting, treating and disposing of sewage in whole or in part into the soil or into waters of the Commonwealth or by means of conveyance of retaining tank wastes to another site for final disposal.

- a. **Sewage System, Individual On-Lot:** An individual sewage system which uses a system of piping, tanks or other facilities for collecting, treating and disposing of sewage into a subsurface absorption area or a retaining tank.
- b. **Sewage System, Individual Sewerage:** An individual sewage system which uses a method of sewage collection, conveyance, treatment and disposal other than renovation in a subsurface absorption area, or retention in a retaining tank.

**SHOULDER:** That portion of the roadway which is adjacent to the cartway and is provided for lateral support of the pavement, emergency stopping, and a minimal amount of recovery area beyond the pavement edge.

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

**SIGHT DISTANCE:** 1) The length of street, measured along the centerline, which is continuously visible from a given point above the road surface; 2) That area of unobstructed vision at street intersections formed by lines of sight between points which are a specified distance from the intersection of the street centerlines; or 3) The amount of distance required to be provided at a street or driveway intersection which is considered adequate for a driver to be able to see in order to proceed in a safe manner.

**SINGLE-FAMILY ATTACHED DWELLING:** See DWELLING, SINGLE-FAMILY ATTACHED.

**SINGLE-FAMILY DETACHED DWELLING:** See DWELLING, SINGLE-FAMILY DETACHED.

**SITE ALTERATION:** Any change or adjustment to the grade of an existing site, i.e. any earth-moving activity. Such alterations generally require the completion of a soil erosion and sedimentation control plan.

**SITE IMPROVEMENTS:** See IMPROVEMENTS.

**SITE PLAN:** A plan for the development of a single tract of land, whether or not a subdivision is involved, which shows the existing and proposed conditions of the parcel including, but not limited to, topography, drainage, floodplains, wetlands, waterways, open spaces, walkways or pedestrian easements, means of ingress and egress, utility service line locations, landscaping, structures, lighting and screening devices and any other information that may reasonably be required in

order that an informed decision can be made by the Township. Such plans are generally required in order to evaluate land development proposals, including multi-family residential, commercial, institutional, industrial, or recreational development submissions.

SLOPE: 1) The face of an embankment or cut section; or 2) The degree of deviation of a surface from the horizontal, usually expressed in percent of degrees, i.e. a ratio determined by dividing the vertical difference between two (2) points (change in elevation) by the horizontal distance measured between the same two (2) points.

SQUARE FOOTAGE: 1) The unit of measure used to express the area of a lot, tract, or parcel involved in a subdivision or land development; or 2) The length of a lot, in feet, times the width of a lot, in feet.

STABILIZATION: Natural or mechanical treatment of a mass of soil or ground area to increase or maintain its stability or otherwise improve its engineering properties and resistance to erosion.

STORM SEWER: A conduit that collects and transports runoff.

STORMWATER MANAGEMENT FACILITY: Any structural or non-structural device, or combination thereof, which is designed, constructed and maintained to manage or control stormwater runoff from a development site, including but not limited to drainage swales, easements, seepage pits, level lip spreaders, culverts, pipes, storm sewers, detention or retention basins, ponds and other similar facilities.

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

STREET: A strip of land, including the entire right-of-way, intended for use as a means of vehicular and pedestrian circulation, whether public or private. For the purposes of this Ordinance, the term "road" may be used interchangeably with the word "street".

- a. Street, Alley: A minor street, privately or publicly owned, which provides secondary access to abutting properties primarily for service to the back or sides of such properties.
- b. Street, Cul-de-Sac: A street intersecting a through street at one end and terminating at the other in a vehicular turn-around.
- c. Street, Local: Streets which are used primarily for access to abutting properties, including streets within subdivisions or developments, usually characterized by low operating speeds and low average daily traffic (ADT).

- d. Street, Major Arterial: Major highways used primarily for rapidly-moving traffic, which carry a large volume of vehicles between regions and major metropolitan areas; i.e. inter- and intrastate highways or limited access freeways or expressways; i.e. Interstate 80.
- e. Street, Major Collector: Streets which facilitate inter-community travel within the region and provide connection to arterial streets and highways; i.e. Wallis Run Road.
- f. Street, Marginal Access: Local streets which are parallel and adjacent to arterial or collector streets and which provide access to abutting properties and protection from through traffic.
- g. Street, Minor Arterial: Highways which provide for the movement of large volumes of through traffic between centers of regional importance, and provide connections between major arterials and collector roads; i.e. PA Route 87.
- h. Street, Minor Collector: Streets which move traffic into and between subdivisions, developments, rural village centers, or other local traffic generators; i.e. Rose Valley Road and Kellyburg Road. For the purposes of street design and construction, streets serving 20 or more lots or dwelling units shall be considered to be minor collector streets.
- i. Street, Private: All streets not dedicated, accepted, or maintained as public streets.
- j. Street, Public: All streets open to public use and maintained by, or dedicated to and accepted by Cascade Township, the County, the State or the Federal Government.

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

STREET SYSTEM: All public and private streets intended for use as a means of vehicular circulation.

- a. Street System, Municipal: All public streets maintained by Cascade Township, including local streets and minor and major collector streets, as applicable.
- b. Street System, State: All public streets maintained by the PA Department of Transportation, including minor and major collector streets, arterial highways, and Interstate Highways.

STRUCTURE: Any man-made object having an ascertainable stationary location on or in land or water, whether or not affixed to the ground. For floodplain management purposes, the term shall also include a gas or liquid storage tank that is principally above ground, as well as a mobile or manufactured home. (Continued on next page.)

- a. Structure. Accessory: A structure detached from a principal structure, but located on the same lot, which is customarily incidental and subordinate to the principal building, structure or use.
- b. Structure. Principal: The main or primary structure on a given lot.

SUBDIVIDER: 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. (See also DEVELOPER.)

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

SUBDIVISION ORDINANCE ADMINISTRATOR: An individual appointed by Cascade Township, on a full- or part-time basis, to assist the Township Supervisors and Planning Commission with the administration and enforcement of the provisions of this Ordinance. (See also Section 804 of this Ordinance.)

SUBDIVISION OR LAND DEVELOPMENT PLAN: A proposal to subdivide or develop one (1) or more tracts of land. The plan shall include the proposed layout of the subdivision or land development and shall be accompanied by all other supplementary materials required by this Ordinance when submitted for consideration. (See also PLAN.)

SUBSTANTIALLY COMPLETED: A subdivision or land development shall be considered substantially completed when, in the judgment of the Cascade Township Engineer, at least 90% (based on the cost of the required improvements for which financial security was posted) of those improvements required as a condition of 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 purpose.

SUPERVISORS OR TOWNSHIP SUPERVISORS: The Board of Supervisors of Cascade Township, Lycoming County, PA; the elected governing body of the municipality.

SURVEYOR: A professional land surveyor, licensed and registered in the Commonwealth of Pennsylvania.

SWALE: A low lying stretch of land which gathers or carries surface water runoff.

TOWNSHIP: Cascade Township, Lycoming County, PA, unless otherwise specified.

TRACT: An area, parcel, site, piece of land or property which is the subject of a subdivision or land development application.

TWO-FAMILY DWELLING: See DWELLING, TWO-FAMILY.

UNDEVELOPED LAND: Land in its natural state before development.

USE: The specific purpose or activity for which land or a building is designed, arranged, intended or for which it is or may be occupied or maintained.

a. Use, Accessory: A use subordinate to the principal use of a building or structure, or land located on the same lot and serving a purpose customarily incidental to the use of the principal building or structure. If no principal use exists on the lot with a lawful accessory use, then such accessory use shall be considered a principal use.

b. Use, Principal: The primary purpose for which a lot is occupied or utilized.

WAIVER: A modification granted by the Cascade Township Supervisors for relief from the strict application of a specific requirement or provision of this Ordinance, which if enforced would cause unique and undue hardship for the applicant.

WATER COURSE: Any river, stream, run, drainageway, lake, pond or other body of water appearing as a permanent or intermittent waterway on United States Geological Survey maps.

WATERSHED AREA: The drainage area of a particular stream or watercourse. (See also DRAINAGE AREA.)

WATERSHED STORMWATER MANAGEMENT PLAN: A plan for managing stormwater runoff from and within a particular watershed area.

WATER FACILITY: Any water works, water supply or water distribution system or part thereof designed, intended or constructed to provide or distribute potable water.

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

a. Water System, Non-Public: All water systems which are not public water systems.

b. Water System, Off-Lot: An approved system in which potable water is supplied to a dwelling or other building from a central water source which is not located on the lot with the dwelling or building.

c. Water System, On-Lot: A well or other approved system designed to provide potable water to a dwelling or building located on the same lot as the source.



- d. Water System. Public: A water system, as defined by the PA Department of Environmental Protection, which has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

WETLANDS: Areas which are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. For the purposes of this Ordinance, the term includes, but is not limited to, wetland areas listed in the State Water Plan, the U.S. Forest Service Wetlands Inventory of PA, the PA Coastal Zone Management Plan, the U.S. Fish and Wildlife National Wetlands Inventory and wetlands designated by a river basin commission.

YARD: An open space which lies on the same lot with a building or structure, unoccupied and unobstructed from the ground upward. The required yard shall be the minimum area or open space required by the Zoning Ordinance in effect in Cascade Township to be provided between the front, side or rear lot lines and a principal or accessory building or structure on the lot.

ZONING ORDINANCE: The Zoning Ordinance in effect in Cascade Township.

ZONING PERMIT: The permit required by the Zoning Ordinance in effect in Cascade Township which states the purpose for which a building, structure, or land is proposed to be used is in conformity with the use requirements, and all other requirements of the applicable Township Zoning Ordinance for the zoning district in which the use is to be located.

## ARTICLE 3

### PLAN REQUIREMENTS

#### 300 GENERAL REQUIREMENTS

All subdivision and land developments plans, whether intended as sketch, preliminary or final submissions, shall meet the requirements outlined in the following Sections. (See also Article 4 for Plan Processing Procedures.)

#### 301 SKETCH PLANS (Optional/Suggested) (See also Section 401)

*Although the utilization of a sketch plan is optional, subdividers and developers are strongly encouraged to prepare and submit informal sketch plans to the Township Planning Commission for review and discussion prior to filing formal preliminary or final subdivision or land development plans.*

##### A. Sketch Plan Content

When utilized, sketch plans need not be prepared by a registered professional land surveyor, but should be legibly drawn at a reasonable scale and should include or show the following data to ensure the greatest usefulness:

1. Title block, containing the name of the owner of the tract, municipality, date, approximate scale of the drawing, and north arrow.
2. Tract boundary sketch, showing the location of the proposed subdivision or development in relation to the entire tract and zoning district boundaries.
3. Location map, showing the relationship of the proposed subdivision or land development to all adjoining properties and the road and highway system in the area.
4. Proposed street and lot layout, including the approximate dimensions and acreage of the area to be developed.
5. The location of all significant topographic and physical or natural features, including watercourses, wetlands, forests, or floodplains on or adjacent to the subdivision or development site.
6. The location of all existing buildings or structures on the site.
7. The location of all existing streets, rights-of-way, and utilities on or adjacent to the site.
8. The probable location of any proposed community sewer and water

facilities, as well as proposed stormwater management facilities or other proposed site improvements.

B. Data to be Submitted with a Sketch Plan

The following data, information, or documents should also be submitted with all sketch plans:

1. A description of the ultimate character, degree and type of development proposed or the extent of subdivision intended.
2. An approximate timetable or staging sequence for the proposed subdivision or land development.
3. Topographic contour information relative to the site of the proposed development, i.e. a copy of the USGS Quadrangle for the area.
4. Copies of proposed deed restrictions, where applicable.

**302 PRELIMINARY PLANS** *(See also Section 402)*

A. Preliminary Plan Requirements

Preliminary subdivision or land development plans shall be either black and white or blue and white prints, drawn on 24" x 36" or 18" x 24" sheets, and shall be prepared at a scale not to exceed 100 feet to the inch. If the preliminary plan is drawn in two or more sections, it shall be accompanied by a key map showing the exact location of the sections.

Preliminary subdivision and land development plans shall be prepared by a PA-registered professional land surveyor or engineer, as applicable under professional registration laws, and shall include the following data:

1. Title block, containing an indication that the submission is a preliminary plan, the name and address of the owner of the tract, name of the development, and municipality, date, graphic scale, and the name, address, and profession of the individual preparing the plan.
2. North arrow; perimeter boundaries showing bearings and distances of the area to be developed; proposed lot lines; dimensions of areas to be dedicated to public use; building setback lines; total number of parcels or dwelling units, including a numbering system to identify each lot; approximate area of each lot; total acreage; and existing zoning classification and applicable district dimensional requirements.
3. Tract boundary sketch, showing the location of the proposed development in relation to the entire tract and showing the names of owners of all adjoining property and of all abutting subdivisions.

4. Location map, showing the relation of the tract to adjoining properties, the road and highway system and municipal boundaries, including an area extending at least one (1) mile from the subdivision boundaries.
5. Location and width of all existing or proposed streets, rights-of-way, parking areas, and easements on or adjacent to the tract, including right-of-way and pavement widths and street names. (Duplication of existing street names within the Township shall be avoided.) And, where required by the standards set forth in Section 502 J. of this Ordinance, the location of all proposed driveways with sight distance noted for each direction of approach.
6. Location and width of all existing or proposed utility rights-of-way or easements (including telephone, electric, gas, fiber optics, etc.) on or adjacent to the tract.
7. Location and size of existing and proposed sewers, water mains, stormwater management facilities and/or culverts, buildings, transmission lines, fire hydrants, and other significant man-made features on or adjacent to the tract.
8. Soil percolation test sites and/or deep test pit locations, and soils mapping or soil type information, as appropriate, except where public sewers are provided.
9. Existing watercourses, floodplains, wetlands, wooded areas and other significant natural features. The boundary of the 100 year floodplain shall be shown utilizing the Flood Insurance Study (FIS) and accompanying flood maps for the municipality. If detailed information is not obtainable, the floodplain shall be generally located utilizing the best available data such as Corps of Engineers' Floodplain Studies or mapping of previous floods. The 100 year flood elevation shall be provided wherever the FIS is available, wherever feasible, or where new developments of more than 50 lots or five (5) acres, whichever is less, are involved.
10. Topographic contours at vertical intervals of a minimum of five (5) feet and datum and benchmark to which contour elevations refer. Topographic contours of two (2) foot intervals may be required for sites with slopes of four (4) percent or less; for plans with average lot sizes less than 1/2 acre; and for all sites located within in the 100 year floodplain. (The Township Planning Commission may however waive the requirements for topographic contours for subdivision plans with average lot sizes greater than one (1) acre involving no public water or sewer systems and where a site investigation provides sufficient information for plan evaluation.)
11. An indication of those areas intended for private use, including streets, roads, easements, open space areas, etc.

12. Preliminary plan review/approval signature blocks for the Cascade Township Planning Commission and the Cascade Township Board of Supervisors.
13. Plan acknowledgement statement, with signature of developer and/or property owner of record if other than the developer, to the effect that the proposal accurately reflects his/her intentions for the site.
14. Certification, with seal and original ink signature, by the PA-registered professional land surveyor having prepared the plan, indicating that the survey and site plans are correct and accurate.

B. Data to be Submitted with the Preliminary Plan

The following information, data, and documents shall be submitted with all preliminary subdivision or land development plans:

1. Completed Subdivision or Land Development application form, where applicable.
2. Applicable plan processing and improvement design review fees.
3. Proof of record ownership.
4. Copies of proposed deed restrictions and preliminary Right-of-Way Use and Maintenance Agreements to be utilized, where applicable.
5. A description of the technique or a preliminary copy of the Agreement to be used to insure proper maintenance of common areas or facilities intended for private use, including streets, stormwater management devices, utilities and similar facilities.
6. Typical cross-sections and centerline profiles prepared by a registered professional engineer or other individual of demonstrated qualifications for each proposed street, and preliminary designs of proposed bridges and culverts, where applicable. (Cross-sectional drawings shall include street right-of-way and cartway widths, and the location of all stormwater control devices, sidewalks, parking lots, driveway entrances, and similar facilities or improvements, where applicable.)
7. Sketch of proposed street and lot layout for the remainder of the affected parcel where the preliminary plan covers only part of the subdivider's holdings, where determined appropriate by the Township Planning Commission.
8. Documentation, in accordance with Section 504 of this Ordinance, that the subdivider has adequately planned for sewage disposal, including preliminary designs and profiles of proposed sewerage systems and

appropriate approvals or permits from the PA Department of Environmental Protection where public or community systems are to be utilized, and, if required, feasibility studies OR soils test results for each proposed lot where public or community systems are not to be utilized.

9. Where appropriate, approval letters or permits issued by the PA Department of Environmental Protection, as required in Section 505 of this Ordinance, regarding proposed water supply systems, preliminary designs and profiles of such systems, and, if required, feasibility studies.
10. Documentation, in accordance with Section 506 of this Ordinance, which shows that the subdivider has adequately provided for the location and installation of all utilities, including letters from utility companies indicating their intent and ability to serve the proposed development. Where the land included in the proposed subdivision has a gas pipeline, a petroleum or petroleum products transmission line, or electricity or fiber optics transmission line located thereon, a copy of the recorded document for such pipeline or transmission line may be required to be submitted to verify the location and width of said right-of-way.
11. Such evidence as may be necessary or required by Section 507 of this Ordinance to show that effective soil conservation measures have been planned and are to be implemented in accordance with Title 25, Chapter 102 of the Rules and Regulations of the PA Department of Environmental Protection, or as may hereafter be amended, including a preliminary grading plan.
12. A Stormwater Management Plan for the proposed subdivision in accordance with the requirements of Section 508 of this Ordinance.
13. Where appropriate, wetlands determinations and/or delineations as per the requirements of Section 509 of this Ordinance.
14. If any portion of the proposed development is located in an identified floodplain area, additional information concerning protection and use of this area shall be submitted as required by Section 510 of this Ordinance. Such information shall include assurances that all utilities and facilities, such as streets and sewer, gas, electrical and water systems are located and constructed to minimize flood damage, and that adequate drainage is provided so as to reduce exposure to flood hazards.
15. Other documentation and certificates of approval from the proper authorities as may be required by the Planning Commission, including but not limited to, PennDOT Highway Occupancy Permits or Township Driveway Permits.
16. Engineer-prepared estimates or contractor's bids of the cost of all proposed or required improvements, when applicable. (See also Section 404 C.)

17. An approximate timetable or staging sequence for the proposed subdivision or land development.

### 303 FINAL PLANS (See also Section 402)

#### A. Final Plan Requirements

Final subdivision or land development plans shall be either black and white or blue and white prints, drawn on 18" x 24" sheets, and shall be prepared at a scale not to exceed 100 feet to the inch. When necessary, the plan may be placed on several sheets, accompanied by an index sheet showing the entire subdivision or land development.

Final plans shall be prepared by a PA-registered professional land surveyor or engineer, as applicable under professional registration laws, and shall include the following data:

1. Title block, containing an indication that the submission is a final plan, the name and address of the owner of the tract, name of the development, municipality, date, graphic scale, and the name, address, and profession of the individual preparing the plan.
2. North arrow; and perimeter boundary lines by bearings and distances which provide a survey of the area to be developed, closing with an error of not more than one (1) foot in 5,000 feet.
3. Proposed lot lines by their courses and distances showing bearings to the nearest second and distances to nearest one-one hundredth of a foot (circular lines shall be defined by their radius, arc distances and the long chord bearing and distance); acreage and dimensions of areas to be dedicated to public use; building setback lines; total number of parcels or dwelling units, including a numbering system to identify each lot; acreage of each lot; total acreage; and existing zoning classification and applicable district dimensional requirements.
4. Tract boundary sketch, showing the location of the proposed development in relation to the entire tract and showing the names of owners of all adjoining property and all adjacent subdivisions.
5. Location map, showing the relation of the tract to adjoining properties, the road and highway system and municipal boundaries, including an area extending at least one (1) mile from the subdivision boundaries.
6. Location and width of all existing or proposed streets, rights-of-way, parking areas, and driveways (as determined appropriate) on or adjacent to the tract, including bearings and distances of rights-of-way and easements, right-of-way and pavement widths, and street names. (Duplication of existing street names within the Township shall be avoided.) And, where

required by the standards set forth in Section 502 J. of this Ordinance, the location of all proposed driveways with sight distance noted for each direction of approach.

7. Location and width of all existing or proposed utility rights-of-way or easements (including telephone, electric, gas, fiber optics, etc.) on or adjacent to the tract.
8. Location and size of existing and proposed sewers, water mains, drainage and/or stormwater management facilities and/or culverts, buildings, transmission lines, fire hydrants, street lights, and other significant man-made features on or adjacent to the tract.
9. Soil percolation test sites and/or deep test pit locations, and soils mapping or soil type information, as applicable, except where public sewers are provided.
10. Existing watercourses, floodplains, wetlands, wooded areas and other significant natural features. The boundary of the 100 year floodplain shall be shown utilizing the Flood Insurance Study (FIS) and accompanying flood maps for the municipality. If detailed information is not obtainable, the floodplain shall be generally located utilizing the best available data such as Corps of Engineers' Floodplain Studies, or mapping of previous floods. The 100 year flood elevation shall be provided wherever the FIS is available, wherever feasible, or where new developments of more than 50 lots or five (5) acres, whichever is less, are involved.
11. Topographic contours at vertical intervals of a minimum of five (5) feet and datum and benchmark to which contour elevations refer. Topographic contours of two (2) foot intervals may be required for sites with a slopes of four (4) percent or less; for plans with average lot sizes less than 1/2 acre; and for all plans located within the 100 year floodplain. (The Township Planning Commission may however waive the requirements for topographic contours for plans with average lot sizes greater than one (1) acre involving no public water or sewer systems and where a site investigation provides sufficient information for plan evaluation.)
12. An indication of those areas intended for private use, including streets, roads, easements, open space areas, etc.
13. Final plan review/approval signature blocks for the Cascade Township Planning Commission and the Cascade Township Board of Supervisors.
14. Plan acknowledgement statement, with applicable deed book and page number reference and signature of the property owner certifying record ownership of the tract, and indicating that the proposal accurately reflects his/her intentions for the site. (Where a valid sales agreement or contract is provided, the plan acknowledgement statement may be signed by the



person or corporation having equitable title in the property.)

15. Location and material of all permanent lot markers.
16. Plan acknowledgement statement, with the signature of the PA-registered professional land surveyor having prepared the plan, certifying that the lot markers shown on the plan have been set and indicating the date such markings were set.
17. Certification, with seal and original ink signature, by the PA-registered professional land surveyor having prepared the plan, indicating that the survey and site plans are correct and accurate.

B. Data to be Submitted with the Final Plan

The following information, data, and documents shall be submitted with all final subdivision or land development plans:

1. Corrected and updated material from the preliminary plan.
2. Completed Subdivision or Land Development application form, where applicable.
3. Applicable plan processing, improvement design review and inspection fees. (See also Section 806 A.)
4. Copies of proposed deed restrictions, Right-of-Way Use and Maintenance Agreements, and deeds proposing dedication of improvements to the Township, where applicable. In addition, where improvements are offered to the Township, the developer shall furnish a written guarantee (release of liens) that all indebtedness incurred for supplies, material, labor, or engineering and professional services for construction of the improvement(s) shall have been paid in full and that there are no claims for damage or suits against the contractor involving such improvements.
5. Final cross-sections and centerline profiles for each street, and final designs of bridges and culverts prepared by a registered professional engineer or other individual of demonstrated qualifications, where applicable. (Cross-sectional drawings shall show street right-of-way and cartway widths, and the location of all stormwater control devices, sidewalks, parking lots, driveway entrances, & other similar improvements, where applicable.)
6. Documentation, in accordance with Section 504 of this Ordinance, that the subdivider has adequately planned for sewage disposal, including final designs and profiles of sewerage systems and appropriate approvals or permits from the PA Department of Environmental Protection where public or community systems are to be utilized OR soils test results for each proposed lot where public or community systems are not to be utilized.

7. Where appropriate, approval letters or permits issued by the PA Department of Environmental Protection, as required by Section 505 of this Ordinance, regarding proposed water supply systems, and final designs and profiles of such systems.
8. Documentation, in accordance with Section 506 of this Ordinance, which shows that the subdivider has adequately provided for the location and installation of all utilities, including letters from utility companies indicating their intent and ability to serve the proposed development. Where the land included in the proposed subdivision has a gas pipeline, a petroleum or petroleum products transmission line, or electricity or fiber optics transmission line located thereon, a copy of the recorded document for such pipeline or transmission line may be required to be submitted to verify the location and width of said right-of-way.
9. Such evidence as may be necessary or required by Section 507 of this Ordinance to show that effective soil conservation measures have been planned and are to be implemented in accordance with Title 25, Chapter 102 of the Rules and Regulations of the PA Department of Environmental Protection or as may hereafter be amended, including a final grading plan.
10. Final designs and profiles of any stormwater control improvements, and related documentation required in accordance with Section 508 of this Ordinance.
11. Where appropriate, wetland determinations and/or delineations as per the requirements of Section 509 of this Ordinance.
12. If any portion of the proposed development is located within an identified floodplain area, additional information concerning protection and use of this area shall be submitted as required by Section 510 of this Ordinance. Such information shall include assurances that all utilities and facilities, such as streets and sewer, gas, electrical and water systems are located and constructed to minimize flood damage and that adequate drainage is provided so as to reduce exposure to flood hazards.
13. Other documentation and certificates of approval from the proper authorities as may be required by the Township, including but not limited to, PennDOT Highway Occupancy Permits or Township Driveway Permits. (See also Section 502 B:2 & 3 of this Ordinance.)
14. Where appropriate, an Improvement Agreement prepared in accordance with the requirements of Section 404 B. of this Ordinance OR a copy of the arrangements made regarding ownership and maintenance of all dedicated and undedicated recreation or open space areas in the development, streets, parking lots, stormwater management facilities, and/or other site improvements.

15. Where appropriate, an Improvement Guarantee (financial security) assuring the satisfactory installation of all required improvements as set forth in Section 404 C. of this Ordinance OR a certificate from the Township Engineer indicating that all improvements have been inspected and found to be installed in accordance with specifications approved as part of the preliminary plan, and copies of "as-built" plans for the improvement(s).
16. Where improvements have been installed prior to final plan approval, a bond or other financial security satisfactory to the Township Supervisors which guarantees the structural integrity of all such improvements in accordance with the requirements of Section 404 F. of this Ordinance.

**304    LAND DEVELOPMENT PLANS** *(See also Article 6)*

All proposed land development proposals shall conform to the requirements for sketch, preliminary and final plan submissions contained in Sections 301, 302 and 303 of this Ordinance in addition to the standards outlined below.

**A.    Land Development Plan Requirements**

In addition to meeting the requirements of the above-referenced sections, all preliminary and final land development plans shall also show the following information:

1. Location and size of all existing and/or proposed principal and accessory buildings and structures, including solid waste storage sites, signs, lighting facilities, fences, walls, and similar features.
2. Location of accessways, and parking, loading/unloading areas.
3. Location of all proposed on-site pedestrian and vehicular circulation routes and controls, including sidewalks, cross-walks, traffic signals, etc.
4. Location and width of all buffer yards and screen plantings.

**B.    Data to be Submitted with Land Development Plans**

The following additional documentation or data shall also be submitted with all preliminary and final land development plans:

1. A description of the proposed development in sufficient detail for the Township to evaluate the submission, including anticipated traffic volumes and traffic flows, and numbers of expected employees, tenants, customers, or inhabitants. (For all residential land developments in excess of an aggregate total of 15 dwelling units and all non-residential development proposals exceeding 15,000 square feet, the Township Supervisors may, upon recommendation of the Township Planning Commission, require the developer to submit a detailed traffic study which describes the expected

impact of the development on the roads and highway system in the vicinity of the development site. Such study shall be prepared by a registered professional engineer or other transportation specialist acceptable to the Township.)

2. Cross-sections, showing the design details of proposed accessways, parking, and loading/unloading areas.
3. Plans addressing proposed landscaping, lighting and signage, where applicable.

## ARTICLE 4

### PLAN PROCESSING PROCEDURES

#### 400 GENERAL PLAN REVIEW AND APPROVAL PROCEDURE

All plans of proposed subdivisions and land development in Cascade Township, whether preliminary or final, shall be subject to approval, modification or rejection by the Cascade Township Board of Supervisors. Prior to action by the Supervisors however, all plans shall be submitted to the Township Planning Commission and to the Lycoming County Planning Commission for their review, evaluation and recommendations. Copies of the plans may also be submitted to the Township Engineer, where applicable, and to other appropriate agencies for review at the discretion of the Township Planning Commission before recommendations for action are made to the Township Supervisors. (See plan processing details below and illustrated in the flow charts on pages 50 and 51.)

#### 401 SKETCH PLANS (Optional/Suggested) (See also Section 301)

Prior to the filing of an application for review and approval of a proposed subdivision or land development, it is recommended that the developer submit a sketch plan to the Cascade Township Planning Commission for advice on the requirements necessary to achieve conformity with the standards and other provisions of this Ordinance, as well as to alert the developer to other factors pertinent to the design and effectuation of the subdivision or land development. **The submission of a sketch plan shall not constitute the filing of an application for approval of a subdivision or land development.**

The developer or his agent or representative should be present to discuss any such proposal with the Planning Commission. No formal action will be taken on a sketch plan submission, but the Commission shall, after review and evaluation of the proposal, indicate to the developer or his agent, their findings and recommendations regarding preparation of preliminary or final plans. The Commission shall complete its review as promptly as possible. One copy of the sketch plan shall be left with the Commission for their files. **The review of a sketch plan shall not authorize the recording of the plan nor the conveyance of lots.**

#### 402 PRELIMINARY AND FINAL PLANS (See also Sections 302 & 303)

##### A. Plan Classifications and Submission Requirements

1. For the purposes of this Ordinance, any proposed subdivision or land development plan which is submitted to the Township for review and approval but does not meet the applicable plan or other Ordinance requirements, may be considered as a sketch plan at the request of the applicant and upon recommendation of the Township Planning Comm-

ission's Subdivision Plan Review Committee. (See also Section 402 B.1. below for additional details on the application submission process.)

2. Plans involving the installation of streets, sanitary sewers, public water supplies, stormwater management facilities and other site improvements shall be considered as preliminary plans for initial consideration.
3. Where site improvements have been installed in accordance with a previously approved preliminary plan, the proposed subdivision or land development plan may be considered as a final plan.
4. Where a subdivision or land development proposal consists of a cumulative total of five (5) lots or dwelling units from the effective date of this Ordinance, each with frontage along an existing public street, and where no site improvements are proposed by the developer or required by the Township, the proposed subdivision or land development plan may be considered as a final plan.
5. Where a final plan covers only a portion of a tract of ground, the Planning Commission may recommend that the developer prepare and submit a sketch plan of the remainder of the tract to the Commission illustrating his future intent and use for the property. (See also Section 402 B.3.d.)
6. The final plan shall conform in all significant respects with any approved preliminary plan. Otherwise the plan submitted shall be considered as a revised preliminary plan. (See also Section 402 D.2.)
7. It shall be the ultimate responsibility of the subdivider/developer to coordinate his plans with all appropriate public and private utilities and/or service agencies in the manner set forth in this Ordinance and to provide sufficient data and information to the Township upon which to review the proposed plan.

#### **B. Plan Evaluation Process**

Applications for preliminary or final plan review and approval shall be submitted to Cascade Township and shall be processed in accordance with the following procedures.

1. **Application.** A minimum of eight (8) copies of all proposed preliminary or final subdivision and land development plans and a minimum of three (3) copies of all other materials and information required by this Ordinance shall be submitted to the Township Secretary no less than 14 days in advance of the next regular meeting of the Township Planning Commission at which the plan is to be considered. **(A plan shall be considered filed upon receipt by the Township of all required plans and materials, including plan processing fees.)** Plans submitted less than 14 days before the next scheduled meeting of the Planning Commission will not be considered filed

until the date of the following regular meeting of the Commission.

The Township Secretary shall, upon receipt of a subdivision or land development plan proposed for either preliminary or final approval, forward the plans to the Subdivision Plan Review Committee of the Township Planning Commission who shall check the submission for completeness. If incomplete, the submission shall immediately be returned to the applicant/developer, with an indication of its deficiencies. Where applicable, the Committee may also indicate to the applicant/developer that such plans could be submitted for sketch plan consideration as per the standards contained in Section 402 A.1 of this Ordinance. Written concurrence from the applicant/developer shall be required for such consideration.

2. Referrals. If the submission is determined complete by the Subdivision Plan Review Committee, copies of the plans shall be distributed as follows:

- a. A minimum of four (4) copies of the plan (or other number as may be required) and one (1) copy of all accompanying documentation (including any applicable review fee) shall be forwarded OR delivered by the subdivider/developer to the Lycoming County Planning Commission for their review and advisory comments. The County Planning Commission shall review the proposed subdivision or land development, stamp or sign the plans indicating a review was conducted, and shall report its findings and return all but one (1) copy of the plan to the Township within 30 days of the date that such plans were submitted to them.
- b. Where a proposed subdivision or land development involves the design of new streets (whether public or private), public or community sewer or water supply systems, stormwater management facilities, or other similar site improvements, one (1) copy of the plan and appropriate improvement designs may be forwarded by the Township Planning Commission to the Township Engineer for review and recommendations. (This submission does not relieve the applicant/developer from obtaining any and all necessary approvals and permits from the appropriate agencies.)

In addition, copies of the plan may also be forwarded to the Township Zoning Officer, the PA Department of Transportation, the PA Department of Environmental Protection, the Lycoming County Conservation District, officials from adjacent municipalities, or other agencies, organizations or professionals for input or comments, where such is deemed appropriate by the Commission. (In some instances, the applicant/developer may be directed to forward or deliver copies of the proposed plan to specific agencies for their review.) All review agencies shall be given 30 days to respond with comments.

- c. All remaining copies of the plans and accompanying documentation

shall be retained for the review, evaluation and recommendations of the Township Planning Commission.

3. Planning Commission Review and Recommendations.

- a. In order to better evaluate a proposed submission, the Planning Commission may, at its discretion, view the site of the subdivision or land development prior to taking action on the plan.
- b. At its first regular meeting following acceptance of a filed plan, the Township Planning Commission shall consider the subdivision or land development plan to determine its conformity to the design standards and general principles contained in this Ordinance. *(The developer or his agent shall be present to discuss all such proposed plans with the Commission and to facilitate the plan review process, or action on the plan by the Commission may be tabled.)* In addition, the Commission shall also consider all comments received from the County Planning Commission, the Township Engineer, and from other review agencies.
- c. Following through evaluation of the proposal, the Commission shall make recommendations for approval, disapproval, or other appropriate action to the Township Supervisors.
- d. The Planning Commission may recommend that the subdivider/developer prepare and submit a sketch plan for remaining undeveloped or residual property where they feel such would be in the best interest of the Township or where they feel such action would facilitate evaluation of subsequent submissions by the developer.
- e. The Commission's recommendations regarding proposed plans shall be communicated to the Township Supervisors in writing. The recommendations shall be signed and dated by the Chairman of the Planning Commission, or in his absence, the Vice-Chairman or other presiding officer. If disapproval is recommended, the specific defects of the plan shall be cited in the Commission's communication to the Supervisors.
- f. When a proposal is recommended for approval, the Chairman of the Planning Commission, or in his absence, the Vice-Chairman or other presiding officer, shall also sign and date all remaining copies of the plan. Such plans shall then be forwarded, along with the Commission's recommendations, to the Township Supervisors for action.

C. Plan Approval Process

1. Upon receipt of recommendations from the Township Planning Commission, the Township Supervisors shall consider and take action on proposed subdivision and land development plans. *(The developer or his*



*agent shall be present to discuss all such proposed plans with the Township Supervisors and to facilitate the plan approval process, or the plan may be disapproved.)* The Supervisors shall render a decision and communicate it to the applicant not later than 90 days following the date of the regular meeting of the Planning Commission next following the date that the plan is filed, provided that should the next regular meeting occur more than 30 days following the filing of the plan, the said 90 day period shall be measured from the 30th day following the date the plan is filed.

2. The Township Secretary shall notify the applicant of the decision made by the Township Supervisors in accordance with the following procedure.
  - a. Within 15 calendar days after the Supervisors' meeting, the Secretary shall notify the subdivider/developer or his agent, in writing, of the action taken by the Supervisors specifying what changes, or additions, if any, will be required prior to plan approval.
  - b. If the proposed plan is disapproved, the decision shall specify the defects found, describe the requirements which have not been met, and cite the provisions of the Ordinance which have been relied upon.
  - c. Failure of the Supervisors to render a decision and communicate it to the applicant within the time and in the manner required herein shall be deemed an approval of the proposed plan, unless the applicant has agreed, in writing, to an extension of the time period or change in the manner of presentation or communication of the decision.
3. All plans approved by the Supervisors shall bear the signatures of all members of the Board voting in favor of the approval and the date of such action. One (1) fully signed "master" copy of the subdivision or land development plan shall be retained by the Township for its files and all other remaining copies shall be returned to the applicant.
4. The Supervisors may grant preliminary or final plan approval subject to conditions acceptable to the applicant. Such conditions shall either be written on all copies of the plan and be signed by the applicant indicating concurrence or the Supervisors shall produce a list of all such conditions within 15 days of the date of conditional approval and present such listing to the applicant for written concurrence. Failure of the applicant to sign the plans or execute the list to indicate concurrence, as applicable, and return it to the Township within 30 days of the conditional approval date or prior to the Supervisors' next regular meeting, whichever comes first, shall nullify the approval granted. **Plans shall not be signed or dated by the Supervisors until receipt of the executed concurrence from the applicant.**
5. The Supervisors may offer a mediation option as an aid in completing proceedings authorized by this Section. In exercising such an option, the

Supervisors and mediating parties shall meet the stipulations and follow the procedures set forth in Section 908.1 of the PA Municipalities Planning Code, or as may hereafter be amended.

6. In order to facilitate financing, when requested by the subdivider/developer, the Supervisors may furnish the subdivider/developer with a signed copy of a Resolution or letter of contingent approval 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 Improvement Agreement is executed and a satisfactory financial security has been provided.** The Resolution or letter of contingent approval shall expire and be deemed to be revoked if the Improvement Agreement is not executed and the financial security is not provided within 90 days unless a written extension is granted by the Supervisors. Such extension shall not be unreasonably withheld and shall be placed in writing at the request of the subdivider/developer.

D. Effect of Plan Submissions and Approvals

1. From the time a plan, whether preliminary or final, is duly filed as provided in this Ordinance, and while such plan is pending approval or disapproval, no change or amendment of any zoning, subdivision or other governing ordinance applicable to the plan shall affect the decision on such plan adversely to the applicant unless the applicant voluntarily and without duress consents. The applicant shall be entitled to a decision in accordance with the provisions of said ordinances as they stood at the time the plan was duly filed.
2. Approval of the preliminary plan shall constitute approval of the subdivision or land development as to the character and intensity of development, and the arrangement and approximate dimensions of streets, lots, and other planned features. The approval binds the subdivider/developer to the general scheme of the subdivision shown and permits the subdivider/developer to proceed with final detailed design of improvements, and with preparation of the final plan. **Approval of the preliminary plan does not authorize the sale of lots nor the recording of the preliminary plan, nor does it constitute approval of the final plan.** (See also Section 402 A.6.)
3. The applicant shall have a period of five (5) years from the date of preliminary approval in which to submit a final plan(s) for the subdivision and/or substantially complete all aspects of the approved development, including installation of all site improvements. If the applicant fails to do so within the five (5) year period, the approval of the preliminary plan shall become null and void unless an extension of time is requested by the applicant, in writing, along with a schedule for submission of the final plan, and is approved by the Supervisors prior to the expiration date.
4. In the case of a preliminary plan calling for the installation of improvements

beyond the five (5) year period, a schedule shall be filed by the developer with the preliminary plan delineating all proposed phases as well as deadlines within which applications for final plat approval of each phase are intended to be filed. Such schedule shall be updated annually by the subdivider/developer on or before the anniversary of the preliminary plan approval, until final plat approval of the final phase has been granted, and any modification in the aforesaid schedule shall be subject to approval by the Supervisors at their discretion.

5. When an application for approval of a plat, whether preliminary or final, has been approved, no subsequent change or amendment in Township zoning or subdivision regulations shall adversely affect the right of the applicant to commence and to complete any aspect of the approved development in accordance with the terms of this approval within five (5) years of such approval. The five-year period shall however 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 the plat. In the event of an appeal filed by any party from the approval or disapproval of a plat, the five-year period shall be extended by the total time from the date the appeal was filed until a final order in such manner has been entered and all appeals have been concluded. No extension shall be based upon any water or sewer moratorium which was in effect at the time the preliminary plan application was filed.
6. The final plan may be submitted in phases, each covering a portion of the entire subdivision or land development shown on the preliminary plan. However, each phase in a residential subdivision or land development, except the last phase, shall contain a minimum of 25% of the total number of lots or dwelling units depicted on the preliminary plan, unless a lesser percentage is approved by the Supervisors.

#### **403    LAND DEVELOPMENT PLANS (See also Article 6)**

##### **A.    General Requirements**

Plans involving the utilization of a single tract of ground for the development or location of one (1) or more non-residential structure or two (2) or more residential structures or dwelling units shall be considered, reviewed and evaluated as land development proposals (except those exempted by definition). Land development activities shall include, but are not limited to, the development or construction of:

1. Commercial or industrial buildings or complexes;
2. Multi-family dwelling structures, i.e. apartment buildings, or single-family attached dwelling structures, i.e. townhouses; and

3. Mobile home parks, multi-family housing developments, or residential cluster developments.

**B. Plan Evaluation, Review and Approval Process**

Land development plans shall be evaluated, reviewed and approved in accordance with the plan submission, processing and approval procedures contained in Section 402 of this Ordinance. Final approval of a land development plan does not authorize the conveyance of lots, but may authorize the conveyance of individual dwelling units, i.e. condominiums.

**404 INSTALLATION AND APPROVAL OF IMPROVEMENTS**

**A. General Requirements**

1. Improvements required by the Township Supervisors may include streets, sanitary sewers, water supply systems, stormwater controls, utilities, or other similar types of improvements necessary for development of a site.
2. Improvements shall be installed by the subdivider/developer prior to final plan approval OR a suitable improvement agreement with satisfactory financial security shall be provided which shall ensure installation of the improvements by the subdivider/developer at the standards set forth in these regulations. **The final plan shall not be approved until final detailed design of the improvements is approved and the improvements are installed and inspected and determined to have been constructed in accordance with the approved plans OR until a suitable Improvement Agreement and financial guarantee for installation and maintenance of such improvements is provided.**

**B. Improvement Agreement**

Where an Improvement Agreement is to be utilized, such a document shall be a legally binding contract between the subdivider/developer and the Township, and shall at a minimum include the following assurances:

1. that development will occur as shown on the approved plot plans and that improvements will be installed in accordance with the plans, specifications and schedules approved by the Township Supervisors; and
2. that the subdivider/developer will be responsible for bearing the cost of installation of all required improvements for the development and for meeting all terms of the plan's approval; and
3. that satisfactory financial arrangements have been made to guarantee the installation, inspection and maintenance of all required improvements in accordance with the requirements set forth in Sections 404 C. and F. below; and

4. that, where applicable, the developer has approval from and an agreement with the appropriate Municipal Authority for installation of public sewers and/or public water in the development.

C. Improvement Guarantee

1. In lieu of completion of any improvements required as a condition of final plan approval, the applicant shall file with the Township, financial security as an Improvement Guarantee in the amount of 110% of the cost to install the improvements estimated as of 90 days after the date of scheduled completion of the improvements. The cost of the required improvements shall be established by a qualified Professional Engineer selected by the applicant and submitted to the Township Supervisors for approval. The Supervisors may choose to reject such estimate for good cause shown.
2. If the developer and the Township Supervisors are unable to agree upon an estimate, then the estimate shall be recalculated and recertified by a qualified Professional Engineer chosen mutually by the Supervisors and the subdivider/developer. The estimate certified by this engineer shall be presumed fair and reasonable, and shall be the final estimate. In the event an engineer is so chosen, fees for the services of said engineer shall be paid equally by the Supervisors and the subdivider/developer.
3. Should completion of the required improvements require more than one (1) year, the Supervisors may increase the amount of financial security by an additional ten percent (10%) for each year beyond the first anniversary date of the posting of the original 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 (1) year period.
4. If a development is projected over a period of years, the Supervisors may authorize submission of plans by stages, which shall be subject to such requirements or guarantees as the Supervisors deem essential for the protection of any finally approved section of the development.
5. If sanitary sewer lines or water mains, 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 Municipal or County Authority or other public utility separate and distinct from the Township, financial security to assure proper completion and maintenance thereof shall be posted in accordance with the regulations of the controlling authority or utility, and shall not be included in the financial security otherwise required by this Section. Copies of any such arrangements shall however be provided to the Township as verification that appropriate security has been posted.
6. Further, the applicant shall not be required to provide financial security for any improvements for which financial security is required by and provided to the PA Department of Transportation in connection with the issuance of

a Highway Occupancy Permit.

D. Inspections Required and Release from Improvement Guarantee

1. During the process of construction of the required improvements the subdivider/developer shall notify the Supervisors at least five (5) working days prior to the initiation of each phase of the installation so that the Township can arrange for progress inspections. It shall however be the responsibility of the applicable Authority or utility company to conduct and complete all inspections associated with the installation of sanitary sewer lines and/or public water supplies approved by such entities. The subdivider/developer shall coordinate all such inspections as well as arrangements for release from any Improvement Guarantee with the appropriate Authority or utility.
2. As the work of installing the required improvements proceeds, the Supervisors may authorize the release to the subdivider/developer of such portions of the security necessary for payment to the contractor or contractors performing the installation of required improvements. Any request for the release of such portions of funds shall be in writing to the Supervisors and the Board shall have 45 days from receipt of the request within which to authorize their engineer to inspect and certify, in writing, that the improvements to be covered by the funds have been completed satisfactorily. Upon such certification, the Supervisors shall authorize release, by the bonding company or lending institution, of the amount estimated by the engineer which fairly represents the value of the completed improvements. The Supervisors may, prior to final release at the time of completion and certification by their engineer, require retention of 10% of the estimated cost of the aforesaid improvements.
3. Under certain conditions the Supervisors may agree to other procedures for the release of portions of any posted financial security so long as the work has been done in accordance with the terms of plan approval.
4. When all necessary improvements have been completed, the subdivider/developer shall notify the Supervisors in writing, by certified or registered mail, of said completion and shall send a copy of said notification to the Township Engineer. The Supervisors shall, within ten (10) days after receipt of such notice, authorize an inspection by their engineer of the aforesaid improvements. A written report shall be filed by the engineer with the Supervisors, and a copy mailed to the subdivider/developer by certified or registered mail, within 30 days after receipt of the Supervisor's inspection authorization. Said report shall indicate approval or rejection of the completed improvements. If all or any portion of the improvements are rejected, the report shall include a statement of reasons for the rejection.
5. The Supervisors shall notify the subdivider/developer within 15 days of receipt of the engineer's report, in writing by certified or registered mail, of

their action with respect to approval or rejection of the completed improvements.

6. If any portion of the completed improvements shall be found not satisfactory, the subdivider/developer shall proceed to correct or complete those improvements and upon completion shall notify the Supervisors by those procedures contained in this Section.
7. Upon approval of the completed improvements, the Supervisors shall release to the subdivider/developer those funds remaining in the financial security deposit including all interest accrued thereunder. Prior to release of such funds however, the subdivider/developer shall guarantee to the Supervisors, in writing, the functioning and structural integrity of the improvements for a period of 18 months from the date of acceptance of dedication. (See also Section 404 F.2.)

In addition, prior to release of the final portion of the financial security deposit, the developer shall submit record drawings or "as-built" plans to the Supervisors for all site improvements completed and certified as completed by the Township Engineer.

8. Should the Supervisors or their engineer fail to comply with the time limitations as provided, all improvements will be deemed to have been approved and the developer shall be released from all liability pursuant to his performance bond or other Improvement Guarantee.

#### E. 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 Supervisors shall enforce any corporate bond, or other security or performance guarantee, by appropriate legal and equitable remedies. If proceeds of such bond, or other security are insufficient to pay the cost of installing or making repairs or corrections to all the improvements covered by said security, the Supervisors may, at their option, install part of such improvements in all or part of the subdivision or land development and may institute appropriate legal or equitable action to recover the monies necessary to complete the remainder of the improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the subdivider/developer, or both, shall be used solely for the installation of the improvements covered by the security, and not any other municipal purpose.

#### F. Dedication of Improvements

1. Upon completion of the required improvement(s), the subdivider/developer shall take the final steps to dedicate those improvement(s) he intends for public usage, and have the same accepted by the Supervisors. A deed which dedicates the land and the improvements to the Township shall be

recorded with the final plan or shall be recorded upon completion of the construction of such improvements and approval by the Township Engineer, as applicable. A copy of such deed shall also be submitted with the subdivision plan, where the construction of such improvements is completed, inspected and approved by the applicable engineer prior to final plan approval. In addition, the developer shall submit "as built" plans to the Township for all improvements being dedicated to the municipality. Such action shall be taken prior to acceptance of the improvements by the Supervisors and before release of the Improvement Guarantee. Further, all streets proposed for dedication to the Township shall undergo at least one (1) freeze/thaw cycle prior to being considered for acceptance by the municipality.

2. Where the Township accepts dedication of all or some of the required improvements, the Supervisors may require up to 15% of the actual cost of installation of said improvements for financial security to insure the structural integrity of those improvements for a term not to exceed 18 months from the date of acceptance of dedication.
3. The Supervisors may approve a final plan without an offer of dedication for streets or other improvements, provided that such improvements are noted as private on the final plan. The subdivider shall also be required to provide a notice in each deed, lease, or conveyance setting forth an arrangement between the subdivider and buyer or lessee for maintenance of such private facilities.
4. Nothing herein shall however require the Township to accept dedication of any improvements which may be required by the municipality as a condition of subdivision or land development approval.

#### **405 PLAN RECORDING REQUIREMENTS**

- A. Upon notification of approval of the final plan, the subdivider/developer shall record one (1) copy of the approved plan in the Office of the Lycoming County Recorder of Deeds within 90 days of the date of approval or the date the Supervisors' approval is noted on the plan, whichever is later. Should the subdivider/developer fail to record the final plan within such 90 day period, the approval of the Supervisors shall be null and void unless an extension of time is requested by the subdivider/developer in writing and is granted in writing by the Supervisors prior to the expiration date.

Where final plan approval is granted subject to conditions which are not written on the plot plans, then a copy of the concurrence letter generated by the Township and signed by the applicant, shall be recorded with the final plan.

A copy of the approved final plan must be recorded before proceeding with the sale of lots.

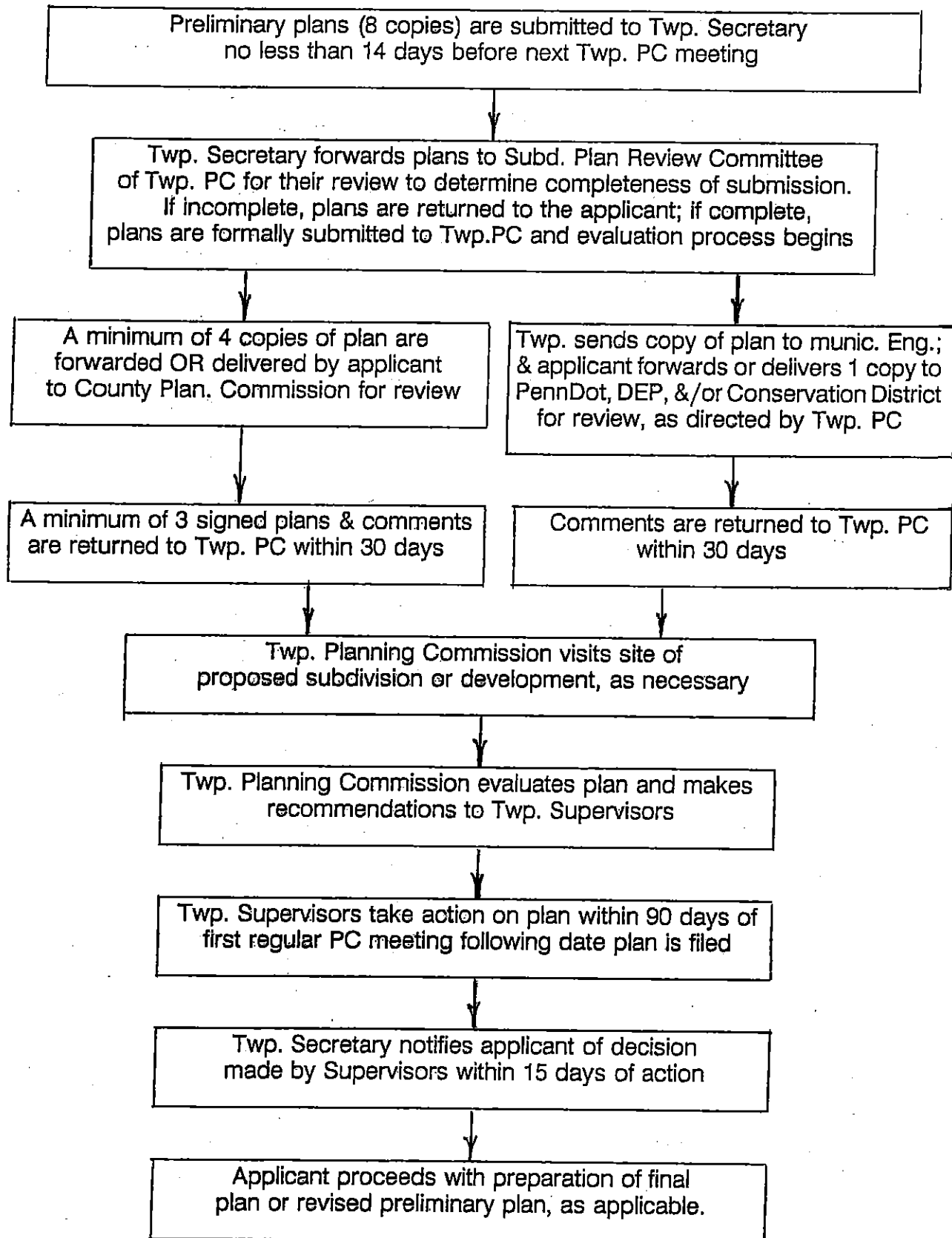


- B. Recording of the final plan shall not constitute grounds for assessment increases until such time as lots are sold or improvements are installed on the subject land.
- C. Recording of the final plan after approval shall not impose any duty upon Cascade Township concerning acceptance, maintenance or improvement of any dedicated streets, parks, recreation or open space areas or portions of the same.

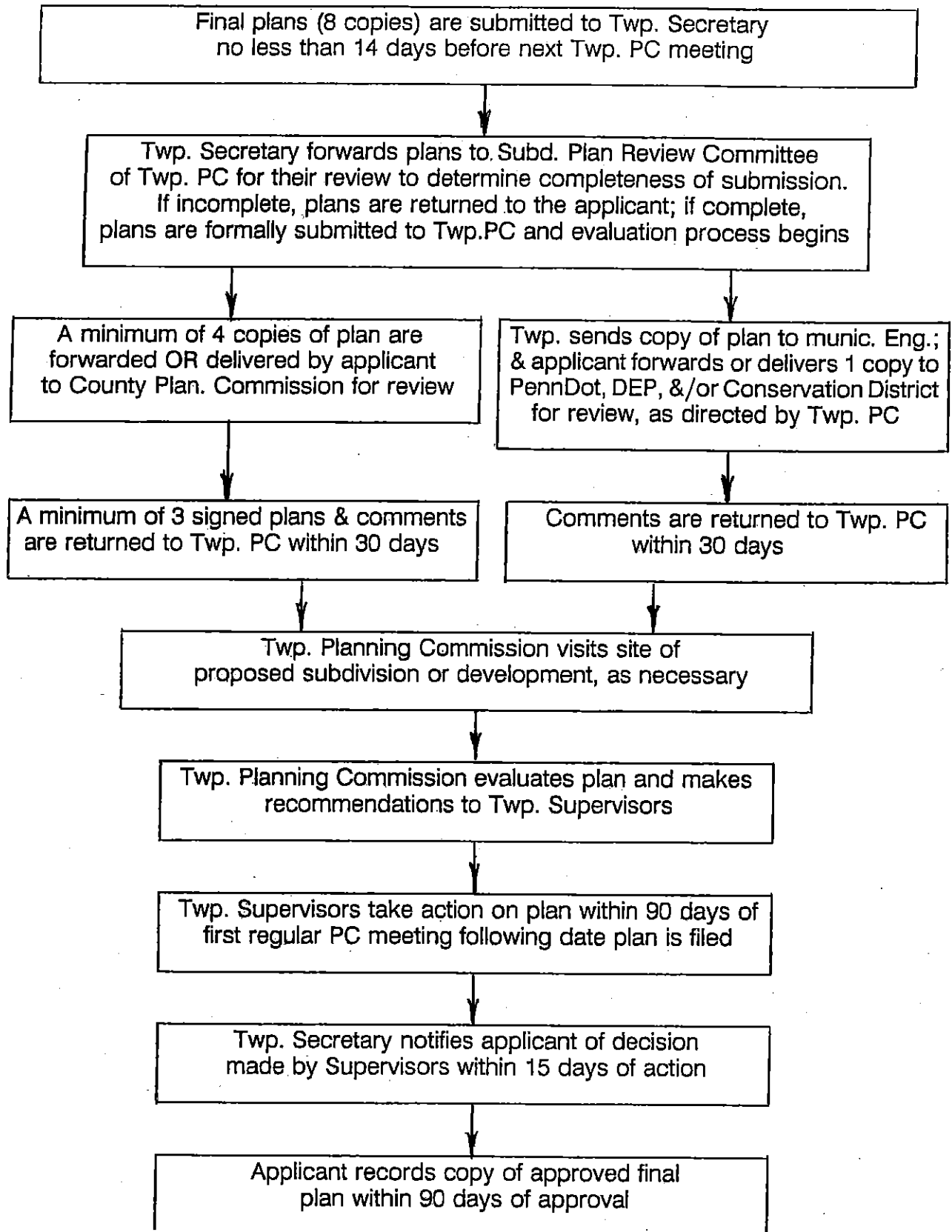
#### **406    RESUBDIVISION PROCEDURES**

For any replatting or resubdivision of land, the same procedure, rules, and regulations shall apply as prescribed herein for an original subdivision or land development.

**PRELIMINARY  
SUBDIVISION AND LAND DEVELOPMENT  
PLAN PROCESSING PROCEDURES**



**FINAL  
SUBDIVISION AND LAND DEVELOPMENT  
PLAN PROCESSING PROCEDURES**



## ARTICLE 5

### **IMPROVEMENT DESIGN & CONSTRUCTION STANDARDS**

#### **500 GENERAL STANDARDS**

- A. The principles, standards, and requirements of this Article shall be applied by the Cascade Township Planning Commission and Supervisors in evaluating and reviewing proposed subdivision and land development plans and shall be considered minimum standards. Where deemed appropriate or necessary to protect the public health, safety or welfare, the Planning Commission may recommend and the Supervisors may require more restrictive standards. Whenever other applicable regulations impose more restrictive standards, those regulations shall apply.
- B. The use of land in any proposed subdivision or land development shall comply with the provisions of the Zoning Ordinance in effect in Cascade Township and any other ordinances or regulations hereafter enacted by the Township.
- C. Land deemed by the Township to be uninhabitable because of the hazards it presents for life, health or property, such as areas of excessive slope, unstable soils or soils of inadequate weight bearing strength, or sites susceptible to severe flooding (i.e. floodway sites), or those with very poor access, should not be plotted for residential occupancy, nor for such other uses as may increase danger to health, life or property, or aggravate the flood hazard unless proper safeguards are provided by the subdivided/developer and approved by the Township.
- D. All subdivisions and land developments and all areas contained therein should be so planned as to take advantage of the natural contour of the land in order to maximize natural drainage, wind shelter and sun exposure. Grading, disruption of topsoil and destruction of natural vegetation and other natural environmental conditions should be minimized to the extent possible to achieve these goals.
- E. Every precaution should be taken to preserve those natural and historic features determined to be worthy of preservation by the Township, including but not limited to, large trees or stands of trees, watercourses, historic areas and structures, and scenic vistas.
- F. New subdivisions and land developments should be coordinated to the extent possible with all existing or proposed developments on adjacent properties.

#### **501 BLOCKS, LOTS AND BUILDING SETBACK LINES**

##### **A. Blocks**

- 1. The length, width and shape of blocks shall be determined with due regard

to the provision of adequate sites for the type of buildings proposed, applicable zoning requirements, topography, and the requirements for safe and convenient vehicular and pedestrian circulation. In general, blocks shall not exceed 1,600 feet in length.

2. Where deemed appropriate by the Township, a walkway, with a right-of-way width of not less than 12 feet and a surfaced width of not less than five (5) feet, may be required to afford pedestrian access to places of public assembly. The surface of such walkway shall be determined on a case by case basis.
3. Residential blocks shall be of sufficient depth to accommodate two (2) tiers of lots, except where reverse frontage lots are necessary; in the case of residential cluster development layouts; or where topographic conditions or other property limitations effectively prevent such design.

**B. Lots**

1. All lots shall conform to the minimum area and width requirements contained in the Zoning Ordinance in effect in Cascade Township and to the related requirements of the PA Sewage Facilities Act and all other applicable state and local sewage and water regulations.
2. Lot size, dimension and the placement of lots should be such that they provide the largest amounts of usable open space for the users thereof; the most economical provision of services; and, the most advantageous relationship with the site's natural topography and vegetation.
3. All lots shall abut a public street or shall have access to a public street via a private street or right-of-way no less than 50 feet in width, except in the case of a lot being added to and becoming a part of an adjacent existing lot with road frontage. (See also Section 501 B.6 below.)
4. In general, side lot lines should be at right angles or radial to street lines.
5. Double frontage lots should be avoided, except where essential to provide separation between residential developments and collector streets or to overcome topographic or orientation disadvantages. Where double frontage lots are permitted, a buffer yard with suitable screen planting, at least ten (10) feet in width, shall be required along the side of the property adjacent to the collector street or other inharmonious use, across which there shall be no right of access.
6. A parcel being subdivided for the purpose of being added to an existing, adjacent lot of record shall not be subject to the minimum lot size or soils testing requirements of this Ordinance, provided that a note indicating the parcel's addition status is placed on the plot plan and the existing lot and the addition are combined into a single deed of record. The plan note shall

also include a reference to the Deed Book and Page Number of the existing parcel. If both parcels are described separately in the same deed, then notes shall be placed on the plan and in the deed indicating the total acreage of the combined parcels and that both lots are to be considered as one for subdivision purposes. In this manner the purchaser is precluded from subsequent conveyance of the acquired addition without prior approval under the terms and conditions of this Ordinance. *(Residual tracts must meet all applicable sewage planning requirements.)*

C. Building Setback Lines

1. All buildings shall be set back in accordance with the minimum standards contained in the Zoning Ordinance in effect in Cascade Township.
2. The straight alignment of dwellings along established minimum front setback lines should be discouraged and instead, varying structure setbacks should be encouraged to promote variety and avoid monotony in development design.

502 STREETS AND DRIVEWAYS

A. Street System Classifications

1. **The State Highway System** includes all public streets and highways operated and maintained by the PA Department of Transportation (PennDOT).
2. **The Municipal Street System** includes all public streets and roads owned and maintained by Cascade Township. *Subdividers or developers proposing public dedication of streets within a subdivision or land development shall submit road design and construction plans which meet the Township's minimum specifications as a part of the preliminary or final plan submission process, as applicable. In instances where the Township agrees to accept a road constructed within a subdivision or land development, a deed dedicating the street and its right-of-way to the municipality shall be recorded with the final plan or shall be recorded upon completion of the street construction and approval by the Township Engineer, as applicable. (See also Section 404 F. of this Ordinance.)*
3. **Private streets** include all streets not dedicated, accepted, and maintained as public streets. Private streets may be permitted where the conditions set forth in Section 502 D.3 can be met.

B. Access Permit Requirements

1. In order to protect public safety, the Township may limit access onto a public street or highway to specific locations and may require such locations to be shown on the plot plan.

2. A Highway Occupancy Permit must be issued by the PA Department of Transportation (PennDOT) before construction of street or driveway access onto any state highway can be initiated. Where any such access is proposed as part of a subdivision or land development proposal, the subdivider shall submit a copy of the PennDOT Highway Occupancy Permit to the Township along with his preliminary or final subdivision or land development plans, as applicable. Where the location of such access is not known at the time of subdivision plan submission, a note shall be placed on the plans indicating the need to obtain this Permit prior to the initiation of driveway construction. (See also Section 502 J.)
3. A Township Driveway Permit must be issued by the Township before construction of street or driveway access onto a Township street can be initiated. In instances where new driveways are proposed as part of a subdivision or land development proposal, the subdivider shall include a copy of the Township Driveway Permit as a part of his preliminary or final plan submission, as applicable. Where the location of a specific driveway access is not known at the time of subdivision plan submission, a note shall be placed on the plans indicating the need to obtain such Permit prior to the initiation of driveway construction. (See also Section 502 J.)

C. General Street System Standards

1. Where practical, subdivision or land development plans shall extend or continue existing public rights-of-way at a width no less than the minimum specified by this Ordinance.
2. Local streets within a new development or subdivision shall be laid out to discourage through traffic. However, provision for the extension and continuation of streets into and from adjoining areas may be required.
3. Where the lots in a development are large enough for resubdivision, or if a portion of the tract is not subdivided, suitable access and street openings for such an eventuality shall be provided.

D. Street Design Standards (See also *Illustrations I & II of Appendix A*)

Minimum design standards for streets are shown on TABLE 1 and are further detailed in the following Sub-Sections. (See also PennDOT's Publication 70M, Guidelines for the Design of Local Roads and Streets, most current edition.)

1. Provision for additional street right-of-way may be required by the Township for public safety and convenience, or for access to off-street parking in nonresidential areas and in areas of high density residential development.
2. In addition to the minimum street grade and alignment standards shown in TABLE 1, the following requirements shall also be applied.

- a. Whenever street lines deflect from each other at any point, connection shall be made by horizontal curves with minimum centerline radii no less than those shown on TABLE 1.
  - b. Vertical curves shall be used in changes of grade exceeding one percent (1%). The minimum length of all vertical curves for local streets shall be 100 feet, and 200 feet for collector streets.
  - c. Proper sight distance shall be provided with respect to both horizontal and vertical alignments as established in TABLE 1.
  - d. Street grades shall be as established in TABLE 1.
  - e. Street crown grades shall be 1/4 inch to 3/8 inch per foot for paved streets and 3/8 inch to 1/2 inch per foot for stabilized streets, except where super-elevated curves are used. Shoulder grades shall not exceed 3/4 inch per foot.
3. The following standards shall apply to the design, use and maintenance of private streets.
- a. Private streets shall be designed in accordance with the standards and specifications contained in TABLE 1 of this Ordinance.
  - b. A survey of the centerline of the private street shall be provided with the subdivision or land development plans and all plans related to the proposed subdivision or development shall clearly identify the street and its right-of-way as being private.
  - c. The subdivider shall include a Use and Maintenance Agreement in each deed, lease, or conveyance prescribing the width of the street right-of-way, its location, and setting forth an arrangement between the subdivider and buyer or lessee for improvement and maintenance of the private roadway. A copy of any such Agreement shall be submitted to the Township for review and approval along with the preliminary or final subdivision or land development plans, as applicable.
  - d. Where an existing private street or right-of-way is proposed to provide access to a new subdivision, the subdivider shall prepare a Use and Maintenance Agreement and have it signed by all property owners using the existing roadway if such an Agreement is not included in their existing deeds. Where such an Agreement is secured, it shall be recorded with the final plan and shall describe the width of the street right-of-way, its location in accordance with the standards of this Ordinance, and shall set forth arrangements for maintenance of the private roadway. A copy of any such Agreement shall be submitted to the Township for review and approval along with the preliminary or final subdivision or land development plans, as applicable.



Where such an Agreement can not be secured however, despite a bonafide effort on the part of the subdivider, the Township may consider the proposed subdivision or land development plans with a Use and Maintenance Agreement signed by all users of the private street in the new subdivision or land development. A copy of any such Agreement shall be submitted to the Township for review and approval along with the preliminary or final subdivision or land development plans, as applicable. The approved Agreement shall then be incorporated into each deed, lease or conveyance for the development. (See also Section 502 G.7 for applicable construction standards for private streets.)

E. Intersections

1. Streets shall be laid out to intersect as nearly as possible at right angles, and no street shall intersect any other at less than 60 degrees. Multiple intersections involving the junction of more than two (2) streets shall be avoided where at all possible.
2. Leveling areas shall be provided at intersections as follows.
  - a. Where the grade of any proposed public or private street at the approach to an intersection exceeds seven percent (7%), a leveling area shall be provided having a grade no greater than four percent (4%) for a distance of 25 feet measured from the edge of the cartway of the intersecting street.
  - b. Where the grade of any proposed driveway or access drive at the approach to an intersection exceeds eight percent (8%), a leveling area shall be provided having a maximum grade of five percent (5%) which extends 20 feet beyond the edge of the intersecting road cartway.
3. The maximum grade within any intersection shall not exceed four percent (4%) in any direction.
4. The edge of pavement radius for the intersection of two local streets shall be 25 feet, and 50 feet for the intersection of a local and collector street or two collector streets.
5. Proper sight distance shall be provided at all street intersections. No obstructions or plantings measuring higher than 36 inches or hanging lower than eight (8) feet above road grade shall be permitted to block a driver's clear sight at any intersection. The minimum sight distance required shall be as provided below and shall be measured from the point of intersection of the street/driveway centerlines. (Sight distance shall be measured at a height of four (4) feet above road surface.)
  - a. Streets. For the intersection of a local street and a private street or the

intersection of two private streets, the minimum sight distance required shall be 150 feet; for the intersection of two local streets, the minimum distance required shall be 200 feet; and for the intersection of a local street and a collector street or the intersection of two collector streets, the minimum distance required shall be 300 feet or as may be required otherwise by PennDOT where State Routes are involved.

- b. Driveways. For the intersection of a street and a driveway, the minimum sight distance required shall be 50 feet where the street involved is a local street; 75 feet where a collector street is involved; and 100 feet or as may be required otherwise by PennDOT where the street involved is classified as a State Route.
6. Streets intersecting on opposite sides of a street shall be laid out directly opposite each other, or where permitted by the Township, shall be separated by at least 150 feet between centerlines.
7. Streets intersecting on the same side of a local street shall be separated by intervals of no less than 600 feet, measured from centerline to centerline, and no less than 800 feet when involving collector streets or State Routes.

#### F. Cul-de-sac Streets

Cul-de-sac streets may only be utilized in Cascade Township where "through" streets cannot be provided. When utilized, such streets must be designed to protect public safety and simplify maintenance. The standards set forth in TABLE 1 shall apply to the design of cul-de-sac streets in addition to the following requirements.

1. Cul-de-sac streets shall not exceed 1,600 feet in length nor serve more than 10 lots or dwelling units, whichever is less. Additional length may only be approved by the Township where such length is deemed to be in the best interest of the municipality, and where it is determined that such extension will cause no jeopardy to public safety.
2. All cul-de-sac streets shall be provided with a turn-around area which shall be graded and surfaced in the same manner as the street. To facilitate maintenance, center islands shall be avoided in the design of turnaround areas, and parking shall also be prohibited in these areas.
3. Innovative alternatives to the standard circular turnaround may be considered by the Township where area equivalent to the requirement for turnarounds in TABLE 1 is provided and the applicant can show that adequate arrangements can be made for maintenance of such areas.
4. Any street dead-ended for access to an adjoining property, or because of authorized, staged development shall be provided with a temporary turn-around with a stabilized surface and an outside diameter of at least 100

TABLE 1

DESIGN STANDARDS FOR PUBLIC AND PRIVATE STREETS

General	Collector Streets <sup>1</sup>	Local Streets	Private Streets <sup>2, 3</sup>
Minimum Right-of-Way Width	50 ft.	50 ft.	50 ft.
Minimum Cartway Width	24 ft.	20 ft. <sup>4</sup>	16 ft.
Minimum Shoulder Width (each side)	6 ft.	4 ft.	2 ft.
<u>Cul-de Sac Turnaround</u>			
Right-of-Way Diameter	---	100 ft.	100 ft.
Cartway Diameter	---	80 ft.	80 ft.
Maximum Grade	---	3 %	3 %
<u>Street Grades</u>			
Maximum Grades <sup>5</sup>	7 %	12 %	12 %
Minimum Grades	0.75 %	0.75 %	0.5 %
<u>Minimum Sight Distance at Road Intersections <sup>6</sup></u>	300 ft.	200 ft.	150 ft.
<u>Minimum Centerline Horizontal Curve Radius <sup>5</sup></u>	400 ft.	150 ft.	100 ft.

<sup>1</sup> For the purposes of determining appropriate design standards, streets serving 20 or more lots or dwelling units shall be considered to be collector streets.

<sup>2</sup> These standards shall apply to private streets serving three (3) or four (4) lots or dwelling units. Private streets serving one (1) or two (2) lots or dwelling units need only provide a minimum right-of-way width of 50 feet. (See also TABLE 3 of this Ordinance for driveway design guidelines.)

<sup>3</sup> Private streets serving five (5) or more lots or dwelling units shall be designed to the standards outlined for local streets.

<sup>4</sup> Where the grade of the street exceeds 8%, required shoulder width shall increase to 6 feet on each side.

<sup>5</sup> Street grades and curve radii may also be calculated utilizing PennDOT's Publication 70M, Guidelines for Local Roads and Streets, most current version, and shall be based on the highway's functional classification and design speed.

<sup>6</sup> Sight distance shall be measured at a height of four (4) feet above road surface.

feet, with an 80 foot cartway. (The specific time period allotted for such temporary construction shall be set forth in an Agreement between the Township and developer.)

G. Street Construction Standards (See also *Illustrations I & II of Appendix A*)

Minimum construction standards for public and private streets are shown on TABLE 2, and are further detailed in the following Sub-Sections.

1. All streets proposed for dedication to the Township shall meet the requirements set forth in TABLE 2 for local or collector streets at the time of dedication. (See also Sections 404 D. and 404 F. for additional dedication requirements.)
2. Streets shall be surfaced to the grades and dimensions shown on plans, profiles, and cross-sections submitted by the subdivider or developer and approved by the Township. Before finalizing street installation, the subdivider shall install any required utilities and provide adequate drainage facilities for the street in accordance with the requirements of Sections 502 H., 506, 507, and 508 of this Ordinance.
3. The pavement sub-base, base, and wearing surface shall be constructed to the specifications contained in TABLE 2. (See also PennDOT's Publication 70M, Guidelines for the Design of Local Roads and Streets, most current edition.) All components of the pavement structure shall meet the requirements specified in the most current version of PennDOT's Publication 408 Specifications.
4. Where low volumes of traffic are anticipated, the Township Planning Commission may recommend and the Township Supervisors may authorize the use of alternate standards for construction of local streets as set forth in TABLE 2.
5. The sub-base shall extend at least six (6) inches beyond the required cartway width on each side of the proposed street in order to provide additional support and structural integrity for the cartway wearing surface. The sub-base shall be composed of crushed stone (2A or equivalent) or other material approved by the Township Supervisors and shall be constructed to the depth set forth in TABLE 2.
6. Street shoulders shall be composed of materials approved by the Township Supervisors and shall be constructed to a compacted depth equal to the depth of the base and wearing surface of the street. The finished surface elevation of the shoulder shall meet the finished elevation of the edge of the cartway. (See TABLE 1 for minimum width requirements.)
7. In instances where access to a subdivision is proposed via a private street or right-of-way, the following construction standards shall apply.

- a. Private streets serving one (1) or two (2) lots or dwelling units need not be constructed to meet specific standards, but shall provide a minimum right-of-way width of 50 feet.
- b. Private streets serving three (3) or four (4) lots or dwelling units shall be constructed to the private street standards outlined in TABLE 2.
- c. Private streets serving five (5) or more lots or dwelling units shall be constructed in accordance with the standards for local streets contained in TABLE 2.
- d. All private streets being offered for dedication to the Township shall be constructed in accordance with the standards for local streets contained in TABLE 2.
- e. Existing private streets proposed as access to a new subdivision or development must be constructed with a stabilized, all-weather driving surface in accordance with the standards of this Ordinance. An independent engineering analysis, paid for by the subdivider or developer, may be required by the Township to evaluate the capability of the existing road to accommodate the projected additional use generated by the proposed development.
- f. Where additional development is proposed utilizing an existing private street or right-of-way, the total number of lots or dwelling units served by the private roadway shall determine the applicable construction standards. It shall be the responsibility of the subdivider or developer to improve the condition of the existing private street where such improvement is deemed appropriate by the Township. (See also Section 502 D.3.d regarding the use and maintenance of private streets.)

#### H. Street Drainage Standards

- 1. Drainage Swales. Where determined appropriate by the Township Supervisors, stabilized drainage swales shall be provided along proposed new streets to avoid erosion and control runoff. These drainage swales, along with other drainage facilities, shall be designed to handle the runoff from the proposed development and areas of the drainage basin already accommodated. At a minimum, all erosion and sedimentation control standards set forth in Title 25, Chapter 102 of the PA Code, the Rules and Regulations of the Department of Environmental Protection (DEP); the most current edition of DEP's Erosion and Sediment Pollution Control Program Manual; and the following specifications shall be met.
  - a. Cut and fill side slopes shall be a maximum of 2:1 horizontal to vertical ratio, with 3:1 or flatter slopes being desirable.
  - b. There shall be a rounded area with a width of two (2) feet at the point

TABLE 2

CONSTRUCTION STANDARDS FOR PUBLIC AND PRIVATE STREETS

Street Type <sup>1</sup>	Course	Type of Material <sup>2</sup>	Depth of Material <sup>3, 4</sup> After Compaction
Collector Streets	Wearing Surface Base/Binder Course Sub-base	Superpave Asphalt Mixture Design, 9.5 mm, PG 64-22, Wearing Course <sup>5</sup> Superpave Asphalt Mixture Design, 25.0 mm, PG 64-22, Base Course <sup>5</sup> 2A Stone or Equivalent	1 1/2 inches 4 1/2 inches 8 inches
Local Streets (Preferred)	Wearing Surface Base/Binder Course Sub-base	Superpave Asphalt Mixture Design, 9.5 mm, PG 64-22, Wearing Course <sup>5</sup> Superpave Asphalt Mixture Design, 25.0 mm, PG 64-22, Base Course <sup>5</sup> 2A Stone or Equivalent	1 1/2 inches 4 1/2 inches 8 inches
Local Streets (Alternate)	Wearing Surface Base Course Sub-base	----- ----- 2A Stone or Equivalent <sup>6</sup>	----- ----- 8 inches
Private Streets (serving 3 or 4 lots or d.u.'s) <sup>7</sup>	Wearing Surface Base Course Sub-base	----- ----- 2A Stone or Equivalent <sup>6</sup>	----- ----- 6 inches

<sup>1</sup> Arterial streets shall be designed and constructed in accordance with all applicable PennDOT standards. For the purposes of this Ordinance, streets serving 20 or more lots or dwelling units shall be considered to be collector streets.

<sup>2</sup> All components of the pavement structure shall meet the requirements specified in the most recent version of PennDOT's Publication 408. (See also Publication 70M, Guidelines for the Design of Local Roads and Streets, most current version.)

<sup>3</sup> Compaction shall be by 10 ton vibratory roller or equivalent.

<sup>4</sup> The depth of all materials may be modified by the Township Supervisors based on the soil types and drainage patterns of the area. In wet or poorly-drained areas, the Township may also require a pavement base drain.

<sup>5</sup> ESAL Loading based on anticipated values.

<sup>6</sup> The sub-base shall consist of 2A stone or other material approved by the Township Supervisors.

<sup>7</sup> Private streets serving 1 or 2 lots or dwelling units need not be constructed to meet specific standards. Private streets serving 5 or more lots or dwelling units shall be constructed to the standards set forth for local streets. All private streets being offered for dedication to the Township shall be constructed to the standards for local streets.

of intersection of the shoulder and side slope.

- c. The minimum depth of the swale shall be one (1) foot below the outer edge of the shoulder.
  - d. The bottom of the swale shall have a rounded area with a width of four (4) feet.
  - e. The minimum and maximum gradient of the drainage swale shall be .75% and 12% respectively.
  - f. The swale shall be sodded, seeded or otherwise stabilized to avoid erosion problems as follows. Any portion of a swale which exceeds a 5% gradient shall have its bottom rounding area lined with stone to a depth below the finished grade equal to one and one-half (1 1/2) times the average size of the largest stone used. For swales of 5% gradient, at least 25% of the stone used shall be eight (8) inches or larger, 75% may be less than eight (8) inches in size. For swales of 12% gradient, at least 25% of the stone used shall be 19 inches or larger in size. Drainage swales having a gradient between 5% and 12% shall use stones which are proportionately larger than the eight (8) inch stone used for the 5% gradient swale.
2. Drainage Pipes. Where a new driveway is proposed to cross a drainage swale adjacent to a public or private street, a drainage pipe of adequate size and length, with adequately engineered end sections, shall be installed by the property owner underneath the driveway to handle the runoff. Where such intersections are to be created along a municipally owned or private street, Township officials shall determine the appropriate pipe size and length as a part of the local Driveway Permit process. Where a State-owned street is involved, PennDOT shall make the necessary determinations.

I. Street Signs and Street Names

1. Street Signs. Street signs shall be placed at all intersections at the expense of the subdivider or developer. The type, design, height and installation arrangements for such signs shall be subject to approval by the Township Supervisors. Street signs shall be erected prior to municipal acceptance of the street.
2. Street Names. Names proposed for new streets shall not duplicate or resemble closely the name of any other existing street in the Township in order to facilitate and simplify emergency dispatching and response. Proposed streets in obvious alignment with others already existing and named, shall be given the name of the street they continue. All proposed street names shall be subject to approval by the Township, County emergency personnel, and the local Post Office, where necessary.

**J. Driveways and/or Access Drives**

1. All proposed lots or land developments shall be situated or laid out so that safe access onto a public or private road can be provided. Driveways and/or access drives should be designed and constructed, to the greatest extent possible, with the guidelines set forth in TABLE 3 below.
2. In a situation where significant potential safety hazards exist, such as excessive slope or areas of extremely limited sight distance, the Township may require, prior to granting final subdivision approval, that:
  - a. the subdivider construct the driveway or access drive; or
  - b. the specific driveway or access drive location be shown on the plot plans; (See also Section 502 B.); or
  - c. a deed restriction be placed on the future use of the lot requiring the guidelines set forth in TABLE 3 to be utilized when a driveway or access drive is proposed for construction.
3. Driveways or access drives shall not serve more than two (2) lots or dwelling units.
4. All driveways and/or access drives shall meet the leveling area and sight distance requirements set forth in Sections 502 E.2.b and 502 E.5, respectively, of this Ordinance.
5. Where a lot fronts on both a local street and a collector street, driveway access shall be from the local street.

**503 OPEN SPACE/RECREATION AREA**

All subdivision and land development proposals meeting the thresholds set forth in this Section shall be required to provide open space and/or recreation area(s) for the use and enjoyment of the occupants of their development in accordance with the following standards.

- A. Where a proposed subdivision or land development of a tract contains 25 or more lots or dwelling units, whether such total is proposed initially or occurs over time as part of a phased development, the Township shall require the reservation and/or dedication of up to ten percent (10%) of the total area of the proposed development (or as may be required otherwise in this Ordinance or in the Zoning Ordinance in effect in the Township) for the common use of all residents of the development. Such reservation may be waived by the Township where the minimum lot size in a subdivision or land development exceeds 2 acres.
- B. Any open space required by the Township shall be suitable for varied outdoor



**TABLE 3****DRIVEWAY AND ACCESS DRIVE DESIGN GUIDELINES**

Type of Development	Min. Width	Max. Grade <sup>1</sup>	Min. Intervals <sup>2</sup>	Min. Sight Distance <sup>3</sup>
Single-Unit Residential	15 ft.	15%	40 ft.	50 ft.
Multi-Unit Residential <sup>4</sup>	15 ft.	12%	75 ft.	75 ft.
Non-Residential Uses	15 ft./lane	8%	100 ft.	100 ft.

**Footnotes**

<sup>1</sup> All driveways and access drives shall provide a stopping or leveling area having a grade of 5% or less which extends 20 feet from the edge of the cartway of the intersecting street. This leveling area shall intersect the street at an angle no less than 60 degrees, preferably 90 degrees.

<sup>2</sup> Minimum intervals for single-family residential uses shall apply between an intersection and the first driveway only. Minimum intervals for other types of uses shall be measured between any two points of access, including both driveways and public streets.

<sup>3</sup> Minimum sight distance shall be measured from the point of intersection of the driveway and street centerlines to a point at the designated distance on the roadway's centerline. No obstructions or plantings measuring higher than 36 inches or hanging lower than eight (8) feet above road grade shall be permitted to block a driver's clear sight at such an intersection. (See also Section 502 E.5 for additional sight distance requirements.)

<sup>4</sup> For the purposes of driveway or access drive design, the multi-unit residential design criteria shall be used for driveways or access drives serving five (5) or more lots or dwelling units.

uses, including recreational activities. Such open space shall be located so as to be easily and safely accessible from all areas of the subdivision and shall be free of safety and health hazards. Open space may also be designed and situated to provide connection to other existing or proposed open space or recreation areas, and may include segments of the site containing unique characteristics or physical features, such as rock outcroppings, virgin or important tree stands, or other environmentally sensitive natural attributes. Portions of the area to be used for recreational purposes shall have suitable physical characteristics for varied recreational use, including well-drained soils, gentle topography, and suitable shape and size, but shall not include area being used for stormwater management purposes.

- C. Where open space/recreation area is required by the Township, the subdivider or developer shall submit, with his subdivision or land development plan, a proposal indicating the type of recreation or related facilities to be installed or constructed in such area. Or, upon agreement between the Township and the developer, the Township may accept the payment of fees in lieu of said construction or installation from the developer. Such fees shall bear a reasonable relationship to the use of the open space and facilities by future inhabitants of the development and shall be used only for the purpose of providing park or recreation facilities accessible to the development. All fees collected by the Township shall be set aside for construction of specific recreation facilities identified as part of the approved subdivision. The Township shall utilize any such fees within three (3) years from the date they were paid or the developer may request a refund. The Township may also require the developer to complete installation of such recreation facilities during the initial phases of his development to ensure their availability to residents as soon as possible.
- D. Where open space/recreation area is provided, the subdivider shall submit, with his subdivision or development plans, a proposal which provides for the maintenance and ultimate ownership of such space. Where such open space is not dedicated to the Township or where such dedication is not accepted by the Township, an Agreement which assigns maintenance responsibilities for the open space and/or recreational facilities shall be approved by the Township, recorded with the final plan, and referenced in the deeds of each parcel within the development.

#### **504   SEWAGE FACILITIES**

All subdivisions and land developments shall be provided with adequate sewage facilities. It shall be the responsibility of the developer to make the necessary arrangements and/or conduct the appropriate tests to determine that such facilities can or will be provided to handle the sewage generated by his development in accordance with the following standards.

A. General Requirements

In general, the type of sewage facilities to be provided shall be determined by the Township, giving consideration to the following order of preference.

1. Connection to a public sanitary sewer or other community sewerage system designed and constructed in accordance with the requirements of the PA Department of Environmental Protection (PA DEP);
2. Provision by the developer of a complete private sanitary sewer or community sewerage system using a treatment plant, designed and constructed in accordance with the requirements of the PA DEP; or
3. Individual on-lot sewage systems designed and constructed in accordance with the requirements of the PA DEP.

The judgment of the Township as to the method of sewage disposal to be used will be made after study and review of a sewage feasibility report submitted by the developer. The submission of such a report may be waived by the Township where it is deemed unnecessary. When required however, such report shall be prepared by a registered professional engineer or other individual of demonstrated qualifications.

B. Planning Requirements

Documentation which demonstrates that the subdivider/developer has adequately planned for sewage disposal within the proposed subdivision or land development shall be submitted with the initial plan (the preliminary or final submission, as applicable), OR the subdivider/developer shall provide the Township with written documentation from the PA DEP or a designated Local Agency that the proposed subdivision/land development has received an exemption from the sewage planning process. Unless such an exemption is granted, the subdivider/developer shall submit the appropriate DEP Planning Module Component(s) to the Township along with plans for the proposed subdivision or land development. No final subdivision or land development plan shall be considered complete or filed with the Township until the applicant has provided the appropriate sewage facilities planning documentation.

C. Individual On-lot Sewage Systems

1. All proposed subdivisions and land developments shall have appropriate soils testing performed by the municipal Sewage Enforcement Officer or a qualified soils scientist in accordance with PA DEP standards, unless connection to or provision of a sanitary sewer or community sewerage system is proposed by the developer. The location of all pit and percolation test sites shall be marked on the subdivision or land development plan, in instances where individual on-lot sewage systems are to be utilized.

2. For single lot subdivisions or for residual parcels created by the subdivision of other land, where the subdivider provides written documentation to the Township which demonstrates that the proposed subdivision or residue is not intended for development, the Township may waive the requirement for soils testing. (All appropriate PA DEP sewage planning requirements shall however still be met, including approval of Non-Building Waiver Request Forms, where applicable.) In such cases, plot plans shall be stamped or marked by the Township indicating that approved lots are "Not For Development". Prior to development, all such plans shall be resubmitted to the Township for approval and the requirements of this Section shall be met in full at that time.
3. Where soils testing indicates that the soils of a site, lot or parcel will not accommodate an individual on-lot sewage system, the Township may approve a proposed subdivision, provided that the plot plans indicate which lot(s) has failed the soils testing. Further, these plans shall be stamped or marked by the Township indicating that such approved lots are "Not For Development" and that prior to development, plans for these lots shall be resubmitted to the Township for approval.

**D. Sanitary Sewer or Community Sewerage Systems**

1. Where an extension to an existing sanitary sewer or community sewerage system or construction of a new sanitary sewer or community sewerage system, either public or private, is proposed or required, the subdivider or developer shall provide the Township with plans prepared by a registered professional engineer and a letter of certification indicating that the proposed facility has been designed in accordance with the standards of the PA Department of Environmental Protection (DEP) **OR** a copy of the DEP-approved Water Quality Permit for the facility. Where an existing sanitary sewer or community sewerage system is to be extended to serve a proposed subdivision or development, the developer shall submit a letter from the applicable service provider or Sewer Authority approving the plans for the proposed extension and indicating the provider's intent to serve the subdivision or land development, as part of the plan submission process.
2. Following construction of the extension, the developer shall provide the Township with an approved inspection report from the applicable service provider or Sewer Authority indicating that such construction was completed satisfactorily. Where a privately-owned community sewerage system is constructed, the developer shall provide the Township with documentation from DEP or other qualified engineer/inspector approved by the Township, which indicates that the facility was installed in accordance with the terms of the Water Quality Permit. (The Township reserves the right to retain an independent registered professional engineer to certify that the sewerage facility has been properly constructed or installed. In this case, the subdivider or developer shall reimburse the Township for all reasonable expenses charged by the engineer for such inspection in accordance with

the procedure established in Section 806 of this Ordinance.)

3. A Plan addressing the maintenance of all private sanitary sewer or community sewerage systems shall be made by the developer and furnished to the Township and the PA DEP for review and approval as a part of the preliminary or final subdivision or development plan submission process, as applicable.
4. Where a public sanitary sewer system is not available to a subdivision or land development at the time of plan submission, but is planned for construction at or near the development site within five (5) years and will have the capacity to serve the development, the subdivider or developer shall install sewer lines, including lateral connections, to provide adequate service to each lot when connection to the public system is made. The sewer lines shall be capped at the limits of the subdivision and the laterals shall be capped at the street right-of-way. When capped sewers are provided, individual on-lot sewage systems shall also be permitted. The installation of such sewer lines and laterals shall also be subject to the inspection process set forth in Sub-Part 2 above.

#### **505 WATER SUPPLY**

All subdivisions and land developments shall be provided with a safe, adequate and potable water supply. It shall be the responsibility of the subdivider or developer to provide such service or assure that each lot to be developed or each dwelling unit proposed in his development can be provided with water utilizing one of the following methods.

##### **A. Public Water Systems**

1. Subdivisions and land developments shall be connected to an existing public water system where connection to such a system is feasible. Where it is not feasible to connect to an existing public system, the Township may require installation of a community water system where a subdivision or land development contains 25 or more lots or dwelling units, either as initially proposed or accumulated over time from the same tract. In such instances, the Township may require the developer to submit a feasibility study prepared by a registered professional engineer or other qualified individual to show that the use of a public or community water system is not feasible.
2. If water is to be provided by means other than by private wells owned and maintained by the individual owners of lots within the subdivision or development, the developer shall present evidence to the Township that water is to be supplied to the subdivision by a certified public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority or utility. A copy of a Certificate of Public Convenience from the PA Public Utility Commission or an application for such certificate, a

cooperative agreement, or a commitment or agreement to serve the area in question, whichever is appropriate, shall be acceptable evidence.

3. Extensions to existing water systems proposed to serve new subdivisions or land developments shall be designed and constructed in accordance with the regulations of the PA DEP. The developer shall supply the Township with a letter from the appropriate service provider or Water Authority approving the plans for the proposed extension to the existing system and indicating the provider's intent to serve the development as a part of the plan submission process.

Following construction of the extension, the developer shall provide the Township with an approved inspection report from the applicable service provider or Water Authority indicating that such construction was completed satisfactorily.

4. Where a new public water system (either public or privately-owned) is proposed to serve a subdivision or development, the system shall be designed and constructed in accordance with the regulations of the PA DEP. The developer shall supply the Township with a copy of the appropriate PA DEP approval letter and Permit for construction and operation of the new water system as a part of the preliminary or final plan submission process, as applicable.

Following construction of the new water system, the developer shall provide the Township with documentation from the PA DEP or other qualified engineer/inspector, approved by the Township, which indicates that the system was installed in accordance with the terms of the State Permit. (The Township reserves the right to retain an independent registered professional engineer to certify that the system has been properly constructed or installed. In this case, the subdivider or developer shall reimburse the Township for all reasonable expenses charged by the engineer for such inspection in accordance with the procedure established in Section 806 of this Ordinance.)

5. A Plan addressing the maintenance of all privately-owned public water systems shall be made by the developer and furnished to the Township and the PA DEP for review and approval as a part of the subdivision or development plan submission process.
6. Fire hydrants with sufficient pressure shall be provided by the developer as an integral part of any public water supply system and shall be placed at such locations as are deemed appropriate, based on the type of development proposed. In addition, the Township may request that plans involving the provision of fire hydrants be reviewed by the local Fire Department to determine the suitability and adequacy of the proposed hydrants, their capability, and their placement.

B. Non-Public Water Systems

1. Where a proposed subdivision or land development involves the conveyance of lots served by a non-public water supply system or the development of a tract upon which an on-site well is to be provided to serve all or parts of the development, the subdivider or developer shall provide the Township with a letter or permit from the PA DEP which approves the construction and operation of the proposed system. This documentation shall be supplied to the Township as a part of the preliminary or final subdivision or land development plan submission, as applicable.
2. A Plan addressing the maintenance of the proposed non-public water supply system shall be made by the developer and furnished to the Township and the PA DEP as a part of the preliminary or final subdivision or development plan submission, as applicable.

C. Individual On-Lot Wells

1. Where neither a public or non-public water supply system is proposed by a developer to serve his development, individual on-lot wells shall be installed by each property owner. Where groundwater problems are known to exist, or where anticipated levels of development may result in water supply problems, the Township may require the developer to demonstrate that a reliable, safe and adequate groundwater supply exists to support the water usage demands of the proposed subdivision without detrimental effects upon existing adjacent water wells. (Supporting documentation must be provided by a qualified engineer or other professional of demonstrated capability; i.e. a hydrogeologist or hydrologist.) The standards set forth in the Safe Drinking Water Act and other appropriate PA DEP regulations shall apply in such instances.
2. Individual on-lot wells shall be located at least 100 feet from the drain field of any individual on-lot sewage system.
3. Where a subdivision or land development proposal consists of five (5) or more lots or dwelling units and a public water supply system is not proposed by the developer to serve his development, the developer shall, at a minimum, be responsible to ensure adequate fire protection is provided for the development. Such protection shall be provided through the use of a pond, a pool, a cistern, a water tank, dry hydrant, or other method or system established by the developer and deemed satisfactory by the local Fire Department.

506 UTILITIES

- A. Plans for the location and installation of other utilities, including but not limited to, electric, gas, street light supply, cable television, and telephone, shall be approved by the Township and the applicable utility company. The location,

width, and purpose of all utility easements shall be indicated on the subdivision or development plans. Utility easements shall have a minimum width of ten (10) feet, and where feasible, shall be located within the street right-of-way. Otherwise, such easements shall be located along rear or side lot lines to the extent possible. (Local utility companies shall be consulted by the developer when designing or locating easements.)

- B. Letters from all appropriate utility companies indicating their ability to supply service for the proposed subdivision or land development shall be provided to the Township by the developer as a part of the subdivision or land development plan submission.
- C. All utilities shall be installed underground in accordance with the PA Underground Utilities Act (Act 287 of 1974, as amended by Act 187 of 1996). Utilities need not be installed underground however where a variance to the requirements of Act 287 has been granted by the PA Public Utilities Commission.
- D. Underground installation of the utility distribution and service lines shall be completed prior to street paving and storm drainage installation. All street rights-of-way and other easements where utility lines are to be installed shall be graded to within six (6) inches of final grade before trenches are excavated.
- E. All natural gas lines shall be installed in accordance with the ASA Code B31, 80 of 1958, as amended. The minimum separation distance from a natural gas line to a dwelling unit or structure shall be as required by the applicable transmission or distributing company.
- F. All proposed dwelling units or structures should be located at least 100 feet from the centerline of any petroleum or petroleum products transmission line which traverses the proposed subdivision or land development, measured at the point of closest proximity.
- G. The Township may require the installation of utilities prior to final plan approval where the cost of installation, including the cost of excavation for underground utilities, will not be completely paid by the utility company. In each case, the Township shall consider the procedures of the applicable utility company involved for the extension of utility service to lots within a new subdivision or land development. The Township may only permit the developer to delay the installation of utilities where the full cost of such installation is included as part of the developer's approved Improvement Agreement and Improvement Guarantee.

## **507    SITE PREPARATION REQUIREMENTS**

### **A.    Erosion and Sedimentation Control**

Effective soil conservation measures shall be planned and implemented for all subdivisions and land developments in accordance with the Rules and



Regulations of the PA Department of Environmental Protection (PA DEP) (PA Code, Title 25, Chapter 102 - Erosion Control/Earthmoving, or as may hereafter be amended) and the following criteria.

1. No changes shall be made in the contour of the land; no grading, excavating, removal or destruction of the topsoil, trees or other vegetative cover of the land shall be commenced unless adequate provisions are made by the landowner for minimizing soil erosion and sedimentation.
2. For the purposes of this Ordinance, a complete erosion and sedimentation control plan as outlined in the most current edition of the Erosion and Sediment Pollution Control Program Manual, developed by the Bureau of Water Quality Management of the PA DEP, shall be prepared by an individual of demonstrated capability for subdivisions or land development proposals where:
  - a. any earth disturbance OR more than 5,000 square feet will be disturbed to develop the site (including construction of the dwelling, driveway and sewage system, etc.); or
  - b. site improvements are involved; or
  - c. major earthmoving activities are proposed; or
  - d. disturbances are proposed for areas of steep or severe slope or for areas adjacent to streams or water bodies; or
  - e. the proposal involves any commercial, institutional or industrial use; or
  - f. where such is deemed appropriate by the Township.
3. When required, Erosion and Sedimentation Control Plans shall be submitted by the developer to the Township along with preliminary or final subdivision or land development plans, as appropriate, and to the Lycoming County Conservation District, and where necessary, to the PA DEP, for review and acceptance. A copy of the Plan shall also be forwarded by the Township to their Engineer for review and input prior to approval of the proposed subdivision or land development. (See also Section 402 B.2.b for other review procedures.)
4. Where appropriate, a notice may be required to be placed on all final subdivision and land development plans indicating that future property owners or developers must meet the Erosion and Sedimentation Control requirements of the PA DEP before lot development is initiated.
5. Whenever sedimentation results from stripping vegetation, grading, regrading or other activity, it shall be the responsibility of the person, corporation or other entity causing such sedimentation to remove it from

all adjoining surfaces, drainage systems and watercourses and to repair any damage at his expense according to the time frame specified by the Township. (All State-mandated permits shall be obtained by the contractor before initiating work in a stream or watercourse.)

6. Where construction activities associated with a subdivision or land development propose to disturb one (1) more acres of land (or as may hereafter be amended by State or Federal statutes) with a point source discharge, the developer shall apply for and obtain a National Pollutant Discharge Elimination System (NPDES) Permit for his site runoff and discharge from the Lycoming County Conservation District prior to initiating such activities. A copy of this Permit shall be submitted to the Township as a part of the subdivision or land development plan submission. Developments involving five (5) or more acres, regardless of point source discharge, shall also require the developer to obtain an NPDES Permit from the County Conservation District.

**B. Grading**

In order to provide suitable building sites, the following standards shall be met:

1. All lots, tracts or parcels shall be graded to provide proper drainage away from buildings without creating ponding problems, and all land within a development shall be graded to drain stormwater water as provided in Section 508 of this Ordinance.
2. Grading shall not divert water onto adjacent properties without the express permission of the land owner and the Township.
3. Grading equipment shall not enter or cross any wetland, stream or watercourse without first obtaining the necessary approval or permit from the PA DEP, U.S. Army Corps of Engineers, or other agencies as appropriate.
4. All excavation and fill activities shall adhere to the following standards.
  - a. Cut and fill slopes shall not be steeper than 3:1 unless stabilized by a retaining wall or cribbing, geo-textile/geo-grid, or other appropriate alternate method.
  - b. Adequate provisions shall be made to prevent surface water from damaging the cut face of excavations or the sloping surface of fills.
  - c. Cut and fill slopes shall not endanger adjoining properties and shall be graded or tapered so that the bottom edge of the slope is no closer than ten (10) feet to any property line.
  - d. Fills shall be placed, compacted, and stabilized to minimize sliding or

erosion.

- e. Fills shall not encroach on natural wetlands, watercourses, nor constructed channels.
  - f. Fills placed adjacent to natural watercourses or constructed channels shall have suitable protection against erosion during periods of flooding and shall be subject to all applicable municipal floodplain management regulations and all floodplain requirements of the PA DEP, Federal Emergency Management Agency (FEMA), and U.S. Army Corps of Engineers. No fill shall be placed in any designated Floodway.
5. Grading shall not accelerate stormwater runoff rates without provision for adequate erosion protection.

## **508    STORMWATER MANAGEMENT**

The management of stormwater from a site, both during and after any subdivision or land development, shall be accomplished in accordance with the standards and provisions of this Ordinance and any PA Stormwater Management Act (Act 167-1978, or as may hereafter be amended) Watershed Plan or Ordinance that may be adopted and implemented hereafter. The provisions of this Section are intended to provide protection against uncontrolled stormwater runoff, and to assure that downstream property owners and water courses are not adversely affected by increases in stormwater runoff resulting from a subdivision or land development. (In addition, all permitting requirements established in the Federal Clean Water Act relating to stormwater discharges shall be met. See Sub-Section A.4 below.)

### **A.    General Requirements**

- 1. A Stormwater Management Plan meeting the criteria outlined in this Section shall be prepared by a registered professional engineer, hydrologist, or other professional of demonstrated capability for all subdivision or land development proposals where:
  - a. disturbance activities that could affect earth resources (such as the creation of impervious surfaces, earth disturbances, or timber harvesting) are proposed that may affect stormwater runoff; or streets or other related improvements are proposed which will increase the total impervious area of the tract; or
  - b. slopes of the site or adjacent areas could affect stormwater runoff as the lot(s) within the proposed subdivision are developed; or
  - c. areas of poor drainage or stormwater runoff problems are known to exist within or directly adjacent to, or immediately down gradient from the proposed subdivision.

2. All subdivision and land development proposals shall meet the requirements of any Watershed Stormwater Management Plan or Stormwater Management Ordinance in effect in the Township or as may hereafter be enacted.
3. Stormwater Management Plans shall be submitted by the developer to the Township along with preliminary and final subdivision or development proposals, as appropriate, and to the Lycoming County Conservation District, and where necessary, to the PA DEP, for review and acceptance. A copy of the Plan shall also be forwarded by the Township to their Engineer for review and input prior to approval of the proposed subdivision or land development. (See also Section 402 B.2.b for other review procedures.)
4. Where construction activities associated with a subdivision or land development propose to disturb one (1) or more acres of land (or as may hereafter be amended by State or Federal statutes) with a point source discharge, the developer shall apply for and obtain a National Pollutant Discharge Elimination System (NPDES) Permit for his site runoff and discharge from the Lycoming County Conservation District prior to initiating such activities. A copy of this Permit shall be submitted to the Township as a part of the subdivision or land development submission. Developments involving five (5) or more acres, regardless of point source discharge, shall also require the developer to obtain an NPDES Permit from the County Conservation District.

**B. Performance Standards**

In order to improve the quality and general utility of stormwater management plans, subdivisions and land developments shall be planned, designed, and constructed in accordance with the following principles.

1. Stormwater management control facilities shall be incorporated into the overall design of any subdivision or land development or improvement in such a way that they may serve multiple purposes such as wildlife areas, recreation areas, fire protection ponds, etc.
2. The natural infiltration and water resource potential of the proposed development site shall guide design, construction, and vegetation decisions. Runoff in excess of natural conditions from roofs and other surfaces which are unlikely to contain pollutants shall be recharged to the ground water table or stored for non-potable water uses to the maximum extent possible.
3. Improvements to manage drainage and stormwater runoff within a subdivision or land development shall be designed to increase the amount of water which infiltrates into the soil where possible, and to control the rate of runoff released off-site through temporary storage of stormwater on-site. Such improvements may include, but are not limited to, deed

covenants which restrict the allowable amount of impervious surface for each lot, the provision of drainage easements, seepage pits, swales, infiltration swales/trenches, and detention or retention basins.

4. Existing trees and shrubs shall be preserved and protected to the maximum extent possible.
5. All natural streams, channels, drainage swales and areas of surface water concentration shall be maintained in their existing condition except where changes can be justified on the basis of other design standards.
6. Stormwater management facilities shall be designed so that the peak rate of runoff from any subdivision or development after development shall be no greater than the peak rate of runoff from the site prior to development, unless this general performance standard is specifically modified by a Watershed Stormwater Management Plan.

C. Design Standards

It shall be the developer's responsibility to provide sufficient plans, documentation and other technical data to demonstrate that the capacity of his proposed stormwater management facilities will adequately control runoff from his development. The following general and technical standards shall be applied when designing such facilities.

1. General Design Criteria.

- a. In calculating the pre-development runoff rate the following assumptions shall apply.
  - 1) Woodland shall be used as the existing condition for those portions of the site having trees greater than six (6) inches in diameter measured breast high (DBH), or where trees existed for at least 18 months prior to the development application.
  - 2) Meadow shall be used for all other areas, including areas which are not presently covered by impervious surfaces.
- b. Calculations for the design of stormwater management facilities shall also assume that all driveways, traffic areas and driving surfaces within the development or subdivision will be paved or covered with an impervious surface.
- c. The design for all proposed stormwater management improvements shall be reviewed and approved by the Township and its Engineer prior to construction of any such proposed improvements. The applicant and/or owner shall reimburse the Township for any and all engineering review charges by the Township Engineer in accordance with the

procedure set forth in Section 806 of this Ordinance.

- d. Stormwater runoff shall not be concentrated onto adjacent properties unless written approval is given by the property owner and the applicable municipality. When stormwater drainage is to be directed into an adjacent municipality, all provisions for accommodating such drainage shall be submitted to the governing body of that municipality for review prior to approval of the subdivision or land development proposal.
  - e. Storm sewers and related installations shall be required by the Township when stormwater runoff cannot be satisfactorily handled within the street right-of-way, as determined appropriate by PennDOT or the Township Engineer, as applicable.
  - f. Where existing storm sewers are reasonably accessible and of adequate capacity, subdivisions and land developments may connect to the existing system, subject to approval of the authority or municipality having jurisdiction over the existing system, after stormwater management has been addressed.
  - g. Where a subdivision or land development is traversed by a watercourse, drainageway, channel or stream, or such plans propose stormwater management facilities, a drainage easement conforming substantially with the line of such water course shall be provided. The drainage easement shall be of such width (minimum 20 feet) as will be adequate to preserve the unimpeded flow of natural drainage; or for the purpose of widening, deepening, relocating, maintaining, improving or protecting such drainageway; or for the purpose of protecting such watercourse for the purpose of stormwater management or installation of a storm sewer. Any change proposed in the existing drainageway shall be subject to the approval of the PA DEP and the U.S. Army Corps of Engineers.
  - h. All storm drainage facilities constructed along or crossing public streets or rights-of-way shall conform to all applicable requirements of the PennDOT related to such drainage facilities.
2. Technical Design Criteria - Stormwater Detention/Retention.
- a. Proposed stormwater detention facilities shall be designed to reduce post-development peak runoff rates to pre-development condition rates for the 2-, 10-, 25- and 100-year design storms. These design storms shall be routed through stormwater detention systems using the modified Puls procedure.
  - b. The Soil Conservation Service Unit Hydrograph Method, Technical Release 55, or other method approved by the Township Engineer should be used to complete hydrologic computations that are required

for the design of stormwater detention basins. Rainfall data for the TR-55 and the SCS Unit Hydrograph Method shall be obtained from the PennDOT Storm Intensity-Duration-Frequency chart for Region 3. (See *Figure 1 of Appendix B of this Ordinance*.) Design shall be based on a 24-hour storm duration. (See also Section 508 C.3.b.)

- c. All stormwater detention basins shall be designed to safely discharge the 100-year peak discharge through an emergency spillway, and all other outlets, in a manner that will not damage the integrity of the basin. The invert elevation of the emergency spillway device shall be placed a minimum of one (1) foot above the 100-year design water surface elevation in the stormwater detention basin. The emergency spillway shall be designed to convey the entire 100-year peak discharge. A modified Puls routing of the 100-year design storm through the basin shall be completed assuming that the emergency spillway is the only operable basin outlet device.
- d. All stormwater basins, except those designed to retain water or special vegetation as part of best management practices, shall be designed to completely drain within 72 hours. Allowances for best management practices shall be made if they are designed in accordance with the most current edition of the PA Stormwater Best Management Practices Manual. Otherwise, low flow channels shall be provided that would extend between points of concentrated inflow to the basin and the basin outlet structure.
- e. Earth fill embankments shall be designed using the following minimum standards:
  - 1) The height of the embankment should not exceed ten (10) feet.
  - 2) The minimum top width of embankments shall be ten (10) feet.
  - 3) The side slopes of the embankment fill should not be steeper than three (3) horizontal to one (1) vertical.
  - 4) The side slopes of areas in a cut should not be steeper than three (3) horizontal to one (1) vertical.
  - 5) A cutoff trench of impervious materials shall be provided under all earth fill embankments exceeding four (4) feet in height.
  - 6) All pipes through embankments shall be constructed with anti-seep collars. The design of such collars shall be in accordance with the attached design procedure and detail specifications (*Figure 2 in Appendix B of this Ordinance*).
- f. Trash racks may be required at basin outlet structures. These trash

racks shall be designed in accordance with recommendations provided in Chapter 11 of "Design and Construction of Urban Stormwater Management Systems" (Water Environment Federation, American Society of Civil Engineers, 1992, or as may hereafter be amended).

- g. Riser outlet structures (where required) shall be constructed on a foundation to prevent floating and movement of the outlet structure due to water and frost action.
- h. Trees and shrubs shall not be planted along the embankment(s) of stormwater basins.
- i. The Township reserves the right to require fencing around stormwater basins where, in their opinion, such protection is warranted.

3. Technical Design Criteria - Conveyance Systems.

- a. Stormwater conveyance systems (such as storm sewers) may be designed for storm events other than the 25-year design storm. However, an overland flow path shall be provided to convey 100-year storm runoff to a stormwater detention/retention/infiltration facility without incidental flooding of a building, parking areas, traffic lanes, or pedestrian areas.
- b. The Rational Method may be used to compute peak runoff for drainage areas involving less than 100 acres. Runoff coefficients and rainfall intensities used in the Rational Method should be selected using the attached table (*Figure 3 in Appendix B of this Ordinance*), (Rawls, et al, 1981). The SCS Unit Hydrograph Method or TR-55 should be used to compute runoff rates for drainage areas involving more than 100 acres. Rainfall data for the SCS Unit Hydrograph Method and for TR-55 shall be obtained from the PennDOT Storm Intensity-Duration-Frequency chart for Region 3 (*Figure 1 in Appendix B.*)
- c. Detailed hydraulic design computations shall be provided for all storm pipes. Recommended hydraulic computational procedures are described in detail in "Design of Urban Highway Drainage - The State of the Art" (US DOT, FHA, 1979, or as may hereafter be amended) and "Hydraulic Charts for the Selection of Highway Culverts" (Hydraulic Engineering Circular Number 5, US DOT, FHA, 1965, or as may hereafter be amended).
- d. Stormwater collection and conveyance systems shall have a minimum diameter of 15 inches.
- e. Manufactured end sections shall be provided at terminus ends of all storm pipes.



- f. Energy dissipators shall be placed at the outlets of all storm pipes. Design computations shall be submitted for all proposed energy dissipators. Recommended design procedures are described in "Erosion and Sediment Pollution Control Program Manual" (PA DEP, 2002, or as may hereafter be amended).
  - g. Drainage swales shall be designed in accordance with procedures described in "Design of Roadside Channels with Flexible Linings" (Hydraulic Engineering Circular Number 15, US DOT, FHA, 1988, or as may hereafter be amended.)
  - h. Detailed hydraulic computations shall be provided for stormwater inlet grates. Recommended hydraulic computational procedures are described in detail in the PennDOT Design Manual, Part 2, Highway Design, Chapter 10 and "Drainage for Highway Pavements" (Hydraulic Engineering Circular Number 12, US DOT, FHA, 1984; or as may hereafter be amended).
  - i. Design water surface elevations in stormwater inlets should be at least six (6) inches below the grate elevation, otherwise, the inlet grate may not accept any stormwater runoff.
  - j. Profile drawings shall be required for all stormwater conveyance systems.
  - k. An engineering evaluation of existing stormwater facilities may be required by the Township or the County Conservation District.
4. Technical Design Criteria - Infiltration Systems to Encourage Recharge (Infiltration Pits/Swales/Trenches).
- a. Stormwater infiltration devices shall be designed in accordance with recommendations provided in the most current edition of the PA Stormwater Best Management Practices Manual.
  - b. Specific Criteria:
    - 1) Infiltration devices shall be designed to infiltrate the entire volume of a 100-year, 1-hour storm and the 2 year, 24-hour storm. All designs must show dewatering of the infiltration device within 48 hours.
    - 2) All infiltration facilities shall be designed based on the results of actual site-specific infiltration tests. Testing shall be conducted in accordance with the most current edition of the PA Stormwater Best Management Practices Manual.
    - 3) Infiltration devices shall not be on slopes greater than 20%. The longer dimensions of the devices shall be parallel to ground

contours where slopes exceed five percent (5%).

- 4) Infiltration devices or the drains to them shall have a sediment trap that can be maintained regularly. All downspouts shall have leaf strainers to prevent leaves from clogging the infiltration device.
- 5) Infiltration devices connected to roof downspouts shall be located at least ten (10) feet from basement walls and downslope of the building.
- 6) The bottom of the infiltration device shall be at least two (2) feet above the seasonally high water table and bedrock or otherwise be shown to be capable of handling the required design volumes.
- 7) Stormwater runoff capacity may be distributed among several infiltration devices, as long as the total required volume is achieved, and that corresponding volumes of stormwater are routed to these devices.
- 8) The use of perforated pipe, concrete vault, or other storage devices may be used to obtain additional storage.
- 9) In all cases, an overflow system should be provided to accommodate storm frequencies in excess of the design requirements.

D. Plan Requirements

1. The Stormwater Management Plan for a proposed subdivision or land development shall include a brief description of the following:
  - a. existing drainage patterns and stormwater runoff characteristics of the site, including any existing drainage or stormwater runoff problems and facilities;
  - b. the anticipated impact that future development of the property will have on existing stormwater runoff and drainage patterns; and,
  - c. the type of structural and nonstructural improvements planned to manage post-development stormwater runoff.
2. The proposed location of both structural and nonstructural improvements shall be shown on the subdivision or development plot plans. The Township shall require the subdivider to provide topographic contour information at such intervals as deemed appropriate on the plot plans in order to better evaluate the proposed stormwater management techniques and/or facilities.
3. Separate, detailed specifications, including complete design calculations,

cross-sections, profiles, manufacturer's details, etc. shall be submitted by the developer for all proposed structural stormwater management improvements.

4. The subdivider shall also submit a proposal for ownership and maintenance of all proposed stormwater management improvements within his development, in accordance with the following provisions.
  - a. Where the subdivider proposes to dedicate such improvements to the Township and the Township has agreed to accept the ownership and maintenance responsibilities thereof, a deed which dedicates the land to be used for the stormwater management improvement to the Township shall be submitted as a part of the Stormwater Management Plan. If approved by the Township, the deed of dedication shall be recorded with the final subdivision or development plan.
  - b. Alternately, where no municipal participation is anticipated, an Ownership and Maintenance Agreement, specifying ownership and assigning maintenance responsibilities for the proposed improvements to either the developer or property owners within the subdivision, shall be recorded with the final subdivision or development plan and shall be referenced in the deeds for each property within the subdivision.

The following criteria shall apply to all stormwater management Ownership and Maintenance Agreements.

- 1) The party (or parties) responsible for the maintenance of all stormwater management facilities shall be identified in the Ownership and Maintenance Agreement. The Township may require the developer to organize a Home Owner's Association to own and maintain such facilities, in lieu of an acceptable alternative suggested by the developer. Regardless of the type of Agreement selected, the developer shall be responsible for the stormwater management facilities and/or participation in the Home Owner's Association until all lots in the development are sold or until all units are leased, as applicable
- 2) A Stormwater Management Maintenance Plan shall be submitted by the developer to the Township for review and approval by the municipality and its Engineer. This Maintenance Plan shall include specific stormwater management maintenance requirements.
- 3) A copy of the applicable Stormwater Management Plan (including the Maintenance Plan), Erosion and Sediment Pollution Control Plan, and design plan(s) for each subdivision and/or stormwater management facility shall be maintained by the party (or parties) identified above for reference purposes.
- 4) An inspection of all stormwater management facilities shall be

conducted at least every six (6) months, and after severe rainfall events by the responsible party (parties). This inspection shall be followed up with a letter report. Copies of this letter report shall be submitted to the Township and to the County Conservation District. Items to be reviewed during this inspection shall include, but need not be limited to, rodent damage, erosion problems, embankment failures, sediment and/or debris accumulation, and vandalism.

- 5) Any damaged facilities shall be repaired and/or replaced by the responsible party (parties) in accordance with the time frame established by the Township.
  - 6) The Township Supervisors and the County Conservation District shall be contacted immediately in the event of severe damage to any stormwater management facility. In such instances, the Township shall reserve the right to review and approve plans to repair and/or replace severely damaged facilities.
  - 7) When, for any reason, the responsible party (parties) fails to properly maintain any stormwater management facilities identified in their Maintenance Plan, the Township Supervisors shall have the right to enter upon such property as may be necessary to access the facilities and perform the appropriate maintenance. Upon completion of such maintenance, the Township shall assess all property owners of the development for costs associated with the necessary maintenance.
5. A record drawing ("as-builts") of all stormwater management improvements certified by a registered professional engineer or land surveyor shall be provided to the Township Supervisors by the developer upon completion of all such construction activities. (See also Section 404 F. for Improvement Dedication requirements.)

## **509 WETLANDS**

- A. No subdivision or land development plan shall be approved by the Township where wetlands are known or are expected to exist until sufficient determination has been made regarding the actual existence and location of such areas. Wetland delineations shall be made utilizing the National Wetland Inventory Maps for Cascade Township and the hydric soils listing contained in the Lycoming County Soil Survey. Where such wetlands are situated within the proposed development area of a site, specific evaluations shall be conducted by a qualified wetlands specialist (with technical training and expertise in botany, hydrology, soil science, or a related field) to determine the actual location and dimension of the wetland areas. Following delineation by the wetlands specialist, a Jurisdictional Determination or verification of the designated wetlands may be required from the U.S. Army Corps of Engineers, where determined necessary or appropriate by the Township.

- B. A statement shall be placed on all plot plans involving wetlands indicating that the landowner and/or his surveyor were responsible for locating such wetland areas and indemnifying the Township against any and all liability arising therefrom. In addition, the statement shall include the source(s) used to make the wetland determination.
- C. Where determined appropriate by the findings of Sub-Section A. above, specific wetland delineations shall be shown on the subdivision or land development plot plans and any additional information or determinations shall be submitted to the Township along with the preliminary or final subdivision or land development plans, as applicable. Subdivision approval may be granted for developments including wetlands, but such approval shall prohibit building construction within 50 feet of these areas unless the requirements of Sub-Section D. below can be met.
- D. Construction within wetland areas of the Township shall not be permitted unless such development can comply with Section 404 of the Federal Clean Streams Act and Chapter 105 of the State Regulations for Bodies of Water within the Commonwealth. (Permits to meet both sets of requirements, administered by the U.S. Army Corps of Engineers and the PA DEP, respectively, can be applied for using a joint application.) Building Permits shall not be issued by the Township Building Code Official until both the Federal and State regulations have been met.

## **510 FLOODPLAIN MANAGEMENT**

The management and regulation of subdivision or development in identified floodplain areas of Cascade Township shall be accomplished in accordance with the standards and requirements of the National Flood Insurance Program and the PA Floodplain Management Act (Act 166-1978). The provisions of this Section are intended to protect property owners from increased flood hazards resulting from inappropriate development of the floodplain, and to protect potential buyers from purchasing land which may not be suitable for development.

### **A. General Requirements**

- 1. Subdivision and land development proposals for properties located in an identified floodplain area must comply with the Floodplain Management Regulations contained in the Zoning Ordinance in effect in Cascade Township, or any subsequently enacted floodplain regulations.
- 2. Land areas susceptible to flooding shall be identified using the most current National Flood Insurance Program mapping, prepared for the Township by the Federal Emergency Management Agency (FEMA). In areas of the Township where detailed flood mapping is not provided by FEMA, the best available elevation and floodway information from Federal, State, and other acceptable sources shall be used to determine the flood hazard area.

3. Subdivision and land development proposals for property located within the floodplain may be approved by the Township, with the stipulation that any planned or future development of the property shall comply with the regulations contained in the Township Floodplain Management Ordinance.
4. The Township may require the subdivider, as a stipulation of subdivision or land development approval, to include a notice on the plot plans and in every deed stating that the subdivision is located in a floodplain and that development of lots within the subdivision must occur in accordance with all Federal, State and municipal floodplain management regulations.

B. Design Standards

All subdivisions or land developments proposed to be located within any identified floodplain area shall be designed in accordance with the floodplain management standards contained in the Zoning Ordinance in effect in Cascade Township, or any subsequently enacted floodplain regulations.

C. Plan Requirements

1. All plans for subdivision or development of property located within an identified floodplain must show the location of the 100-year floodplain boundary and the location of the floodway, if available, according to the most current National Flood Insurance Program flood mapping for the Township.
2. Where applicable, and as may be required by the PA Department of Community and Economic Development, a copy of a Special Permit application shall be submitted to the Township for evaluation along with the subdivision or land development plans.

**511 LOT MARKERS**

Lot markers shall be constructed and located as provided below and shall be set by a registered professional land surveyor prior to final plan approval.

A. Material and Size

Markers shall be iron rods or iron or steel bars, 5/8" x 24" in size.

B. Placement and Markings

Markers must be placed by a registered professional land surveyor so that the scored or marked point coincides exactly with the point of intersection of the lines being marked and shall be set prior to final plan approval.

C. Location of Markers

Lot markers shall be set at:

1. all points where lot lines intersect curves, either front or rear;
2. all angles in property lines of lots; and
3. all other lot corners.

D. Maintenance or Removal

It shall be the responsibility of the subdivider or developer to see that all markers are properly maintained until such time as the lot or tract is conveyed. Maintenance of such markers shall then become the responsibility of the new owner. Any markers that are removed shall be replaced by a registered professional land surveyor at the expense of the person(s) removing them.

## ARTICLE 6

### LAND DEVELOPMENTS

#### 600 GENERAL REQUIREMENTS

- A. The standards outlined in this Article shall be applied by the Cascade Township Planning Commission in evaluating land development proposals. These standards shall be considered minimum standards. The Supervisors may require more restrictive standards be met by the applicant in those circumstances that they determine appropriate, or upon recommendation of the Township Planning Commission. Plans for land development proposals shall comply with the requirements of this Article as well as all other applicable provisions of this Ordinance, including Section 304. *(See also Section 601 below for exceptions.)*
- B. All land development proposals shall also meet the Design and Construction Standards outlined in Article 5 of this Ordinance, unless otherwise noted. Proposals for land developments not specifically listed in this Article shall be submitted to the Township for review and action in accordance with the procedures contained in Section 403 of this Ordinance.
- C. Innovative design techniques which will provide for all foreseeable problems and which will enhance the character of the Township may be permitted and will be encouraged. The criteria for review will be the quality of the design and the proposed development.
- D. All proposed land developments shall comply with the provisions of the Zoning Ordinance in effect in Cascade Township and any other ordinances or regulations hereafter enacted by the Township.
- E. In addition to the requirements outlined below, land development proposals shall also comply with all applicable State and Federal laws and regulations. Approval of a land development plan by Cascade Township does not absolve the developer from his responsibilities to meet such other requirements as may be applicable.

#### 601 EXCEPTIONS

##### A. Exemptions by Definition

As established by Section 503 (1.1) of the PA Municipalities Planning Code, the following activities shall be exempt from the land development requirements of this Ordinance.

1. The conversion of an existing single-family detached dwelling or single family semi-detached dwelling into not more than three (3) residential units,



unless such units are intended to be a condominium;

2. The addition of an accessory building, including farm buildings, on a lot(s) subordinate to an existing principal residential building or agricultural use; or
3. The addition or conversion of buildings or rides within the confines of an enterprise which would be considered an amusement park. For purposes of this Sub-Section, an amusement park is defined as a tract or area used principally as a location for permanent amusement structures or rides. This exclusion shall not apply to newly acquired acreage by an amusement park until plans for the expanded area have been approved by proper authorities.

**B. Waiver of Plan Submittal Requirement**

For the purposes of reasonable and consistent administration of this Ordinance, the requirement for submission of a land development plan may be waived when the following criteria are met and the specified procedures are fulfilled.

1. Land development plan submittal may be waived when:
  - a. existing nonresidential buildings are reused or converted for a single reuse; or
  - b. temporary construction buildings or structures are involved; or
  - c. nonresidential building additions and/or renovations involving internal reallocation of space where the percentage of total expanded floor area does not exceed a cumulative total of 20% of the floor area of the building when it was constructed; the number of additional employees does not exceed 20% of the current number of employees; the number of required off-street parking spaces to be added does not exceed 20% of the existing total; and the volume of anticipated truck traffic, customer usage, or any other aspect of the development is not likely to create an adverse impact on the area where the development is to be located.
2. In order to determine potential eligibility for the above-referenced waiver, the developer shall submit an informal sketch to the Township Planning Commission which specifies the exact location and nature of the proposal, with information sufficient to evaluate the request. Upon receipt of such a waiver request, the Commission shall review the submission and render a determination within 30 days of receipt of the sketch and supporting documentation.
3. All waivers approved by the Planning Commission shall be reported to the Township Supervisors and the Township Building Code Official.

4. A waiver, if granted, shall not relieve the developer from the obligation to comply with all applicable zoning and other Federal, state or local laws and regulations.

## **602 SITE PLANNING REQUIREMENTS**

The following site planning requirements should be utilized to the greatest extent possible in the design of proposed land developments, as determined applicable by the Township.

### **A. Pedestrian Circulation**

1. Pedestrian walkways should be provided within all multi-family residential developments, commercial, industrial and institutional developments, or in other circumstances which may be deemed appropriate by the Township, in order to promote safe pedestrian circulation throughout the developed area. Width, alignment and gradient of walkways should provide for the safety and convenience of the intended users.
2. Pedestrian walkways should be physically separated from all streets and, where possible, from vehicle circulation ways within non-residential developments.
3. Parking lots should be designed to minimize the necessity for pedestrians to walk within and across vehicle circulation areas.
4. Where possible, common open space areas and other residential service areas should be located at the interior of development sites to minimize the necessity for pedestrians to cross streets. Other safety precautions as deemed appropriate by the Planning Commission may be required.

### **B. Structure Orientation**

1. Structure sites should be clustered whenever possible to ensure the largest, most useable tracts of open space are preserved.
2. All buildings should be situated so as to assure that the sight distance required for driveways set forth in Table 3 of this Ordinance can be met.
3. Commercial structures should be located in reasonable proximity to their parking areas in order to minimize required walking distance for safety and convenience.

### **C. Landscaping**

1. Development should be planned to minimize the removal of existing trees, shrubs and ground cover and to minimize the percentage of each site covered with structures, paved parking areas, and other impermeable

surfaces. (See also Sections 507 and 508 of this Ordinance for grading and stormwater management requirements.)

2. New street trees may be provided in development areas to absorb traffic noise, provide shade, reduce visual impacts of developments, mitigate air pollution, and improve community appearance.
3. All sites shall be landscaped in accordance with the requirements set forth in the Zoning Ordinance in effect in Cascade Township.

**D. Buffering and Screen Planting**

1. Buffer yards shall be provided in accordance with the requirements set forth in the Zoning Ordinance in effect in Cascade Township.
2. Screen plantings shall be provided in the following instances and shall be accomplished in accordance with the standards for "screening" set forth in the Zoning Ordinance in effect in Cascade Township.
  - a. where commercial and industrial districts abut and where such zones abut residential districts or uses;
  - b. where residential developments abut major collector streets, including reverse frontage lots;
  - c. around all open sides of commercial or industrial storage, service or other unsightly areas; and
  - d. any other location determined necessary by the Township, or as set forth in the Zoning Ordinance in effect in the Township.

**E. Off-Street Parking**

Off-street parking spaces shall be provided in accordance with the requirements of the Zoning Ordinance in effect in Cascade Township.

**F. Off-Street Loading**

Off-street loading berths shall be provided in accordance with the requirements of the Zoning Ordinance in effect in Cascade Township.

**G. Street and Outdoor Lighting**

1. Where street lights are required by the Planning Commission, the developer shall be responsible for making the necessary arrangements with the public utility company involved; provided however, that whether or not street lights are initially installed, the developer shall be responsible for providing utility easements for future street lighting installations upon consultation with the

applicable utility company.

2. All on-premises types of outdoor lighting being provided as part of a development proposal shall be mounted and shielded to effectively eliminate direct glare on adjacent properties or on public streets.

## **603 RESIDENTIAL DEVELOPMENTS**

The placement of two or more residential buildings on a lot or tract of land OR the division or allocation of space in a single residential structure for the purpose of creating additional residential dwelling units within the building (except the conversion of an existing single-family dwelling into not more than three non-condominium residential units) shall be considered residential land development. (For the purposes of this Ordinance, the placement of a single two-family dwelling on a lot shall not be considered a land development.)

Residential developments shall include, but need not be limited to, single-family attached or multi-family dwelling structures (townhouses or apartment buildings), multi-family housing developments, residential cluster developments, mobile home parks and other similar types of residential developments. (See also Article 7 of this Ordinance for standards pertaining to Mobile Home Parks.) The following standards shall apply to the design of residential land developments.

### **A. Single-Family Attached or Multi-Family Dwelling Structures (Townhouses or Apartment Buildings)**

Single-family attached and multi-family dwelling structures may only be located in those zoning districts of the Township as specified in the District Regulations of the Zoning Ordinance in effect in Cascade Township. In addition, the minimum area and maximum density standards, and open space requirements contained in the Zoning Ordinance shall be utilized in evaluating plans for such dwelling structures. The following standards shall also be met for all such developments.

1. General Requirements. All single-family attached and multi-family dwelling land development plans shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall comply with all applicable Design and Construction Standards outlined in Article 5, including the standards for streets and driveways contained in Section 502. Plans for these residential land developments shall be submitted to the Township for review and action pursuant to the procedure set forth in Section 403 of this Ordinance.

Along with all appropriate development plans, the developer shall submit a written description of the type of housing proposed and shall indicate the total number of dwelling units being proposed per structure.

2. Design Standards. All site planning requirements contained in Section 602

above shall be applied in the design of residential land developments. In addition, the following standards shall also be met.

a. Arrangement of Buildings and Facilities.

- 1) All of the elements of the site plan shall be harmoniously and efficiently organized in relation to topography, the size and shape of the plot, the character of the adjoining property, and the type and size of the proposed buildings in order to produce a liveable and economic land use pattern.
- 2) Buildings shall be arranged in favorable relation to the natural topography, existing desirable trees, views within and beyond the site, and exposure to the sun and other buildings on the site. Grading around the buildings shall be designed to be in harmony with the natural topography, at the same time assuring adequate drainage and safe and convenient access. (See also Sections 507 and 508.)
- 3) Adequate provision shall be made for light, air, and privacy in the arrangement of buildings to each other. Each dwelling unit shall have a minimum of two (2) exterior exposures.

b. Site Access and Circulation.

- 1) Access to the dwellings and circulation between buildings and other important project facilities for vehicular and pedestrian traffic shall be safe, adequate and convenient for the occupants.
- 2) Access and circulation for fire fighting equipment, furniture moving vans, fuel trucks, garbage collection, deliveries and snow removal shall be planned for efficient operation and maintenance.
- 3) Walking distance from the main entrance of a building to a street, driveway or parking area shall be designed to be less than 100 feet. Any exceptions to this standard shall be reasonably justified by compensating advantages, such as desirable views and site preservation through adaptation to topography. In no case however shall the distance exceed 250 feet.

c. Yards. Yards shall assure adequate privacy, desirable views, adequate natural light and ventilation, convenient access to and around the dwelling and other essential facilities or uses. (See also applicable yard requirements in the Township's zoning regulations.)

d. Streets and Access Drives. All streets and/or access drives within single-family attached and multi-family residential developments shall meet the design and construction standards contained in Section 502

of this Ordinance.

- e. Sewage and Water Facilities. Proposed sewage facilities and water supply systems shall be designed and constructed in accordance with the requirements of Sections 504 and 505 of this Ordinance. All multi-family housing developments shall be served by a public or community sewer system AND a public or municipal water supply.
- f. Solid Waste Collection, Storage and Disposal. Arrangements for the collection, storage and disposal of solid wastes generated by the proposed development shall be made by the developer and submitted to the Township for approval as part of his development plan submission. Where determined appropriate, the Township may request review of the proposed arrangements by the PA DEP prior to granting their approval.
- g. Facility and Open Space Maintenance. A proposal for the maintenance of all facilities and/or open space areas which are to be shared by the residents of the development shall be provided by the developer as a part of his plan submission. Where the developer proposes to subdivide and/or convey individual dwelling units of a single structure, i.e. townhouse or condominium units, an agreement which assigns maintenance responsibilities for commonly owned or used facilities or open space shall be submitted with the development plan, recorded with the final plan, and referenced in the deed for each conveyance. In addition, the developer shall demonstrate to the Township that all other requirements of the PA Uniform Condominium Act will be met where individual units are to be conveyed independent of any land area. (See also Section 503 of this Ordinance for open space/recreation area requirements.)

**B. Residential Cluster Developments**

Residential cluster developments may only be located in those zoning districts of the Township as specified in the District Regulations of the Zoning Ordinance in effect in Cascade Township. In addition, the minimum area and maximum density standards, and open space requirements contained in the Zoning Ordinance shall be utilized in evaluating plans for such developments. The following standards shall also be met for all such developments.

- 1. General Requirements. All residential cluster development plans shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall comply with all applicable Design and Construction Standards outlined in Article 5, including the standards for streets and driveways contained in Section 502. Plans for these residential land developments shall be submitted to the Township for review and action pursuant to the procedure set forth in Section 403 of this Ordinance.

Along with all appropriate development plans, the developer shall submit a written description of the type of housing proposed and shall indicate the total number of dwelling units being proposed per structure.

2. Design Standards. The site planning requirements contained in Section 602 above shall be applied in the design of all residential land developments. In addition, the design standards set forth in Section 603 A.2 shall also be met.

C. Mobile Home Parks

See Article 7 of this Ordinance for specific standards pertaining to the design of mobile home parks.

**604 COMMERCIAL DEVELOPMENTS**

The placement of one or more commercial buildings on a lot, regardless of the number of occupants or tenure, shall be considered a commercial land development.

Commercial developments may only be located in those zoning districts of the Township as specified in the District Regulations of the Zoning Ordinance in effect in Cascade Township, and shall include, but need not be limited to, country inns, agricultural support businesses and related sales facilities, and other similar activities. In addition, the applicable minimum lot sizes and supplemental controls contained in the Zoning Ordinance shall be utilized in evaluating plans for such developments. The following standards shall also be met for all such developments.

A. General Requirements

All commercial land development plans shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall also comply with all applicable Design and Construction Standards outlined in Article 5, including the standards for streets and driveways contained in Section 502. Plans for commercial developments shall be submitted to the Township for review and action pursuant to the procedures set forth in Section 403 of this Ordinance.

B. Design Standards

The site planning requirements contained in Section 602 above shall be applied in the design of all commercial land developments. In addition, the following design standards shall also be met.

1. Site Access and Circulation.

- a. Access to public streets shall be limited to well-defined, appropriately

marked entrance and exit lanes. The Township may require exit lanes to be separated from entrance lanes by dividers or planting islands where traffic volumes in entrance lanes are expected to exceed 25 vehicles per hour for any part of the day. In addition, all such points of ingress and/or egress shall meet all applicable PennDOT and Township Permit requirements. (See also Section 502 B.)

- b. Appropriate directional signage, pavement markings, and/or dividers shall be provided to control parking and vehicular circulation. To the extent possible, customer parking and circulation shall be separated from delivery service drives and loading areas.
2. Streets and Access Drives. Driveways or access drives providing vehicular access to such land developments shall be designed and constructed in accordance with the requirements established in Section 502 J. of this Ordinance.
3. Sewage and Water Facilities. Proposed sewage disposal and water supply systems shall be designed and constructed in accordance with the requirements of Sections 504 and 505 of this Ordinance.
4. Solid Waste Collection, Storage and Disposal. Arrangements for the collection, storage and disposal of solid wastes generated by the proposed development shall be made by the developer and submitted to the Township for approval as part of the subdivision or development plan submission. Where determined appropriate, the Township may request review of the proposed arrangements by the PA DEP prior to granting their approval.

## **605 INDUSTRIAL DEVELOPMENTS**

The placement of one or more industrial buildings on a lot, regardless of the number of occupants or tenure, shall be considered an industrial land development.

Industrial developments may only be located in those zoning districts of the Township as specified in the District Regulations of the Zoning Ordinance in effect in Cascade Township, and shall include, but need not be limited to, agricultural product processing, light industrial uses, sawmills, mineral extraction operations and other similar activities. In addition, the applicable minimum lot sizes and supplemental controls contained in the Zoning Ordinance shall be utilized in evaluating plans for such developments. The following standards shall also be met for all such developments.

### **A. General Requirements**

All industrial land development plans shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall also



comply with all applicable Design and Construction Standards outlined in Article 5, including the standards for streets and driveways contained in Section 502. Plans for commercial developments shall be submitted to the Township for review and action pursuant to the procedures set forth in Section 403 of this Ordinance.

**B. Design Standards**

The site planning requirements contained in Section 602 above shall be applied in the design of all industrial land developments. In addition, the design standards set forth in Section 604 B. shall also be met.

**606 RECREATIONAL DEVELOPMENTS**

The division or allocation of space on a lot or tract of land for intermittent recreational use; the placement of two or more recreational buildings or dwelling units on a lot; or the creation of a recreational complex or facility, whether public or private, shall be considered a recreational land development.

Recreational developments may only be located in those zoning districts of the Township as specified in the District Regulations of the Zoning Ordinance in effect in Cascade Township, and shall include, but need not be limited to, campgrounds or recreational vehicle parks; vacation or seasonal home developments; hunting camps; and similar outdoor recreational facilities. In addition, the applicable minimum lot sizes and supplemental controls contained in the Zoning Ordinance shall be utilized in evaluating plans for such developments. The following standards shall also be met for all such developments.

**A. General Requirements**

All recreational land development plans shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall also comply with all applicable Design and Construction Standards outlined in Article 5, including the standards for streets and driveways contained in Section 502. Plans for recreational developments shall be submitted to the Township for review and action pursuant to the procedure set forth in Section 403 of this Ordinance.

**B. Design Standards**

The site planning requirements contained in Section 602 above shall be applied in the design of all recreational land developments. In addition, the design standards set forth in Section 604 B. shall also be met, where applicable.

**607 INSTITUTIONAL DEVELOPMENTS**

The placement of one or more institutional buildings on a lot, regardless of the number of occupants or tenure, shall be considered an institutional land

development.

Institutional developments may only be located in those zoning districts of the Township as specified in the District Regulations of the Zoning Ordinance in effect in Cascade Township, and shall include, but need not be limited to, schools, churches, cemeteries, public service facilities, group homes, day care centers, institutional residences, correctional institutions, and similar institutional uses. In addition, the applicable minimum lot sizes and supplemental controls contained in the Zoning Ordinance shall be utilized in evaluating plans for such developments. The following standards shall also be met for all such developments.

A. General Requirements

All institutional land development plans shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall also comply with all applicable Design and Construction Standards outlined in Article 5, including the standards for streets and driveways contained in Section 502. Plans for recreational developments shall be submitted to the Township for review and action pursuant to the procedure set forth in Section 403 of this Ordinance.

B. Design Standards

The site planning requirements contained in Section 602 above shall be applied in the design of all institutional land developments. In addition, the design standards set forth in Section 604 B. shall also be met, where applicable.

**608 OTHER LAND DEVELOPMENTS**

Plans for other types of land development not specifically listed shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall also comply with all applicable Design and Construction Standards outlined in Article 5. Plans for such developments shall be submitted to the Township for review and action pursuant to the procedure set forth in Section 403 of this Ordinance.

## ARTICLE 7

### MOBILE HOME PARKS

#### 700 APPLICATION OF MOBILE HOME PARK REGULATIONS

Mobile home parks may only be located in those zoning districts of Cascade Township as specified in the Zoning Ordinance in effect in the Township, and shall comply with all requirements for such developments set forth in that Ordinance. In addition, the site planning requirements provided in Section 602 of this Ordinance and the design standards set forth in Section 603 A 2. shall be applied in the layout of all mobile home parks.

All mobile home park development plans shall be prepared in accordance with the Plan Requirements contained in Section 304 of this Ordinance and shall comply with the applicable Design and Construction Standards outlined Article 5, including the standards for streets and driveways contained in Section 502. Plans for mobile home park developments shall be submitted to the Township for review and action pursuant to the procedure set forth in Section 403 of this Ordinance.

## ARTICLE 8

### ADMINISTRATION AND ENFORCEMENT

#### 800 WAIVERS OR MODIFICATIONS

- A. The provisions of this Ordinance represent minimum standards for the protection of the public welfare.
- B. If an applicant feels that any mandatory provision of this Ordinance is unreasonable and would cause unique and undue hardship as it applies to his proposed subdivision or land development, such applicant may apply to the Township Supervisors in writing for a waiver of said provision. If, upon review, the Supervisors find that substantial justice would be served and the public interest secured by granting the applicant's request, they may grant a waiver or modification in writing to such applicant; provided that such waiver or modification will not have the effect of nullifying the intent and purpose of this Ordinance. Further, the Township Planning Commission may recommend the waiver or modification of any provision of this Ordinance to the Supervisors where they feel that such adjustment is necessary or appropriate in a given situation to grant relief for a hardship and is consistent with the purposes of this Ordinance.
- C. In granting waivers or modifications, the Township Supervisors may impose such conditions as will, in their judgement, encourage innovative design and secure substantially the objectives of the standards or requirements so waived or modified.

#### 801 RECORDS

The Township Planning Commission and Supervisors shall maintain an accurate public record of all the plans they review and those upon which they take action and of their findings, decisions, and recommendations in relation thereto.

#### 802 AMENDMENTS

The Township Supervisors may, from time to time, revise, modify, and amend this Ordinance by proceeding to advertise and take action at a scheduled public meeting, all in accordance with the applicable provisions of the PA Municipalities Planning Code.

#### 803 PREVENTIVE REMEDIES

- A. In addition to other remedies, the Cascade Township Supervisors may institute and maintain appropriate actions by law or in equity to restrain, correct or abate violations; to prevent unlawful construction; to recover damages; and to

prevent illegal occupancy of a building, structure or premises. The description by metes and bounds in the instrument of transfer or other documents used in the process of selling or transferring shall not exempt the seller or transferee from such penalties or from the remedies herein provided.

- B. As provided by Section 515.1 of the PA Municipalities Planning Code, or as may hereafter be amended, the Cascade Township Supervisors may refuse to issue any permit or grant any approval necessary to further improve or develop any real property which has been developed or which has resulted from a subdivision of real property in violation of the Cascade Township Subdivision and Land Development Ordinance, enacted September 4, 1970, or any prior regulations adopted pursuant to the requirements of the PA Municipalities Planning Code, which may have been in effect in Cascade Township. The authority to deny such a permit or approval shall apply to any of the following applicants:
1. The owner of record at the time of such violation.
  2. The vendee or lessee of the owner of record at the time of such violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.
  3. The current owner of record who acquired the property subsequent to the time of violation without regard as to whether such current owner had actual or constructive knowledge of the violation.
  4. The vendee or lessee of the current owner of record who acquired the property subsequent to the time of violation without regard as to whether such vendee or lessee had actual or constructive knowledge of the violation.
- C. As an additional condition for 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 Township Supervisors may require compliance with the conditions that would have applied to the property at the time the applicant acquired an interest in such real property.

#### **804 ADMINISTRATION**

In order to properly carry out the administration and enforcement of this Ordinance, the Cascade Township Supervisors may appoint a Subdivision Ordinance Administrator and may grant to this individual the power and authority to administer and enforce the provisions of this Ordinance. Said Administrator shall hold no elective office in the municipality. The individual selected shall meet the qualifications established by the Township; shall be able to demonstrate a working knowledge of municipal subdivision regulations; and may be compensated for his work.

The Administrator shall be technically responsible to the Township Supervisors and

shall report to them monthly on work accomplished. He shall also work closely with the Township Planning Commission and assist them as they review all proposed subdivision and land development applications. The Administrator shall verify all subdivision information supplied as part of any application for a Zoning Permit or Building Permit and shall coordinate with the Township Zoning Officer or Building Code Official, as applicable, on other matters as necessary or appropriate. In addition, the Administrator shall perform all other tasks as designated in his job description. In the event that the Subdivision Ordinance Administrator is unavailable to perform the duties and responsibilities assigned herein, or an Administrator is not appointed, the Township Secretary or other individual duly designated by the Township Supervisors (including any member of the Township Planning Commission) may perform these functions:

## **805 VIOLATIONS AND ENFORCEMENT**

Failure to obtain subdivision or land development approvals as required by this Ordinance, or failure to carry out the requirements of any such approval shall be considered a violation of this Ordinance and shall be remedied as follows.

### **A. Enforcement Notice**

Whenever it appears to the Subdivision Ordinance Administrator or other individual designated to administer this Ordinance that there has been a violation of any provision of this Ordinance, the Administrator, on behalf of the Township, shall give notice of such alleged violation as hereinafter provided. Such enforcement notice shall:

1. be in writing;
2. be served upon the owner of record of the property on which the violation has occurred, or be sent to him by certified mail (return receipt requested);
3. state the name of the owner of record and any other person against whom the Township intends to take action;
4. indicate the location of the property in violation;
5. identify the specific violation(s) with a description of the requirements which have not been met, citing in each instance the applicable provisions of the Ordinance;
6. contain an outline of remedial action which, if taken, will effect compliance, or specify a time period within which the property owner must contact the Administrator to discuss appropriate remedial action; and
7. indicate that failure to comply with the notice within the time specified shall constitute a violation and will be prosecuted or remediated as provided in this Section.

## **B. Enforcement Remedies**

1. Any person, partnership or corporation who or which has violated the provisions of this Ordinance, whether enacted under current law or prior enabling laws shall, upon being found liable therefore in a civil enforcement proceeding commenced by Cascade Township, pay a judgment of not more than \$500.00 plus all court costs, including reasonable attorney fees incurred by the Township as a result thereof. No judgment shall commence or be imposed, levied or be payable until the date of the determination of a violation by the District Justice. If the defendant neither pays nor timely appeals the judgment, Cascade Township may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the District Justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership or corporation violating the Ordinance to have believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth day following the date of the determination of a violation by the District Justice and thereafter each day that a violation continues shall constitute a separate violation. All judgments, costs and reasonable attorney fees collected for the violation of this Ordinance shall be paid over to Cascade Township.
2. In addition to the procedures set forth above, Cascade Township may also utilize the procedures set forth in Section 803 A. of this Ordinance as enforcement remedies.
3. The Court of Common Pleas, upon petition, may grant an order of stay, upon cause shown, tolling the per diem judgment pending a final adjudication of the violation and judgment.
4. Nothing contained in this Section shall be construed or interpreted to grant to any person or entity other than Cascade Township, or their duly appointed agent, the right to commence any action for enforcement pursuant to this Section.

## **806 FEES**

### **A. Township Fees**

All plan processing, improvement design review and inspection fees shall be paid to Cascade Township. Such fees shall be as defined below and shall be designed to cover reasonable and necessary costs associated with processing and evaluating subdivision and land development plans, reviewing proposed designs for site improvements, and conducting inspections of improvement construction and installations required by this Ordinance.

1. Municipal Plan Processing Fees. Fees for the processing and evaluating

of preliminary and final subdivision and land development plans shall be established by Resolution of the Cascade Township Supervisors. Such fees shall be reasonable and shall include all municipal review and processing charges. These fees shall accompany the submission of plans to Cascade Township and shall be nonrefundable.

2. Improvement Design Review Fees. The applicant shall reimburse the Township for all reasonable and necessary charges by the Township Engineer and/or other Professional Consultants, including the municipal Solicitor, for review of site improvement or development designs. Such engineering and/or consulting fees shall be in accordance with the ordinary and customary charges by the engineer or consultant for similar service in the region, but in no event shall the fees exceed the rate or cost charged by the engineer or consultant to the Township when fees are not reimbursed or otherwise imposed on applicants. These fees shall be paid to Cascade Township prior to approval of preliminary or final plans, as applicable.

In the event the applicant disputes the amount of such design review fees, the procedure for resolution of such disputes contained in Section 503 (1) of the PA Municipalities Planning Code, or as may hereafter be amended, shall be applied.

3. Improvement Inspection Fees. Where site improvements are required by the Township to be installed as a condition of final approval of a subdivision or land development plan, said improvements must be inspected by the Township Engineer in accordance with the procedure set forth in Section 404 D. of this Ordinance upon their completion. The applicant shall reimburse the Township for the reasonable and necessary expenses incurred for the inspection of such improvements. Such expense shall be in accordance with the ordinary and customary fees charged by the Township Engineer for work performed for similar services in the region, but in no event shall the fees exceed the rate or cost charged by the engineer to the Township when fees are not reimbursed or otherwise imposed on applicants. These fees shall be paid to Cascade Township prior to approval of a final plan or prior to the release of an improvement guarantee or other financial security guaranteeing satisfactory improvement installation.

In the event the applicant disputes the amount of such inspection fee, the procedure for the resolution of such disputes contained in Section 510 (g) of the PA Municipalities Planning Code, or as may hereafter be amended, shall be applied.

#### B. County Plan Review Fees

Fees for County Planning Commission review of plans for proposed subdivision or land development located in Cascade Township shall be established by the Lycoming County Board of Commissioners. Applicants shall be responsible



for assuming all costs associated with the County review of subdivision or land development plans, according to the Fee Schedule and procedure established by the County.

ARTICLE 9

**MISCELLANEOUS PROVISIONS AND ENACTMENT**

**900 SEVERABILITY AND VALIDITY**

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

**901 REPEALER**

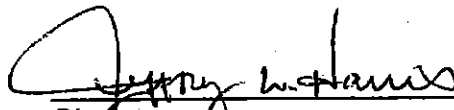
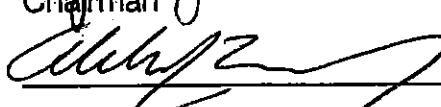
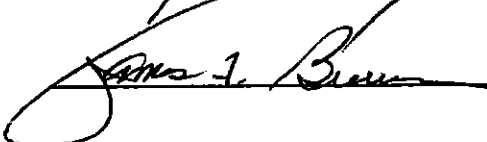
All Ordinances or sections thereof, which are inconsistent with any of the provisions herein, and all prior subdivision and land development regulations which may have been in effect in Cascade Township, including the Cascade Township Subdivision and Land Development Ordinance of 1970, are hereby repealed. Nothing in this Ordinance shall be construed to affect any suit or proceeding now pending in any court or any rights accrued or liability incurred or any causes of action accrued or existing under any Ordinance repealed by this Ordinance. Nor shall any right or remedy be lost, impaired, or affected by this Ordinance.

**902 ENACTMENT AND EFFECTIVE DATE**

**ENACTED** and **ORDAINED** into an Ordinance this 2nd day of December, 2008, by the Board of Supervisors of Cascade Township, Lycoming County, PA.

**TO BECOME EFFECTIVE** on the 1<sup>st</sup> day of January, 2009.

CASCADE TOWNSHIP SUPERVISORS

  
Chairman  
  


ATTEST:

TOWNSHIP SEAL:

  
Cascade Township Secretary

## **APPENDIX A**

### **ILLUSTRATIONS**

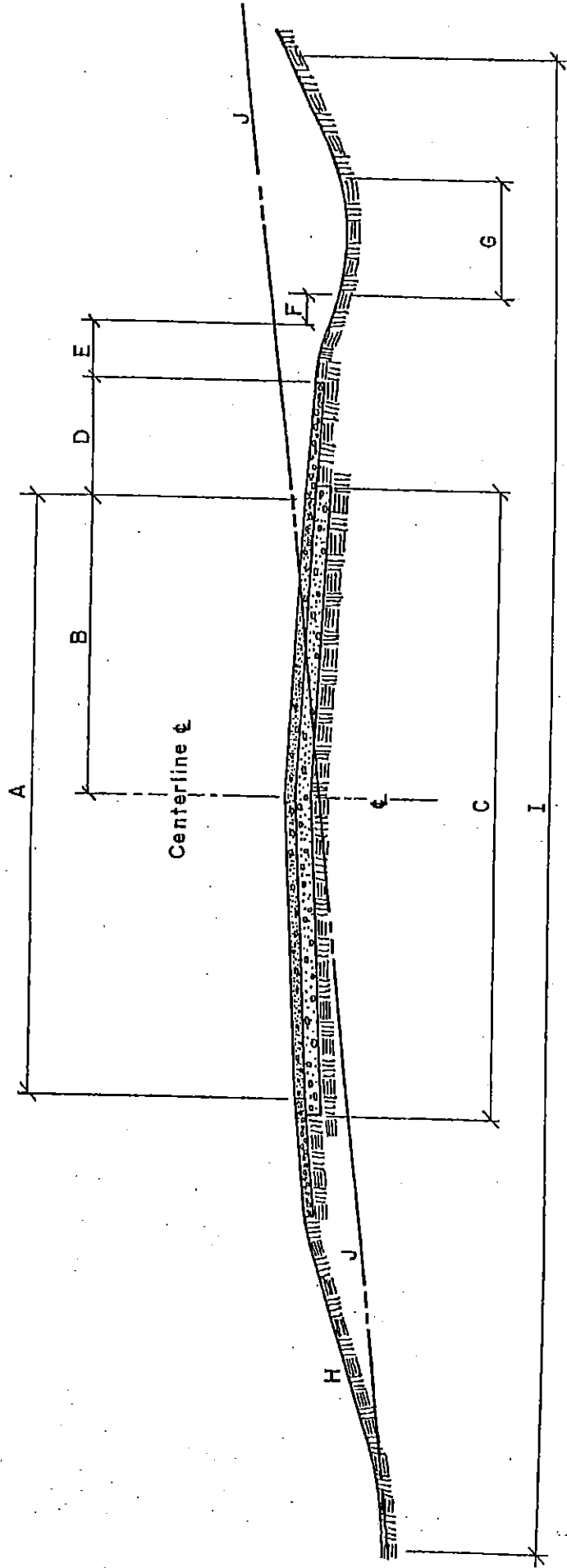
Illustration I. Roadway Elements & Typical Cross Section

Illustration II. Roadway Cross Section Details



# Illustration I

## ROADWAY ELEMENTS and TYPICAL CROSS SECTION for Local Subdivision Road to be Dedicated to Township



- A. Cartway: 20 feet wide, composed of 4 1/2 inches of Superpave Asphalt Mixture Design 25.0 mm, PG 64-22, Base Course, and 1 1/2 inches of Superpave Asphalt Mixture Design, 9.5 mm, PG 64-22, Wearing Course. (See also TABLE 1 & TABLE 2.)
- B. Traveled Lane: 10 feet wide, with crown grade of 1/4 inch to 3/8 inch per foot. (See also 502 D.2.e.)
- C. Sub-Base: 21 feet wide, composed of 6 inches of 2A Stone or other material approved by the Township Supervisors. (See also Section 502 G.4.)
- D. Shoulder: 4 feet wide each side, composed of material approved by the Township Supervisors, to a compacted depth equal to the depth of the base and wearing surface. (See also Section 502 G.6.)
- E. Rounding at the Intersection of Shoulder and Side Slope: 2 foot cross-sectional dimension.
- F. Side Slope: 2:1 ratio maximum.
- G. Swale Rounding: 4 foot cross-sectional dimension with a minimum depth of 1 foot below the outer edge of the shoulder.
- H. Side Slope: 3:1 ratio or flatter preferred.
- I. Right-of-Way: 50 feet.
- J. Original Grade.

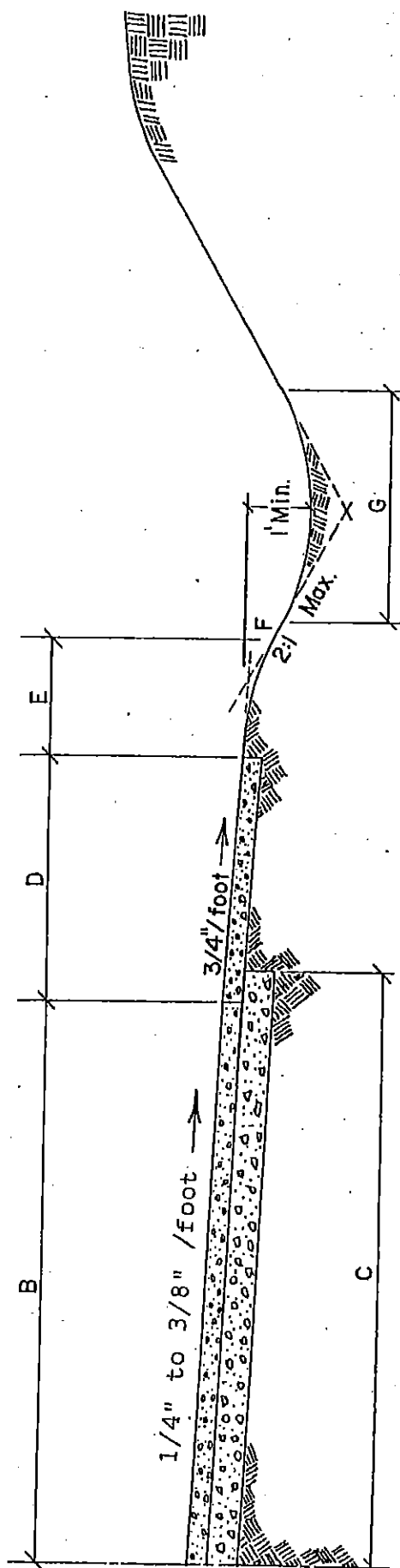
NOT TO SCALE



## Illustration II

### CROSS SECTION DETAILS

for Local Subdivision Road to be Dedicated to Township



Note: Letters B-G correspond with letters B-G on Illustration I.

Not to Scale





## **APPENDIX B**

### **STORMWATER MANAGMENT FIGURES**

Figure 1: PennDOT Storm Intensity-Duration-Frequency Chart for Region 3

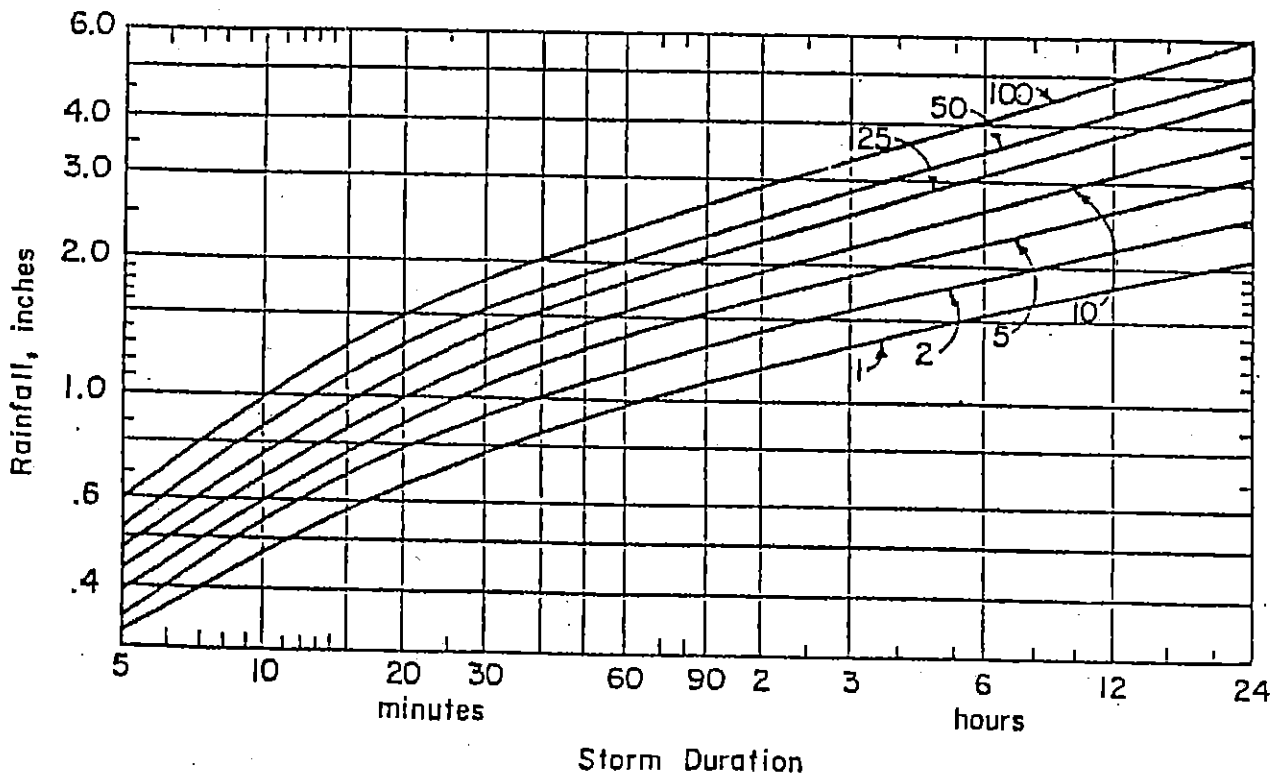
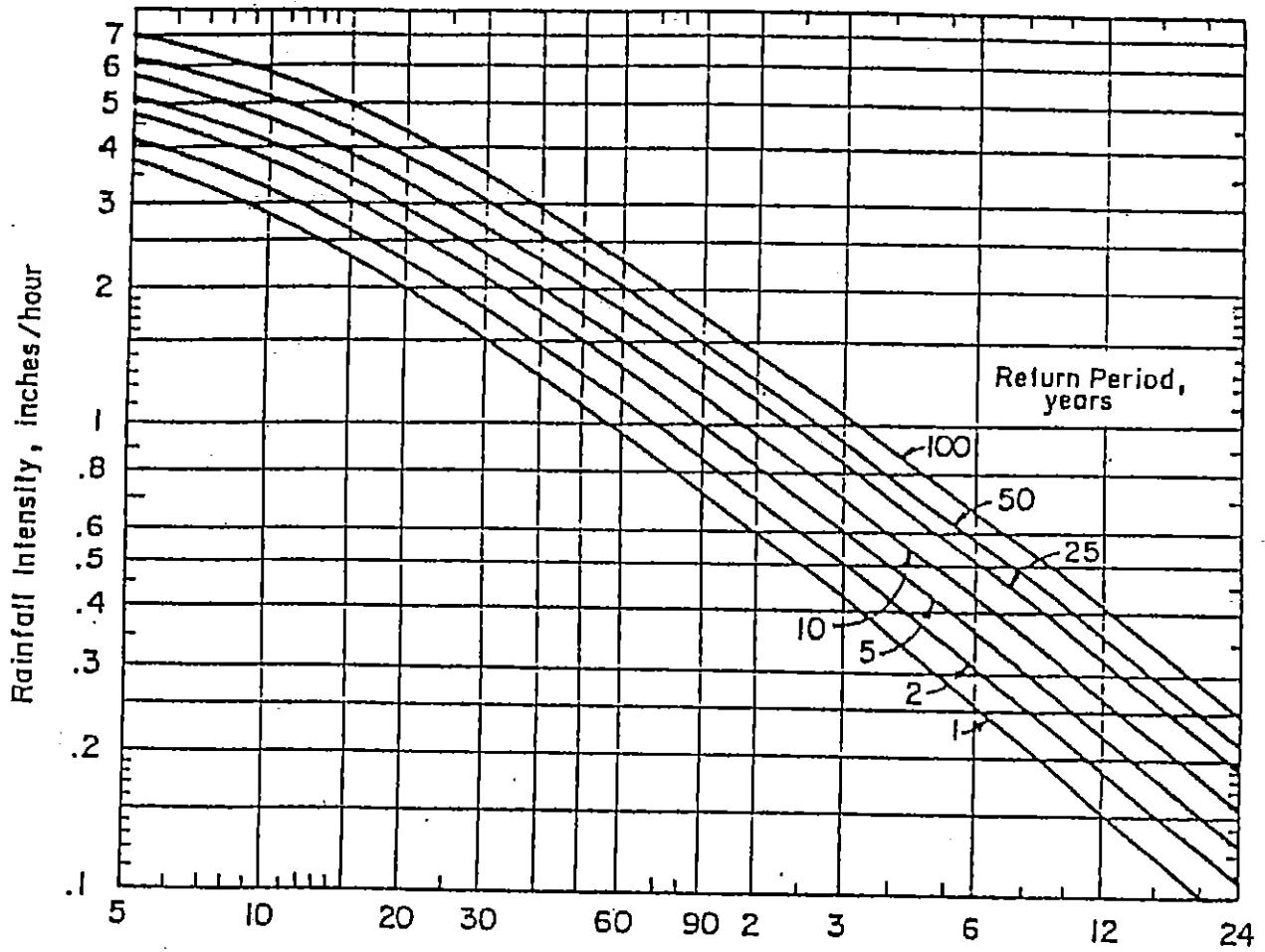
Figure 2: Anti-Seep Collar Design Details

Figure 3: Run-off Coefficients for the Rational Formula



Figure 1.

REGION 3



PennDOT Storm Intensity-Duration-Frequency Chart

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## Figure 2.

### ANTI-SEEP COLLAR DESIGN

This procedure provides the anti-seep collar dimensions for only temporary sediment basins to increase the seepage length by 15% for various pipe slopes, embankment slopes and riser heights.

The first step in designing anti-seep collars is to determine the length of pipe within the saturated zone of the embankment. This can be done graphically or by the following equation, assuming that the upstream slope of the embankment intersects the invert of the pipe at its upstream end. (See embankment-invert intersection on the drawing below:

$$L_s = y (z + 4) \left[ 1 + \frac{\text{pipe slope}}{0.25 - \text{pipe slope}} \right]$$

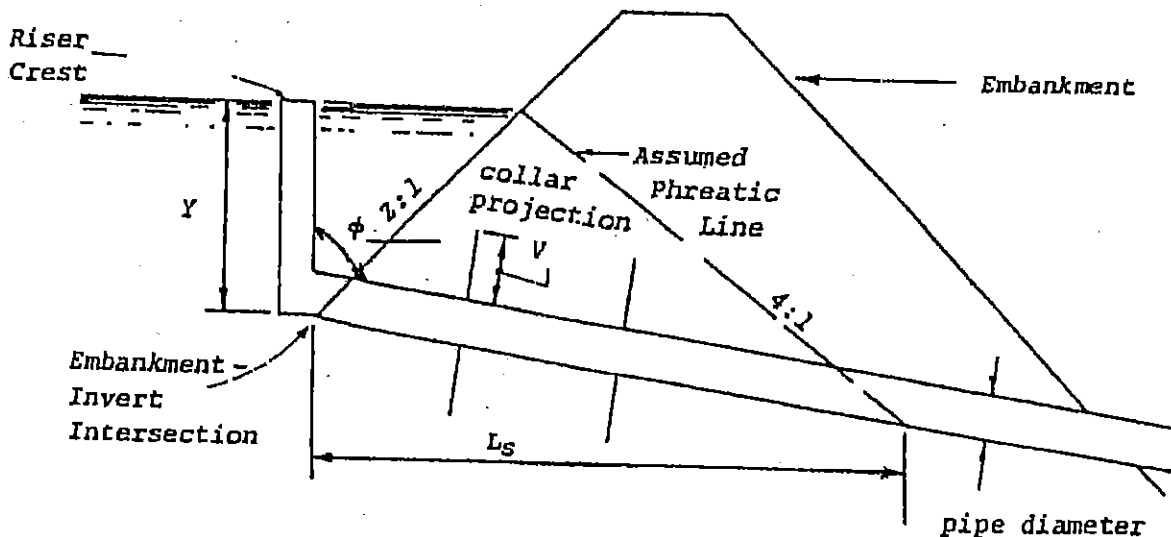
where:  $L_s$  = length of pipe in the saturated zone (ft.)

$y$  = distance in feet from upstream invert of pipe to highest normal water level expected to occur during the life of the structure, usually the top of the riser.

$z$  = slope of upstream embankment as a ratio of  $z$  ft. horizontal to one ft. vertical.

pipe slope = slope of pipe in feet per foot.

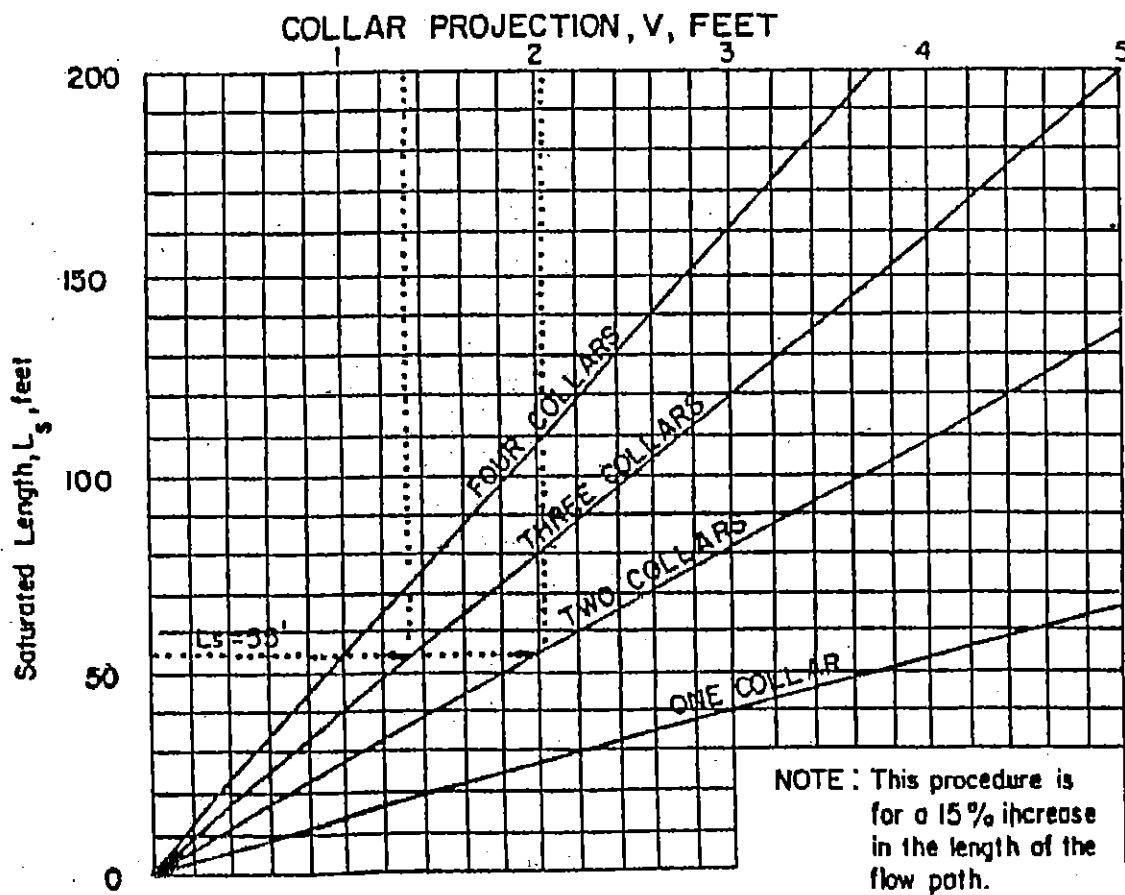
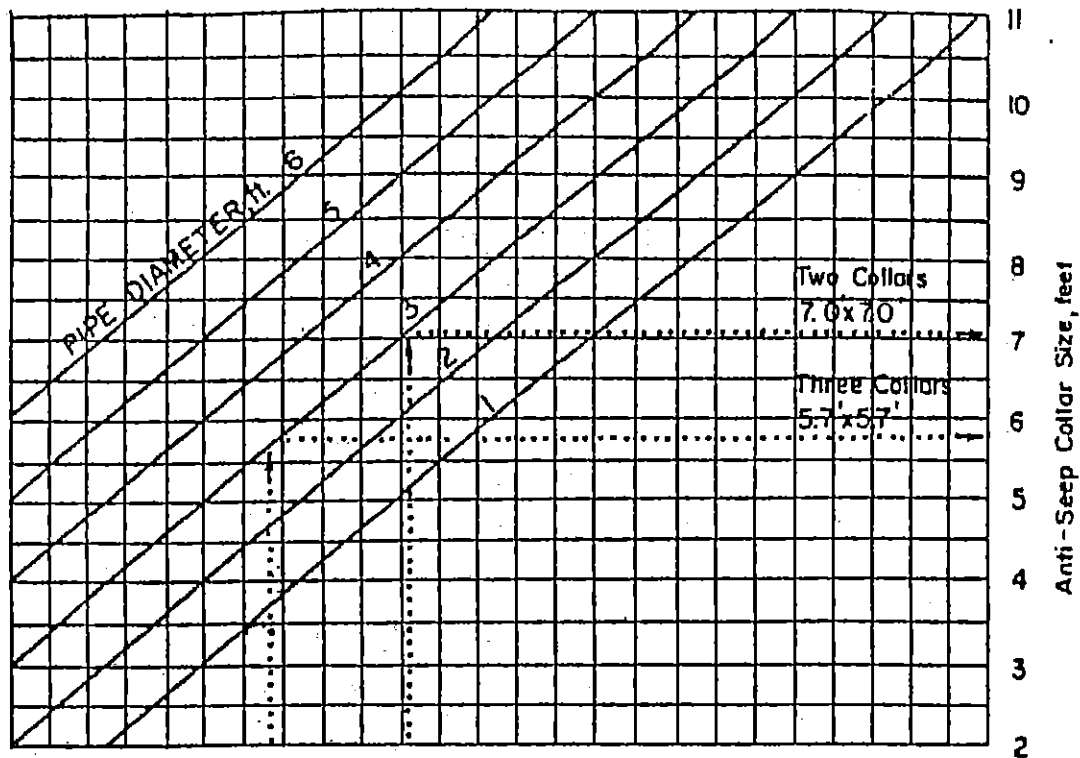
This procedure is based on the approximation of the phreatic line as shown in the drawing below:



SOURCE: "1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control," Maryland Department of the Environment, 1983.

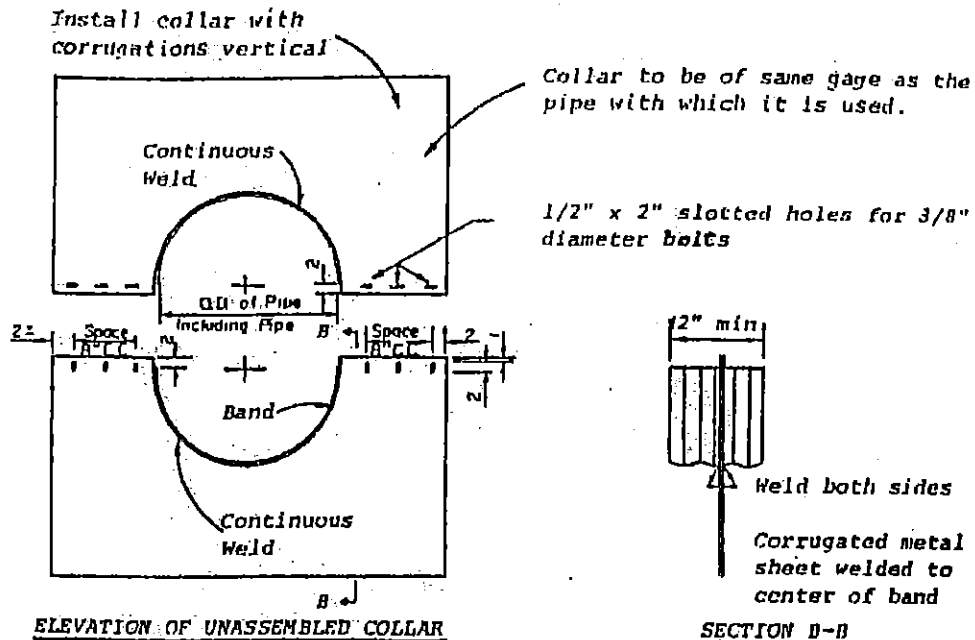


# ANTI-SEEP COLLAR DESIGN









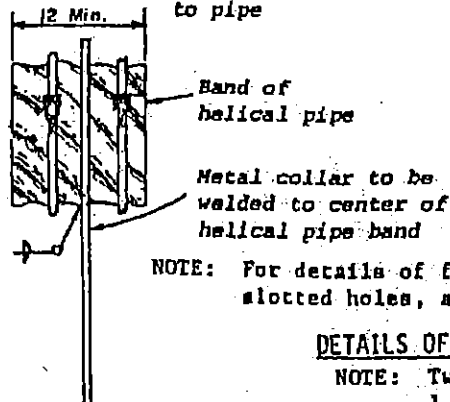
**NOTES FOR COLLARS:**

1. All materials to be in accordance with construction and construction material specifications.
2. When specified on the plans, coating of collars shall be in accordance with construction and construction material specifications.
3. Unassembled collars shall be marked by painting or tagging to identify matching pairs.
4. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at time of installation.
5. Each collar shall be furnished with two 1/2" diameter rods with standard tank lugs for connecting collars to pipe.

**DETAILS OF CORRUGATED METAL ANTI-SEEP COLLAR**

Size and spacing of slotted openings shall be the same as shown for CM collar

Use rods and lugs to clamp bands securely to pipe

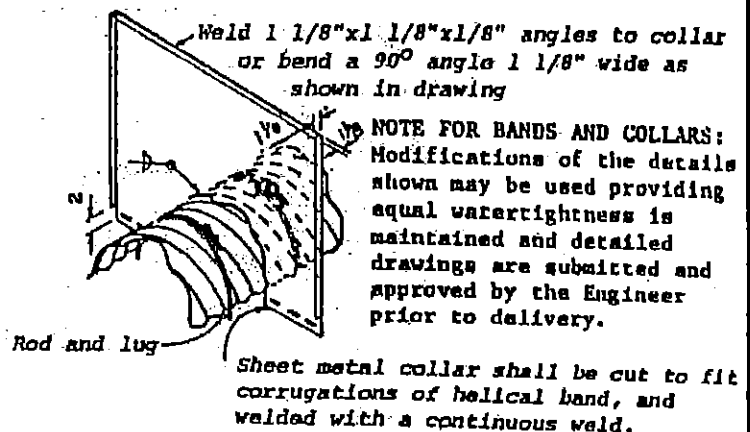


NOTE: For details of fabrication dimensions, minimum gages, slotted holes, and notes, see detail above.

**DETAILS OF HELICAL PIPE ANTI-SEEP COLLAR**

NOTE: Two other types of anti-seep collars are:

1. Corrugated metal, similar to upper detail, except shop welded to a short (4 ft.) section of the pipe and connected with connecting bands to the pipe.
2. Concrete, six inches thick formed around the pipe with #3 rebar spaced 15" horizontally and vertically.



**PARTIAL ELEVATION**

Ref: Engr. Field Manual

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Figure 3.

Ruoff Coefficients for the National Formals  
By Hydrologic Soil Group and Overland Slope (%)

Land Use	A			B			C			D		
	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+
Cultivated Land	0.08 <sup>a</sup> 0.14 <sup>b</sup>	0.13 0.18	0.16 0.22	0.11 0.16	0.15 0.21	0.21 0.26	0.14 0.20	0.19 0.25	0.26 0.34	0.18 0.24	0.23 0.29	0.31 0.41
Pasture	0.12 0.15	0.20 0.25	0.30 0.37	0.18 0.23	0.26 0.34	0.37 0.45	0.24 0.30	0.34 0.42	0.44 0.52	0.30 0.37	0.40 0.50	0.50 0.62
Meadow	0.10 0.14	0.18 0.22	0.25 0.30	0.14 0.20	0.22 0.28	0.30 0.37	0.20 0.26	0.28 0.35	0.38 0.44	0.24 0.30	0.30 0.40	0.40 0.50
Forest	0.05 0.08	0.08 0.11	0.11 0.14	0.08 0.10	0.11 0.14	0.14 0.18	0.10 0.12	0.13 0.16	0.15 0.20	0.12 0.15	0.16 0.20	0.20 0.25
Residential Lot Size 1/8 Acre	0.25 0.33	0.28 0.37	0.31 0.40	0.27 0.35	0.30 0.39	0.35 0.44	0.30 0.38	0.33 0.42	0.38 0.48	0.33 0.41	0.38 0.45	0.42 0.54
Lot Size 1/4 Acre	0.22 0.30	0.26 0.34	0.29 0.37	0.24 0.33	0.28 0.37	0.33 0.42	0.27 0.36	0.31 0.40	0.36 0.47	0.30 0.38	0.34 0.42	0.40 0.52
Lot Size 1/3 Acre	0.19 0.28	0.23 0.32	0.26 0.35	0.22 0.30	0.25 0.35	0.30 0.39	0.25 0.33	0.29 0.38	0.34 0.45	0.28 0.36	0.32 0.40	0.39 0.50
Lot Size 1/2 Acre	0.16 0.25	0.20 0.28	0.24 0.32	0.19 0.26	0.23 0.32	0.28 0.36	0.22 0.31	0.27 0.35	0.32 0.42	0.26 0.34	0.30 0.38	0.37 0.48
Lot Size 1 Acre	0.14 0.22	0.18 0.26	0.22 0.28	0.17 0.24	0.21 0.28	0.26 0.34	0.20 0.26	0.25 0.32	0.31 0.40	0.24 0.31	0.28 0.35	0.35 0.46
Industrial	0.67 0.85	0.66 0.85	0.68 0.88	0.68 0.85	0.69 0.88	0.69 0.88	0.68 0.88	0.69 0.88	0.69 0.87	0.69 0.86	0.69 0.88	0.70 0.88
Commercial	0.71 0.86	0.71 0.88	0.72 0.89	0.71 0.89	0.72 0.89	0.72 0.89	0.72 0.89	0.72 0.89	0.72 0.89	0.72 0.89	0.72 0.89	0.72 0.90
Streets	0.70 0.78	0.71 0.77	0.72 0.79	0.71 0.80	0.72 0.82	0.74 0.84	0.72 0.84	0.73 0.85	0.76 0.89	0.73 0.89	0.75 0.91	0.78 0.95
Open Space	0.05 0.11	0.10 0.16	0.14 0.20	0.08 0.14	0.13 0.19	0.19 0.28	0.12 0.18	0.17 0.23	0.24 0.32	0.16 0.22	0.21 0.27	0.28 0.39
Parking	0.85 0.85	0.86 0.87	0.87 0.87	0.85 0.85	0.86 0.86	0.87 0.87	0.85 0.85	0.86 0.86	0.87 0.87	0.85 0.85	0.86 0.86	0.87 0.87

<sup>a</sup> Ruoff coefficients for storm recurrence intervals less than 25 years.  
<sup>b</sup> Ruoff coefficients for storm recurrence intervals of 25 years or more.

Source: Hauls, W.J. & S.L. Wong and R.H. McQueen, 1981, "Comparison of Urban Flood Frequency Procedures," Preliminary Draft, U.S. Department of Agriculture, Soil Conservation Service, Beltsville, MD.

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