

Westfall Township Planning Commission

Subdivision and Land Development Ordinance &

Zoning Ordinance Pike County, Pennsylvania

WESTFALL TOWNSHIP
PIKE COUNTY, PENNSYLVANIA

ORDINANCE NUMBER 141

An Ordinance Amending the Westfall Township Subdivision and Land Development Ordinance No. 133, adopted November 1, 2007, providing for in-lieu open space fee for non residential developments.

WHEREAS, under and pursuant to the Second Class Township Code, 53 P.S. 66506, and 66601, the Board of Supervisors may make and adopt any Ordinances, By Laws, Rules and Regulations not inconsistent with or restrained by the Constitution and Laws of this Commonwealth necessary for the proper management, care and control of the Township and its finances and the maintenance of peace, good government, health and welfare of the Township and its citizens, trade, commerce and manufacturers;

WHEREAS, under and pursuant to the Westfall Township Subdivision and Land Development Ordinance, No 133, adopted November 1, 2007, Section 108, the Board of Supervisors may, after public hearing, amend the provisions of the Ordinance pursuant to the provisions of the Municipalities Planning Code as amended;

WHEREAS, under and pursuant to the Municipalities Planning Code, 53 P.S. 10609, before voting on the enactment of the amendment, the Board of Supervisors shall hold a public hearing thereon pursuant to public notice; and

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Board of Supervisors of Westfall Township, Pike County, Pennsylvania;

1. The preceding Whereas Clauses are hereby incorporated as though same were set forth at length herein;
2. The Ordinance is hereby amended as follows:

FROM: 503.8.2 APPLICABILITY This section shall apply to a residential subdivision or land development for which a preliminary or final plan is submitted after the effective date of this amendment.

TO: 503.8.2 APPLICABILITY This section shall apply to residential and non residential subdivision or land development for which a preliminary or final plan is submitted after the effective date of this amendment.

This Ordinance shall become effective immediately. Duly enacted and ordained this 7th day of August, 2008 by the Westfall Township Supervisors of the Township of Westfall, County of Pike, and Commonwealth of Pennsylvania in lawful session duly assembled.

James Muir
JAMES MUIR, CHAIRMAN

Lester J. Buchanan
LESTER J. BUCHANAN, VICE-CHAIRMAN

Robert M. Ewbank
ROBERT M. EWBANK, SUPERVISOR

Paul C. Fischer
PAUL C. FISCHER, SUPERVISOR

Raymond Banach
RAYMOND BANACH, SUPERVISOR

ATTEST:

Lisa P. Green
LISA GREEN, SECRETARY

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ARTICLE I GENERAL PROVISIONS

101. TITLE

This is an Ordinance providing for the regulation of land subdivisions and land developments within the Township of Westfall, Pike County, Pennsylvania. It shall be known and may be cited as "The **2007** Subdivision and Land Development Ordinance of Westfall Township."

102. LEGISLATIVE AUTHORITY

This Ordinance is enacted pursuant to the authority conferred by the Pennsylvania Municipalities Planning Code, as amended.

103. APPLICABILITY

This Ordinance shall apply to all "subdivisions" and "land developments" (as defined by this Ordinance), or portions thereof, located within the Township limits which are subdivided, developed and/or submitted after the effective date of this Ordinance. This Ordinance shall also apply to all subdivisions previously approved by the Township or County when the required improvements and other approved or required aspects of the subdivision in accordance with the terms of such approval have not been substantially completed within 5 years of their preliminary plan approval date.

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 facilities in connection therewith shall be laid out, constructed, opened or dedicated for public use or travel, or for the common use of occupants of buildings abutting thereon, except in strict accordance with the provisions of this Ordinance.

104. PURPOSE

This Ordinance has been adopted for the purpose of providing for conditions favorable to the health, safety, general welfare, convenience, economy and preservation of the environment for the citizens of the Township through regulations that will ensure the harmonious development of the community. Township growth should be orderly and consistent with the overall Westfall Township Comprehensive Plan. This Ordinance is also intended to carry out the purposes that are listed for a Subdivision and Land Development Ordinance in the Pennsylvania Municipalities Planning Code.

105. CONFLICT AND SEVERABILITY

105.1 Conflict with Other Ordinances: Whenever there is a difference between minimum standards or dimensions specified herein and those contained in

Zoning Ordinance or other official regulations, the highest standards shall apply. Where a provision of this Subdivision and Land Development Ordinance (SALDO) and the Zoning Ordinance apply to the same matter, the most restrictive provision upon development or use of the land shall apply, unless specifically stated otherwise.

- 105.2 Severability: If any article, section, subsection, sentence, clause, or phase of this ordinance is for any reason held by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the remaining portions of this Ordinance.

106. **REPEALER**

This Ordinance repeals all provisions of the pre-existing 1989 Westfall Township Subdivision and Land Development Ordinance, as amended, except that Westfall Township reserves its power to enforce and prosecute any violations of all these Ordinances previously in effect.

107. **MODIFICATIONS, EXCEPTIONS AND DEFERRALS**

- 107.1. An applicant seeking a modification or exception to this Ordinance shall submit to the Township staff a request in writing that states a) the specific Ordinance section(s) involved and b) the reasons for the request. The staff shall provide the request to the Planning Commission for a recommendation. After the Planning Commission has had an opportunity for review at a meeting, the Board of Supervisors may in writing grant a waiver or modifications to the specific requirements of this Ordinance.

- 107.2. The applicant must prove that the request will meet one or more of the following conditions:

- 107.2.1. Avoid an undue hardship that was not self-created and that results from the peculiar and uncommon conditions of the property, or
- 107.2.2. Avoid a clearly unreasonable requirement that would not serve any valid public purpose, or
- 107.2.3. Allow an alternative standard that is clearly proven by the applicant to provide equal or better results, or
- 107.2.4. Allow a layout or improvements that would clearly be more in the public interest than what would occur if the modification were not granted or

- 107.2.5. Remove a requirement that is not applicable, especially because of the small size of the proposed subdivision or land development, or
- 107.2.6. Recognize that individual lots within a proposed commercial or industrial subdivision will require future land development approvals, and that certain engineering matters can be deferred until specific land development plans are later submitted.

107.3. Modification of Requirements for Open Space Development.

- 107.3.1. In addition to the authority granted in Section 107.2., the Board of Supervisors shall have the authority to modify specific requirements of this Ordinance for an application approved as an Open Space Development under the Zoning Ordinance in any of the following cases.
- (a) To result in a higher quality site design, including a design that is more pedestrian-friendly, encourages lower speed traffic on residential streets and/or promotes patterns of development similar to traditional villages.
 - (b) To minimize adverse impacts upon important natural features, scenic views and historic buildings.
- 107.3.2. Allowed Modifications. A modification under this Section 107.3. shall not be primarily intended to result in the allowance of a higher number of lots/dwelling units on a tract than would otherwise be possible. A modification under this Section 107.3. may include, but is not limited to, the following:
- (a) Reduction in the minimum horizontal curve radius of streets to promote lower-speed traffic.
 - (b) Variations in the design of cul-de-sac street ends.
 - (c) Reduction of street cartway widths and provisions for alleys to provide rear access to properties, considering the expected traffic volumes, on-street parking and traffic speeds.
 - (d) Allowance of roadside drainage swales without curbing where curbing is not necessary for storm water management reasons.
 - (e) Variations in landscaping and buffer yard requirements that still achieve a similar effect to what would otherwise be required.

- (f) Allowance of a private access drive, serving a maximum of 2 dwelling units, where necessary to minimize impacts upon natural resources and to manage traffic access onto through-streets.
- (g) Allowance of flag lots where necessary to minimize impacts upon natural resources.

107.3.3. Deferral of Submission Requirements. For an application for an Open Space Development, an applicant may defer the submittal of the following specific detailed engineering information until the Final Plan submission if the applicant commits to not construct any improvements, conduct substantial grading or remove forested areas until after Final Plan approval. This provision shall not restrict routine soil testing and well drilling.

- (a) The applicant shall submit a written list of the information that is proposed to be deferred and the draft text of an agreement to carry out this subsection. The agreement shall be in a legally binding document that is acceptable to the Township Solicitor. The list of information that is deferred shall require written approval by the Planning Commission but shall not require approval by the Board of Supervisors. The agreement shall be prepared in a manner that is binding upon all of the applicant's heirs, successors and assigns.
- (b) This deferral of submission requirements may include detailed road profiles (except that the applicant shall be required to show that slope requirements will be met), road data, utility profiles, grading plans, storm water calculations and improvement construction details.
- (c) In place of submitting this information at the Preliminary Plan stage, an applicant shall submit sufficient information at the Preliminary Plan stage to prove the feasibility of proposed development. The Township Engineer, Planning Commission or Board of Supervisors may require that specific information be provided to show this feasibility. This shall include proving the ability of all Final Plan stages to fully function in a coordinated manner, even if all stages are not completed.

108. AMENDMENTS

The Board of Supervisors may, after public hearing, amend the provisions of this Ordinance, pursuant to the provisions of the Pennsylvania Municipalities Planning Code as amended.

109. REMEDIES AND PENALTIES

109.1 Enforcement Notice. If the Township has reason to believe that a violation of this Ordinance has occurred, the Township Staff shall issue a written enforcement notice to the landowner and/or developer. This enforcement notice shall state the nature of the violation, one or more applicable section numbers, and a contact person for the Township. The Enforcement Notice shall provide a time deadline for the landowner and/or developer to come into compliance with the Ordinance. A Cease and Desist Order may also be issued by the Township.

109.1.1 The Township may then file an enforcement proceeding with the District Magistrate, with written notice provided to the landowner and/or developer.

109.2 Preventive Remedies:

109.2.1 In addition to other remedies, the Township may institute and maintain appropriate actions by law or in equity to restrain, correct or abate violations, to prevent unlawful construction, to recover damages and to prevent illegal occupancy of a building, structure or premises. The description by metes and bounds in the instrument of transfer or other documents used in the process of selling or transferring shall not exempt the seller or transferor from such penalties or from the remedies herein provided.

109.2.2 The Township 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 any ordinance adopted pursuant to this article. This 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 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.

109.2.3 As an additional condition for issuance of a permit or the granting of an approval to any such owner, vendee or lessee for the development of any such real property, the Township may require compliance with the conditions that would have been applicable to the property at the time the applicant acquired an interest in such real property.

109.3 Enforcement Remedies: Any person, partnership, corporation or other entity who or which has violated the provisions of any subdivision or land development ordinance enacted under this act or prior enabling laws shall, upon being found liable therefore in a civil enforcement proceeding commenced by the Township, pay a judgment of not more than \$500 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, the Township may enforce the judgment pursuant the applicable rules of civil procedure.

- a. Violations. 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. 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.
- b. Fines. All fines collected for such violations shall be paid over to the general fund of the Township.

110. **EFFECTIVE DATE**

This Ordinance shall become effective 5 calendar days after the date of its adoption by the Township Board of Supervisors.

111. **ADOPTION**

This Ordinance was duly adopted at a public meeting of the Township Board of Supervisors held on after a public hearing, properly advertised, held on November 1,
2007.

Adopted this 1st, day November 2007.

BOARD OF SUPERVISORS OF WESTFALL
TOWNSHIP, PIKE COUNTY

James Kline
Lester J. Buchanan
Thaddeus
W. H. H.

Lisa C. Green

Attest, Township Secretary

ARTICLE II

DEFINITIONS

201. Inclusions

As used in these regulations, words expressed in the singular include their plural meanings and words expressed in the plural include their singular meanings. The word "person" includes a corporation, unincorporated association, and a partnership, as well as an individual. The words "building" and "street" are used generally and shall be construed as if followed by the phrase "or part thereof". The word "may" is permissive, the words "shall" and "will" are mandatory.

202. Definitions

The following words or phrases, when used in these regulations, shall have the meaning ascribed to them in this section, except where the context clearly indicates a different meaning. If any term is not defined in this Ordinance, but is defined in the Township Zoning Ordinance, then such Zoning Ordinance definition shall also apply to this Ordinance.

1. AGENT: Any person other than the subdivider who, acting for the subdivider, submits subdivision plans to the Commission and Board for the purpose of obtaining approval thereof.
2. AGRICULTURAL ACTIVITY: The work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops, or pasturing and raising of livestock and installation of conservation measures. Construction of new buildings or impervious area is not considered an Agricultural Activity.
3. APPLICANT: A landowner or developer, as hereinafter defined, who has filed an application for development, including his heirs, successors and assigns.
4. BERM OR SHOULDER: That portion of a roadway between the outer edge of the traveled way or pavement and the point of intersection of the slope lines at the outer edge of the roadway, for the accommodation of stopped vehicles and for lateral support.
5. BLOCK: A tract of land or a lot or group of lots bounded by streets, public parks, railroad right-of-way, watercourses, bodies of water, boundary lines of the Township, or by any combination of the above.
6. BMP (BEST MANAGEMENT PRACTICE): Activities, facilities, designs, measures or procedures used to manage stormwater impacts from Regulated Activities, to meet State Water Quality Requirements, to promote groundwater recharge and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: "structural" or "non-

structural". In this ordinance, non-structural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural SWM BMPs are permanent appurtenances to the project site.

7. BOARD: The Westfall Township Board of Supervisors.
8. BUILDING: The definition in the Zoning Ordinance shall apply.
9. CAMPGROUND: The definition in the Zoning Ordinance shall apply.
10. CAMPSITE: A lot within a campground used for tent camping or as a site for recreational vehicles; or a tract of land otherwise offered by the developer or operator through sale, lease, rent, membership or other means, for camping purposes.
11. CARTWAY: The graded portion of a street or service drive, including travelway and shoulders.
12. CLEAR SIGHT TRIANGLE: An area of unobstructed vision at a street intersection(s), defined by lines of sight between points at a given distance from the intersecting street right-of-way line.
13. COMMISSION: The Westfall Township Planning Commission.
14. COMMONWEALTH OR STATE: The Commonwealth of Pennsylvania and any of its departments or agencies.
15. COMMON OPEN SPACE: The definition in the Zoning Ordinance shall apply.
16. COMMON PROPERTY: All of the land and improvements part of a subdivision or land development which is to be jointly owned and maintained by the lot owners, lessees and/or members of the development and identified as such by the subdivider on any plan offered to the Township for approval.
17. CONSERVATION DISTRICT: (Pike County Conservation District) A conservation district, as defined in section 3(c) of the Conservation District Law (3 P. S. § 851(c)), which has the authority under a delegation agreement executed with the Department to administer and enforce all or a portion of the erosion and sediment control program in this Commonwealth.

18. COUNTY: The County of Pike, Pennsylvania, and its Planning Commission.
19. DEDICATION: The deliberate appropriation, by its owner, of land for any general or public uses. This shall not be construed as acceptance by the Township of responsibility for maintenance and/or ownership of such land and attendant facilities, except where appropriate legal documents specifically relating to the same have been executed.
20. DEP: The Pennsylvania Department of Environmental Protection.
21. DESIGN STORM: The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g. a 5-year storm) and duration (e.g. 24-hours), used in the design and evaluation of stormwater management systems.
22. DETENTION: The volume of runoff that is captured and released into the Waters of this Commonwealth at a controlled rate.
23. 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. The term "developer" is intended to include the term "subdivider."
24. DEVELOPMENT SITE (SITE): See Project Site.
25. DIRECTLY CONNECTED IMPERVIOUS AREA (DCIA): An impervious or impermeable surface, which is directly connected to a stormwater drainage or conveyance system.
26. DISCONNECTED IMPERVIOUS AREA (DCA): An impervious or impermeable surface which is disconnected from any stormwater drainage or conveyance system and is redirected or directed to a pervious area which allow for infiltration, filtration, and increased time of concentration as specified in Appendix B, Disconnected Impervious Area.
27. DISTURBED AREA: An un-stabilized land area where an Earth Disturbance is occurring or has occurred.
28. DRIVEWAY: A defined private access from an individual lot to a public or approved private right-of-way.
29. DWELLING: The definitions in the Zoning Ordinance shall apply.
30. EARTH DISTURBANCE: A construction or other human activity which disturbs the surface of the land, including, but not limited to, clearing and grubbing; grading;

excavations; embankments; road maintenance; building construction; the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

31. EASEMENT: A limited right of use granted in private land for public or quasi-public purpose.
32. ENGINEER: A professional engineer licensed by the state of Pennsylvania.
33. EROSION: The removal of soil or soil material by the action of wind or water.
34. EXISTING CONDITION: The dominant land cover during the five (5) year period immediately preceding a proposed Regulated Activity.
35. FLOODPLAIN: A relatively flat or low land area adjoining a river, stream or water course which is subject to partial or complete inundation or flooding. Floodplain boundaries have been delineated for floods having recurrence intervals of 100 and 500 years by FEMA.
36. FLOODWAY: The channel of the watercourse and those portions of the adjoining floodplains that is reasonably required to carry and discharge the 100-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it is assumed - absent evidence to the contrary - that the floodway extends from the stream to 50 feet from the top of the bank of the stream.
37. FOREST MANAGEMENT/TIMBER OPERATIONS: Planning and activities necessary for the management of forestland. These include timber inventory and preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation and reforestation.
38. FUTURE RIGHT-OF-WAY:
 - a. The right-of-way width required for expansion of existing streets to accommodate anticipated future traffic loads
 - b. A right-of-way established to provide future access to or through undeveloped land.
39. HALF OR PARTIAL STREET: A street parallel and adjacent to a property line having a lesser right-of-way width than required for satisfactory improvement and use of the street.
40. HIGHWAY: Same as street.

41. **HYDROLOGIC SOILS GROUP (HSG):** Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSG's (A, B, C, and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The Natural Resources Conservation Service (NRCS) of the US Department of Agriculture defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the area of the development site may be identified from a soil survey report that can be obtained from local NRCS offices or conservation district offices. Soils become less pervious as the HSG varies from A to D.
42. **IMPERVIOUS SURFACE (IMPERVIOUS AREA):** A surface that prevents the infiltration of water into the ground. Impervious surfaces (or covers) shall include, but not be limited to, roofs, additional indoor living spaces, patios, garages, storage sheds and similar structures, and any new streets or sidewalks. Decks, parking areas, and driveway areas are not counted as impervious areas if they do not prevent infiltration.
43. **KARST:** A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles / uneven bedrock surface, underground drainage and caves. Karst is formed on carbonate rocks, such as limestone or dolomite.
44. **LAND DEVELOPMENT:**
- a. The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:
 - (i) a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a non-residential building on a lot or lots regardless of the number of occupants or tenure; or,
 - (ii) 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.
 - b. The following shall be excluded from review and approval as a Land Development under this Ordinance:
 - (i) The addition of the first accessory building on a lot or lots subordinate to an existing principal residential building on a residential use lot.
 - c. A subdivision of land.
45. **LANDOWNER:** The legal or beneficial owner or owners of land including the holder of an option or contract to purchase, a lessee if he is authorized under the

lease to exercise the rights of the landowner, or other persons having a proprietary interest in the land.

46. LOT: The definitions in the Zoning Ordinance shall apply.
47. LOT LINE: The definitions in the Zoning Ordinance shall apply.
48. MOBILE/MANUFACTURED HOME: The definition in the Zoning Ordinance shall apply.
49. MOBILE/MANUFACTURED HOME SPACE: An area of land in a mobile/manufactured home park that is improved with the necessary utility connections and other appurtenances for the erection thereon of mobile homes.
50. MPC or PLANNING CODE. The Pennsylvania Municipalities Planning Code, as amended.
51. MUNICIPALITY: Westfall Township, Pike County, Pennsylvania.
52. NRCS: Natural Resources Conservation Service (previously SCS).
53. PEAK DISCHARGE: The maximum rate of stormwater runoff from a specific storm event.
54. PENNDOT: The Pennsylvania Department of Transportation.
55. PERSON: Any individual, firm, trust, partnership, public or private association or corporation, or other entity.
56. PERVIOUS AREA: Any area not defined as impervious.
57. PLAN OR PLOT: A map or chart indicating the subdivision or re-subdivision of land, which in its various stages of preparation can include the following:
 - a. Sketch Plan - An informal plan, identified as such with the title "Sketch Plan" on the map indicating salient existing features of a tract and its surroundings and the general layout of the proposed subdivision or land development, to be used as a basis for consideration by the Township.
 - b. Preliminary Plan - A complete plan signed and sealed by a registered professional engineer or registered surveyor, identified as such with the wording "Preliminary Plan" in the title, accurately showing proposed streets and lot layout and such other information as required by this Ordinance.
 - c. Final Plan - A complete and exact plan, identified as such with the wording, "Final Plan" in the title, with professional engineer's or registered surveyor's seal affixed, and prepared for official recording as required by this

Ordinance, to define property rights and proposed streets and other improvements.

- 58. PLANNING COMMISSION: The Westfall Township Planning Commission.
- 59. PROFESSIONAL ENGINEER: A person registered and licensed to practice engineering with the Commonwealth of Pennsylvania. The "Township Engineer shall be an engineer officially retained by the Township Board of Supervisors.
- 60. PROJECT SITE: The specific area of land where any Regulated Activities in the Municipality are planned, conducted or maintained.
- 61. QUALIFIED PROFESSIONAL: Any person licensed by the Pennsylvania Department of State or otherwise qualified by law to perform the work required by the Ordinance.
- 62. REGULATED ACTIVITIES: Any Earth Disturbances or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.
- 63. REGULATED EARTH DISTURBANCE ACTIVITY: Activity involving Earth Disturbance subject to regulation under 25 Pa. Code Chapters 92, Chapter 102, or the Clean Streams Law.
- 64. RETENTION / REMOVAL: The volume of runoff that is captured and not released directly into the surface Waters of this Commonwealth during or after a storm event.
- 65. RETURN PERIOD: The average interval, in years, within which a storm event of a given magnitude can be expected to occur one time. For example, the 25-year return period rainfall would be expected to occur on average once every twenty-five years.
- 66. RIGHT-OF-WAY: Land reserved for use as a street, service drive, or for other means of travel. The right-of-way shall not be considered as land area when computing lot size. See also "Future Right-of-Way" in this Section.
- 67. RUNOFF: Any part of precipitation that flows over the land.
- 68. SECRETARY: The Westfall Township Secretary to the Board of Supervisors.
- 69. SEDIMENT: Soils or other materials transported by surface water as a product of erosion.
- 70. SEO: The Sewage Enforcement Officer for Westfall Township, as appointed by the Board of Supervisors.

71. SET BACK OR BUILDING LINE: The definition in the Zoning Ordinance shall apply.
72. SEWAGE DISPOSAL SYSTEM:
- a. Centralized Sewage Disposal System - A publicly or privately owned and operated utility system or other system designed to collect, centrally treat with a sewage treatment plant, and dispose of sewage from users in compliance with regulations of the appropriate state agency and of the Township.
 - b. Community Sewage Disposal System - A publicly or privately owned and operated utility system or other system designed for the collection of sewage from two or more lots and for the treatment and disposal of the sewage on one or more lots or at any other site, by on-site subsurface (into the soil) disposal systems and techniques in compliance with regulations of the appropriate state agency and of the Township.
 - c. Individual Sewage Disposal System - A utility system or other system designed for the collection, treatment and disposal of sewage from a single lot into the soil or into the waters of the Commonwealth or for conveyance to another site for final disposal.
73. SIGHT DISTANCE: The length of street, measured along the centerline, which is continuously visible from any point 3.75 feet above the centerline to an object 6 inches above the road surface.
74. STATE WATER QUALITY REQUIREMENTS: The regulatory requirements to protect, maintain, reclaim, and restore water quality under Pennsylvania Code Title 25 and the Clean Streams Law.
75. STORMWATER: Drainage runoff from the surface of the land resulting from precipitation or snow or ice melts.
76. STORMWATER MANAGEMENT FACILITY: Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to, detention and retention basins, open channels, storm sewers, pipes, and infiltration structures.
77. STORMWATER MANAGEMENT SITE PLAN: The plan prepared by the Developer or his representative indicating how stormwater runoff will be managed at the development site in accordance with this Ordinance.
78. STREET OR ROAD: A strip of land including the entire legal right-of-way intended for vehicular circulation, and which may also include portions of the right-of-way that are used for pedestrian circulation, utilities and stormwater runoff.

- a. Expressway - A high-speed divided highway upon which traffic is only allowed to access the highway at controlled access interchanges.
- b. Arterial Street - Arterial streets are designed primarily to carry traffic and generally should not provide access to land, which would interfere with their primary traffic functions. An arterial may be designated a "partial" access controlled street. Arterial streets serve an unlimited number of dwelling units and unlimited average daily traffic.
- c. Connector Street - Connector streets collect traffic from minor, local access and collector streets and also provide a connection to arterial streets and expressways and between connector streets and serve an unlimited average daily traffic.
- d. Collector Street: - Collector streets gather traffic from minor and local access streets and they feed this traffic to connector and arterial streets and expressways. Collector streets carry heavier traffic volumes than local streets although they also provide direct access to individual uses located along them. Collector streets serve up to an ultimate 500 dwelling units or up to an ultimate average daily traffic count of 4000 vehicles.
- e. Minor Street - Minor streets provide direct access to individual uses or gather traffic from local access streets and feed this traffic to collector streets. Minor streets serve up to an ultimate 150 dwelling units or up to an average daily traffic count of 1250 vehicles.
- f. Local Access Street - Local access streets primarily provide direct access to individual uses. They serve to provide the connecting link between the beginning or end point of a trip and the higher categories of streets. Local Access streets are further classified as:
 - (i) Cul-De-Sac: A cul-de-sac street is permanently terminated at one end by a vehicular turnaround and intersects another street at the other end. Cul-de-sac streets shall not exceed the maximum length established in the street requirements of this Ordinance. If a cul-de-sac is intended to service commercial properties it shall not be permitted if the reasonable anticipated traffic count is in excess of 200 vehicles daily.
 - (ii) Loop Road: A loop street intersects other streets on each end and may intersect a cul-de-sac street at some point between each end. A loop shall not ultimately furnish access to more than 75 dwelling units or ultimately have an average daily traffic count in excess of 600 vehicles.

- g. Marginal Access Street - Marginal access streets are minor streets parallel and adjacent to major traffic streets. They provide access to abutting properties and control of intersections with major traffic streets.
 - h. Private Access Drive - A private access drive provides access to no more than two residential lots, from an approved street where the residential lot does not have frontage on an approved street. The private access drive shall have a minimum right-of-way of 50 feet. Construction and maintenance of private access drive shall be the sole responsibility of owners benefitting by the use thereof and shall never be offered or accepted by the Township for public maintenance. See Section 503.7.
79. STRUCTURE: The definition in the Zoning Ordinance shall apply.
80. SUBDIVISION: The division or re-division of a lot, tract or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development: provided, however, that the subdivision by lease of land for 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. As defined in the Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247.
81. SUBDIVISION - MINOR: Subdivision of land under any of the following conditions:
- a. A subdivision which contains no more than 5 lots which each have frontage on an existing public road or approved private street and which does not involve the new construction or extension of a street or extension of central sewer lines.
 - b. A subdivision of any parcel of land to create a single lot which involves no new road or street or improvement of an existing road or street other than a private access drive as defined by this Ordinance.
 - c. A division of any parcel of land for the purpose of joining or annexing a lot to an adjacent existing lot, parcel or tract of land providing a covenant running with the parcel to be conveyed joins it with and makes it an inseparable part of the parcel to which it is joined.
82. SUBDIVISION - MAJOR: Any subdivision or land development that does not meet the definition of a "Minor Subdivision." In addition, whenever a new street is created or an existing street is extended or the central sewage lines are extended, such proposal shall be considered a Major Subdivision.
83. SURVEYOR: A professional surveyor licensed by the State of Pennsylvania.

84. TRAVELWAY OR CARTWAY: That portion of a street or road which is intended for vehicular traffic.
85. TOWNSHIP: Westfall Township, Pike County, Pennsylvania.
86. TOWNSHIP ENGINEER: A Professional Engineer licensed as such by the Commonwealth and appointed or hired on a consulting basis to provide engineering advice to the Township.
87. WATERCOURSE: A discernible, definable natural course or channel along which water is conveyed ultimately to streams and/or rivers at lower elevations. A watercourse may originate from a lake or underground spring (s) and be permanent in nature, or it may originate from temporary sources such as runoff from rain or melting snow.
88. WATER FACILITY: Any water works, water supply works, water distribution system or part thereof, designed, intended or constructed to provide or distribute potable water.
89. WATERS OF THIS COMMONWEALTH: Rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs and other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.
90. WATERSHED: Region or area drained by a river, watercourse or other body of water, whether natural or artificial.
91. WETLAND: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, fens, and similar areas.
92. YARD: The definitions in the Zoning Ordinance shall apply.
93. ZONING ORDINANCE: The officially adopted Zoning Ordinance as enacted by the Westfall Township Board of Supervisors, including any and all amendments thereto.

ARTICLE III
PLAN SUBMISSION AND REVIEW PROCEDURES

301. GENERAL PROCEDURES

- 301.1 Required Plans: Preliminary and Final plans and required fees and supporting data for all proposed subdivisions and land development of land lying within Westfall Township limits shall be submitted by the applicant for review. Submission of a sketch plan is encouraged but shall not be considered a required plan. A preliminary plan shall not be required for minor subdivisions and minor land developments.
- 301.2 Submission Requirements: All plans, applications and supporting data shall be submitted by certified mail or delivered in person to the Township Secretary.
- 301.3 Submission Date: The date of submission of any preliminary or final subdivision or land development plan shall be the regular meeting date of the Commission next following the date of receipt of complete plans by the Township Secretary excepting that should the next regular meeting occur more than 30 days following receipt of the plans, the submission date shall be the 30th day following the day of receipt by the Township Secretary.
- 301.4 Fees: Preliminary and final subdivision and land development plans shall be accompanied by an application fee as shall be set in a fee schedule as adopted by resolution of the Board of Supervisors. The applicant shall also be required to pay to the Township the actual costs of any reasonable and necessary charges by the Township's professional consultants or engineer or Sewage Enforcement Officer for plan review and report thereon to the Township.

302. SKETCH PLAN SUBMISSION AND REVIEW

The developer may, at his option submit a Sketch Plan to the Township Planning Commission before submitting preliminary or final plans. It is recommended that the subdivider or developer submit 5 copies of the Sketch Plan including the items of information required in Article IV to allow prompt review. The purpose of a Sketch Plan is to allow the applicant an opportunity to informally discuss in advance his overall objectives and the extent to which the plan conforms with this Ordinance and any pending changes to this Ordinance. The Sketch Plan procedure is intended to be a fast and inexpensive method for the applicant to make preliminary determinations on the feasibility of his plan in terms of this Ordinance. Sketch plan review and comment does not constitute formal submittal of a proposed development or subdivision nor any approval or disapproval of the proposed project.

There shall be no fee charged for the Commission's review of a Sketch Plan. The Commission will normally comment on the Sketch Plan during the meeting at which it is presented or not later than the next regularly scheduled meeting if questions of legal or engineering interpretation require longer deliberation.

303. PRELIMINARY PLAN SUBMISSION AND REVIEW

303.1 Preliminary Plan Submission:

- a. Applicants shall submit 7 copies of the preliminary plan and application. The preliminary plan submission shall include all items of information and supporting data required in Article IV. The preliminary plan submission shall be accompanied by any required reviewed fees.
- b. All applications shall be submitted to the Township Secretary by certified mail or delivered in person to the Township office at least 20 days prior to the date of the regularly scheduled meeting of the Township Planning Commission.
- c. The Applicant shall concurrently submit copies of the proposed preliminary plan and applicable supporting data and any required fees to:

The Township Sewage Enforcement Officer (SEO)
Pike County Planning Commission (with a copy of the receipt
returned by the applicant to the Township)
Pike County Conservation District
PennDOT (if applicable)

- d. The Applicant shall provide evidence of submission of the plans, supportive data and any fees to these parties to the Township Planning Commission at its first meeting following submission of the plans. The Township SEO shall sign one copy of the proposed preliminary plan as evidence of review of sewage disposal aspects of the plan.

303.2 Referrals:

- a. Upon receipt of any Preliminary Plan and supporting data the Planning Commission shall refer the plan and appropriate supporting data as follows:

One copy to the Township Supervisors
One copy to the Township Zoning Officer

- b. Within 5 days following the submission date (the first Commission meeting following receipt of a complete plan) the Commission may direct the plan and supportive data be referred to the following if appropriate:

- One copy to the Township Engineer
- One copy to the Township Solicitor
- One copy to the Water Authority (if applicable)
- One copy to the applicable fire company
- One copy to others as applicable

303.3 Planning Commission Review:

- a. Preliminary subdivision and land development plans and supporting data submitted to the Township shall be considered at the Planning Commission's next regularly scheduled meeting for completeness of submission. If the plans and supporting data, as submitted, are incomplete in that they do not meet the preliminary plan requirements specified in Article IV of this Ordinance, the Planning Commission shall have authority to disapprove the plan as incomplete and advise the Planning Commission Secretary to return the plan to the applicant with a list of required items or supportive materials missing from the submission.
- b. The Planning Commission, upon determining that a preliminary plan submission is complete shall issue a Submission Receipt to the applicant specifying the Submission Date of the complete plan.
- c. Upon receipt of a complete preliminary plan and issuance of a submission receipt, the Planning Commission shall review the Preliminary Plan to ascertain whether it complies with the standards and criteria of this Ordinance. It shall consider the comments of the above referral agencies if received on a timely basis and may request additional information of the applicant if necessary for review.
- d. The Planning Commission shall recommend to the Board of Supervisors approval, approval subject to modification, or disapproval of the plan, while leaving sufficient time for the Board of Supervisors to make a decision within the time limits of State law. The recommendation shall be in letter form. If recommending approval, the Planning Commission should also submit 5 signed copies of the preliminary plan and accompanying planning module for land development to the Board of Supervisors. The Planning Commission shall retain a copy of the recommendation and all pertinent documentation for its files.

303.4 Board of Supervisors Review:

- a. The Board of Supervisors shall review the Preliminary Plan for compliance with the standards and criteria of this Ordinance and shall consider the recommendations of the Planning Commission and comments of any referral agency if received on a timely basis.
- b. After such review, the Board of Supervisors shall determine the extent to which the plan complies with this Ordinance and shall make a decision whether to approve the plan entirely, approve the plan conditionally or to disapprove the plan.
- c. In those instances where the Board of Supervisors approves a preliminary plan with specific conditions or required changes, the applicant shall communicate his acceptance or rejection of the subject conditions or required changes in writing to the Township office within 7 calendar days of receipt of the decision of the Board. Failure of the applicant to submit written notice of acceptance of the subject conditions or required changes within 7 calendar days following receipt of the Board's written decision shall result in the automatic rescinding of the Board's approval of the preliminary plan.
- d. In those instances where a preliminary plan is approved with conditions or required changes or disapproved the Board shall, in communicating its decision to the applicant, specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite to the provisions of this Ordinance relied upon.
- e. The Board shall make its review, render its decision and communicate it to the applicant within the time limitations of the State Municipalities Planning Code. The decision of the Board shall be writing and shall be communicated to the applicant personally or mailed to him at his last known address not later than 15 days following the decision. If the decision is communicated by mail, the decision shall be deemed to be communicated when postmarked.
- f. Failure of the Board 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 application in terms as presented unless the applicant has agreed in writing to an extension of time or change in the prescribed manner of presentation of communications of the decision, in which case, failure to meet the extended time or change in manner of communication shall have like effect.
- g. The Board shall concurrently make its decision with respect to the Planning Module for Land Development to revise or supplement its

Official Plan and, if approval is granted, said revision or supplement will promptly be forwarded to DEP. Preliminary approval shall be conditional upon DEP acceptance of the proposed revision or supplement.

- h. No Preliminary Plan (or portions of such Plan) shall remain valid for development of Final Plans after a period of 5 years from Preliminary Approval and no Final Plans will be accepted for any subdivision or land development for which DEP has not approved the necessary revision to the Official Wastewater Disposal Plan.

304. FINAL PLAN SUBMISSION AND REVIEW

304.1 Final Plan Submission:

- a. Applicants shall submit 7 copies of the final plan and application for major subdivisions and land developments or 7 copies of the final plan and application for minor subdivisions and land developments. The final plan submission shall include all items of information and supportive data and required in Article IV of this Ordinance and shall be accompanied by any required review fees. The applicant shall provide 2 reproducible prints of the approved final plan on stable base mylar for signatures by the Township for recording purposes.
- b. All applications and plans shall be submitted to the Township Secretary by certified mail or delivered in person to the Secretary at least 20 days prior to the date of Planning Commission's regularly scheduled meeting.

304.2 Submission by Stages:

- a. If requested by the Applicant, the Township Planning Commission, at their discretion, may permit the undertaking of the required improvements and may permit the Final Plan to be completed in a series of sections or stages, each covering a portion of the proposed subdivision as shown on the Preliminary Plan. If the Final Plan is submitted in sections or stages; each section or stage shall relate logically to provide continuity of access, extension of utilities and availability of amenities. The Board shall approve both the boundaries and configuration of stages or sections of a development.

304.3 Referrals: Upon receipt of any Final Plan and supportive data, referrals thereof shall be made by the Applicant and Planning Commission in a manner similar to referrals of Preliminary Plans.

304.4 Review by Planning Commission:

- a. The Planning Commission shall review the Final Plan application to determine that it conforms in all important respects with the approved Preliminary Plan and incorporates modifications and revisions specified by the Board in its approval of the Preliminary Plan. Otherwise, the Plan shall be considered as a revised Preliminary Plan.
- b. The Township SEO shall review the submitted final plans and shall sign one mylar copy and one paper copy certifying that the proposed sewage disposal systems and information conforms with the approved preliminary plan.
- c. The Final Plan and supporting data shall comply with the provisions of Article IV of this Ordinance. The Plan shall comply with any Zoning Ordinance or other applicable regulations adopted by the Township.
- d. The Commission shall review the recommendations of plan referral agencies. The Planning Commission shall review final plans of subdivisions and land developments and make its recommendations in writing to the Board of Supervisors, while leaving sufficient time for the Board of Supervisors to make a decision within the time limitations of State law.

304.5 Review and Action by the Board of Supervisors: The Board of Supervisors shall review and make the final decision on all Final Plans for subdivisions and land developments, within the time limit established by the State Municipalities Planning Code. The Board shall consider the recommendations of the Commission, and other referral agencies in making its decision to approve or disapprove final plans. The Board shall complete its review and communicate its decision to the applicant within 15 days of making its decision and within 90 days following the Final Plan submission date.

- a. Failure of the Board to render a decision within the time set forth above and in the manner specified shall be deemed an approval of the Final Plan as presented unless the applicant has agreed in writing to an extension of time or change of the prescribed manner of notification.
- b. The Board shall not sign any Final Plan until all required improvements have been installed or until the applicant has entered into a Development Agreement with the Board of Supervisors specifying the time and manner in which required improvements will be completed and deposit with the Board of Supervisors a suitable financial security in an amount sufficient to cover the costs of the required improvements.

305. **PROCEDURE FOR INSTALLATION OR GUARANTEE OF REQUIRED IMPROVEMENTS**

305.1 Improvements to be provided by Applicant: In all cases the subdivider or land developer shall be responsible for the installation of all required and developer-promised improvements in the manner specified below.

- a. All required permits shall be secured and copies shall be provided to the Township Board of Supervisors prior to signature of the final plans and prior to initiation of installation of any improvements or any site alterations.
- b. The Township Engineer or the Township's designee shall make such inspections of the required improvements, and at such intervals, as may be reasonably necessary to assure compliance with the provisions of this Ordinance. The reasonable cost of such inspections shall be borne by the subdivider or land developer. The required improvements and the design standards for constructing them are set forth in this Ordinance.

305.2 Method of providing improvements: No final subdivision plan or land development plan will be approved for signature by the Board of Supervisors unless the streets shown on the plan have been improved to a mud-free and permanently passable condition. As used herein, the phrase "mud-free and permanently passable condition" shall refer to the street design standards of Section 502.8, Table 5-1 and the street Construction standards of Section 604 referred to therein; provided, however, that phrase shall not refer to the obligation under Section 604.204 to install surface course road paving.

- a. Nor shall any Final Plan (land development, major or minor subdivision) be approved for signature unless all other required improvements (including the surface course road paving) and promised improvements have been installed to the satisfaction of the Board of Supervisors; provided, however, in lieu of completion of the improvements mentioned in the preceding clause of this sentence, the Board of Supervisors will accept Federal or Commonwealth chartered lending institution irrevocable letters of credit and restrictive or escrow accounts in such financial institutions or other financial security acceptable to the Board of Supervisors (hereafter referred to as Performance Guarantee) accompanied by a signed Development Agreement in a satisfactory form.
- b. Where submission of a Final Plan by sections or stages has been approved, the Board of Supervisors may require construction of, or guarantee of, improvements in future sections or stages before

granting final approval to the plan under consideration, if such future improvements are essential for the protection of the stage or section under consideration.

305.3 Performance Guarantee/Financial Security:

- a. The developer shall provide for, and secure to the public, the completion of any improvements which may be required on or before the date fixed in the Board's formal action of approval or in the executed Developers Agreement for completion of the improvements.
- b. The amount of financial security to be posted shall be equal to 110% of the cost of completion estimated as of 90 days following the date scheduled for completion by the developer. Annually the Township may adjust the amount of the financial security by comparing the actual cost of the improvements which have been completed and the estimated cost for the completion of the remaining improvements as of the expiration of the 90th day after either the original date scheduled for completion or a rescheduled date of completion. Subsequent to said adjustment, the Township may require the developer to post additional security in order to assure that the financial security equals said 110%. Any additional security shall be posted by the developer in accordance with this subsection.
- c. The obligation shall be in favor of, and enforceable by, the Board of Supervisors and the ultimate grantees, lessees or licensees of the developer.
- d. The guarantee shall be secured by the credit of any of the following: a qualified corporate surety; the unconditional letter of credit of a lending institution; a restrictive or escrow account in a lending institution; or other financial security acceptable to the Board of Supervisors.
 - (1) The precise form of the security acceptable as a performance guarantee will depend upon what improvements have not been completed when the Final Plan is submitted; their anticipated cost; whether they are required or promised improvements; and the Supervisor's evaluation of the financial risk of non-performance.
- e. The amount of financial security required shall be based upon an estimate of the cost of completion of the required improvements, submitted by an applicant or developer and prepared by a professional engineer licensed as such in this Commonwealth and certified by such engineer to be a fair and reasonable estimate of

such cost. The Township, upon the recommendation of the municipal engineer, may refuse to accept such estimate for good cause shown.

- (1) If the applicant or developer and the Township are unable to agree upon an estimate, then the estimate shall be recalculated and re-certified by another professional engineer licensed as such in this Commonwealth and chosen mutually by the Township Board and the applicant or developer. The estimate certified by the third shall be the final estimate. In the event that a third engineer is so chosen, fees for the services of said engineer shall be paid equally by the Township and the applicant or developer.
- (2) If the party posting the financial security requires more than one year from the date of posting of the financial security to complete the required improvements, the amount of financial security may be increased by an additional 10 % for each one year period beyond the first anniversary date from posting of financial security or to an amount not exceeding 110 % of the cost of completing the required improvements as re-established on or about the expiration of the preceding 1 year period by using the above bidding procedure.

305.4 Development Agreement: All applicants proposing any subdivision or land development requiring the installation of improvements upon the plot map, shall be required to enter into a legally binding Development Agreement with the Township of Westfall guaranteeing the installation of the improvements in accordance with all Township requirements prior to Final Plan approval for signature.

The Development Agreement (a form of which is attached as Appendix E) shall be in a form suitable for execution by the Board of Supervisors and it shall consist of the following, where applicable:

- a. The construction depicted upon the plan in itemized format.
- b. Construction of streets with related curbs, street signs, drainage facilities and related improvements.
- c. Installation of utility lines.
- d. Dedication of streets, transfer of water and sewer lines and easements. In the event public water or sewer lines are offered for transfer to the Township or a municipal authority, there shall be no charge, cost, or payment of any nature imposed upon the Township or municipal authority. In the event streets are offered for dedication to the Township, the developer shall bear all reasonable cost of the

Township's inspection before acceptance of the offer of dedication and all costs of document preparation and recording.

- e. Prevention of erosion, sedimentation and water damage to the subject and adjacent properties.
- f. Developer's responsibilities for damage to other property.
- g. A work schedule setting forth the beginning and ending and such other details as the Township deems fit and appropriate for the improvements covered by the Development Agreement.
- h. The estimated cost of the improvements not yet completed, including a detailed breakdown in a form acceptable to the Board of Supervisors, and the amount of the Performance Guarantee.
- i. Security, in the form of a maintenance bond or escrow deposit for the repair or reconstruction of improvements which are found by the Township Engineer to be defective within one (1) year from the date on which the engineer certified them to have been completed, shall be included together with provisions for disbursement thereof.
- j. The developer shall provide the Township with a set of reproducible "AS BUILT" plans prepared by and certified by a professional engineer of all storm and sanitary sewers and water distribution facilities.
- k. Provisions for remedy of any violation of the development agreement.
- l. That Developer shall secure or maintain public liability insurance for the duration of improvements construction. A copy or other evidence of coverage shall be submitted to the Township.
- m. A save harmless clause to protect the Township from liability.
- n. Following construction, the developer shall provide the Township with a certified statement prepared by a professional engineer to the effect that the sanitary sewers, sewage treatment facilities, and water supply and distribution facilities comply with the approved plans and have been constructed in accordance with all applicable rules and regulations.
- o. The developer shall be responsible for all reasonable engineering and legal costs and expenses for inspections, consultations, and preparation of agreements, to the extent that such costs and

expenses exceed the monies paid by the developer in accordance with the Westfall Township fee schedule.

305.5 Method of Approving Required Improvements: The developer shall notify the Township Board of Supervisors, with a copy thereof to the Township Engineer, by certified or registered mail, that the required improvements have been made. Within 10 days of receiving this notice, the Board of Supervisors shall direct the Engineer to inspect all of the aforesaid improvements. The Engineer shall make his inspection and file a report to the Board of Supervisors, the Planning Commission and the developer within 30 days of the date which the developer's notification was received by the Board of Supervisors. If the Engineer finds any or all improvements to be not as required, he shall include a statement of reasons for their rejection in his report to the Board and to the developer.

- a. Where appropriate, the Township may require that periodic inspections be made of the aforesaid improvements, in which case the developer's failure to comply with that schedule of inspections shall be grounds for disapproval. The developer shall notify the Township of the progress of construction to enable the Township Engineer to make such inspections.
- b. The Board of Supervisors shall consider the Engineer's report and recommendations of the Planning Commission and render a decision to the developer by certified or registered mail within 15 days of receipt of the engineer's report.

305.6 Maintenance Bond: A maintenance bond or other suitable security shall accompany the Final Plan being submitted to the Commission. Said maintenance bond shall be in the form approved by the Township, to guarantee maintenance and repair of the streets and other improvements in the subdivision for one year after completion of construction and acceptance thereof by the Township. The amount of said maintenance bond or security shall be determined by the Township but will generally not exceed 10 percent of the estimated costs of all required improvements. After the expiration of one year from the date of formal acceptance of said improvements, the Township shall release said maintenance bond or security to the subdivider or developer or party posting said maintenance bond or security.

- a. When the Board of Supervisors accept dedication of any improvements following completion, the Supervisors shall require posting of a maintenance bond or other suitable security to the secure structural integrity of the dedicated improvements in the amount of 15% of the actual cost of installation for a period of 18 months from date of dedication.

306. **APPROVAL OF FINAL PLAN FOR RECORDING**

Following review and approval of the Final Plan submission and completion of required improvements or deposit of satisfactory guarantee and arrangement of Development Agreement for completion of required improvements the Final Plan reproducible drawings submitted shall be approved for recording by the signatures of all members of the Board of Supervisors.

307. **RECORDING OF FINAL PLAN**

Upon the signing of an approved final plan, the applicant shall, within 90 days of such approval, unless an extension has been granted in writing by the Board of Supervisors, record such plan in the Office of the Recorder of Deeds of the County. Any approved subdivision plans not filed in accordance with the provisions stated herein become null and void.

308. **RECORDS, REVISIONS AND RE-SUBDIVISIONS**

308.1 Revisions and Re-subdivisions: A revision or re-subdivision of a recorded plan of an approved Final Plan shall be considered as a new subdivision and shall come under the jurisdiction of this Ordinance. (A submission to correct erroneous data or omissions on recorded plans shall not be construed to be a revision or re-subdivision).

308.2 Township Records: The Planning Commission shall make a record of its findings, decisions, and recommendations relative to all subdivision plans recommended for action by the Township Board of Supervisors. Such records shall be open to the public for review.

- a. The Secretary of the Board of Supervisors shall also keep a record of the findings, decisions and recommendations relative to all subdivision plans filed for action by the Board of Supervisors.

309. **COMBINATIONS (MERGERS) OF EXISTING LOTS**

309.1. Contiguous previously subdivided lots currently owned by the same person or entity are qualified to be combined as one integral and unified property.

309.2. The owner thereof shall submit to the Planning Commission for its review the following:

- a. A copy of the subdivision map depicting the lots to be combined.
- b. A copy of the current deed or deeds for the lots to be combined.
- c. A copy of the proposed deed for the combined property containing a good and sufficient metes and bounds perimeter description of the combined lots.

- d. The proposed deed and map shall contain in bold face type the following covenant or restriction:

"The herein described real property shall henceforth be and be deemed to be one integral and single piece, parcel or lot of land and no portion thereof shall at any time in the future be conveyed or transferred separate from the remainder thereof except under and in accordance with the applicable ordinances of Westfall Township, in effect at the time of any such proposed or contemplated conveyance or transfer."

309.3. Nothing contained in this qualification and procedure shall be deemed to effect in any manner any private rights of contract.

310. TRAFFIC IMPACT STUDIES

310.1. Purposes: To enable the Township to assess the impact of a proposed development on the transportation system. To ensure that proposed developments do not adversely affect the transportation network. To identify any traffic problems associated with access from the site to the existing transportation network. To delineate solutions to potential problems and propose improvements to be incorporated into the proposed development.

310.2. Applicability:

- a. A traffic impact study shall be required for any subdivision or land development that at build-out after completion of all phases is projected to generate 500 or more average daily trip ends. "Trip ends" shall mean the total number of trips both entering and exiting the proposed development. These projected trip ends shall be based on the latest edition of the publication titled *Trip Generation*, published by the Institute of Transportation Engineers, or upon traffic studies conducted within the last 5 years at comparable developments.
- b. If a development is proposed to be submitted in phases, the initial traffic study shall consider a reasonable estimate of the likely development in later phases, in addition to the current phase.
- c. The boundaries of the study area to be analyzed shall include those existing and proposed streets and intersections which may be affected by the proposed subdivision or land development. If there is any dispute as to whether existing and proposed streets and intersections may be affected or not, the final discretion shall rest with the Township Engineer or designated Traffic Engineer.
- d. In lieu of submitting a traffic impact study, under the waiver and modifications provisions of Section 107, the Board of Supervisors may approve a modification to accept a fee from an applicant to be put towards the cost of a larger more comprehensive traffic study or

to accept a developer making an improvement to a street that otherwise would not be required by the Township or PennDOT.

310.3. Traffic Impact Study Contents:

- a. Site Description. This section shall include the location, proposed land uses, acreage, construction staging and completion date of the proposed land development. Types of dwelling units and number of bedrooms shall be included for residential developments, and gross and usable floor area for non-residential developments. A brief description of surrounding land uses and other proposed land developments within the study area shall be provided. A study area map should also be included.
- b. Transportation Facilities Description.
 - 1) The study shall describe the proposed internal transportation system, including vehicular, bicycle, bus and pedestrian circulation, all internal roadway widths and rights-of-way, parking conditions, traffic channelizations and any traffic controls within the site.
 - 2) The study shall describe location and design of proposed access, including sight distance limitations and distance from adjacent driveways and intersections.
 - 3) The report shall describe the external roadway system within the study area. Major intersections in the study area shall be identified and mapped. All proposed or approved roadway improvements within the study area shall be noted.
- c. Existing Traffic Conditions. Existing traffic conditions shall be documented for all streets and intersections in the study area. Traffic volumes shall be recorded for existing average daily traffic, existing peak hour traffic and for traffic during the development's peak hour. Complete traffic counts at all intersections in the study area shall be conducted, encompassing the peak hours of the development and roadway. A volume capacity analysis using the procedures of the current *Highway Capacity Manual* and based upon existing volumes shall be performed during the peak hour(s) of the development for the peak hour(s) of all roadways and major intersections in the study area. Levels of service shall be determined for each location.
- d. Traffic impact of the Development. Estimation of vehicular trips to result from the proposal shall be completed for the peak hour(s) of both the street system and the development. Acceptable source(s) and methodology shall be followed. These generated volumes shall be distributed to the study area and assigned to the existing streets and intersections throughout the study area. Documentation of all assumptions used in the distribution and assignment phase shall be provided. Traffic volumes shall be assigned to all access points. Safety issues for any pedestrian crossings shall be described. Any characteristics of the site that will cause unusual trip generation rates and/or traffic flows shall be noted.

- e. Analysis of Traffic impact. The total future traffic demand based on full occupancy of the proposed subdivision or land development shall be calculated for the existing and proposed streets and intersections. This demand shall consist of the combination of the existing traffic expanded to the completion year through the use of an accepted background growth rate, the development-generated traffic, and the traffic generated by other proposed developments in the study area. A volume/capacity analysis shall also be conducted using the total future demand and the future roadway capacity. This analysis shall be performed using the peak hour(s) for all streets and major intersections in the study area. The Township Engineer may also require this analysis to be conducted for the peak hour(s) of the development. Volume/ capacity calculations shall be completed for all movements at major intersections. Levels of service for all streets and intersections shall be listed.
- f. Conclusions and Recommended Improvements.
 - 1) Any movements on streets and intersections within the study area showing a Level of Service E, or worse, based on the latest edition of the *Highway Capacity Manual*, shall be considered deficient. Specific recommendations for the elimination of these problems shall be listed. For unsignalized intersections where the traffic impact of the development causes the side street approach to degrade to a Level of Service D or lower, the intersection shall be evaluated for a signal warrant. Highway capacity evaluations shall consider not only the overall intersection level of service, but also each approach and movement to identify any substandard values which need to be improved.
 - 2) All locations where the level of service for the completion year of the development is deficient without the proposed development, the study shall determine improvements which would provide a level of service and delay no worse than conditions without the subject development. These improvements may include street and intersection design and improvements, traffic signal installation and operation, traffic signal timing and other improvements. The study shall also provide an analysis to determine improvements which would eliminate all deficient levels of service.
 - 3) The listing of recommended improvements for both streets and transit shall include, for each improvement, the party responsible for the improvement, a preliminary cost estimate and funding of the improvement, and the phase of development during which the improvement is proposed to be completed. Any roadway improvement which requires increased right-of-way shall be identified.
 - 4) The traffic impact study may be used as a basis for a Township requirement under this Ordinance.

- 5) Approval of a site access plan by PADOT does not guarantee approval by the Township.
- g. Preparation and Review. The preparer of the traffic impact study shall be a professional engineer or transportation planner. The developer shall reimburse the Township for reasonable fees and expenses incurred by the Township Engineer or Traffic Engineer for the review of the developer's traffic impact study and plans.

ARTICLE IV PLAN REQUIREMENTS

Preliminary and Final Plans submitted for approval shall meet the requirements outlined in the following sections. (NOTE: Sketch plans are optional. They do not have to be prepared by a professional. The following criteria is suggested to make the sketch plan review meaningful.)

401. SUBMISSION OF SKETCH PLANS

401.1 The Sketch Plan should show:

1. Proposed subdivision name, location, land owner and developer's name and address. Names and addresses of corporation officers and major shareholders or partners. Designation of zoning district. Location map at a scale of 1"=2000'. Show major roads, points of interest and Township boundaries within 1000 feet. Give name under which the subdivision is to be recorded. Identify the plan as Sketch Plan.
2. North arrow, true or magnetic, graphic scale (1"=50' or 1"=100' preferred) and date.
3. Names of adjoining property owners including those across adjacent roads.
4. Proposed and existing streets, water/sewer, gas, power and other utility lines existing and proposed buildings and lot layout on immediately adjoining tracts, including name and right-of-way widths that fall within 500 feet distance from the project boundary lines.
5. Water courses, lake, and wetland locations and names (if any), rock outcrops and stone fields. Give location and description of any certified historic site or structure or certified natural feature.
6. Identify the location of all soils as mapped by the U.S. Natural Resource Conservation Service (formerly "SCS"), with soils identified that are poorly drained or have an expected seasonal high water table less than 20 inches from the land surface.
7. Lot layout and existing topography (general). Lot width, depth, and area (typical). Lot layout, lot width, depth and area and lot identification by number system. Street lines and names, lot lines, right-of-way, easements, community or public areas and areas to be dedicated.

8. Site data: Acreage, number of lots, average lot size, lineal feet of new roads.
9. Proposed uses of the various areas of the proposed subdivision or land development.
10. Location and type of rights-of-way, easements or other restrictive covenants which might affect development.

401.2 The following supportive information should be submitted with the Sketch Plan:

1. The latest U.S.G.S. Quadrangle map or portion thereof with the perimeter of the development accurately plotted thereon.
2. A map of the entire contiguous holdings of owner or developer showing sketch plan for roads and the location of the portion to be subdivided or developed.
3. The Planning Commission shall, at its discretion, require that evidence be presented indicating the manner in which the Environmental Protection Requirements described in Section 502.3 and the Zoning Ordinance are to be met.

402. SUBMISSION OF PRELIMINARY PLAN

402.1 Preliminary Plans for Major Subdivisions and Major Land Developments shall be drawn at a scale of one inch equals 50 or 100 feet provided all bearings, distances and other information can be legibly and accurately presented on the plan. Plans shall be prepared on a standard sheet of 12 inch by 18 inch, 18 inch by 24 inch, or 24 inch by 36 inch, except when the Commission approves other size plans. Identify the plan as Preliminary Plan. Preliminary Plans shall be signed and sealed by a professional engineer or licensed surveyor as defined in Article 2 of this Ordinance. In addition, a licensed surveyor shall certify any plan that involves a new lot.

402.2 Preliminary Plans shall show:

1. Proposed subdivision name, location, land owner and developer's name and address. Names and addresses of corporation officers and major shareholders or partners. Designation of zoning district. Location map at scale of 1"=2000'. Show major roads, points of interest and Township boundaries within 1000 feet. Give name under which the subdivision is to be recorded. The name shall not duplicate any other record subdivision in Pike County.

2. North arrow, true or magnetic, graphic scale (1"=50' or 1"=100' preferred) and date.
3. Names and tax parcel numbers of adjoining property owners including those across adjacent roads.
4. Proposed and existing streets, proposed and existing buildings and lot layout on immediately adjoining tracts, including name and right-of-way widths that fall within 300 feet distance from the project boundary lines.
5. Water course, lake and other surface water bodies, rock outcrops and stone fields. Give location and description of any certified historic site or structure or certified natural feature. Wetland areas locations as delineated by a trained and competent professional or as certified by the appropriate state and federal agencies.
6. Identify the location of all soils as mapped by the U.S. Natural Resource Conservation Service (formerly SCS), with soils highlighted that are classified as poorly drained or have an expected seasonal high water table less than 20 inches from the land surface.
7. Lot layout, lot width, depth and area (typical). Lot identification by number system. Street lines and names, lot lines, right-of-way, easements, community or public areas and areas to be dedicated.
8. Site data: Acreage, number of lots, average lot size, lineal feet of new roads.
9. Tract boundaries with bearings in degrees, minutes and seconds and distances in feet and hundredths. These boundaries shall be determined by accurate field survey, closed with an error not to exceed one in five thousand and balanced.
10. Location and log of soil test pits and soil percolation tests results, including locations of unsuccessful test sites.
11. Location, purpose and nature of any existing right-of-way or other easement. Location, purpose and nature and width of proposed easements. Location of existing sanitary sewers, public water mains, storm sewers, electric power and transmission lines, gas lines and all other utility facilities above or below ground with direction of flow and pressure.
12. Dimensions of streets, lots and proposed community areas. Sufficient bearings, lengths of lines, radii, arc lengths, street widths, rights-of-way, easements and community or public areas, to

accurately and completely reproduce each and every course on the ground.

13. Proposed street names, road profiles, including grades, points of vertical curvature and tangency and length of vertical curve; typical cross sections and specifications for streets.
14. Proposed areas for location of wells and sub-surface sewage disposal fields (if applicable).
15. Designs for sanitary sewer systems, water systems and storm water system improvements.
16. Building setback lines and lot width at the front building setback line.
17. A place on the plan for review by the Planning Commission, and Township SEO, and a place for approval by the Board of Supervisors, including space for the dates thereof. Space reserved for noting plan revisions.
18. All applicable zoning data.
19. Approximate final grades in areas of cut or fill.
20. Any lots designated for use other than residential shall be indicated.
21. Parcels to be dedicated to the public or reserved for their use, or to be reserved by covenant for residents shall be shown and marked as such.
22. Contour lines shall be shown at intervals of not more than 2 feet for land with an average natural slope of 4 percent or less and of not more than 5 feet for land with an average natural slope of more than 4 percent. The Township reserves the right to require greater detail when the slope or nature of the development demands the same.
23. Designs and location of proposed bridges and road culverts.
24. Any proposed landscaping including trees and other plantings and screening or buffer areas.
25. The seal and signature of the Professional Engineer or Registered Surveyor responsible for preparation of the plan.

402.3 The following supportive documents and information shall be submitted with Preliminary Plans for land development or major subdivisions.

1. Copies of the proposed deed restrictions, protective and restrictive covenants referenced to the drawing.
2. Proposed offers of dedication and reservation of rights-of-way and land areas with conditions attached.
3. If the developer proposes to install private amenities or facilities (for example, private roads, recreation facilities, open spaces, central sewer or water system, etc.) the developer must submit a narrative description of how responsibility for maintenance and care and ownership of those amenities or facilities will be transferred to the persons or organization which will own them. If the developer proposes to dedicate all or some portion of the amenities or facilities to the Township at some future date, the developer must submit a narrative description of how responsibility for maintenance and care of these amenities or facilities will be handled during the period before the offer of dedication to the Township. In no event will the Township accept a dedication of such amenities or facilities if, at the time of the dedication, they do not meet the then existing standards of the Township.
4. Certification of central water supply system:
 - a. Public: When the subdivision is to be served with water by an existing water company or authority, the developer shall submit two (2) copies of a letter from the water company or authority which states that the company or authority can adequately serve the subdivision.
 - b. Private: When the subdivision is to be served by a private central water supply system.
 - (i) The developer shall submit a preliminary plan of the proposed system showing all pertinent features and meeting the requirements specified in Appendix A of this Ordinance.
 - (ii) The approval of the subdivision shall be conditioned upon the receipt by the township of the approval of the appropriate agencies prior to Final Plan submission.
 - (iii) Failure to submit the approval of the system by the appropriate agencies shall render any conditional Preliminary Plan approval null and void.
 - (iv) The Commission and Board of Supervisors shall have the right to review any such preliminary and final plans to determine the overall adequacy of the proposed system.
5. Certification of a central sewage disposal system:

- a. Public: When the subdivision is to be served by an existing sewer company or authority the developer shall:
- (i) Submit a preliminary plan of the proposed sewage system showing all pertinent features.
 - (ii) Submit 2 copies of a letter from the company or authority which states that the company or authority can adequately serve the subdivision or development, including any conditions and/or costs imposed by the sewer company or authority.
 - (iii) The Commission and Board of Supervisors shall have the right to review any such preliminary and final plans to determine compliance and compatibility of the same with any Township plans or studies and the overall adequacy of the proposed system.
 - (iv) Submit proof of the approval of the design of the system by the appropriate agency prior to the final plan submission. Preliminary approval will be conditional until this requirement is met.
- b. Private or Community: When the subdivision is to be served by a private central sewage disposal system or community subsurface sewage disposal system:
- (i) The developer shall submit a preliminary plan of the sewage and treatment systems showing all pertinent features.
 - (ii) The developer shall submit 4 copies of a complete Planning Module for Land Development concurrent with the Preliminary Plan.
 - (iii) The approval of the subdivision shall be conditioned upon the receipt by the Township of the approval of the sewage and treatment system by the appropriate agencies prior to final Plan submission.
 - (iv) Failure to submit the approvals of the Land Planning Modules and of the sewage and treatment systems shall render any conditional Preliminary Plan approval null and void.
 - (v) The Commission and Board of Supervisors and Township SEO shall have the right to review any such preliminary and final plans to determine compliance and compatibility of the same with any Township plans or studies and the overall adequacy of the proposed system.

6. Certification of on-lot sewage system: When the subdivision is to be served by individual on-lot sewage disposal systems:
 - a. The developer shall submit 7 copies of a completed Planning Module for Land Development concurrent with the Preliminary Plan.
 - b. The approval of the subdivision shall be conditioned upon the receipt by the Township of the approval of the Land Planning Module by the appropriate agencies.
 - c. Failure to submit the approvals of the Land Planning Modules by the appropriate agencies shall render any conditional Preliminary Plan approval null and void.
7. The Planning Commission or Board of Supervisors may, at its discretion, require that evidence be presented indicating the manner in which the Environmental Protection Requirements described in Section 502.3 and the Zoning Ordinance are to be met. Soil erosion and sedimentation control plans shall be prepared in cooperation with the County Conservation District.
8. Map of entire contiguous holdings and all other holdings of the owner within 2000 feet, indicating area of proposed subdivision. A sketch plan of the proposed road system will be required for any contiguous area not included in the Preliminary Plan.
9. A storm water drainage plan consisting of location, type and character of storm sewers, culverts, natural water courses, drainage easements, impoundment areas, existing and proposed topographic contours shall be prepared in compliance with methods specified in Appendix B and in cooperation with the District.
10. A properly executed Application on a form provided by the Board.
11. In those cases where proposed subdivision roads or proposed lots abut or access directly to state highways the applicant shall submit an application to Penn DOT for a state highway access permit at the time preliminary subdivision or land development plans are submitted to the Township. A copy of this application shall be submitted to the Township with the preliminary plans along with evidence of submission of the application to Penn DOT.

PennDOT approval of an access permit, where applicable, is required for preliminary plan approval.

403. SUBMISSION OF FINAL PLANS FOR MAJOR SUBDIVISIONS

403.1 Final Plans for Major Subdivisions shall be drawn at a scale of one inch equals 50 or 100 feet provided all bearings, distances and other information can be legibly and accurately presented on the plan. Plans shall be prepared on a standard sheet of 12" x 18", 18" x 24", or 24" x 36", except when the Commission approves other size plans. The plan for recording shall be a clear, legible, reproducible original or print on stable base mylar or comparable quality material. Identify the plan as Final Plan. Final plans shall be prepared by a professional engineer or registered surveyor as defined in Article 2 of this Ordinance.

403.2 The Final Plan for Subdivision and Land Development shall show:

1. Proposed subdivision name, location, land owner and developer's name and address. Names and addresses of corporation officers and major shareholders or partners. Designation of zoning district. Location map at scale of 1"=2000'. Showing major roads, points of interest and Township boundaries within 1000 feet. Give name under which the subdivision is to be recorded.
2. North arrow, true or magnetic, graphic scale (1"=50' or 1"=100' preferred) and date.
3. Names of adjoining property owners including those across adjacent roads.
4. Proposed and existing streets, existing and proposed buildings and lot layout on immediately adjoining tracts, including name and right-of-way widths that fall within 300 feet distance from the project boundary lines.
5. Water course, lakes and other surface water bodies, outcrops and stone fields. Give location and description of any certified historic site or certified natural feature. Wetland area locations as delineated by a trained and competent professional and by the appropriate state and federal agencies.
 - a. The Township may require a written certification by a trained and competent professional that no wetlands exist on the site when no wetlands are shown on the plans.
6. Identify the location of all soils as mapped by the U.S. Natural Resource Conservation Service (formerly SCS), which are classified as poorly drained soils or have an expected seasonal high water table less than 20 inches from the land surface.

7. Lot layout. Lot width, depth and area and lot identification by number system. Street lines and names, lot lines, right-of-way, easements, community or public areas and areas to be dedicated.
8. Site data: Acreage, number of lots, average lot size, lineal feet of new roads.
9. Tract boundaries with bearings in degrees, minutes and seconds and distances in feet and hundredths.
 - a. The boundaries of lots (other than a residual lot of at least 10 acres) shall be determined by accurate field survey by a professional Pennsylvania-licensed surveyor, closed with an error not to exceed 1 in 10,000 and balanced. However, the boundaries of any residual tract that is not proposed for additional development and which is greater than 10 acres may be determined by deed.
10. Location and extent of various soil types, location and log of soil test pits and soil preclusion tests results.
11. Location, purpose and nature of any existing right-of-way or other easement. Location, purpose and nature and width of proposed easements, utilities and improvements.
12. Dimensions of streets, lots and proposed community areas. Sufficient bearings, lengths of lines, radii, arc lengths, street widths, rights-of-way, easements and community or public areas, to accurately and completely reproduce each and every course on the ground.
13. Proposed areas for location of wells subsurface disposal fields (if appropriate).
14. Designs for sanitary sewer systems, water systems and storm water system improvements.
15. Building setback lines.
16. A place on the plan for review signatures of the Planning Commission, and Township SEO, and a place for approval by the Board of Supervisors, including a space for the dates thereof. A space to note plan revisions. A place for notation of review by the Pike County Planning Commission.
17. Contour lines shall be shown at intervals of not more than 2 feet for land with an average natural slope of 4 percent or less and of not more than 5 feet for land with an average natural slope of more than

4 percent. The Township reserves the right to require greater detail when the slope or nature of the development demands the same.

18. Designs and locations of proposed bridges and road culverts.
19. Excepted parcels or sections shall be marked "not included in this plat" and their boundary completely indicated by bearings and distances.
20. The total tract boundary lines of the area being subdivided, with accurate distances to hundredths of a foot and bearings to one second of arc. These boundaries shall be determined by accurate survey in the field; provided, however, that the boundary(s) of adjoining additional unplatted land of the subdivider (for example, between separately submitted Final Plan sections) are not required to be based upon field survey, and may be calculated.
21. Block and lot numbers.
22. Location and type of permanent monuments and markers which have been set in place.
23. Lot area - size of each lot in square feet or acres.
24. The Deed Book Volume and page number, as entered by the County Recorder, reference to the latest source of title to the land being subdivided.
25. The seal and signature of the Professional Engineer or Registered Surveyor responsible for preparation of the plan.
26. Proposed landscaping including trees and other plantings and screening or buffer areas.
27. Zoning District.

403.3 The following items shall be on all Final Plans in the form of protective covenants:

1. Building setbacks.
2. Corner lot sight easements.
3. Utility, drainage and slope easements.

4. "Well and sewage disposal systems shall be constructed in accordance with recommended standards of the PA. Department of Environmental Protection" (if applicable).
5. "Individual owners of lots must apply to the Township for a sewage permit prior to undertaking the construction of an on-lot sewage disposal system" (if applicable).
6. "The Planning Commission and the Board of Supervisors have not passed upon the feasibility of any individual lot or location within a lot being able to sustain any type of well or sewage disposal system" (if applicable).
7. Subdivision and Land Development Final Plans requiring access to a highway under the jurisdiction of the PennDOT shall contain the following notice: "The plan requires access to a highway under the jurisdiction of the Pennsylvania Department of Transportation and a Highway Occupancy Permit is required pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the "State Highway Law," before any driveway access to a state highway is permitted." Final plans shall also be noted to indicate that access to the State Highway shall be only as authorized by a highway occupancy permit.

403.4 The following information shall supplement the Final Plan:

1. Final Profiles, cross-sections and specifications for street improvements. Final designs of bridges and road culverts.
2. Final Plans of drainage, storm sewer, sanitary sewer and water distribution system.
3. Final grading and finish contours for proposed commercial or industrial development which grading shall be consistent with **Section 502.301**.
4. Approval by the appropriate agencies for the water supply, sewage, storm water runoff, and soil and erosion control plans.
5. Proof of the formation of any property owners association, or similar organizations, which is to assume responsibility for maintenance and care of the amenities and facilities. Also, a narrative description of how control of the owners association will pass to the lot purchasers.
6. A final version of all restrictions and covenants, if any, the developer intends to place in the deeds to the lots in the subdivision. If no such

restrictions or covenants are to be imposed, a statement to that effect shall be included.

7. Evidence of actual arrangements and legal agreements with utility Companies or Authorities for providing services to each lot in the subdivision or to the land development.
8. In those cases where Final Plans propose water supply to be provided by means other than by private wells owned and maintained by the individual owners of lots within the subdivision or development, applicants shall provide evidence with the Final Plan that the subdivision is to be supplied by a certified public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority or utility. A copy of a Certificate of Public Convenience from the Pennsylvania Public Utility Commission or an application for such certificate, a cooperative agreement or a commitment or agreement to serve the area in question, whichever is appropriate, shall be acceptable evidence.
9. In those cases where subdivision or land development roads or proposed lots abut or access directly to state highways, the applicant shall secure from PennDOT a state highway access permit as a requirement for final plan approval. A copy of the approved permit shall be submitted to the Township with the final plan.

403.5 After all signatures have been affixed to the reproducible print of the Final Plan, the developer shall supply one reproducible mylar copy and four black line or blue line prints to the Township. The developer or subdivider shall also provide one reproducible mylar copy and one paper print to the county mapping office. The Township and/or the County may also require an electronic copy.

403.6 The following general note shall be on all Final Plans if applicable:

"All roads shall remain private, not open to public travel, and shall not in the future be offered for dedication to Westfall Township by the subdivider, heirs, successors or assigns, unless all requirements of Township Ordinance No. 64, or any amendment thereto, shall have been installed."

404. SUBMISSION OF FINAL PLAN FOR MINOR SUBDIVISION

404.1 Final plans for Minor Subdivisions shall be drawn at a scale of one inch equals 50 or 100 feet provided all bearings, distances and other information can be legibly and accurately presented on the plan. Plans shall be prepared on a standard sheet of 12" x 18", 18" x 24", or 24" x 36" except when the Commission approves other size plans. The plan for recording

shall be a clear, legible, reproducible original or print on stable base mylar or comparable quality material. The plan shall be identified as Minor Subdivision Final Plan.

Final plans shall be prepared by a professional engineer or registered surveyor as defined in Article 2 of this Ordinance.

404.2 A final plan for a minor subdivision or minor land development shall show or include all applicable items of information required for final plans in Section 403.2 of this Ordinance with the following additions:

1. Sufficient data, acceptable to the Township Engineer shall be submitted to readily determine the location, bearing and length of every boundary, street and proposed lot line and the accurate location of each proposed lot or parcel or land development feature within and in relation to the boundaries of the entire original tract being subdivided or developed (based upon an accurate field survey, closed with an error not to exceed one in 5,000 and balanced).
2. All dimensions shall be shown in feet and hundredths of a foot with all bearings shown to the nearest one second of arc. **The area of each proposed lot or parcel.**
3. **The location and boundaries of any land areas having a slope of thirty (30%) percent or greater shall be highlighted.**

404.3 A final plan for a minor subdivision or minor land development shall include all applicable protective covenants listed in Section 403.3 and supplemental information listed in Section 403.4 of this Ordinance and the following if applicable:

1. In the event the Subdivision incorporates a private access drive as defined in this Ordinance, the following: "The improvement and maintenance of the private access drive shall be the sole responsibility of those persons benefitting by the use thereof."
2. In the event the Subdivision qualifies under Subparagraph C. of the definition "Minor Subdivision" in this Ordinance, the following: "Lot number _____ shall be joined to and become an inseparable part of lands of _____ as recorded in Deed Book Volume _____, page _____, and cannot be subdivided or conveyed separately or apart therefrom without Township approval."
3. In the event the subdivision incorporates a private access drive, as defined in this Ordinance, which serves as access to a parcel, two or more, then the design of such drive shall conform to the requirements set forth in Table 5-1 and Table 6-2. Typical cross-

sections shall be submitted for all private access drives, the design of which shall be adequate for the anticipated traffic. The Commission may at its discretion, require that center-line profiles, together with all vertical curve data, be submitted.

405. SUBMISSION OF LAND DEVELOPMENT PLANS

405.1 Land development plans proposing new construction or change of use residential developments of 5 dwelling units or less or for public services, commercial or industrial uses involving 2,500 square feet of gross building floor space or less or any proposed changes of use of land not involving any buildings or structures shall meet all applicable requirements of Section 404 for the Submission of Final Plans for Minor Subdivisions. These Land Development Plans shall be identified in the plan title block as "Minor Land Development Plans".

405.2 Land development plans submitted for residential developments of 6 dwelling units or more and for public services, commercial or industrial uses involving more than 2,500 square feet of gross building floor space shall meet all applicable requirements of Section 402 and 403 for Preliminary and Final Plans for Major Subdivisions.

These Land Development Plans shall be identified in the plan title block as "Major Land Development Plans."

ARTICLE V DESIGN STANDARDS

501. APPLICATION

The design standards and requirements set forth in this Article shall be observed as minimums by the subdivider or developer of each subdivision and land development within Westfall Township. Table 5-1 at the end of this Article is a part of the design standards within this Article V. The Township may require more restrictive standards where necessary to protect health, safety and welfare of the public and the environment and where unique site or design conditions so dictate.

502. DESIGN STANDARDS APPLICABLE TO ALL TYPES OF DEVELOPMENT

502.1 General Standards: Land shall be suited to the purpose for which it is to be subdivided. Land subject to hazards against life, health, or property shall not be subdivided or developed unless adequate safeguards are provided as approved by the Board of Supervisors, based upon reviews by the Planning Commission and fire officials. The subdivision or land development shall fully comply with the provisions of the Township Zoning Ordinance.

- a. In addition to the Zoning Ordinance and Comprehensive Plan, information for determining and evaluating potential hazards may include references to historical records, soil evaluations, engineering studies, expert opinions, established standards used by registered insurance companies, and Federal, State, or local policies, such as, but not limited to, established flood plain lines.
- b. All portions of a tract being subdivided shall be taken up in lots, streets, public lands, or other proposed uses, so that remnants and land-locked areas shall not be created. The layout of a subdivision shall also be planned with consideration to existing nearby developments or neighborhoods, so that the development is coordinated in terms of traffic movement, drainage, and other reasonable considerations.
- c. Wherever possible, lot lines shall follow municipal and county boundary lines rather than cross them, and reserve strips controlling access to lots, public rights-of-way, public lands or adjacent private lands are prohibited.

502.2 Land Requirements:

- 502.201 Minimum lot or parcel area and dimensional requirements for residential and nonresidential subdivisions and land

developments shall be as set forth in the Westfall Township Zoning Ordinance.

502.202 See the definition of "Lot Width" in the Zoning Ordinance, which includes certain exceptions.

502.203 See Section 310 of the Zoning Ordinance concerning land with slopes of 15 percent or greater.

502.204 The minimum required lot area shall generally be designed and plotted as a contiguous area of land not separated or interrupted by permanent drainage or utility rights-of-way or street rights-of-way. Separation or interruption of this required minimum contiguous lot area by drainage or utility rights-of-way or street rights-of-way shall be avoided wherever possible and shall be permitted in all subdivisions and land developments only upon grant of a modification by the Board of Supervisors upon written request by the applicant.

502.3 Natural and Historic Feature Preservation: The Planning Commission and the Board of Supervisors shall, at their discretion, require that the design and development of all subdivisions shall preserve insofar as possible, all natural, scenic, and historic features, which will add attractiveness by providing parks, adequate open space for recreation, light and air by proper distribution of population thereby creating conditions favorable to the health, safety, morals and general welfare of the citizens and for the harmonious development of the Township. Some of these features are the natural terrain and natural drainage, large trees or groves, water courses and falls, historic areas and structures, exceptional scenic views and landmarks, and other community assets. Land subject to hazardous conditions such as open quarries, unconsolidated fill, floods, excessive erosion, precipices, and water supply shall not be subdivided until the hazards have been eliminated or overcome by the subdivision and proposed construction.

502.301 Soil Protection: If required by regulations of the DEP, a developer shall submit with the preliminary plan an "Erosion and Sedimentation Control Plan" prepared by a person trained and experienced in erosion and sedimentation control methods and techniques as provided for under Title 25 Rules and Regulations, Chapter 102, issued by DEP. Such plans shall be submitted by the Applicant to the County Conservation District for review and recommendation of the District directors. Three (3) copies of the "Erosion and Sedimentation Control Plan" with any required approval or permit by the appropriate agency shall be submitted to the Township Planning Commission with the Preliminary Plan. Regardless of the requirements of the DEP, if the subdivision or land development will require excavation or

fill in excess of 3 feet in depth, the developer shall be required to submit to the Township Planning Commission with the preliminary plan, an "Erosion and Sedimentation Control Plan" prepared by persons trained and experienced in erosion and sedimentation control methods and techniques.

- a. A submittal to the Township may also be required under Section 501 of the Zoning Ordinance.

502.302 Uninhabitable Land: Land subject to flooding or subsidence, hazardous excessive erosion, precipices and land deemed by the Commission or the Board of Supervisors to be uninhabitable for other reasons shall 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; but, such land within a plan shall be set aside for such uses as will not be endangered by periodic or occasional inundation, or will not produce unsatisfactory living conditions; such land may be incorporated as additional areas in plotted lots.

502.303 Water and Wetland Areas: Bodies of surface water and wetland areas defined and designated by federal and state agencies shall not be utilized in the calculations of, or used to meet required minimum lot sizes for any proposed residential or non-residential use nor utilized to calculate or to meet the minimum total parcel areas required for a residential unit or other nonresidential activity. The Township shall require that significant designated wetlands or surface water areas be retained in a single ownership common area rather than incorporated as additional area in plotted lots to facilitate current or future management of surface waters or wetlands for maintenance of environmental quality.

- a. Damming, filling, relocating or other interference with the flow of surface water along any surface water drainage channel or natural water course shall not be permitted except with the approval of the Township and, where appropriate, the Pennsylvania DEP.

502.4 Water Supply and Sewage Disposal Requirements: All subdivision and land developments shall be served with an adequate water supply and sewage system, either on lot, public, or private central systems. All such systems shall be acceptable to the Pennsylvania DEP and to the Board of Supervisors. All residential lots shall contain a suitable area for on-lot sewage disposal system or be served by an approved community or central sewage disposal system. In those cases where Final Plans propose water supply to be provided by means other than by private wells owned and

maintained by the individual owners of lots within the subdivision or development, applicants shall provide evidence with the Final Plan that the subdivision is to be supplied by a certified public utility, a bona fide cooperative association of lot owners, or by a municipal corporation, authority or utility.

- a. All suppliers of non-municipally owned central or community sewage disposal facilities shall be organized as a certified public utility or a bona fide cooperative association of lot owners in a manner which is acceptable to the Board of Supervisors.
- b. In the event any such central water and/or central sewer system is transferred to the Township or a municipal authority, neither the developer nor the developer's assignee shall be entitled to receive compensation or payment thereof, and in no event shall the Township or municipal authority be obligated to accept such system by virtue of the terms of this Ordinance.
- c. One copy of all correspondence, supporting documentation, applications for permits, and certificates for operation submitted to DEP and/or Pennsylvania Public Utility Commission for the right to provide such services shall be forwarded to the Township as a part of the public record. One copy of the permit and/or certificate of convenience issued by DEP and the PUC authorizing such services shall be forwarded upon receipt to the Township as a part of the public record.
- d. Plans and specifications for central or community water and/or sewage systems (i.e. extension of an existing or new proposed utility) shall be prepared by a registered professional engineer well versed in the design of such systems and duly licensed to practice within the Commonwealth of Pennsylvania. A minimum of 4 complete sets of preliminary plans for such systems shall be submitted to the Planning Commission, with the application for review of preliminary plans. A minimum of 4 complete sets of approved plans and specifications shall be submitted to the Planning Commission with the application for review of the Final Plan.
- e. Four copies of a completed Planning Module for Land Development shall be submitted concurrent with the Preliminary Plan. The Board of Supervisors will submit copies of the module and necessary documentation to the Pennsylvania DEP for review. DEP approval of the module and any required Township Official Sewage Facilities Plan revision or supplement will be required prior to Final Plan approval.

502.401 Public or Private Central Water System: Where a public water supply is available to the proposed residential development, the subdivider shall construct a system of water mains and connect with such system and provide a connection for each

lot. Regardless of this requirement, all subdivisions and land developments shall be served with an adequate water supply. Plans and specifications for off-site water systems (i.e. extension of an existing system or a proposed new facility) shall be prepared by a professional Engineer and shall conform to accepted engineering practices. The system shall be designed to furnish adequate water supply including flow and pressure, main sizes and fire hydrants located to meet the specifications of the National Fire Protection Association and the Westfall Township Fire Department or the Mill Rift Fire Department. Suitable agreements shall also be established for the design, specifications, construction, ownership and maintenance of such distribution system.

502.402 Central Sewers: Subdividers or land developers shall provide sewer connections to a public sewer system if such sewer system is reasonable to the proposed subdivision or development.

- a. If a county plan, regional plan, municipal plan, or subdivision requirement indicates that construction of sanitary sewers will serve the site within approximately 5 years, then capped sewers shall be required. When public sanitary sewer systems may not be available within 10 years, then a central sewage treatment and disposal system (commonly called a package treatment plant) or a community subsurface sewage disposal system may be installed by the developer. Central sewers or community systems are required for all residential lots and non-residential developments where the Board of Supervisors determines upon review of competent data and information that on-site soil conditions are unsuitable for on-lot subsurface disposal systems. In those cases where community subsurface disposal systems are proposed, a replacement area which has been properly tested and meets current state and Township standards for subsurface sewage disposal shall be provided for the subsurface sewage disposal field.
- b. Design standards, materials, and specifications shall be as outlined in the current Pennsylvania DEP Sewerage Manual, Publication No. 1, as amended or revised, and all other requirements either Federal or State necessary to secure the requisite permits from such agencies.

502.403. Well and Septic System Locations. Every plan for a subdivision or land development and every application for a building permit for a new principal building that will be served by a well and/or

septic system shall designate the proposed well and a primary and an alternate septic system locations.

- 502.403.1. Such plan shall show that the proposed locations will meet the minimum isolation distances established by PA DEP regulations between a well and septic systems on the subject lot and all adjacent lots.
- 502.403.2. A plan may show the outer extent of potential well locations, instead of one exact location, provided all of the potential area would still meet the isolation distance.
- 502.403.3. If the well or septic system location is proposed to be changed from the location shown on the submitted plan, then a site plan showing the revised location shall be submitted for approval by the Zoning Officer and Sewage Enforcement Officer prior to issuance of the building permit.
- 502.403.4. It is requested that well sites be placed in the front yard, thereby allowing septic systems to be placed in the rear yard. The intent is to minimize the visibility of any septic mound systems. In addition, if wells are located in consistent locations within a subdivision, it will make it easier for adjacent property-owners to meet minimum separation distances between septic systems and wells.

502.404. Water Studies.

- 502.404.1. Purposes. To provide the Township with information to properly evaluate the impact a proposed development will have upon groundwater resources. To make sure that adequate water supplies will be available to service a proposed development without negatively impacting adjacent uses dependent upon the same water source.
- 502.404.2. A hydrogeologic study shall be required to be submitted by the applicant whenever a proposed use, subdivision or land development will involve total average water usage of groundwater or spring water after build-out exceeding 10,000 gallons per day.
- 502.404.3. See also the provisions of Section 306 and 402 of the Zoning Ordinance concerning withdrawals of spring water and groundwater for off-site use.
- 502.404.4. Credentials. The study shall be prepared by a professional geologist or professional engineer with substantial experience in preparing similar studies.

502.404.5. The hydrogeologic study at a minimum shall include the following:

- (a) A location map for the proposed development showing proximity to waterways, lakes and major roads.
- (b) A proposed 30 day average rate and maximum daily rate of groundwater or spring water withdrawal from each water source.
- (c) A map showing water withdrawal points.
- (d) An analysis of the impacts of the water withdrawal upon the groundwater supply and upon uses and creek levels within a one-half mile radius of the project, including agricultural activities.
- (e) Consideration of the impacts during both normal conditions and drought conditions.

502.5 On-Lot Water and Sewer System: Where neither connection to a centralized water or sewer system is required, on-lot water and sewer systems shall be constructed in accordance with criteria set forth by the Pennsylvania DEP. The Township Sewage Enforcement Officer's site and soils investigation and favorable report is required prior to unconditional Preliminary Plan approval. An adequate number of test pits and soil percolation tests, as determined by the Sewage Enforcement Officer, shall be undertaken to determine the general suitability of soils throughout the subdivision or development for on-lot subsurface sewage disposal.

502.6 Stormwater Management & Drainage:

502.601 Statement of Findings

The Board of Supervisors finds that:

- (a) Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines floodplain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases non-point source pollution of water resources.
- (b) A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public

health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.

- (c) Stormwater is an important water resource, which provides groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.
- (d) Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).

502.602 Purpose

The purpose of this Section is to promote health, safety, and welfare within the Township and its watersheds by minimizing the harms and maximizing the benefits described in Section 502.601 through provisions designed to:

- (a) Meet legal water quality requirements under state law, including regulations at 25 Pa. Code, Chapter 93 to protect, maintain, reclaim, and restore the existing and designated uses.
- (b) Preserve natural drainage systems as much as possible.
- (c) Manage stormwater runoff close to the source.
- (d) Provide procedures and performance standards for stormwater planning and management.
- (e) Maintain groundwater recharge, to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- (f) Prevent scour and erosion of stream banks and streambeds.
- (g) Provide proper operations and maintenance of all permanent Stormwater Management BMPs that are implemented within the Township.
- (h) Provide standards to meet NPDES permit requirements.

502.603 General Requirements

- (a) No Regulated Activities shall commence until the Township approves a plan, which demonstrates compliance with the requirements of this Section.
- (b) Plans approved by the Township shall be on site throughout the duration of the Regulated Activity.
- (c) The Township may, after consultation with DEP, approve measures for meeting the State Water Quality Requirements other than those in this Section, provided that they meet the minimum requirements of, and do not conflict with State law including but not limited to the Clean Streams Law.
- (d) For all Regulated Earth Disturbance Activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the Regulated Earth Disturbance Activities (e.g., during construction), to meet the purposes and requirements of this Section and to meet all requirements under Pennsylvania Code Title 25 and the Clean Streams Law. Various BMPs and their design standards are listed in the *Erosion and Sediment Pollution Control Program Manual* (E&S Manual), Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008 (2000), as amended and updated.
- (e) Discharges onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without permission of the adjacent property owner(s).
- (f) All regulated activities shall include such measures as necessary to:
 - (1) Protect health, safety, and property.
 - (2) Meet State Water Quality Requirements.
 - (3) Meet the water quality goals of this Section by implementing measures to:
 - a. Minimize disturbance to floodplains, wetlands, natural slopes over 15%, and existing native vegetation.
 - b. Preserve and maintain trees and woodlands. Maintain or extend riparian buffers and protect existing forested buffer. Provide trees and

woodlands adjacent to impervious areas whenever feasible.

- c. Establish and maintain non-erosive flow conditions in natural flow pathways.
 - d. Minimize soil disturbance and soil compaction. Cover disturbed areas with topsoil having a minimum depth of 4 inches. Use tracked equipment for grading when feasible.
 - e. Disconnect impervious surfaces by directing runoff to pervious areas.
- (4) Incorporate the techniques for Low Impact Development Practices described in *The Pennsylvania Stormwater Best Management Practices Manual*.
- (g) The design of all facilities over Karst shall include an evaluation of measures to minimize adverse effects.
 - (h) Infiltration BMPs should be spread out, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this Section.
 - (i) Storage facilities should completely drain both the volume control and rate control capacities over a period of time not less than 24 hours and not more than 72 hours from the end of the design storm.
 - (j) The design storm volumes to be used in the analysis of peak rates of discharge should be obtained from the Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, US Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland, 20910. NOAA's Atlas 14 can be accessed at Internet address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.
 - (k) For all Regulated Activities, stormwater management BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this Section and to meet all requirements under Pennsylvania Code Title 25, the Clean Streams Law, and the Storm Water Management Act.

- (l) Various BMPs and their design standards are listed in *The Pennsylvania Stormwater Best Management Practices Manual*.

502.604 Drainage Requirements

- (a) Lots shall be laid out and graded to prevent cross lot drainage and to provide positive drainage away from proposed building areas. Natural drainage courses shall be maintained. The drainage easements may be incorporated into lots or established separately and apart therefrom. To minimize sheet flow of stormwater across lots located on the lower side of roads or streets, and to divert flow away from building areas, the cross-section of the street as constructed shall provide for parallel ditches or swales or curbing on the upper side which shall discharge only at drainage easements and may also be required on the lower side in situations where site conditions or design indicate a need.
- (b) All lots shall be laid out and graded to prevent cross lot drainage, to provide positive drainage away from proposed building locations, and any primary or alternate septic system locations, on or off of the site.
- (c) No stormwater runoff or natural drainage water shall be so diverted as to overload existing drainage systems, or create flooding or the need for additional drainage structure on other private properties or public lands, without complete approval of provisions being made by the developer for properly handling such conditions, including water runoff impoundments, if necessary.
- (d) Storm drainage facilities should be designed not only to handle the anticipated peak discharge from the property being subdivided, but also the anticipated increase in runoff that will occur when all the property at a higher elevation in the same watershed is fully developed.
- (e) Drainage structures that are located on state highway rights-of-way shall be approved by the PennDOT, and a letter from that office indicating such approval shall be directed to the Township Planning Commission prior to final approval.
- (f) All streets shall be designed as to provide for the discharge of surface water from their right-of-way.

- (g) All proposed surface drainage structures shall be indicated on the Stormwater Management Site Plan.
- (h) Interceptors for stormwater runoff along streets shall be spaced and designed to intercept 80% of the peak runoff from the design storm.
- (i) Stormwater Management Site Plans shall include all appropriate designs, details, and dimensions necessary to clearly explain proposed construction materials and elevations.
- (j) Whenever storm drains are required by the Commission and Board of Supervisors, such storm sewer system shall be separate from the sanitary sewer system. Storm drains or storm sewer facilities may be required in any development situation where the Township Planning Commission and Supervisors determine that surface drainage facilities are inadequate to prevent excessive erosion and lot or road maintenance problems.
- (k) Properly designed open swales and other surface drainage facilities shall be used where feasible. If determined by the Board of Supervisors to be necessary, based upon the recommendation of the Township Engineer, then an adequate storm sewer system consisting of inlets and underground drainage pipes with approved outlets shall be constructed by the developer. The Township may determine whether an underground storm drainage is needed based upon the expected velocity and depth of the stormwater flows (including depths in the street) and the proximity of dwellings.

502.605 Exemptions

- (a) Disconnected Regulated Activities equal to or less than 2,000 square feet are exempt from the Volume Controls, Rate Controls, and the Stormwater Management Site Plan preparation requirements.
- (b) Agricultural Plowing and Tilling are exempt from the Volume Controls, Rate Controls, and Stormwater Management Site Plan preparation requirements, provided the activities are performed according to the requirements of 25 Pa. Code, Chapter 102.
- (c) Forest Management and Timber Operations are exempt from the Volume Controls, Rate Controls, and Stormwater

Management Site Plan preparation requirements provided the activities are performed according to the requirements of 25 Pa. Code, Chapter 102.

502.606 Volume Controls

The Low Impact Development practices provided in *The Pennsylvania Stormwater Best Management Practices Manual* shall be utilized for all Regulated Activities to the maximum extent practicable.

(a) Areas Tributary to Special Protection Waters

- (1) All Regulated Activities occurring in drainage areas tributary to waters designated High Quality or Exceptional Value pursuant to 25 Pa. Code, Chapter 93, shall not change any biological, chemical, or physical characteristic, including volume, rate, velocity, course, current, cross-section, or temperature of the Special Protection Waters.

(b) Areas Not Tributary to Special Protection Waters

- (1) For Regulated Activities in drainage areas that are not tributary to Special Protection Waters, water quality controls shall be implemented using *The Design Storm Method* or *The Simplified Method*. For Regulated Activity areas equal or less than 1 acre that do not require hydrologic routing to design the stormwater facilities, this Section establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of economic considerations, the intrinsic limitations on applicability of the analytical procedures associated with each methodology, and other factors.

- a. *The Design Storm Method* (CG-1 in *The Pennsylvania Stormwater Best Management Practices Manual*) is applicable to any size of Regulated Activity. This method requires detailed modeling based on site conditions.

1. Do not increase the post-development total runoff volume for all storms equal to or less than the 2-year, 24-hour duration

rainfall.

2. For modeling purposes:

- i. Existing (pre-development) non-forested pervious areas must be considered meadow or its equivalent.
- ii. 20% of existing disturbed impervious area, when present, shall be considered meadow in the model for existing conditions.

b. *The Simplified Method* (CG-2 in *The Pennsylvania Stormwater Best Management Practices Manual*) provided below is independent of site conditions and should be used if the Design Storm Method is not followed. This method is not applicable to Regulated Activities greater than 1 acre or for projects that require design of stormwater storage facilities.

For new impervious surfaces:

- i. Stormwater facilities shall be sized to capture at least the first 2.0 inches of runoff from all new impervious surfaces.
- ii. At least the first 1.0 inch of runoff from new impervious surfaces shall be permanently removed from the runoff flow — i.e. it shall not be released into the surface Waters of this Commonwealth. Removal options include reuse, evaporation, transpiration, and infiltration.
- iii. Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the 0.5 inch of the permanently

removed runoff should be infiltrated.

- iv. This method is exempt from the requirements of 502.607, Rate Controls.

502.607 Rate Controls

- (a) Areas not covered by a Release Rate Map from an approved Act 167 Stormwater Management Plan:
 - (1) Post-development discharge rates shall not exceed the pre-development discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year storms. If it is shown, that the peak rates of discharge indicated by the post-development analysis are less than or equal to the peak rates of discharge indicated by the pre-development analysis for 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storms, then the requirements of this Section have been met. Otherwise, the applicant shall provide additional controls as necessary to satisfy the peak rate of discharge requirement.
- (b) Runoff that is detained shall be held and released at a pre determined controlled rate by appropriately installed devices. The release shall be in the same manner as the natural or pre-development means of discharge from a site (such as point discharge or sheet flow).
- (c) All stormwater management methods are subject to approval by the Township Engineer, including all outlet locations.
- (d) If it can reasonably be anticipated that there will be an increase in the flow of water onto the property of some other person as a result of action, a drainage release shall be submitted with the application. The drainage release(s) will be obtained, by and at the expense of the applicant, from all property owners over whose land additional drainage will flow. All drainage releases shall be notarized and recorded, by and at the expense of the applicant, in the County Office of the Recorder of Deeds.

502.608 Velocity Controls

- (a) The Board of Supervisors, based upon the recommendations of the Township Engineer, may require specific sizes or types of stormwater velocity control measures based upon both the

need to control the velocity and upon long-term maintenance concerns.

502.609

Stormwater Management Site Plan Contents

The Applicant shall furnish 3 copies of a Stormwater Management Site Plan and associated calculations to the Commission for review and analysis. Said plan shall also meet the State of Pennsylvania Title 25, Pa. Code, Chapter 102, DEP requirements for an Erosion and Sedimentation Control Plan. The Commission shall submit one copy of the Stormwater Management Site Plan to the Township Engineer for review and comment. See Appendix B of this Ordinance which contains methods and coefficients for calculating storm water runoff.

The following items shall be included in the Stormwater Management Site Plan:

- (a) Provisions for a permanent access or maintenance easement for all physical Stormwater Management BMPs, such as ponds and infiltration structures.
- (b) The overall stormwater management concept for the project.
- (c) A determination of Site Conditions in accordance with *The Pennsylvania Stormwater Best Management Practices Manual*. A detailed site evaluation shall be completed for projects proposed in karst topography.
- (d) Stormwater runoff computations, design computations, and documentation as specified in this Section, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Section.
- (e) Expected project time schedule.
- (f) A soil erosion and sedimentation control plan, where applicable, as prepared for and submitted to the approval authority.
- (g) The effect of the project (in terms of runoff volumes, water quality, and peak flows) on surrounding properties and aquatic features and on any existing stormwater conveyance system that may be affected by the project.

- (h) Plan and profile drawings of all Stormwater Management BMPs including open channel and swales. Drawings shall indicate hydraulic facility.
- (i) Stormwater Management Site Plan shall show the locations of existing and proposed septic tank infiltration areas and wells.
- (j) The Stormwater Management Site Plan shall include an Operation and Maintenance (O&M) plan/narrative for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for operation and maintenance as well as schedules and costs for O&M activities.

502.610 Stormwater Runoff Calculations

- (a) The stormwater calculations shall include the following:
 - (1) Pre- and post-development drainage maps showing existing and proposed grades and including any off-site tributary area.
 - (2) Pre- and post-development runoff calculations.
 - (3) Detention basin design calculations (as applicable).
 - (4) Pipe and swale sizing calculations.
 - (5) Such information as the Township Engineer determines is needed to determine compliance with this Ordinance, including, but not limited to, slopes, proposed elevations, typical cross sections and details.
- (b) Impervious Areas:
 - (1) The measurement of impervious areas shall include all of the impervious areas in the total proposed development even if development is to take place in stages.
 - (2) For development taking place in stages, the entire development plan must be used in determining conformance with this Section.
 - (3) For projects that add impervious area to a parcel, the total impervious area on the parcel is subject to the requirements of this Section.

502.611

Drainage Design Standards

- (a) Open pipe ends must be fitted with concrete endwalls, prefabricated end sections, rip-rap and/or energy dissipaters if necessary to meet the velocity standards in the latest published version of the State DEP Erosion and Sediment Pollution Control Program Manual, or its successor publication.
- (b) Drainage pipes shall have a minimum slope of 0.5% and drainage swales not designed for stormwater detention shall have a minimum slope of 1%. As a minimum, the tops of all pipes should be at the same elevation when changing pipe sizes.
- (c) Manholes or inlets shall be used at all changes in horizontal alignment, at changes of vertical grade and at all pipe intersections. No run of pipe shall exceed 400 feet in length, without appropriate measures to allow clean out. Trash racks shall be placed on all stormwater entrance structures.
- (d) Grating. Appropriate bicycle-safe safety grates shall be attached to all catch basins, stormwater inlets, pipe openings and other stormwater receiving structures, as needed, to ensure that maximum openings do not exceed 25 square inches.
- (e) Storm Sewer Outfalls. Storm sewer outfalls shall be designed, with respect to the elevation of the invert or other features, that when the receiving watercourse is inundated with a 50-year design storm, the storm sewer system will continue to drain the area it is designed to serve.
- (f) The maximum side slopes of swales shall be 2:1 unless otherwise approved by the Board of Supervisors. "V" shaped or parabolic swales are preferred.

502.612

Detention Basins Standards

- (a) Perforated risers, staggered orifices, V notch weirs, or other outlet structures as approved by the Township, may be permitted to control the outflow.
- (b) All outflow structures from storage facilities shall be equipped with a regulatory device that will permit modification to

regulate the amount of outflow. Suitable anti-vortex and/or velocity retarders shall be used.

- (c) All stormwater detention facilities, including detention basins, shall contain an emergency spillway and be designed to pass the 100-year design storm with a minimum 1.0 foot freeboard.
- (d) The downstream slope of the emergency spillway shall, at a minimum, extend to the toe of the berm embankment. The edge of the basin grading shall be within the subject property.
- (e) The emergency spillway and the outfall of the detention basin shall be lined with rip-rap designed to comply with State DEP standards and which is acceptable to the Pike County Conservation District.
- (f) All detention basin outflow structures shall be designed with trash racks over the outflows.
- (g) Entrances to stormwater pipes, including outflow pipes in detention basins, shall have childproof grates or similar devices.
- (h) The minimum top width of a detention basin berm shall be 10 feet, unless the Township determines that a differing width is needed for maintenance and structural purposes.
- (i) In order to provide proper drainage, a minimum grade of 1%, directed toward the outlet structure, shall be maintained across the basin floor. Concrete low flow channels are discouraged because they may need footings below the frost-line to be effective and because they do not provide for infiltration. The minimum grade of 1% may not be applicable if the stormwater control facility is also being used to provide infiltration.
- (j) Slopes of Basins. The maximum inside and outside slope of earth detention basin embankments shall be 3 horizontal to 1 vertical.
- (k) Landscaped Screening of Detention Basins
 - (1) A detention basin designed to have a water depth of greater than 20 inches shall be screened by landscaping from view of existing dwellings, a residential zoning district, or a public street, unless the basin would meet one of the following conditions:

- a. The basin would have an average slope of less than 4 to 1 on the inside of the berm of the basin and both the inside and outside of the basin would be planted in grass and intended to be mowed or planted in other attractive vegetative ground cover.
 - b. The basin is a retention basin that is designed to closely resemble a natural pond.
- (2) Any required screening shall meet the "buffer yard" standards of the Township Zoning Ordinance, unless the Board of Supervisors approves alternate landscaping that serves the same purposes. This landscaping shall not be required along an area where natural vegetation will be maintained that will completely fulfill this purpose or where landscaping is not feasible (such as the overflow).
- (3) Thorny and prickly shrubs (that are also attractive) are encouraged to be used around detention basins to discourage entry by children. If a fence is used, it shall be placed on the inside of landscaping.

(l) Fencing of Basins

- (1) A detention basin shall be surrounded by a fence if any of the following situations apply:
 - a. The maximum depth of water in the basin after a 10-year or 25-year storm is greater than 30 inches for more than 1 hour, or
 - b. The basin is to be dedicated to the Township and the Township requires that it be fenced.
- (2) The fencing shall be secure and have a minimum height of 4 feet. The design of the fence shall be approved by the Township. Vinyl clad chain link metal, vinyl picket or vinyl post fences are recommended.

502.613 Construction Standards

- (a) Construction and materials of storm drainage and control facilities (including pipes) and erosion control facilities shall be in accordance with the approved plans and any accompanying specifications. The construction details and

standards of the following publications, or their successor publications, in their most recent revision shall be used:

(1) PennDOT, Form 408, Specifications.

(2) PennDOT, RC Series, Roadway Construction Standards.

502.614 Sequence of Construction

- (a) No substantial grading shall occur and no building permits shall be issued for any building unless any detention basin, siltation basin, or improved major swale approved to handle the resulting runoff is in place. Any detention basin shall be seeded and stabilized and have an installed outlet structure prior to the construction of any streets or buildings within that drainage basin.

502.615 Phasing

- (a) The phasing of a development shall ensure that all stormwater facilities needed to manage runoff from a phase are in place and functioning adequately prior to and after the construction of buildings in that phase. This shall, for example, include the extension of the main outfall line. This may require the use of temporary structures, which shall be shown on submitted plans. If the development occurs in phases, the entire system shall be shown as part of the preliminary plan submission.

502.616 Ownership and Maintenance of Stormwater Facilities

- (a) A system for the ownership and maintenance responsibilities of all temporary and permanent storm water facilities and erosion and sedimentation control facilities that is satisfactory to the Board of Supervisors shall be established prior to Final Plan approval.
- (b) The Stormwater Management Site Plan shall include a narrative stating the proposed methods and schedules of maintenance of stormwater facilities to ensure their proper operation. The method of ownership and maintenance responsibilities of stormwater facilities shall be subject to approval by the Board of Supervisors.
- (c) At its discretion, the Township may require that stormwater facilities be dedicated to the Township for maintenance. However, the Township is under no obligation to accept dedication or maintenance responsibilities. If the Township

accepts maintenance responsibilities, it may require the developer to fund an account to pay for on-going maintenance.

- (d) The Township may require that maintenance responsibilities be handled through a property-owners association with all owners legally obligated to fund their share of the costs.
- (e) If stormwater facilities that require proper maintenance are to be privately owned, legal mechanisms shall be established prior to property conveyance to require the owner and his/her successor and assigns to properly maintain the facilities in a safe, functional and attractive manner in accordance with the approved maintenance schedule.
- (f) If stormwater facilities will not be municipally owned, the developer shall establish a legal right of the Township to access the facilities for periodic inspections and maintenance at the Township's discretion. However, the Township is under no obligation to perform such inspections and maintenance. The Township may require that the entity responsible for maintenance of stormwater facilities reimburse the Township for costs of maintenance and repair of stormwater facilities if that entity fails to perform its duties.
- (g) Stormwater facilities shall be designed to require minimal maintenance. Before any basin or other stormwater facility is transferred to the Township or a property-owner association, it shall be in maintainable condition. This includes having adequate topsoil for areas that are planted, and to have vegetation planted where it was required. An entryway shall be provided that is suitable (including slope and drainage) for the type of equipment that will perform the maintenance (such as a tractor with a mowing attachment). Invasive vegetation shall be removed. The plans shall fully describe the types of plantings and the amount of maintenance that will be required.
- (h) All storm drainage facilities shall be properly maintained by the party designated as responsible on the final subdivision or land development plan, unless the Board of Supervisors agree to accept a change in the party responsible or the party owning the facility.

502.617 Drainage Easements

Drainage easements shall be provided as follows:

- (a) Where a subdivision is traversed by a water course, a drainage easement shall be provided conforming substantially to the line of such watercourse of such width as will be adequate to preserve the unimpeded flow of natural drainage.
- (b) Drainage easements shall be provided adjacent to street rights-of-way as indicated and required by the Stormwater Management Site Plan.
- (c) Drainage easements a minimum of 10 feet in width shall be provided along side and rear lot lines. Such easements shall, to the fullest extent possible, either immediately adjoin or be centered on such lot lines.

502.618 Prohibitions

(a) Prohibited Discharges and Connections

- (1) Any drain or conveyance, whether on the surface or subsurface, which allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter the Waters of this Commonwealth is prohibited.
- (2) No person shall allow, or cause to allow, discharges into surface Waters of the Commonwealth which are not composed entirely of stormwater, except
 - a. As provided in subsection 502.618(a)(3) below, and
 - b. Discharges allowed under a state or federal permit.
- (3) The following discharges are authorized unless they are determined to be significant contributors to pollution to the Waters of this Commonwealth:

-Discharges from fire fighting activities	-Flows from riparian habitats and wetlands
-Potable water sources including water line flushing	-Uncontaminated water from foundations or from footing drains
-Irrigation drainage	-Lawn watering
-Air conditioning condensate	-Dechlorinated swimming pool discharges

-Springs	-Uncontaminated groundwater
-Water from crawl space pumps	-Water from individual residential car washing
-Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used	-Routine external building wash down (which does not use detergents or other compounds)

- (4) In the event that the Township or DEP determines that any of the discharges identified in subsection 502.618(a)(3), significantly contribute to pollution of the Waters of this Commonwealth, the Township or DEP will notify the responsible person(s) to cease the discharge.

(b) Roof Drains

- (1) Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs to the maximum extent practicable.

(c) Alteration of BMPs

- (1) No person shall modify, remove, fill, landscape, or alter any Stormwater Management BMPs without the written approval of the Township.

502.7 Drainage Easements: Drainage easements shall be provided as follows:

- 502.701 Drainage easements shall be provided adjacent to street rights-of-way as indicated and required by the drainage plans.
- 502.702 Drainage easements a minimum of ten (10) feet in width shall be provided along side and rear lot lines. Such easements shall, to the fullest extent possible, either immediately adjoin or be centered on such lot lines.

502.8 Streets.

- 502.801 Access to Proposed Subdivisions and Land Developments: No subdivision or land development application shall be approved where the existing private road providing access to the subdivision lots or land development has a right-of-way width less than 40 feet. All proposed subdivisions and land

developments shall have adequate access to the public highway system. Existing private roads providing access to proposed subdivisions and land developments shall have adequate right-of-way width and be adequately designed and constructed to provide safe and convenient access to the proposed subdivision or land development. The Board of Supervisors, upon review and report of the Township Engineer and recommendations of the Planning Commission, shall determine the adequacy of such existing private access roads and may require such improvements as they find necessary to provide safe and convenient access to the proposed subdivision or land development prior to final plan approval, or may disapprove the submitted plans if such existing private roads cannot be improved to provide safe and convenient access.

- 502.802 Streets and Topography: Proposed streets shall be adjusted to the contour of the land so as to produce usable and accessible lots and streets of reasonable gradient. Proposed streets serving subdivisions utilizing central sewage facilities or in areas of the Township in which public sewage systems are proposed shall, to the greatest extent possible, be located such that gravity sewers can be utilized and the necessity of pumping stations be minimized.
- 502.803 Street Continuations: Right-of-way of proposed streets shall be extended to exterior property lines to ultimately provide access to adjoining lands; provided, however, that the Commission may not normally require more than one such right-of-way to each adjoining tract. Any dead end street of a temporary nature, if longer than 200 feet shall have a surfaced turning area equal in diameter to the right-of-way of the street. Wherever there exists a dedicated or platted portion of a street or alley along a boundary of the tract being subdivided or developed the remainder of said street or alley to the prescribed width shall be platted within the proposed development where this would not adversely affect the proposed subdivision or development. Where a subdivision or development abuts or contains an existing municipal or private street of inadequate right-of-way width, additional right-of-way width in conformance with Table 5-1 "Design Standards for Streets", shall be required in the case of land abutting a municipal street, or additional setback and easement for right-of-way shall be provided in the case of land abutting private streets.
- 502.804 Alleys: Alleys shall not be used in residential developments. Private service drives may be included in commercial or

industrial developments for loading and unloading or access purposes.

- 502.805 Intersections: The center-lines of streets shall intersect as nearly at right angles as possible. Intersections of more than two streets at one point shall be avoided. Where streets intersect other streets, offsets shall not be created. The minimum offset or distance between center-lines of parallel or approximately parallel streets intersecting a cross-street from opposite directions shall be 150 feet for minor and local access streets, 400 feet for collector and connector streets and 800 feet for arterial streets.

At intersections of streets and/or alleys the property line shall be rounded by arcs with radii of not less than 25 feet. For streets other than minor and local access streets, the Township may require a larger radius. Minimum curb or pavement edge radii at street intersections shall be 30 feet.

- 502.806 Arterial, Connector and Collector Street Frontage: Where a subdivision abuts or contains an existing or proposed major traffic street or a railroad, the Commission and the Board of Supervisors may require marginal access streets, rear service access, reverse frontage lots or such other treatment as will provide protection for abutting properties, reduction in the number of intersections with the major street, and separation of local and through traffic. The Township may also require interconnection of streets, marginal access streets, rear service drives and other such access treatments between adjacent subdivisions and land developments for improved vehicular and pedestrian movement. The required buffer strips may be provided by establishing an easement on lots or may be established separately and apart therefrom.

- 502.807 Street Right-of-way and Travelway Widths: Minimum street right-of-way widths, measured from the lot lines and minimum pavement widths shall be as shown on Table 5-1.

- 502.808 Easements: Easements shall be provided adjacent to street rights-of-way as follows:

1. Drainage easements shall be provided as indicated and required by the drainage plans.
2. Slope easements shall be provided as indicated by the required cuts and fills.

3. Utility easements a minimum of 10 feet in width shall be provided.

502.809 Curbs, Gutters and/or Drainage Swales: Curbs and paved gutters and/or paved or stoned drainage swales shall be provided where excessive water flow velocities occur and where they are needed to facilitate proper drainage. Curbs and paved or stoned gutters shall be required throughout commercial and industrial development.

502.810 Street Alignment:

1. Whenever street lines are deflected in excess of 5 degrees, within 100 feet, connection shall be made by horizontal curves.
2. Streets shall be so laid out to provide unobstructed sight distances along the center-lines thereof. Minimum horizontal sight distances shall be as set forth in Table 5-1 measured from a point 3.75 feet above the road surface to a point 6 inches above the road surface.
3. Between reversed curves on arterial streets, a tangent of not less than 200 feet shall be provided, on connector and collector streets such a tangent shall be not less than 100 feet.

502.811 Street Grades:

1. Center-line grades shall not exceed the grades set forth in Table 5-1.
2. Crest vertical curves shall be used at changes of grade exceeding one percent and shall be designed in relation to the design speed to provide vertical sight distance consistent with the horizontal sight distances specified above except for crest curves on a subordinate street at the intersection with a predominant street where the vertical curve length shall be in conformance with Section 502.811 4.C.
3. Sag vertical curves shall be used at changes of grade exceeding one percent and shall be designed as follows:
 - a. On minor streets and local access streets, sag vertical curves on through streets shall have a minimum length of 15 feet for each one percent algebraic difference in tangent grade with an absolute minimum length of 75 feet, (i.e. 1% to 5% - 75' v.c.; 5.1% to 6% - 90' v.c.; etc.).

- b. Except on minor streets and local access streets, sag vertical curves on through streets shall have a minimum length of 25 feet for each one percent algebraic difference in tangent grade with an absolute minimum length of 100 feet. (i.e. 1% to 4% 100'v.c.; 4.1% to 5% - 125' v.c.; etc.).
 4. A leveling area for all street intersections shall be provided as follows:
 - a. The tangent grade of the through street at the point of intersection of the center-lines of the two streets shall not exceed 8 percent. Crest and sag vertical curves shall be provided in accordance with Section 3 of this subparagraph.
 - b. The tangent grade of a connector or arterial street intersecting another street shall not exceed 2 percent within the right-of-way lines of the through street. Crest or sag vertical curves shall be provided in accordance with Section 3 of this subparagraph. The point of vertical curvature or tangency shall not be within the through street right-of-way.
 - c. The tangent grade of a connecting marginal access, local access, minor or collector street intersecting another street shall not exceed 2 percent within the right-of-way lines of the through street. The point of vertical curvature or tangency of any vertical curve of the subordinate street shall not be within the through street right-of-way and any such vertical curve shall have a minimum length as follows:

Street Classification	Minimum Sag Curve Length in Feet	Minimum Crest Curve Length in Feet
Marginal & Local Access	100	80
Minor	130	100
Collector	200	160

- d. Speed limit signs, "Stop Ahead" signs and stop signs shall be installed on all subordinate streets at the approach to the intersection regardless of the vertical alignment and available sight distance of the subordinate street. The location of all such signs shall be as approved by the Township Engineer.

5. The maximum grade across the turnaround in a cul-de-sac shall not exceed 8 percent.
6. To provide for adequate drainage, the minimum grade of any paved street gutter shall be not less than 0.5 percent and the acceptable minimum centerline grade of any street shall be 0.5 percent. The minimum size culvert pipe beneath any street or driveway shall be 15 inch diameter.

502.812 Clear Sight Triangle: At an intersection, a triangle area shall be graded and/or other sight obstructions removed in such a manner as not to obscure vision between a height of from two to ten feet above the center-line grades of the intersecting streets. Furthermore, by deed restriction, by lease restriction, or by plan amendment, whichever method is applicable, vegetation shall not be planted or allowed to grow in such a manner as to obscure vision between a height of from two to ten feet above the centerline grades of the intersecting streets. Such triangular area shall be determined by the intersecting street center-lines and a diagonal connecting two points, one at each center-line, each of which points is:

1. Two hundred fifty (250) feet from the intersection of such street center-lines, if either street is an arterial street.
2. One hundred (100) feet from the intersection of such street center-line of either street is a collector or connector street.
3. Seventy-five (75) feet from the intersection of such street center-lines, if both streets are minor or local access streets. Where a local street is approaching a stop sign or a traffic signal, the length of the length of the leg of the triangle may be reduced to 50 feet.

502.813 Modifications: The Board of Supervisors recognize that the preceding subparagraphs of this Section may not be applicable in all circumstances because of unusual topography or lot layout and will consider deviations or variations therefrom on an individual basis (such as divided cartways or one-way loop streets) provided the basic purpose and intent set forth in subparagraph A is complied with. In granting a request for such modification, the Board of Supervisors may impose such requirements and conditions they deem fit and proper.

503. RESIDENTIAL DESIGN STANDARDS

503.1 Application: All subdivisions and land developments proposed for residential use, shall conform with the provisions of this Section.

503.2 Blocks:

- 503.201 Residential blocks shall not normally exceed 2000 feet in length in subdivisions having an average lot size one acre or larger and shall not normally exceed 1,500 feet in length in subdivisions having an average lot size less than one acre.
- 503.202 Blocks normally shall be of sufficient width to permit two tiers of lots except where access limited by virtue of adjoining arterial or connector streets or by virtue of topographic limitations.

503.3 Lots: The minimum lot sizes, lot widths and yard requirements shall be as set forth in the Township Zoning Ordinance and further shall conform to the following:

- 503.301 All lots shall front on a public street or private street, approved under provisions of this Ordinance and constructed in accordance with the standards of this Ordinance, except as provided for private access drives.
- 503.302 Side lines of lots shall be at right angles to straight streets and on radial lines to curved streets. At the discretion of the Commission some variation from this rule will be permitted but pointed or very irregular lots shall be avoided.
- 503.303 Double frontage lots shall ordinarily not be platted except as specifically provided herein. In the event such lots are platted as provided, the lot shall be increased 20 feet in depth to provide for a planting strip along the back of the lot.
- 503.304 If remnants of land other than rights-of-way or buffer strips exist after subdividing, they shall be incorporated in existing or proposed lots unless proposed and suitable for common open space or recreation uses.
- 503.305 The building site on each residential lot shall be accessible from the existing or proposed street by means of a driveway or private access drive having a maximum grade of 15 percent.

503.4 Cul-de-sac streets:

- 503.401 Cul-de-sac streets, permanently designed as such, within residential developments shall not exceed 1,200 feet in length, and shall furnish access to not more than 12 dwelling units. The length of a cul-de-sac street shall be measured from the point of center-line intersection with an approved through road

that has an alternate access to an existing public road to the center-line point of radius of the cul-de-sac turnaround curve.

- 503.402 A cul-de-sac street shall terminate with a circular turn-around with a minimum paved radius of 40 feet to the outer pavement edge or curb line. The street right-of-way shall be located so as to maintain a minimum distance of at least 10 feet between the pavement edge or curb line and the right-of-way line.
- (a) The Township may require a snow storage easement at the end of a cul-de-sac to assist in snowplowing. In such case, the storage area shall be free of driveways, be aligned with the direction of snowplowing, and be designed with adequate drainage.
- 503.403 The circular right-of-way of the cul-de-sac shall be connected to the approach right-of-way by an arc having a radius of not less than 30 feet.
- 503.404 The circular paving of the cul-de-sac shall be connected to the approach paving by an arc having a radius of not less than 40 feet.
- 503.405 The Board of Supervisors recognize that geometric configurations other than that set forth in subsections above may function satisfactorily and, upon recommendation of the Planning Commission, will consider a request for a modification of the requirements under appropriate circumstances.

503.5 Off-Street Parking: Every type of residential land development or subdivision shall provide for off-street parking space for at least two vehicles for each proposed dwelling unit. Two off-street parking spaces shall be provided in addition to any individual garage or carport within a driveway or in a common parking area convenient to the dwelling units to be served and shall be installed concurrently with the construction of the dwelling units.

503.6 Driveways: Driveways shall not be permitted to have direct access to arterial, connector or collector streets unless authorized by the Township, and/or the PennDOT through issuance of a highway occupancy permit.

Future driveways which are to be constructed adjacent to a street intersection shall be indicated on the preliminary plan. The minimum distance between a driveway or point of access to a street shall be as follows:

Type of Subdivision or Land Development	Distance Between Center lines Driveways and Nearest Intersection		
	Road by Type of Intersecting Road		
	Arterial	Collector & Connector	Minor
Residential	150 ft.	100 ft.	75 ft.
Non-residential	300 ft.	200 ft.	150 ft.

NOTE: Nearest intersecting street shall be construed as being on the same or the opposite side of the street on which the lot is located.

503.7 Private Access Drives: Private access drives may be utilized to provide access to residential lots in a minor subdivision which does not abut or have frontage on a public or approved private road. A private access drive may serve a maximum of 2 dwelling units. Private access drives shall have a minimum right-of-way width of 50 feet. A private access drive shall not exceed 750 feet in length or **15 percent in grade**. Use of private access drives shall be avoided wherever possible in major subdivisions and shall only be permitted upon grant of a modification by the Township upon written request by the Applicant.

503.8 Open Space and Recreation Areas and Fees.

503.8.1. Purposes. To provide adequate open spaces, recreational lands and recreational facilities to serve new residents of new developments, for both active and passive recreation; To recognize and work to carry out the recreation portion of the Westfall Township Comprehensive Plan, which is hereby approved as the Recreation Plan for Westfall Township.

503.8.2. Applicability. This section shall apply to a residential subdivision or land development for which a preliminary or final plan is submitted after the effective date of this amendment.

503.8.201. However, this section shall not apply to a final plan if the final plan is consistent with a valid complete approved preliminary plan that was officially accepted by the Township for review before the effective date of this section.

503.8.202. This section shall not apply to plans that the Board of Supervisors determines only involve clearly minor adjustments or corrections to an approved preliminary plan or clearly minor adjustments or corrections to a preliminary plan that was before the Township for consideration at the date of the adoption of this amendment.

503.8.203. Exemption. This Section 503.8 shall not apply when a single lot is subdivided for one dwelling unit.

503.8.3. Limitations on Use of Fees.

503.8.301. Any fees collected under this section shall be placed in an interest-bearing account and shall be accounted for separately from other Township funds.

503.8.302. To ensure that the lands and facilities are accessible to the residents of the developments that paid fees towards their cost, such fees shall only be used within a 6 mile radius of the boundaries of the subdivision or land development that paid the fees, unless the Board of Supervisors determine that a proposed improvement would clearly serve the entire population of the Township.

503.8.303. Such fees shall only be used for the following: acquisition of public open space, development of public recreational facilities, landscaping of public open space and closely related engineering and design work. Such fees may be used on recreation land that is owned by the Township or an abutting municipality, a non-profit organization that commits to making recreation land available to the public, the School District, the County, the State Government or the Federal Government.

503.8.304. The Township should designate the recreation facilities/area where the fees will be used at the time of a subdivision or land development approval.

503.8.305. Land Dedication. The applicant for any subdivision or land development regulated under this Section 503.8 shall be required to dedicate the specified amount of publicly-owned common open space, unless the Board of Supervisors and the applicant mutually agree to the payment of recreation fees-in-lieu of land, the construction of recreational facilities, the reservation of common open space through an allowed alternative ownership method, or a combination thereof. The common open space is being required to provide park and recreational areas accessible to the residents of the subdivision or land development.

- (1) Generally, it is the intent of this Section that developments of, at a minimum, 5 or fewer dwelling units that do not include land that is adjacent to existing publicly-owned land should be required to pay a recreation and open space fee in lieu of dedicating land.
- (2) The land and fee requirements of this section shall be based upon the number of new dwelling units that would be permitted on the lots of a subdivision or land development after approval.

- (3) Amount of Common Open Space. For townhouses, mobile / manufactured home parks, apartments, and Open Space Developments, open space requirements are established in the Zoning Ordinance. For any other type of residential subdivision or land development, a minimum of 10 percent of the total area of the subdivision or land development shall be set aside as common open space. If a lot for a single family detached dwelling includes 2 or more acres, such lot shall not be included in the requirement for the 10 percent common open space.

503.8.306. Fees. If the Board of Supervisors and the applicant agree that a proposed subdivision or land development will pay fees-in-lieu of dedicating open space, this fee shall be as established by the Township Fee Schedule, which may be updated by resolution of the Board of Supervisors. Until such time as a different fee is established, this fee shall be \$600 per dwelling unit.

503.8.307. Decision on Land vs. Fees. The Board of Supervisors shall determine whether a land dedication would be in the public interest, or rather instead, whether the payment of fees would be preferable. This determination should, but is not required to, be made at the time of sketch plan review. The Township should, at a minimum, consider the following in this decision:

- (1) Whether the land in that location would serve a valid public purpose.
- (2) Whether there is potential to make a desirable addition to an existing public or School District recreation area.
- (3) Whether the proposed land would meet the objectives and requirements of this section and any relevant policies of any Township Comprehensive Plan or Recreation Plan.
- (4) Whether the area surrounding the proposed development has sufficient existing recreation and open space land, and whether it is possible for pedestrians and bicyclists to reach those lands.
- (5) Any recommendations that may be received from the Planning Commission, the Township Engineer, the local School Board or School District staff, and any Township Parks and Recreation Commission.

503.8.308. Common Open Space to be Preserved.

- (1) Suitability. Land required to be dedicated shall be suitable for its intended purpose, in the determination of the Board of Supervisors. The applicant shall state what improvements, if any, he/she intends to make to the land to make it suitable for its intended purpose, such as grading, landscaping, or development of trails. Such land shall be free of construction debris at the time of transfer or dedication.
- (2) Ownership. Required common open space shall be offered for dedication to the Township, unless the Board of Supervisors agree to accept a transfer to any of the following: the School District, the County, the PA. Bureau of State Parks, the PA. Game Commission, a similar agency, a homeowner association, or an environmental organization acceptable to the Board of Supervisors. The Board of Supervisors is under no obligation to accept an offer of dedication to the Township, but shall have authority to ensure that an appropriate long-term method will be in place to own and maintain common open space. In the case of a rental development, the Township may permit the common open space to be retained by the owner of the adjacent residential buildings.
 - (a) If the applicant proves to the Board of Supervisors that no other method is appropriate to own and maintain common open space, then the Board of Supervisors may allow the common open space to be owned and maintained as part of one or more residential lots. In such case, the open space shall be protected by a conservation easement that prevents that portion of the lot from being subdivided or developed in the future.
 - (b) If required common open space is to be owned by a homeowner association, the developer shall be required to establish such association in a form that requires all property-owners within the development to annually contribute to the maintenance of the common open space. The applicant shall prove full compliance with the Pennsylvania Uniform Planned Communities Act, as applicable.
 - c) Any homeowner association agreements regarding required common open space shall be subject to acceptance by the Board of Supervisors, based upon review by the Township Solicitor. An acceptable process shall be established for the timing of the transfer of the lands and maintenance responsibilities to the homeowner association. Each dwelling or lot owner shall be required to regularly fund maintenance of the common open space. If this requirement is not met, the agreement shall specify that the Township may have the work

accomplished and may place municipal liens on properties to recover the maintenance and legal costs.

- (3) Restrictions/Easements. Any required common open space shall include Township-approved deed restrictions and/or conservation easements to permanently prevent the open space from being further subdivided or developed for buildings, except approved buildings for non-commercial recreation or to support maintenance of the land. The Board of Supervisors shall be provided with authority to enforce any deed restriction or conservation easement pertaining to preservation of the common open space. In addition, other parties may be given separate overlapping authority to enforce the deed restriction or conservation easement.
- (4) Priority shall be given to dedication of land that would be suitable for a) additions to existing public schools and public parks, or b) would preserve woods, steep slopes or other important natural features or land along a creek or river, or c) that would be suitable for centralized active recreation.
- (5) Land that is not suitable for active or passive recreation shall not be permitted to meet the requirements of this section, including areas within a stormwater detention basin that are not suitable for recreation.
- (6) Access and Contiguosness. Common open space within a subdivision or land development shall be contiguous, except as may be specifically exempted by the Board of Supervisors, and shall have adequate access for maintenance and by pedestrians.
- (7) Other Ordinances. Any required land dedication under this Section shall be in addition to any land dedication or improvement requirements of any other Township ordinance.
- (8) Residual Lands. If only a portion of a larger tract of land is currently proposed to be subdivided, or the applicant owns one or more adjacent tracts that are not currently proposed to be subdivided, the applicant shall provide a sketch of a possible future land dedication on these adjacent lands in case they would be developed in the future.
- (9) Coordination With Future Adjacent Dedication. The Board of Supervisors may require that a required land dedication within a property currently being subdivided be placed along an edge of the property so that it may, in the future, be combined with an open space dedication on the edge of an adjoining property

when that adjoining property is subdivided or developed. the intent is to coordinate currently proposed common open space with future development, over the long-term.

- 503.8.309. Combination of Land and Fees. Upon mutual agreement of the Board of Supervisors and the applicant, the Township may accept a combination of common open space and fees-in-lieu of land to meet the requirements of this section for a residential subdivision or land development. This combination shall be based upon the common open space requirement applying for a certain number of dwelling units and the fee-in-lieu of land requirement applying for the remaining number of dwelling units.
- 503.8.310. Timing of Fees. One-half of the fees required by this Section for all of the dwelling units shall be paid prior to the recording of the final plan, and the other half of the fee per dwelling unit shall be paid prior to issuance of the building permit, except as follows:
- (1) If the required fee would be greater than \$2,000, and the applicant and the Township mutually agree to provisions in a binding development agreement to require the payment of all applicable recreation fees prior to the issuance of any building permits within each clearly defined phase of the development, then such fees are not required to be paid prior to recording of the final plan but may instead be paid within the requirements of that development agreement.
 - (2) If the applicant agrees to pay such fees in installments, then all such fees shall not be considered to be "paid" for the purposes of any applicable time limitations for utilization under the Municipalities Planning Code until all such fees are paid in full, including all installments and phases.
- 503.8.311. Facilities in Place of Land or Fees. If there is mutual agreement by the Board of Supervisors and the applicant, the requirements of this Section may be met by the applicant constructing permanent non-commercial recreation facilities within the proposed subdivision or land development or on a different public recreation area. The applicant shall show that the proposed recreation facilities would reduce the future burden upon the Township in providing for recreation facilities. The facilities do not necessarily need to be open to the public if they are not constructed on publicly-owned land. However, the facilities shall, at a minimum, be open to residents of the subdivision or land development.
- 503.8.312. Definition of Common Open Space. The definition of "Open Space, Common" in the Zoning Ordinance shall apply."

503.9 Drainage: Storm water management and disposal facilities shall be designed and constructed as set forth in Section 502.6 and Appendix B of this Ordinance.

503.10 Setbacks or Yards: Minimum yards as set forth in the Township Zoning Ordinance shall be provided for all single family and two-family residential lots.

504. **APARTMENT DWELLING STANDARDS**

The following standards shall apply to all apartment dwellings, in addition to the requirements of Section 503 of this Ordinance.

504.1 Sewage and Water Systems: All sewage disposal and water supply systems proposed to serve said developments shall comply with the requirements set forth in Appendix A and Appendix C of this Ordinance, whichever is more restrictive. In those cases where on-lot individual or community subsurface sewage disposal systems are proposed, a replacement area shall be provided for the subsurface sewage disposal field, which has been properly tested and meets current state and Township standards for subsurface sewage disposal.

504.2 Setback: Space between buildings shall be no less than twice the height of the tallest building involved. All buildings shall have a minimum distance of thirty (30') feet from paved development streets or parking areas.

504.3 State Approval: A copy of Pennsylvania Department of Labor and Industry certificate shall be delivered to the Township when required by state regulations.

504.4 Lot Area Sizes: Lot area requirements for each dwelling unit within multi-family dwelling developments shall conform to the requirements set forth in the Zoning Ordinance.

504.5 Access Points: The plan shall indicate specific ingress and egress points to existing public roads in conformance with PennDOT regulations and standards.

505. **COMMERCIAL AND INDUSTRIAL DEVELOPMENT STANDARDS**

505.1 Application: All commercial and industrial subdivisions and developments shall conform with the Schedule of Required Improvements, Table 6-1 and the requirements of the Township Zoning Ordinance.

505.2 Size: Approval of lot or parcel determined by the following factors:

505.201 Requirements of the Westfall Township Zoning Ordinance.

505.202 The total lot area shall be sufficient to provide adequate space for required yards, proposed buildings, off-street parking and loading, landscaping, sewer and water systems, and other facilities.

- a. Each lot or area plotted for industrial and/or commercial use shall provide, inside of the required yards, an area at least equal to the projected horizontal area of the proposed building, plus such additional area as is required for parking. Such area shall have an average natural slope not greater than 10 percent and shall be accessible from the existing or proposed street by means of adequately and properly designed service drives having a maximum grade of 10 percent.
- b. In the case of lots utilizing an on-site sewage disposal system, or a community subsurface disposal system in addition to such area, there shall be sufficient area, separate and apart from parking areas, for the sewage disposal field, and a field replacement area which has been properly tested and meets current Pennsylvania DEP and Township standards for subsurface sewage disposal.

505.203 Whenever possible, commercial parcels should include enough land to provide for a group of commercial establishments, planned, developed, and operated as a unit. Narrow, highway ribbon developments should be avoided.

505.3 Street System:

505.301 Traffic movements in and out of commercial and industrial areas should not interfere with external traffic, nor should it create hazards for adjacent residential areas. The plan shall indicate ingress and egress points to existing public roads in conformance with PennDOT regulations and standards.

505.302 The design of streets, service drives, and pedestrian ways, should provide for safe and hazard free internal circulation.

505.4 Block Layout: Block layout shall conform with due consideration of site conditions, with best possible service customers, traffic and parking circulation, and pick-up and delivery services. In no case shall block length be less than 800 feet.

505.5 Parking: Parking shall be provided in conformance with the Zoning Ordinance.

505.6 Drainage: Storm water management and disposal facilities shall be designed and constructed as required in Section 502.6 and Appendix B.

505.7 Setbacks: Minimum yards or setbacks for all commercial and industrial development shall be as set forth in the Township Zoning Ordinance. Additional yard widths and buffer strips and screening may be required by the Commission and Board of Supervisors in cases where deemed appropriate and necessary to protect adjacent development.

TABLE 5-1 - DESIGN STANDARDS FOR STREETS (a)

<u>Design Specifications</u>	Arterial	Connector	Collector	Minor	Local Access	Marginal Access	Private Access Street (a)
Design Speed (MPH)	60	50	40	30	25	25	20
Right-of-Way Width	80(c)	60(c)	50(c)	50(c)	50(c)	50(c)	50
Cartway Width (Pavement + Shoulders):							
-- with shoulders	44	40	38	34	30	32	10
-- with curbs, no parking	28	28	26	24	24	28	10
-- with curbs, on-street Parking	NA	NA	(d)	(d)	(d)	NA	10
Travelway Width (f)	24	24	22	22	22		10
Minimum Centerline Radii (e)	900	600	350	200	150	100	100
Minimum Sight Distance	550	475	325	200	150	150	100
Maximum Grade (g)	6	6	8	10	10	10	15
Shoulder Width	10	8	8	6	4	4	0

ALL DIMENSIONS IN FEET EXCEPT AS SPECIFIED

N/A - NOT APPLICABLE

Notes:

- (a) See Section 604 for Required Improvements and Construction Standards.
- (b) Expressways shall meet PennDOT specifications.
- (c) Plus slope, drainage, and utility easements as required by Section 502.7 and 502.6.
- (d) As determined by the Board of Supervisors.
- (e) Larger radii may be required as determined by alignment to provide the required sight distance. To be determined or confirmed by the Township Engineer and/or PennDOT.
- (f) The travelway width for streets requiring curbs shall be the same as the designated cartway width for those streets.
- (g) See also Section 503.7.

ARTICLE VI
REQUIRED IMPROVEMENTS AND CONSTRUCTION STANDARDS

601. APPLICATION

The minimum improvements required for all subdivisions and land developments (including commercial and industrial) shall be provided by the subdivider as set forth in this Section. Additional or higher type improvements may be required in specific cases where, in the opinion of the Commission and the Board of Supervisors, they are necessary to create conditions essential to the health, safety, morals, and general welfare of the citizens of Westfall Township and to protect the environment of the Township.

602. SUMMARY OF REQUIRED IMPROVEMENTS

The accompanying schedule on Table 6-1 summarizes the required improvements for various types of subdivision and/or land developments. The remainder of the Article sets forth the construction standards for several of the required improvements. Other construction standards shall be evaluated and approved by the Engineer.

603. MONUMENTS AND MARKERS

Monuments and markers shall be placed so that the center or a scored or marked point shall coincide exactly with the intersection of the lines to be marked.

603.1 Monuments shall consist of either:

- a. Reinforced concrete, 4" x 48".
- b. Cut stone, preferably granite, 4" x 48".
- c. 2" x 48" galvanized iron pipe filled with concrete.
- d. Brass pin, 3/4" in diameter, grouted 4" into rock.
- e. Such other monuments as the Township Engineer may approve.

603.2 Monuments shall be placed flush with the ground. The 48 inch depth of a monument may be shortened if it hits solid rock at a more shallow depth.

603.3 Monuments shall not be placed until road grading has been completed.

603.4 Monuments shall be set as follows:

- 603.401 Placed at intervals of approximately one thousand (1,000) feet along rear lot lines and at points agreed upon by the Planning Commission and the Township Engineer.
- 603.402 One at the intersection of street right-of-way lines with exterior property lines.

- 603.403 At all exterior property corners where permanent corners did not exist at the time of the perimeter survey. (Existing corners shall not be removed).

603.5 Markers shall consist of either:

- 603.501 Solid steel rods not less than 0.75 inch in diameter and not less than 24 inches in length; or
603.502 Steel pipes not less than 0.75 inch in diameter or less than 24 inches in length; or
603.503 Such other marker as the Township Engineer may approve.

603.6 Markers normally shall be set 2 inches above the surrounding grade.

603.7 Markers shall be set as follows:

- 603.701 At all points where lot lines intersect street right-of-way lines, except for monument location.
603.702 At all other lot corners.

604. **STREETS**

604.1 General: Streets (and alleys where provided) shall be graded, improved and surfaced to the grades and dimensions shown on plans, profiles and cross-sections submitted by the developer and approved by the Commission and the Board of Supervisors.

604.2 Design and Construction Standards:

- 604.201 Clearing and Grading: The right-of-way shall be cleared and graded to the extent shown on the approved cross-section. All trees, stumps, roots, sod and other material deemed unsuitable by the Engineer shall be removed from the subgrade and thereafter backfilled and compacted to the satisfaction of the Engineer.
- 604.202 Cut and Fill: The maximum slope of any earth embankment or excavation shall not exceed one foot vertical to two feet horizontal.

The maximum slope of any rock excavation shall not exceed 4 feet vertical to one foot horizontal. The maximum slope of rock filled slopes shall not exceed one foot vertical to 1.5 feet horizontal. All excavations and embankments shall have a continuous slope to the point of intersection with the natural grade. Any required slope easement shall have sufficient width to contain the entire required slope.

604.203 Drainage: Parallel and cross drainage facilities shall be properly located, designed and installed to maintain proper drainage of the completed streets. Drainage facilities shall be designed in accordance with requirements of Section 502.6 and of Appendix B. Proper design and construction in accordance with those requirements may require the use of curb and paved gutter or paved drainage swales to prevent erosion. The minimum diameter of any cross drainage or culvert pipe shall be 15 inches.

- a. Consideration shall be given for subgrade drainage of those soils subject to frost heave (as itemized in subparagraph 604.204 of this Section). Design of the roadbed in such locations may require parallel drainage facilities and/or underdrains to properly stabilize the subgrade. The Commission and the Board of Supervisors may require that such drainage facilities be provided. The design of such subgrade drainage facilities shall be subject to the review and approval of the Engineer.

604.204 Subgrade, Base Course, Surface Course and Shoulders:

- a. The design and construction of the road bed shall take cognizance of the supporting capacities of the subgrade, with particular attention to those soils which are subject to frost heave. Unsuitable soils shall be removed and replaced, drained or otherwise stabilized to provide adequate support for the road bed and anticipated loads.

The Pike County Soil Survey Report lists the following and similar soils as having moderate or high potential for frost heave: Alden, Alvira, Bath, Benson, Braceville, Bughanan, Chippewa, Clymer, Empeyville, Hartleton, Hazelton, Holly, Kedron, Klinessville, Lackawanna, Lawrenceville, Leckhill, Mardin, Meckesville, Morris, Peat, Philo, Pope, Rexford, Sheffield, Swartswood, Volusia, Watson, Wayland, Weikert, Wellsboro and Wurtsboro.

- b. Base Course: Base course aggregate material shall conform in type and be compacted in accordance with the latest specifications of PennDOT to the depths of material shown in Table 6-2.
- c. Surface Course: The bituminous surface course shall conform in type and be compacted to the depths shown in Table 6-2 and be placed in accordance with the latest specifications of PennDOT (Form 408).

- d. Shoulders: Where curbs are not required or provided, shoulders shall be provided. Shoulders shall be constructed of the material and compacted to the depth shown in Table 6-2 and to the widths shown in Table 5-1.
- e. Alternative Designs: Alternative roadbed designs may be prepared and will be considered. The alternate design must provide load capabilities equivalent to or higher than the capabilities of the designs set forth above. Alternate designs will be reviewed on the basis of design recommendations of the Asphalt Institute.
- f. Commercial/Industrial Areas: Any street serving a commercial or industrial area shall be designed and constructed on the basis of the requirements for a Collector Street.
- g. Parking Lanes: Where curbs are required and/or provided for arterial, connector or collector streets the parking lane (between the travelway and the curb) shall be not less than 10 feet wide and shall be constructed to the same standards as the travelway.

Where curbs are required and/or provided for all other classes of streets the parking lane shall be not less than 8 feet wide for minor streets and 6 feet wide for local and marginal access streets and shall be constructed of the same material and to the same depth as required for shoulders and stabilized by the application of bituminous product.

604.205 Cross Section:

- a. Travelway and shoulder widths shall conform to the requirements set forth in Table 5-1.
- b. Shoulder surfaces shall be graded at a slope of 0.75 of an inch per foot away from the paved travelway.
- c. The finished paved travelway surface of tangent sections, and curve sections not required to be super elevated, shall be crowned at 0.25 inch per foot away from the center-line. Properly super elevated cross-sections shall be required on arterial, connector and collector streets when the curve radii are less than 500 feet. The maximum permissible super elevation shall be 0.08 feet per foot.

604.206 Bridges and Stream Crossings: Bridges and other stream crossing structures which are part of the proposed street system shall be designed and constructed in accordance with

current PennDOT Standards and Specifications. Evidence of compliance with and approval of the Division of Dams and Encroachments, Pennsylvania DEP, shall be provided, if applicable.

605. CURBS AND GUTTERS

Minimum curb construction standards are as follows:

- 605.1 Straight curbs of portland cement concrete shall be 21 inches in depth, 6 inches wide at the top, and 8 inches wide at the bottom, and shall have an exposed face between 6 inches and 8 inches. Expansion joints shall be provided at least every 20 feet.
- a. The Engineer and/or the Planning Commission and the Board of Supervisors may require steel reinforcing of portland cement concrete curbs.
 - b. Gutter requirements shall be in conformance with good engineering practice and subject to the approval of the Engineer. Gutters and/or drainage swales shall be designed to prohibit erosive velocities and shall be paved or otherwise stabilized with rock or other methods recommended by the Township Engineer, if runoff velocities exceed 5.0 feet per second when calculated in accordance with PennDOT Manual Part 2.
 - c. Velocity calculation shall be placed on the centerline profile drawings or shall be submitted separately with the profiles.

606. DRIVEWAY ENTRANCES

Any driveway entrance shall make adequate provisions for parallel drainage facilities where drainage requires, a culvert pipe of not less than 15 inches in diameter (and of such gauge as conforms to PennDOT specifications) with head walls of a size recommended by the Township Supervisors, shall be installed across the width of the driveway and at such depth as drainage and soil conditions may require at that location. The depth and manner of installation will be subject to approval by the Township Supervisors.

607. PRIVATE ACCESS DRIVE

Private access drive entrances or aprons within the street right-of-way shall be installed by the developer or subdivider. Construction of the remaining length of the private access drive shall be the responsibility of the developer and/or lot buyer and will not be accepted by the Township as a municipal road. A covenant shall be placed on the Final Plan clearly assigning responsibility for construction and maintenance of the private access drive and its future private ownership status. See also Section 503.7.

The private access drive shall be improved to the cross-sections approved by the Commission and the Board of Supervisors.

608. SIDEWALKS AND BIKEPATHS

Sidewalks built to Township specifications shall be required by this Section. Sidewalks shall be located within the right-of-way adjacent to a street, unless the Township approves an alternate location with a pedestrian easement.

608.1 Sidewalks shall have a minimum width of 4 feet.

608.2 Street cross-walks shall have a minimum width of 4 feet.

608.3 The type of construction permitted is as follows: Sidewalks shall be portland cement concrete of at least 4 inches thick underlain by 4 inches of compacted cinder, gravel, or crushed stone. Sidewalks at driveway crossings shall be at least 6 inches thick reinforced and underlain by 4 inches of compacted cinder, gravel, or crushed stone.

608.4 Sidewalks shall be required along both sides of all *proposed* public and private streets, or in other locations approved by the Board of Supervisors for subdivisions and land developments meeting any of the following criteria:

- a. The subdivision is a residential development with an average lot width of 150 feet or less. (Width for each lot shall be calculated in accordance with the zoning ordinance)
- b. The subdivision or land development is a multi-family dwelling development or mixed use development.
- c. The land development is a commercial or industrial use.
- d. The subdivision or land development is along any roadway served by mass transit.

608.5 Sidewalks shall be required along the subdivision or land development's entire frontage on *existing* public and private streets for subdivisions and land developments meeting any of the following criteria:

- a. The subdivision or land development is a multi-family dwelling development, or mixed use development.
- b. The land development is a commercial or industrial use.
- c. The subdivision or land development is along any roadway served by mass transit.
- d. The subdivision is within a 1,500-foot radius of an existing or planned pedestrian walkway.

608.6 An ownership and maintenance plan for the sidewalks shall be provided for in the developer's agreement.

608.7 Bicycle Path

- a. Bicycle paths shall be required along one side of the *proposed* public and private streets, or in other locations approved by the Board of Supervisors for subdivisions and land developments meeting any of the following criteria:
 - 1) The subdivision is a residential development with an average lot width of greater than 150 feet. (Width for each lot shall be calculated at the building setback line.)
 - 2) The subdivision is within a 1,500-foot radius of an existing or planned pedestrian walkway.
- b. Bicycle paths shall be required along one side of all *existing* public and private streets for the entire frontage of subdivisions and land developments meeting any of the following criteria:
 - 1) The subdivision is a residential development with an average lot width of greater than 150 feet. (Average width for each lot shall be calculated in accordance with the zoning ordinance)
 - 2) The subdivision is within a 1,500-foot radius of an existing or planned pedestrian walkway.
- c. An ownership and maintenance plan for the bicycle path shall be provided for in the developer's agreement.
- d. The bicycle path shall be within the road R.O.W., or an easement shall be provided.
- e. Bicycle paths shall be designed and constructed according to the following:
 - 1) The cross-slope of the surface shall be sloped towards the adjacent roadway at a slope of 1%.
 - 2) The path shall be a minimum of 6 feet wide.
 - 3) The base course shall be a minimum of 6 inches of PADOT 2A modified.
 - 4) The surface course shall have a minimum of 2.5 inches of bituminous pavement (1.5 inches binder course, 1.0 inch surface course).
 - 5) The slope along the bicycle path shall match that of the road, as designed and/or constructed, but shall not exceed 12%.
 - 6) Other designs for the bicycle paths may be considered, but must be approved by the Board of Supervisors.

609. STREET NAME SIGNS

The developer shall provide the subdivision or land development with adequate street signs at the intersections of all streets. Sign style and characteristics, i.e. color and lettering, shall be acceptable to the Board of Supervisors.

610. LIGHTING

Lights may be required on streets and in non-residential developments when the Commission and the Board of Supervisors deem them necessary to provide safe traffic circulation and pedestrian safety. Such lights shall meet design standards established by the Board of Supervisors in conformance with the guidelines in Appendix F.

611. TRAFFIC SIGNALS AND SIGNS

Traffic signals and signs may be required where traffic studies determine them necessary to provide safe traffic circulation. Traffic signals and traffic control signs shall meet the latest PennDOT published standards for such improvements.

612. LANDSCAPING

612.1 See the requirements of Sections 803 and 804 of the Zoning Ordinance.

612.2 For a business subdivision or land development, trees or other approved natural landscaping features, such as shrubbery, grass areas, ornamental bushes or flower beds, may be required in non-paved areas between the front building line and the front property line. All such plantings shall be located on the site in a manner that will not interfere with ingress and egress points of the lot and adjoining properties.

613. GROUND COVER REQUIREMENTS

Exposed ground surface in all parts of the subdivision or land development shall be paved or covered with stone screenings, or other solid material, or protected with a vegetative growth that is capable of preventing soil erosion and the emanation of dust during dry weather. The vegetative cover shall not be poisonous in nature.

614. SEWER AND WATER FACILITIES

614.1 Where applicable, sanitary sewers shall be installed to adequately serve all lots with connections to any public or private central system which might exist, and shall be subject to inspection by the Engineer and approval by the Commission and the Board of Supervisors. See Section 502.4, Design Standards, and Appendix C.

614.2 Where the developer provides the subdivision or land development with a complete central water supply system, the system shall be designed to furnish adequate flow and pressure, main sizes and fire hydrants located to meet the specifications of the National Fire Protection Association and the Westfall Township or Mill Rift Fire Departments and be subject to inspection by the Engineer and approval by the Board of Supervisors. See Section 502.4, Design Standards, and Appendix A.

614.3 Adequate storm water drainage facilities shall be installed consistent with designs prepared in accordance with the requirements of Appendix B. Where the conveyance of storm water and/or the prevention of erosion cannot be accomplished satisfactorily by surface drainage facilities, an adequate storm sewer system consisting of inlets and other underground drainage structures with approved outlets shall be constructed. Outlets shall be approved by the owners of properties affected and by the Board of Supervisors.

615. WATER SUPPLY AND FIREFIGHTING

615.1 The Applicant for any property to be subdivided or developed hereunder not to be served by a central water supply system with a capacity sufficient to and capable of supplying water for fire suppression shall, at the request of the Board of Supervisors, provide a water supply source for the purpose of fire protection and/or suppression. Such water supply source shall be acceptable to the Board of Supervisors, with the affirmative advice of the Township's Engineer and after consultation with the fire company serving the property to be subdivided and/or developed.

615.2 At a minimum, such water supply shall consist of a storage tank or tanks located within the property and to be used solely for the purpose of fire protection and/or suppression. The effective volume of storage capacity shall be a minimum of the lesser of 750 gallons per equivalent dwelling unit to be constructed or 5,000 gallons. For commercial and industrial development the storage volume shall be determined in accordance with the National Fire Protection Association's standards and criteria, as certified to the Board of Supervisors by a professional engineer at the cost and expense of the Applicant. The location of such tank or tanks shall be selected and maintained so as to provide year round access by fire equipment.

615.3 The tank or tanks shall be buried to a sufficient depth below grade or otherwise protected so as to prevent freezing. The tank or tanks are to be designed and constructed to be used as suction tanks by fire company pumping equipment and shall be equipped with appurtenances compatible with such use at a pumping rate of 1,000 gallons per minute. Commercial and industrial applications may be required to provide for a greater capacity based on the proposed application and the National Fire Protection Association's standards and criteria for such applications. Standard 4.5-inch pumper nozzles, plumbed to allow full draw down of the required storage volume shall be acceptable.

TABLE 6-1
SCHEDULE OF REQUIRED IMPROVEMENTS

Minimum Improvements Required by Type of Subdivision or Land Development

Type of Improvements	Residential Single Family & Two Family	Residential - Other than Types Listed Separately	Mobile Home Parks	Camp-grounds	Commercial	Industrial
Streets	X	X	X	X	X	X
Curbs	c	c	c	c	X	X
Gutters	c	c	c	c	X	X
Street Signs	X	X	X	c	X	X
Traffic Lights and Signs	c	c	c	c	c	c
Off-Street Parking	d	X	X	X	X	X
Loading					X	X
Central Water	c	b	b	b	b	b
Central Sewer	c	b	b	b	b	b
Stormwater Management - as required by this Ordinance and any Stormwater Ordinance	X	X	X	X	X	X
Sewer Storm	c	c	c	c	c	c
Underground Utilities: Electric, Telephone and TV Cable	Y	Y	Y	Y	Y	Y
Street Lighting	c	c	c	c	c	c
Open Space and Recreation Areas - as required by the Zoning Ordinance and this Ordinance						
Landscaping - as required by the Zoning Ordinance and this Ordinance						
Monuments / Markers	X	X	X	X	X	X

NOTES:

- X** - Indicates a requirement for that particular type of subdivision or land development.
- Y** - Required wherever practical and required by Public Utility Commission.
- a** - Permitted to provide service as needed.
- b** - Required according to the number of units and size of non-residential development planned for the development.
- c** - The Township Planning Commission and the Board of Supervisors may require according to individual site characteristics.
- d** - By lot owner at time of construction of dwelling unit(s).

**TABLE 6-2
REQUIRED ROAD IMPROVEMENTS**

Class of Street	SubBase		Binder Course		Wearing Course		Shoulders	
	Material (2)	Compacted Depth (inches)	Material (1)	Compacted Depth (inches)	Material (1)	Compacted Depth (inches)	Material (2)	Compacted Depth (inches) (1)
ARTERIAL	Crushed Stone, Sandstone or Slag	12	ID-2	2-1/2	ID-2	1-1/2	Crushed Lime- stone, Sand- stone or Slag	8
CONNECTOR	Crushed Stone, Sandstone or Slag	12	ID-2	2-1/2	ID-2	1-1/2	Crushed Lime- stone, Sand- stone or Slag	8
COLLECTOR	Crushed Stone, Sandstone or Slag	10	ID-2	2-1/2	ID-2	1-1/2	Crushed Lime- stone, Sand- stone or Slag	8
MINOR	Crushed Stone, Bank Run Gravel	10	ID-2	2	ID-2	1-1/2	Crushed Stone	6
LOCAL ACCESS Cul-de-sac Loop Street	Crushed Stone, Bank Run Gravel	8	ID-2	2	ID-2	1-1/2	Crushed Stone	6
MARGINAL ACCESS	Crushed Stone, Sandstone or Slag	10	ID-2	2	ID-2	1-1/2	Crushed Stone	6
SERVICE ACCESS	Crushed Stone, Bank Run Gravel	8	ID-2	2	ID-2	1-1/2	Crushed Stone	6
PRIVATE ACCESS DRIVE	Crushed Stone, Bank Run Gravel	6	Double Surface Treatment		Double Surface Treatment		Crushed Stone	6

NA Not applicable.

(1) Except as may be approved pursuant to Section 604.204.

(2) SubBase course and shoulder material shall conform to gradation for AASHTO Number 1 Coarse Aggregate.

All surface voids shall be filled with AASHTO Number 10 Coarse Aggregate prior to paving.

ARTICLE VII
MOBILE/ MANUFACTURED HOME PARK STANDARDS

701. APPLICATION

- 701.1 Applications for proposed development of mobile/manufactured home parks proposed for sale or longer term lease exceeding 12 months of mobile/manufactured home lots or spaces shall meet all requirements and standards for a single family residential subdivision as set forth in this Ordinance.
- 701.2 Application for proposed development of new mobile/manufactured home parks or expansions of existing mobile/manufactured home parks that are proposed to be held under single ownership and to provide mobile/manufactured home sites on a maximum 12 month lease period or rental basis only, shall meet the design standards and required improvements set forth in this Article.
- 701.3 For the purposes of this Ordinance, the terms "mobile home" and "manufactured home" shall have the same meaning. See the definitions of "mobile/manufactured home" and "mobile/manufactured home park" in the Zoning Ordinance.

702. GENERAL STANDARDS AND REQUIREMENTS

- 702.1 No mobile/manufactured homes within a mobile/manufactured home park shall be located within a 100 year floodplain as defined by the Federal Flood Insurance Program.
- 702.2 The site of any proposed mobile/manufactured home park shall be free from adverse influence by swamps, marshes, garbage or rubbish disposal areas or other potential breeding places for insects or rodents.
- 702.3 The site of any proposed mobile/manufactured home park shall not be subject to any hazard or nuisance, such as excessive noise, vibration, smoke, toxic matter, radiation, heat, odor or glare.
- 702.4 All mobile/manufactured home parks shall not be located on soil areas having a seasonal high water table or limiting zone within 20 inches of the ground surface; the average natural slope of the area of the site intended for development shall not exceed 15 percent.
- 702.5 Any proposed mobile/manufactured home park shall have direct access to paved public streets or roads.

703. **SUBMISSION OF APPLICATION AND COMPLIANCE**

703.1 All provisions of Article 3 of this Ordinance shall apply with respect to submission, application and approval. Fees shall be charged in accordance with the approved fee schedule.

703.2 The plans of the proposed mobile/manufactured home park shall conform in content to the requirements for Preliminary Plans and Final Plans as set forth in this Ordinance.

704. **DESIGN STANDARDS**

704.1 General: All plans for proposed new mobile/manufactured home parks or expansion of existing mobile/manufactured home parks shall meet the Design Standards applicable to all types of development contained in Section 502 of this Ordinance.

704.2 Lot Size: Each mobile/manufactured home lot shall have a minimum area of 6000 square feet for the exclusive use of the occupants of the mobile/manufactured home placed upon the space. Minimum widths of home spaces shall be 60 feet.

704.3 Site Drainage Requirements:

- a. The ground surface in all parts of every park shall be graded and equipped to drain all surface water in a safe, efficient manner as required in Section 614.3 and Appendix B of this Ordinance.
- b. Surface water collectors and other bodies of standing water capable of breeding mosquitoes and other insects shall be eliminated or controlled in a manner approved by the Pennsylvania DEP and the Board of Supervisors.

704.4 Soil and Ground Cover Requirements:

- a. Exposed ground surfaces in all parts of every park shall be paved, or covered with stone screenings, or other solid material, or protected with a vegetative growth that is capable of preventing soil erosion and the emanation of dust during dry weather.
- b. Park grounds shall be maintained free of vegetation growth which is poisonous or which may harbor rodents, insects, or other pests harmful to man.

704.5 Park Areas for Non-Residential Uses:

- a. No part of any park shall be used for non-residential purposes, except such uses that are required for the direct servicing and well-being of park residents and for the management and maintenance of the park and for the sale and rental of homes placed in the park.

704.6 Streets: All streets within proposed mobile/manufactured home parks shall conform to the requirements for streets as set forth in Sections 502.8 and 604 of this Ordinance. Right-of-way width shall be a minimum of 50 feet. The Township will not accept any street in a Mobile/manufactured Home Park, which is offered for dedication. All streets or roads providing access from the public street system into and/or through a proposed mobile/manufactured home park shall conform to the requirements for streets as set forth in Sections 502.8 and 604 of this Ordinance. Street signs acceptable to the Township Supervisors shall be provided at all intersections.

- a. There shall generally be at least two points of ingress and/or egress in each mobile/manufactured home park but no more than two accesses to a mobile/manufactured home park from any one public right-of-way (emergency accesses excepted). Accesses shall be separated by at least 150 feet where they intersect with a public street.

704.7 Lot Frontage: Mobile/manufactured home sites and parking spaces shall have direct access to and frontage on the interior park street system, as opposed to a public street. Mobile/manufactured home sites and parking spaces shall not front or have access directly to public streets or to private streets passing through the mobile/manufactured home park and providing access to other parcels or developments.

704.8 Illumination: All parks shall be furnished with lighting units so spaced and equipped with luminaries placed at such mounting heights, as will provide adequate levels of illumination for the safe movement of pedestrians and vehicles at night. Lighting standards as recommended in Appendix F, Table II, Medium Activity for Open Parking Areas shall be followed in designing park lighting.

704.9 Off Street Parking: Off-street parking for 2 motor vehicles shall be provided at each mobile/manufactured home lot and off-street parking areas for additional vehicles of park occupants and guests shall be provided where street rights-of-way are of insufficient width for such purposes. These spaces shall be improved to a grade not greater than 8 percent and shall be paved with a minimum 6 inches depth of select material approved by the Township Engineer.

704.10

Walks:

- a. General Requirements: All parks must provide safe, convenient, all-season pedestrian access of adequate width for intended use, durable and convenient to maintain, between individual mobile/manufactured homes, the park streets and all community facilities provided for park residents. Sudden changes in alignment and gradient shall be avoided.
- b. Common Walk System: Where pedestrian traffic is concentrated, and a common walk system is provided, such common walks shall have a minimum width of 3.5 feet.
- c. Individual Walks: All mobile/manufactured home lots shall be connected to common walks, or to streets, or to driveways or parking spaces connecting to a paved street. Such individual walks shall have a minimum width of 2 feet.

704.11

Landscaping and Outdoor Living Requirements:

- a. Private Area: Private outdoor living and service space shall be provided for each mobile/manufactured home and shall be partially hard surfaced for garden furniture. The minimum area shall be not less than 300 square feet with a least dimension of 15 feet. The hard surface area shall be not less than 100 square feet with a least dimension of 10 feet.
- b. Screen Planting: Screen plantings shall be provided adequate to screen objectionable views effectively within a reasonable time; views to be screened including garbage and trash collection stations, non-residential uses, and rear yards of adjacent properties.
- c. Other Planting: Other plantings shall be adequate in size, quantity, and character to provide an attractive setting for the mobile/manufactured homes and other improvements, to provide adequate privacy and pleasant outlooks for living units, to minimize reflected glare and to afford summer shade.

704.12

Sewer and Water Systems: All mobile/manufactured home lots and service buildings in proposed mobile/manufactured home parks shall be provided with connection to an adequate supply of potable water and a connection to a centralized sewer system designed and constructed as required in Sections 502.4 and 614 and Appendices A and C of this Ordinance. The water supply system shall have an adequate reserve supply of water at adequate pressure to meet fire-fighting needs as required in Article V.

In those cases where a community subsurface sewage disposal system is proposed, a replacement area shall be provided for the subsurface sewage disposal field which has been properly tested and meets current state and Township standards for subsurface sewage disposal.

704.13 Underground Utilities: All mobile/manufactured home lots in proposed mobile/manufactured home parks shall be provided with underground electric, telephone and T.V. cable (if available) service. These service systems shall be installed and maintained in accordance with local service company specifications regulating such systems.

704.14 Central Fuel System: Any central fuel supply systems and/or central fuel storage facilities shall be installed underground.

705. EXCEPTIONS

705.1 Mobile/manufactured Home Sales: None of the provisions of this Article shall be applicable to the business of mobile/manufactured home sales, provided that the mobile/manufactured home on such lots shall not be occupied.

705.2 Storage of Recreation Vehicles: None of the provisions of this ordinance shall be applicable to the storage or garaging within a building or structure of recreational vehicles not being used for living or sleeping purposes or to the storage of one (1) unoccupied recreational vehicle on the premises occupied as principal residence by the owner of such recreational vehicle, provided however, that such unoccupied recreational vehicle shall not be parked between the street line and the front building line of such premises, but shall be parked within the lot, within the same setbacks as required for accessory buildings in any Zoning Ordinance.

705.3 Construction Project: None of the provisions of this Ordinance shall be applicable to a mobile/manufactured home located on the site of a construction project, survey project, or other work project and used solely as a field office or work or tool house in connection with such project, provided such mobile/manufactured home is removed from said site within 30 days after the completion of such project.

ARTICLE VIII
CAMPGROUND STANDARDS AND REQUIRED IMPROVEMENTS

801. APPLICATION

801.1 The definition and standards for Campgrounds in the Township Zoning Ordinance shall apply. Among other matters, those provisions prohibit use of a campground for year-round occupancy.

801.2 No campsite or lot within a campground shall be occupied as a permanent or primary residence or on a permanent or year-round basis. Each campsite shall be used and occupied only for camping and recreational purposes by a single household. This requirement shall be attached to each campsite sale or membership in non-transient campground developments by restrictive covenant.

802. GENERAL STANDARDS AND REQUIREMENTS

802.1 All campgrounds shall be located on moderately well or better-drained land; the average natural slope of the area to be improved for campsites shall not exceed 12 percent.

802.2 The provisions in the Zoning Ordinance shall apply.

802.3 No permanent campground structures or buildings or sewage collection or disposal facilities shall be located within any defined 100 year floodplain area.

802.4 The proposed campground shall have direct access to an existing public street or road.

802.5 The area improved for camping sites shall not exceed 50 percent of the total gross area of the tract being developed as a campground.

802.6 No camping site may be occupied as a permanent residence or on a permanent basis. No improvement or any mobile/manufactured home or year-round shall be erected or placed on any campsite. All recreational vehicles in the development shall be maintained in a transportable condition at all times.

802.7 No part of any campground shall be used for activities or uses except those required for the direct servicing and well being of the campers only, and for the management and maintenance of the campground.

803. SUBMISSION, APPLICATION, AND COMPLIANCE

- 803.1 All provisions of Section 301, 302, 303 and 304 shall apply with respect to submission, application and approval, and fees shall be in accordance with the Township fee schedule.
- 803.2 The design of the campground shall conform to the requirements of this Ordinance and/or the requirements of the Pennsylvania DEP for Travel Trailer Parks, whichever is greater or more restrictive. The applicant shall submit proof of approval of the proposed plan by the DEP before the plan will be considered for final approval by the Commission and the Board of Supervisors.

804. DESIGN STANDARDS

- 804.1 Each camping site shall have a minimum area of 3,000 square feet exclusive of street rights-of-way and walkways and a minimum width of 50 feet and a minimum depth of 60 feet.
- 804.2 To the extent possible, existing trees and shrubbery shall be retained by the campground developer.
- 804.3 Any new electric service lines shall be installed underground.
- 804.4 The applicant shall prove that a sufficient supply of potable water will be provided.
- 804.5 All campsites which are not provided with a connection to a centralized sewage system shall be located within 300 feet of a bath house / toilet facility which shall be equipped with toilets, urinals and lavatories in accordance with DEP regulations.
- 804.6 All campsites designed for recreational vehicles shall have off-street parking spaces for the recreational vehicle and for one passenger vehicle. The Township may allow the second parking space to be provided in a nearby parking area. The parking spaces shall be level in a longitudinal direction and shall be uniformly crowned in a transverse direction and shall be well drained. The parking spaces need not be paved, but shall have a minimum depth of 6 inches of compacted crushed stone, bank run gravel or shale.
- 804.7 All campsites designed for tents may be provided with on-site parking spaces in accordance with section 804.8 or may have a common parking area not over 500 feet from the most distant campsite. Common parking areas shall provide at least 1.5 spaces per campsite. The minimum area of each parking space shall be at least 200 square feet, exclusive of any aisle.

804.8 Any centralized water and centralized sewage system shall be designed in accordance with the requirements of the DEP and be in accordance with the standards of Appendices A and C of this Ordinance.

804.9 A campground serving recreational vehicles shall be equipped with sewage dumping stations designed and constructed in accordance with the DEP requirements.

804.10 Streets within the campground shall conform to the following:

- a. All campground streets shall conform to the requirements for Private Access Drives as set forth in Table 6-2.
- b. One way streets shall have a minimum right-of-way width of 20 feet and shall be improved with a travelway not less than 15 feet in width.
- c. Two way streets shall have a minimum right-of-way width of 30 feet and shall be improved with a travelway not less than 20 feet in width.
- d. The minimum center-line radius of any interior campground street shall be not less than 100 feet.
- e. The maximum grade of any campground street shall not exceed 10 percent.
- f. Drainage facilities shall be designed and constructed in accordance with the standards set forth in Appendix B.
- g. No campground street may be offered for dedication to Westfall Township. Construction and maintenance of campground streets shall be the sole responsibility of the developer or operator of the campground. Street signs acceptable to the Township Supervisors shall be placed at each intersection.

804.11 At least 10 percent, but not less than one acre, of the parcel shall be suitable for and improved to provide for active recreation for users of the campground. Such active recreation may include, but is not limited to: swimming pools, playgrounds, play fields, ball fields, courts of all types, community buildings and similar facilities. The Commission and the Board of Supervisors will determine the adequacy of the proposed facilities for the number of campsites and may require additional facilities before granting approval.

- 804.12 The access road(s) serving the campground shall be designed and constructed in accordance with the standards set forth for Minor Street in Table 5-1 and Table 6-2 of this Ordinance.
- 804.13 There shall be provided in each campground such other improvements as the Board of Supervisors may require whereby such requirements shall at all times be in the best interests of the public's health, safety and general welfare and may include, but shall not be limited to, garbage and trash collection, removal and disposal as approved by the DEP; adequate park lighting system; and maintenance of all areas.

APPENDIX A
CENTRAL WATER SYSTEM DEVELOPMENT
PROCEDURES AND REQUIREMENTS

- A. **Central Water Supply.** A central water supply system shall meet the requirements stated herein prior to the final approval of a subdivision or land development plan which proposes to use such central water system.

1. Existing Utility: The utility shall submit plans for extensions of its present distribution system to Westfall Township Planning Commission and the Board of Supervisors. The utility shall also secure such permits and certificate of convenience to furnish such services from the appropriate governmental agencies where required by this Ordinance.

The utility shall demonstrate adequacy of supply to serve the proposed subdivision or development.

2. Proposed Utility: Any proposed new utility shall be engineered or designed by a registered professional engineer and/or professional ground water geologist well versed and knowledgeable in the field of water supply engineering and/or design.

B. **Deep Well Source Requirements.**

1. Wells shall be sited, drilled, and tested under the direct supervision of a qualified registered professional engineer or a professional ground water geologist.
2. The projected capacity of the well or wells shall be sufficient to produce at least 100 gallons per capita per day and/or 400 gallons per day for each residential dwelling unit to be serviced. Service to industrial or commercial establishments shall show adequacy of supply to meet such needs as established by the American Water Works Association or other professional standards acceptable to the Township.
3. The wells shall be pump tested utilizing a controlled step drawdown test to establish the specific capacity of each well and to establish a long term pumping rate. The well shall be pumped at the above determined long term pumping rate for a sufficient period of time for stabilization to occur and the recovery noted. In no case will a pumping rate greater than the recharge rate be allowed.
4. Well construction shall be consistent with good practice and the guidelines of the Pennsylvania DEP.
5. Wells shall be so located away from potential sources of pollution. The well shall be located on a reserved one-acre parcel.
6. The effect of area drawdown shall be carefully evaluated and reported.

C. Water Distribution System Requirements.

1. The system design shall follow good engineering practice and the guidelines of the Pennsylvania DEP and/or the Public Utilities Commission. The distribution system shall be designed and sized to provide the design flows at a minimum pressure of 25psi at curb stops.
2. Pipe classes shall be consistent with design pressures.
3. Service connections shall be a minimum 3/4 inch. Corporation stops, service connections and curb stops shall be installed concurrent with the installation of the water main.
4. Before being placed into service the system must be tested and chlorinated by procedures established by the Engineer.
5. The proposed utility shall maintain adequate storage for the subdivision or development supplied. At any given period of development, such storage normally shall be not less than one day's supply.
6. Flow rates:
 - a. Systems serving residential developments shall provide for a minimum flow rate of at least five (5) gallons per minute for each lot or proposed dwelling unit for domestic purposes only.
 - b. Systems serving commercial or industrial developments shall provide for a minimum rate of flow per minute not less than twenty-five (25) times the projection from the average daily rate of flow.
 - c. Central water systems shall provide for fire flows and shall provide for minimum flow and pressure rates in accordance with the standards of the National Fire Protection Association.

APPENDIX B
STORM WATER DRAINAGE RUNOFF CALCULATION

The following standards shall apply, unless alternative standards are required to be used by the Township Engineer or unless the Township Engineer pre-approves alternative standards,

A. Rational Formula.

The method used in calculating runoff shall be the Rational Formula $Q = CIA$, in which "Q" is the storm flow in cubic feet per second. "C" is coefficient indicating the degree of imperviousness of the drainage area. "I" is the intensity of rainfall in inches per hour for the particular frequency of storm used, and "A" is the drainage area in acres.

B. Values of Coefficient "C".

Coefficient "C" used for the calculation of runoff shall be based on the anticipated ultimate use of the land. Except for cemeteries, golf courses, and publicly owned park areas, the minimum value of "C" to be used for composite areas shall be 0.20. Other suggested "C" values to be used are as follows:

TYPE OF SURFACE	NORMAL RANGE	RECOMMENDED VALUES*
Pavements: Portland Cement Concrete and hot mix bituminous concrete	0.75-0.95	0.90
Pave Pavements: Penetrated macadam (bituminous); bituminous soil stabilization; portland cement stabilization	0.65-0.80	0.75
Pavements: Water bound macadam, shale gravel, etc.	0.25-0.60	0.50
Sandy soil: Cultivated or light growth	0.15-0.30	0.20
Sandy soil: Woods or heavy brush	0.14-0.30	0.20
Clay soil: Bare or light growth	0.35-0.75	0.50
Clay soil: woods or heavy growth	0.25-0.60	0.40
Mixed: Industrial Commercial Developments	0.70-0.95	0.90
Mixed: Moderate Density Residential Developments (more than one (1) unit/acre)	0.50-0.75	0.60
Mixed: Low Density Residential Developments (one (1) unit or less/acre)	0.35-0.60	0.35
Mixed: Rural Areas, Parks, Golf Courses	0.15-0.30	0.25

* Use of lower values must be fully justified

C. Values of Storm Intensity "I".

1. The values of "I", in inches per hour, to be used are as follows:

Time of Flow (minutes)	Frequency of Storm (Years)	
	10-year	25-year
5	6.5	7.5
10	5.4	6.2
15	4.6	5.2
20	4	4.5
25	3.5	4
30	3.2	3.6
35	2.9	3.3
40	2.7	3.1
45	2.5	2.9
50	2.3	2.7
55	2.2	2.6
60	2.1	2.5

2. Storms with a frequency of occurrence of one in 10-years shall be used for drainage facilities in new developments and for minor streets, and 25-year storms shall be used for Collector and Connector streets. The time of flow shall be the time which it takes to reach the location of the drainage facility to be designed, and shall include overland flow time plus gutter flow time plus time of flow through pipes, culverts, or natural streams. Overland flow time shall be computed using a generally accepted chart or formula.

D. Suggested Runoff Velocities.

Suggested runoff velocities are as follows:

Percent Slope vs. Velocities*

Description of Course of Runoff Water	0-2%	2-4%	4-7%	7-10%	15%	20%
Woodland or Dense Grass	0.2	0.3	0.4	0.4	0.4	0.4
Pasture or Average Grass	0.3	0.4	0.4	0.4	0.5	0.5
Poor Grass	0.4	0.5	0.5	0.6	0.7	0.8
Bare Soil	0.5	0.6	0.7	0.8	0.9	0.9
Pave Areas	0.8	1.0	1.2	1.4	1.6	2.0

*In feet per second

E. Velocity of Flow in Open Channels.

1. The velocity of flow in open channels, and in closed drains not under pressure, shall be determined by Manning's velocity equation:

$$V = \frac{1.49 * R^{(2/3)} * s^{(0.5)}}{n}$$

V = Velocity (feet per second)
n = Manning's coefficient of roughness
R = Hydraulic Radius (Area/Perimeter)
a = Cross-sectional Area
p = Perimeter of the Wetted Channel
s = Slope (feet per foot)

2. The coefficient of roughness, "n", shall be as follows unless otherwise approved by the Township Engineer:

- a. .015 for concrete pipe and similar paving.
- b. .025 for annular corrugated metal pipes and flumes.
- c. .040 for earth ditches.
- d. .014 to .021 for Helical corrugated metal pipe.

F. Permissible Stream Velocities in Open Channels.

Material Allowable Velocity (feet per second)
Well established grass on good soil:

Alfalfa	2.5 - 3.5
Bermuda grass	4 - 8
Crabgrass	2.5 - 3.5
Crownvetch	3 - 5
Kentucky Bluegrass	4 - 7
Kentucky 31 Tall Fescue	2.5 - 7
Red Clover or Red Fescue	2.5 - 3.5
Reed Canary	3 - 5
Ryegrass	2.5 - 3.5
Small Grains	2.5 - 3
Smooth Brome	3 - 7
Sudan Grass or Timothy	2.5 - 3.5
Other:	
Bituminous or cement stabilized channels	6
Paved channels	10-15
Earth without vegetation:	
Fine sand or silt	1-2
Ordinary firm loam	2-3
Clay and gravel	3-5
Stiff clay	4-5
Coarse gravel	4-5
Soft Shale	5-6

G. Design Storm Volumes to be used in the analysis of Peak Rates of Discharge.

Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, US Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland, 20910. NOAA's Atlas 14 can be accessed at Internet address: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.

ARI* (years)	5 min	10 min	15 min	30 min	60 min	120 min	3 hr	6 hr	12 hr	24 hr	48 hr	4 day	7 day	10 day	20 day	30 day	45 day	60 day
1	0.30	0.47	0.57	0.76	0.92	1.10	1.21	1.55	1.94	2.29	2.67	2.98	3.54	4.10	5.56	6.96	8.96	10.84
2	0.36	0.56	0.68	0.91	1.11	1.33	1.45	1.85	2.32	2.74	3.20	3.56	4.21	4.88	6.57	8.18	10.45	12.61
5	0.42	0.66	0.81	1.11	1.39	1.66	1.80	2.27	2.86	3.39	3.95	4.36	5.13	5.86	7.68	9.41	11.82	14.15
10	0.48	0.74	0.91	1.26	1.60	1.92	2.09	2.63	3.32	3.97	4.62	5.06	5.93	6.72	8.63	10.46	12.98	15.47
25	0.55	0.84	1.04	1.46	1.90	2.33	2.53	3.17	4.04	4.88	5.66	6.19	7.19	8.05	10.08	12.01	14.69	17.40
50	0.61	0.92	1.14	1.63	2.15	2.67	2.91	3.66	4.68	5.71	6.62	7.23	8.35	9.24	11.36	13.36	16.14	19.04
100	0.67	1.01	1.25	1.81	2.42	3.07	3.36	4.22	5.43	6.70	7.75	8.46	9.69	10.62	12.79	14.86	17.72	20.79
200	0.74	1.10	1.37	2.00	2.71	3.52	3.86	4.86	6.29	7.87	9.09	9.91	11.28	12.21	14.41	16.51	19.43	22.70
500	0.84	1.24	1.54	2.29	3.16	4.21	4.65	5.87	7.65	9.75	11.25	12.27	13.82	14.72	16.89	18.99	21.95	25.48
1000	0.93	1.35	1.69	2.53	3.55	4.84	5.36	6.78	8.88	11.50	13.25	14.45	16.14	16.98	19.06	21.12	24.07	27.80

- These precipitation frequency estimates are based on a partial duration series. **ARI** is the Average Recurrence Interval.

NOTE: Formatting forces estimates near zero to appear as zero.

APPENDIX C
CENTRALIZED SEWAGE DISPOSAL SYSTEM
PROCEDURES AND REQUIREMENTS

A. General.

All centralized sewage disposal system designs, plans and/or construction shall:

1. Be compatible with sewage feasibility studies and plans of the Township.
2. Comply with all requirements of the DEP and/or of the Township or Township Authority, whichever may be more stringent.
3. Be approved by the appropriate agencies prior to Final Plan submission.

B. Collection.

All sanitary sewer and appurtenances shall be designed and constructed in accordance with regulations and requirements of the DEP (as set forth in the Sewerage Manual prepared by the Bureau of Water Quality Management) and/or the Township or Township Authority. In the case of relatively small community sewage systems the applicant may submit a written request for a variance from such requirements together with justification thereof. All sanitary sewers shall be designed and constructed to provide adequate capacity for the ultimate flow of the subject development plus such additional flow as may be projected to be generated by adjacent or nearby properties within a period of 20 years.

The plans shall provide that all individual lateral connections be installed to the curb or right-of-way line at the time of initial installation.

1. Existing Facility: Plans for the extension of existing sanitary sewers shall be prepared by or on behalf of the utility and approved by it. Such plans shall be submitted to the Township Planning Commission and the Engineer. The utility shall also secure such approvals, permits, and certificates of convenience to furnish such services from the appropriate state agencies as required.
2. Proposed Facility: Plans for proposed sanitary sewers shall be prepared by a registered professional engineer well versed and knowledgeable in the field. Such plans shall be submitted to the Township Planning Commission and the Engineer. The applicant shall also secure such approvals, permits and certificates of convenience as required.

C. Community Sewage Systems.

All systems utilizing subsurface disposal of sewage effluent (Community Sewage Systems as defined by the DEP Regulations) shall be designed and constructed in accordance with requirements of the Township or Township Authority. Such systems shall also be operated and maintained in accordance with requirements of the Township or Township Authority.

The registered professional engineer employed by the applicant shall certify that the existing or proposed facility has adequate capacity to satisfactorily treat the total projected sewage flow.

D. Sewerage Services.

All systems classified as Sewerage Services (as defined by the DEP Regulations) shall be designed and constructed in accordance with regulations and requirements set forth in the Sewerage Manual prepared by the Bureau of Water Quality Management.

1. Existing Facility: The utility shall demonstrate the adequacy of treatment capacity to serve the proposed subdivision or development.
2. Proposed Facility: Plans for proposed treatment and discharge facilities shall be prepared by a registered professional engineer well versed and knowledgeable in the field. Such plans shall be submitted to the Township Planning Commission and the Board of Supervisors. The applicant shall also secure such approvals, permits and certificates of convenience as required.

E. Township Official Plan.

The applicant shall demonstrate compliance with or cause to be prepared such revisions or supplements as may be required for the Official Township Sewage Plan and/or Township Sewage Feasibility Study.

APPENDIX D
ON LOT SEWAGE DISPOSAL SYSTEMS

- A. Wherever individual on-lot sanitary sewage disposal systems are proposed, the subdivider shall either install such facilities or require by deed description or otherwise as a condition of the sale of each lot or parcel within such subdivision that the on-lot sanitary sewage disposal facilities be installed by the purchaser of said lot at the time that the principal building is constructed. The standards of Title 25, Chapter 73, "Standards for Sewage Disposal Facilities", Pennsylvania DEP, shall be strictly adhered to.

APPENDIX E
DEVELOPMENT AGREEMENT - SAMPLE FORM

This AGREEMENT is made this _____, day of _____, 20____, by and between the Supervisors of Westfall Township, Pike County, Pennsylvania, (Hereinafter referred to as "Supervisors"),

and

(hereinafter referred to as "Developer").

The background to this Agreement is that Developer is the owner of a certain tract or parcel of land situated in Westfall Township, Pike County, as shown on a certain plot or plan entitled _____ (hereafter sometimes called "the Final Plan") which has been submitted to the Supervisors for final approval in accordance with the applicable ordinances of Westfall Township. In addition, the Developer has submitted supporting data and information as a supplement to the final plan.

Attached as Exhibit A to this Agreement is a narrative description of the improvements required under the Ordinances of Westfall Township (sometimes referred to as "required improvements") which have not yet been completed at the time the final plan was submitted for approval. And attached as Exhibit B is a narrative description of certain other improvements which the Developer has depicted upon the plan (sometimes referred to as "promised improvements") and which have not been completed.

The Developer seeks approval of the final plan before completing the improvements described in Exhibits A and B. The Supervisors, on the other hand, seek to assure that the improvements will be made. Accordingly, the Developer and Supervisors have agreed as follows.

NOW, THEREFORE, in consideration of the mutual premises, promises, covenants and conditions set forth below, the parties agree as follows:

1. Plan Approval: Developer shall record the said plan within ninety (90) days of the execution of this agreement in the Pike County Office for the Recording of Deeds. The Supervisors' execution of the final plan constitutes their acknowledgment that the plan and supporting data comply with applicable ordinances and regulations of Westfall Township. Developer agrees to the strict and timely performance of the conditions of this agreement and the posting by Developer of a Performance Guarantee as required by the pending Subdivision and Land Development Ordinance of Westfall Township.
2. Security Performance Guarantee: The Developer agrees to complete the improvements in a workmanlike manner and in accordance with the design criteria of applicable Westfall Township ordinances or in accordance with the plans and specifications submitted by the Developer to the Supervisors, whichever standard is the more stringent. The improvements shall be completed within the following time periods:

(a) Required improvements: _____

(b) Other Improvements that the Applicant Has Committed to Make:

Time shall be of the essence of Developer's agreement to construct or install the improvements by the date (s) specified; and the failure or forbearance of the Supervisors, or a third party, in not acting upon Developer's failure to complete the improvements as promised shall not be deemed a waiver of their right to insist upon such performance. No extension of the time limits set forth above shall be binding unless it is in writing and signed by the Supervisors.

3. Security of Performance Guarantee: The parties acknowledge that the Supervisors have accepted as security for the performance of Developer's promises under this contract the following:

The aforesaid security is referred to in this Agreement as a "Performance Guarantee". The Performance Guarantee shall be collateral security for Developer's performance obligations under this agreement. The parties further agree that the fair and reasonable estimate of the current cost to complete the required improvements described in Exhibit A is \$_____, and the fair and reasonable cost of completing the promised improvements described in Exhibit B is \$_____. The amount of the Performance Guarantee shall be \$_____.

Upon the Developer's default, the Supervisors shall have the right to pursue their remedies under the Performance Guarantee, and in addition, to bring action under this Agreement if the fund available from Performance Guarantee reasonably appears to be insufficient to pay completion of the improvements.

4. Method of Approving Installation of Improvements and Cost Thereof: The Developer shall notify the Supervisors, with a copy to the Township Engineer, by certified or registered mail when any improvement has been completed. Within ten (10) days of receiving this notice, the Supervisors shall direct the Engineer to inspect the improvement. The Engineer shall make his inspection and file a report to the Supervisors, the Westfall Township Planning Commission and the Developer within thirty (30) days of the date on which the Developer's notification was received by the Supervisors. If the Engineer finds any or all improvements to be not as required or promised, he shall include a statement of reasons for their rejection in his report to the Supervisors and to the Developer.

Where appropriate, the Township may require that periodic inspections be made of the improvements, in which case the Developer's failure to comply with that schedule of inspections shall be grounds for disapproval. The Developer shall notify the Township of the progress of construction to enable the Township Engineer to make such inspections.

The Supervisors shall consider the Engineer's report and recommendation of the Planning Commission and render a decision to the Developer by certified or registered mail within forty (40) days after the Developer's official letter of notification to the Board of his completion of the improvements. Upon approval of all the improvements, the Developer's collateral under the Performance Guarantee shall be released to Developer and the Performance Guarantee shall be of no further force and effect.

The Developer agrees to pay the fair and reasonable cost of inspections and reports performed or made by the Township Engineer or other designee.

Notwithstanding any other provision of this paragraph, Developer agrees that no blacktopping or asphalt material shall be applied to a required improvement unless prior notice is given to the Supervisors, or their authorized representative, and approval is obtained.

5. Non-Assignment: The Developer shall not assign, transfer, sublease, pledge, hypothecate, surrender or otherwise dispose of this agreement or of any rights created by the agreement, or permit any other person or persons, company, assign, or corporation to assume Developer's obligations hereunder without the written consent of the Supervisors of Westfall Township first being obtained.
6. Developer to Provide As-Built Drawings: Upon request of the Supervisors, the Developer shall, upon completion of installation of a required improvement, submit "as built" drawings of the improvement for the records of Westfall Township.
7. Developer to Indemnify, etc: Developer hereby agrees to indemnify, defend and hold harmless the Board of Supervisors of Westfall Township, their successors and assigns and their agents, servants, and employee, from any and all actions, claims or demands arising from or by virtue of this agreement and the installation of required or promised improvements as provided herein.
8. Additional Assurances of Completion: The Developer, upon request of the Supervisors, shall provide such additional security or such additional documentation as the Supervisors may from time to time reasonably require in order to effect the terms of this contract. In the event the Supervisors reasonably request additional security under the Performance Guarantee, the Developer's failure to provide additional security shall be deemed a breach of this Agreement.
9. Maintenance Bond: In addition to the Performance Guarantee, Developer shall post with the Supervisors a bond or other acceptable security to secure the cost of repair or

replacement of any required improvement for a period one (1) year or eighteen (18) months after the date of its completion.

10. No Offer of Dedication: Nothing in this agreement shall be construed as an offer by the Developer to dedicate any improvement to the Board of Supervisors of Westfall Township, and nothing herein shall be deemed to be an acceptance of an offer of dedication. In the event the Developer, or Developer's heirs, administrators, successors or assigns, offers to dedicate an improvement to Westfall Township, there shall be no payment or compensation of any kind paid to Developer or Developer's heirs, administrators, successors or assigns, and this agreement shall constitute a full and complete release from any such claim or demand for payment. Developer shall bear all of the Township's costs incidental to the dedication of a required improvement.
11. Default: If Developer fails or neglects to do, or perform, or observe, any of the covenants contained herein, and such failure or neglect continues for a period of not less than thirty (30) days after the Supervisors have notified Developer in writing of Developer's default hereunder, and Developer has failed to correct such default within said thirty (30) days, or if Developer shall be declared to be bankrupt or insolvent according to law, or if any assignment of Developer's property shall be made to the benefit of creditors, then in any such case or event, the Supervisors may, at their option, immediately or at any time thereafter without demand or notice, declare this contract to have been breached and exercise their remedies, in law or equity, and simultaneously therewith to exercise their right under the Performance Guarantee to complete such work or as much thereof as may be completed from the available resources of the Performance Guarantee. The Supervisors' exercise of their rights under the Performance Guarantee shall not bar them from pursuing their rights under this contract, it being agreed that those rights are cumulative and not exclusive.
12. Attorney Fees: In the event any action, suit, or proceeding is brought by the Supervisors against the Developer for Developer's failure to observe any of the covenants of this agreement. Developer agrees to pay to the Board of Supervisors such sum as the court may judge reasonable as attorney fees to be allowed in said suit, action or proceeding.
13. Third Parties to Benefit: This agreement shall inure to the benefit of the grantees, lessees, and licensees of the Developer; provided, however, in no event may such third party beneficiary, alone or together, bring action for breach of this agreement without the prior written approval of the Supervisors.
14. Insurance: Developer shall secure and maintain public liability insurance for the duration of the construction of the improvements and evidence of such coverage shall be submitted to the Township.
15. Adequacy of Plans: Nothing in this contract shall be construed as approval by the Supervisors or their agents, servants, independent contractors or employees, of the adequacy or fitness of purpose or intended use of the improvements depicted upon the plans and supporting documentation submitted to the Township. It being agreed that the

Supervisors' approval constitutes no more than their acknowledgment that minimum standards of Township Ordinance have been met.

IN WITNESS WHEREOF, the parties, for themselves, their heirs, administrators, successors and assigns, have hereunto set their hands and seals this _____ day of _____, 20_____, intending thereby to be legally bound.

DEVELOPER

By: _____

ATTEST:

SUPERVISORS OF WESTFALL
TOWNSHIP

By: _____
Chairperson

ATTEST:

Comments Regarding the general form of the model Development Agreement:

1. This form is designed as a model of an acceptable Development Agreement and may be modified as circumstances warrant. This model Development Agreement shall not by itself limit the ability of the Township to require additional provisions if necessary to carry out Township ordinances and requirements and to protect public safety.
2. The agreement does not include a specific form of Performance Guarantee because a number of types of financial security may be acceptable. See the Westfall Township Subdivision and Land Development Ordinance for a list of acceptable forms of security.
3. In no event will the Township approve final plans of a subdivision until the roads shown on the plan have been installed to a "mud free and permanently passable" condition.
4. The Developer should obtain estimates from reputable contractor(s) to substantiate the present cost of the required and promised improvements.
5. It is suggested that the Developer or his attorney contact the Township's Solicitor to obtain approval of modifications of the sample form of Development Agreement.

APPENDIX F

LIGHTING STANDARDS

Wherever lighting is required for vehicular or pedestrian safety and convenience on roadways, parking areas, or pedestrian walkways, along streets or in commercial, industrial, or residential developments, the guidelines and recommendations of the Illuminating Engineering Society of North America, as contained in the IES Lighting Handbook shall be used as the basis for determining and providing adequate lighting.

The following are two tables from the 1981 Edition IES Lighting Handbook, which provide recommendations for provision of lighting under varied conditions. Applicants may utilize later versions of this Handbook.

TABLE F-1
RECOMMENDATIONS FOR AVERAGE MAINTAINED ILLUMINANCE
ON THE HORIZONTAL FOR PEDESTRIAN WAYS

Walkway and Bike Way Classification	Minimum Average Levels		Average Levels for Special Pedestrian Security**			
			Mounting Heights 9-15 feet		Mounting Heights 10-30 feet	
	Lux	Foot-candles	Lux	Footcandles	Lux	Foot-candle s
Sidewalks (roadside) and Type A bikeways						
Commercial Areas	10	0.9	22	2	43	4
Intermediate Areas	6	0.6	11	1	22	2
Residential Areas	2	0.2	4	0.4	9	0.8
Walkway distance from roadways and Type B bikeways						
Park walkways and bikeways	5	0.5	6	0.6	11	1
Pedestrian tunnels	43	4	54	5	—	—
Pedestrian overpasses	3	0.3	4	0.4	—	—
Pedestrian stairways	6	0.6	9	0.8	—	—

NOTE: Crosswalks traversing roadways in the middle of long blocks and at street intersections should be provided with additional illumination producing from 1.5 to 2 times the roadway illuminance level recommended.

** For pedestrian identification at a distance.

TABLE F-2
RECOMMENDED MAINTAINED ILLUMINATION FOR
OPEN AND COVERED PARKING FACILITIES

Open Parking Facilities

Level of Activity	For Vehicular Traffic			For Pedestrian Safety		For Pedestrian Security		
	Lux*	Foot-candles	Uniformity Ratio	Lux*	Foot-candles*	Lux*	Foot-candles*	Uniformity Ratio
Low activity	5	0.5	4:1	2	0.2	9	0.8	5:1
Med activity	11	1	3:1	6	0.6	22	2	5:1
High activity	22	2	3:1	10	0.9	43	4	5:1

Covered Parking Facilities

Areas	Day		Night	
	Lux***	Footcandles***	Lux*	Footcandles
General Parking and pedestrian areas	54	5	54	5
Ramps and corners	110	10	54	5
Stairways and Lobbys	540	50	54	5

*Average on pavement

**Minimum on pavement

***Average on payment-sum of electrical lighting and daylight

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• **APPENDIX G**
STORMWATER OPERATION AND MAINTENANCE AGREEMENT

STORMWATER BEST MANAGEMENT PRACTICES

THIS AGREEMENT, made and entered into this _____ day of _____, 200__, by and between _____, (hereinafter the "Landowner"), and Westfall Township, Pike County, Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of Pike County, Pennsylvania, Deed Book _____ at Page _____, (hereinafter "Property").

WHEREAS, the Landowner is proceeding to build and develop the Property; and

WHEREAS, the Stormwater Management Site Plan approved by the Municipality (hereinafter referred to as the "Plan") for the property identified herein, which is attached hereto as Appendix A and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of Best Management Practices (BMPs); and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site stormwater Best Management Practices be constructed and maintained on the Property; and

WHEREAS, the Municipality requires, through the implementation of the Stormwater Management Site Plan, that stormwater management BMP's as required by said Plan and the Municipal stormwater management and drainage provisions and standards be constructed and adequately operated and maintained by the Landowner, his successors and assigns.

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the Stormwater Management Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the Plan in good working order accordance with the specific maintenance requirements noted on the approved Stormwater Management Site Plan.
3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and upon presentation of proper credentials, to inspect the BMPs whenever necessary. Whenever possible, the Municipality shall notify the Landowner prior to entering the property.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). This provision shall not be construed to allow the Municipality to erect any permanent structure on the land of the Landowner. It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within 10 days of receipt of invoice from the Municipality.
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences or claims which might arise or be asserted against said employees and representatives from

the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.

8. The Municipality shall inspect the BMPs at a minimum of once every three years to ensure their continued functioning.

This Agreement shall be recorded at the Office of the Recorder of Deeds of Pike County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs and any other successors in interests, in perpetuity.

ATTEST:

WITNESS the following signatures and seals:

(SEAL)

For the Municipality:

(SEAL)

For the Landowner:

ATTEST:

Westfall Township

County of Pike, Pennsylvania

I, _____, a Notary Public in and for the County and State aforesaid, whose commission expires on the _____ day of _____, 20__, do hereby certify that _____ whose name(s) is/are signed to the foregoing Agreement bearing date of the _____ day of _____, 20__, has acknowledged the same before me in my said County and State.

GIVEN UNDER MY HAND THIS _____ day of _____, 20__.

NOTARY PUBLIC

(SEAL)

