

**LYNN TOWNSHIP SUBDIVISION**

**AND LAND DEVELOPMENT ORDINANCE**

**ORDINANCE NO. 1980-2**

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LYNN TOWNSHIP

SUBDIVISION AND LAND  
DEVELOPMENT ORDINANCE

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This Ordinance was prepared by the Lynn Township Planning Committee with technical assistance from the staff of the Joint Planning Commission Lehigh-Northampton Counties.

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SECTION I - PURPOSE, AUTHORITY, TITLE, AND JURISDICTION

**100** Purpose

**101** The purpose of this Ordinance is to regulate subdivision and land development within the Township of Lynn, Lehigh County, Pennsylvania.

**110** Authority and Title

**111** This Ordinance is enacted pursuant to the Pennsylvania Municipalities Planning Code and may be cited as the Lynn Township Subdivision and Land Development Ordinance.

**120** Jurisdiction

**121** This Ordinance shall apply in the following circumstances:

**121.1** To all subdivision and land development plans submitted after the effective date of this Ordinance.

**121.2** To all subdivision and land development plans, previously approved in accordance with any law or regulation then applicable, the development of which has not been completed in accordance with the terms of such approval within three (3) years of such approval.

**121.3** To the conveyance of agricultural conservation easements to the extent and as hereinafter set forth in this Ordinance. (Ord. 93-1)

## SECTION II - SUBMISSION PROCEDURES

### 200 General

**201** Feasibility Review - Review materials and fees may \* be submitted to the Administrator for discussion with the Township Planning Commission as to the suitability of a parcel of land for a specific subdivision or land development use and for direction or advice from the Township Planning Commission. The feasibility review materials shall be submitted to the Township Engineer and the Lehigh Valley Planning Commission for review. (Ord. #97-7) ,\*(Ord. # 2002-2)

**202** Preliminary Plan - Plans, supplementary data, and fees shall be submitted to the Administrator for distribution to various review bodies. All reviews shall be submitted to the Township Planning Commission which shall review the plan and recommend action to the Township Supervisors. The Board of Supervisors shall take action and advise the applicant in writing of their decision.

**203** Final plan - Plans, supplementary data, and fees shall be submitted to the Administrator for distribution to various review bodies. The final plan shall be submitted within one (1) year of preliminary plan approval. All reviews shall be submitted to the Township Planning Commission which shall review the plan and recommend action to the Township Supervisors. The Board of Supervisors shall take action on the plan and advise the applicant in writing of their decision. As a condition of approval, the applicant shall enter into improvement and maintenance agreements with the Board of Supervisors. No permits shall be issued until said agreements have been executed and secured to the satisfaction of the Township Solicitor and until the approved final plan has been recorded in the Lehigh County Recorder of Deeds Office. (Ord. 94-4)

**210** Feasibility Review Submission

**211** Feasibility review maps and materials may\* be submitted for all proposed subdivisions and land developments, for purposes of discussion between the Township Planning Commission and the developer, and for the review of the Lehigh Valley Planning Commission. (Ord. #97-7), \*(Ord. # 2002-2)

**212** Fifteen (15)\* copies of all feasibility review maps and materials as set forth in Section 300, shall be submitted to the Administrator. \*(Ord. # 2002-2)

**213** The Administrator shall refer four (4) copies of feasibility review maps and materials to the Township Planning Commission for its review and recommendation.

**214** The Administrator shall refer one (1) copy of feasibility review maps and materials to the Township Engineer for review and recommendation except for plans exempted from standard procedure.

**215** The Administrator shall refer one (1) copy of feasibility review maps and materials to the Lehigh Valley Planning Commission for review and recommendations. (Ord. #97-7)

## **220** Feasibility Review

**221** When feasibility review maps and materials have been submitted to the Township Planning Commission, the data presented will be reviewed by that body at its next regular meeting, provided that submission has occurred no less than twenty-one (21) days prior to such scheduled meeting.

**222** The Township Planning Commission shall review the feasibility review data to determine the development potential of the site, as indicated by the natural features analysis presented. The general development concepts of the developer will be reviewed to determine their compatibility with the development potential of the site and with relevant plans and ordinances. Also, the feasibility review stage is designed to offer the developer an opportunity to informally discuss his plans for the proposed subdivision or land development with the Township Planning Commission.

**223** No recommendations shall be made by the Township Planning Commission until the Commission has received and considered the written report of the Lehigh Valley Planning Commission or until thirty (30)\* days have passed from the date that the plans were forwarded to the LVPC.  
(Ord. #97-7), \*(Ord. # 2002-2)

**224** Within sixty (60) days of submission of feasibility review maps and materials to the Township Planning Commission, the Commission shall make any recommendations to the developer which it deems necessary or advisable in the public interest in order to provide an acceptable subdivision or land development plan for the site.

Within fifteen (15) days after such meeting, the Secretary of the Township Planning Commission shall send written notice of the Commission's recommendations to the following:

**224.1** The developer or his representative;

**224.2** The Board of Supervisors;

**224.3** The Lehigh Valley Planning Commission;

**224.4** The Township Administrator.

**224.5** The Township Engineer. (Ord. #99-1)

**225** Within one year after completion of the feasibility review by the Township Planning Commission, the developer shall submit a Preliminary Plan. An extension of time may be granted by the Board of Supervisors upon written request. If a written grant of extension is not presented, the plan submitted shall be considered as a new feasibility review.

**230** Submission of the Preliminary Plan

**231** Preliminary Plans and all required supplementary data for all proposed subdivision and land developments shall be submitted to the Administrator.

**232** If the Preliminary Plan submission complies with Section 310 of this Ordinance, the Administrator shall accept the Preliminary Plan for distribution to the various review bodies.

**233** Official submission of a Preliminary Plan to the Administrator by a developer shall comprise:

**233.1** Six (6) copies of a completed Application for Review of Preliminary Subdivision Plans;

**233.2** Submission of ten (10) black-on-white or blue-on-white prints on paper of the Preliminary Plan which shall fully comply with the provisions of this Ordinance as set forth in Section 310;

**233.3** Submission of eight (8) copies of all required supplemental information as set forth in Section 316.

**234** The Administrator shall refer preliminary plan submission materials to the various review bodies as follows:

**234.1** One (1) application, three (3) plan prints, and three (3) copies of the supplemental information to the Township Planning Commission;

**234.2** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Township Engineer;

**234.3** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Board of Supervisors;

**234.4** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Township Sewage Enforcement Officer;

**234.5** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Lehigh Valley Planning Commission; (Ord. #97-7)

**234.6** One (1) plan print, and one (1) copy of supplemental information relevant to sewage disposal

shall be submitted to the Pennsylvania Department of Environmental Resources;

**234.7** One (1) application and one (1) plan print to the Township Administrator;

**234.8** One (1) plan print to the Northwestern School District.

**235** Additional copies of the Preliminary Plan materials shall be referred by the Administrator to the respective agencies in the following circumstances:

**235.1** Whenever the property being subdivided or developed abuts a State Legislative Route, one (1) plan print shall be submitted to the Pennsylvania Department of Transportation District Office;

**235.2** Whenever a proposed subdivision or land development is located adjacent to another municipality, one (1) application and one (1) plan print shall be referred to that municipality.

**235.3** Whenever the subdivision site is crossed by a public utility right of way or easement, one (1) application and one (1) plan print shall be submitted to the involved utility.

**235.4** Whenever all or part of the property being subdivided or developed is within the area served by the Lynn Township Sewer Authority, two (2) plan prints and two (2) copies of the supplemental information shall be submitted to the Lynn Township Sewer Authority for distribution to the Authority Board and Authority Engineer.  
(Ord. 96-3.) (Ord. #99-1)

## **240** Review of Preliminary Plan

### **241** By the Township Planning Commission

**241.1** When a Preliminary Plan has been officially submitted, such plan shall be placed on the agenda of the Planning Commission for review at its next regular monthly meeting, provided that such official submission has occurred no less than twenty one (21) calendar days prior to such regular meeting. The Planning Commission may hold a Public Hearing on the Preliminary Plan at this time.

**241.2** The Planning Commission shall review the Preliminary Plan to determine its conformance with the standards contained in this Ordinance and other applicable Township ordinances, and shall require or recommend such changes and modifications as it deems necessary.

**241.3** No action shall be taken by the Township Planning Commission with respect to a Preliminary Plan until the Township Planning Commission has received and considered the written report of the Lehigh Valley Planning Commission provided, however, that if the Lehigh Valley Planning Commission shall fail to report thereon within forty-five (45) days after receipt of a Preliminary Plan, then the Township Planning Commission may officially act without having received and considered such report. (Ord. #97-7)

**241.4** Within sixty (60) days after submission of the Preliminary Plan, the Planning Commission shall recommend to the Board of Supervisors, in writing, that the Preliminary Plan be approved, conditionally approved, or disapproved together with the documented findings upon which the recommendations are based.

### **242** By the Board of Supervisors

**242.1** Within ninety (90) days following the date of the regular meeting of the Planning Commission next following the date of the application, the Board of Supervisors shall, in accordance with the provisions of relevant ordinances and considering the recommendations of the Planning Commission, take action by approving, conditionally approving or disapproving the Preliminary Plan. The exception to this procedure shall occur when a Planning Commission meeting is not scheduled within 30 days

of the date of the application. In such cases, the actions by the Board of Supervisors shall be within 120 days of the date of the application. The Supervisors, in all cases, shall document the action and the findings on which it is based within 15 days of the action to:

**242.11** The applicant;

**242.12** The Administrator;

**242.13** The Township Planning Commission;

**242.14** The Township Engineer;

**242.15** The Township Sewage Enforcement Officer

and

**242.16** The Lehigh Valley Planning Commission.

## **250** Submission of the Final Plan

**251** Within twelve (12) months after approval of the Preliminary Plan, a Final Subdivision or Land Development Plan and all required supplemental data shall be submitted to the Administrator. An extension of time may be granted by the Board of Supervisors upon written request. Otherwise, the plan submitted may be considered as a new Preliminary Plan.

**252** The Final Plan shall conform in all significant respects to the Preliminary Plan as previously reviewed by the Township Planning Commission and approved by the Board of Supervisors and shall incorporate all modifications required by the Board of Supervisors in its Preliminary Plan approval. The Township Planning Commission may, however, accept a Final Plan modified so as to reflect any substantial changes which have occurred on the site of the proposed subdivision, or in its surroundings, since the time of Preliminary Plan review.

**253** The Final Plan may be submitted in sections or stages each covering a reasonable portion of the entire proposed subdivision as shown on the reviewed Preliminary Plan, in accordance with the regulations set forth in Section 320. In the case of the Final Subdivision or Land Development Plan which is to be submitted in sections or stages over a period of years, the time between submission of application for final approval of each stage or section shall be no greater than twelve (12) months.

**254** Final plans and all required supplementary data set forth in Section 320 for all proposed subdivisions and land developments shall be submitted to the Administrator.

**255** Official submission of a Final Plan to the Administrator by a developer shall comprise:

**255.1** Five (5) copies of a completed Application for Review of Final Subdivision Plan;

**255.2** Submission of ten (10)\* black-on-white or blue-on-white prints on paper of the Final Plan which shall fully comply with the provisions of this Ordinance as set forth in Section 320; \*(Ord. # 2002-2)

**255.3** Submission of ten (10)\* copies of all required supplemental information as set forth in Section 320. \*(Ord. #2002-2)

**256** The Administrator shall refer Final Plan submission materials to the various review bodies as follows:

**256.1** One (1) application, three (3) plan prints, and three (3) copies of the supplemental information to the Township Planning Commission;

**256.2** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Township Engineer;

**256.3** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Board of Supervisors;

**256.4** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Township Sewage Enforcement Officer;

**256.5** One (1) application, one (1) plan print, and one (1) copy of the supplemental information to the Lehigh Valley Planning Commission. (Ord. #97-7)

**257** Additional copies of the Final Plan materials shall be referred by the Administrator to the respective agencies in the following circumstances:

**257.1** Whenever the property being subdivided or developed abuts a State Legislative Route, and the plan differs from plans previously submitted to PennDOT with reference to access points, proposed external road improvements, or traffic impact, one (1) application and one (1) plan print shall be submitted to the Pennsylvania Department of Transportation District Office.

**257.2** Whenever the subdivision or land development requires a soil erosion and sedimentation control permit, as described in Section 491.5 of this Ordinance, one (1) application, one (1) plan print, and one (1) copy of supplemental information shall be submitted to the Lehigh County Conservation District.

**257.3** Whenever a proposed subdivision or land development is located adjacent to another municipality, one (1) application and one (1) plan print shall be referred to that municipality.

**257.4** Whenever all or part of the property being subdivided or developed is within the area served by the Lynn Township Sewer Authority, two (2)\* plan prints and two (2)\* copies of the supplemental information shall be submitted to the Lynn Township Sewer Authority.  
(Ord. 96-3.) \*(Ord. # 2002-2)

## **260** Review of Final Plan

### **261** By the Township Planning Commission

**261.1** When a Final Plan has been officially submitted, such plan shall be placed on the agenda of the Planning Commission for review at its next regular monthly meeting, provided that such official submission has occurred no less than twenty-one (21) calendar days prior to such regular meeting. The Planning Commission may hold a Public Hearing on the Final Plan at this time.

**261.2** The Planning Commission shall review the Final Plan to determine its conformance with the standards contained in this Ordinance and other applicable Township ordinances and shall require or recommend such changes and modifications as it deems necessary.

**261.3** No action shall be taken by the Township Planning Commission with respect to a Final Plan until the Township Planning Commission has received and considered the written report of the Lehigh Valley Planning Commission or until forty-five (45) days have passed from the date that the plans were forwarded to the LVPC. (Ord. #97-7)

**261.4** Within sixty (60) days after submission of the Final Plan, the Planning Commission shall recommend to the Board of Supervisors, in writing, that the Final Plan be approved, conditionally approved, or disapproved, together with the documented findings upon which the recommendation is based. The action of the Township Planning Commission shall be noted, together with the date of action and signatures of its Chairman and Secretary on the Record Plan.

### **262** By the Board of Supervisors

**262.1** Within ninety (90) days following the date of the regular meeting of the Planning Commission next following the date of the application the Board of Supervisors shall, in accordance with the provisions of relevant ordinances and considering the recommendations of the Planning Commission, take action by approving, conditionally approving or disapproving the Final Plan.

The exception to this procedure shall occur when a Planning Commission meeting is not scheduled within 30 days of the date of the application. In such cases, the action by the Board of Supervisors shall be within 120 days of the date of the application. The Supervisors, in all cases, shall document the action and the findings on which it is based within 15 days of the action to:

**262.11** The developer or his representative;

**262.12** The Administrator;

**262.13** The Township Planning Commission;

**262.14** The Township Engineer;

**262.15** The Lehigh Valley Planning Commission. (Ord. 94-4)

(Ord. #97-7)

**262.2** Action by the Board of Supervisors conditionally approving a subdivision plan which has not been signed by the governing body shall be deemed a disapproval unless the conditions are met within ninety (90)days of such action. The conditions that need to be met in order to obtain approval shall be set forth in a letter to the developer or his representative, with copies to those parties listed in Section 262.1.

(Ord. #99-1)

**270** Recording of the Final Plan

**271** After completion of the procedures set forth in Section 520 and after the Final Plan is approved by the Township Planning Commission and the Board of Supervisors, eight (8) paper prints and one (1) reproducible copy of the Final Plan shall be endorsed by the Board of Supervisors. The signature of the LVPC shall also be placed on the plans indicating LVPC review of the plans. (Ord. #97-7)

**272** The Record Plan shall be a clear and legible print of a type and material required by the County Recorder of Deeds.

**273** After endorsement by the Township Planning Commission, the Board of Supervisors, and the Lehigh Valley Planning Commission, the developer shall file the Record Plan with the Lehigh County Recorder of Deeds within ninety (90) days of the date of the Final Approval by the Board of Supervisors. If the developer fails to record the Final Plan within such period, the action of the Board of Supervisors shall be null and void, unless an extension of time is granted in writing by the Board of Supervisors upon written request by the developer. (Ord. #97-7)

**274** After the plan has been endorsed as per the requirements of Section 271, two prints of the plan shall be forwarded to the Township Planning Commission. One plan shall be forwarded each to the Board of Supervisors, the Sewage Enforcement Officer, the Administrator, and the Lehigh Valley Planning Commission. (Ord. #97-7)

**275** The recording of the plan, required by Section 273, shall be verified by the forwarding of the receipt from the Office of the Recorder of Deeds to the Administrator. This receipt shall be forwarded by the applicant.

## **280** Plans Exempted From Standard Procedures

**281** In the case of any proposed residential subdivision or lot boundary adjustment which does not, and will not in the future, involve more than a total of three (3) lots including the remaining parcel and does not involve the provision of any new street or easement for access (i.e. one in which all proposed lots will have frontage on an existing public street), the following procedure shall be followed:

**281.1** The applicant shall prepare and submit a feasibility review plan in accordance with the requirements of Section 300 of this ordinance.

**281.2** The feasibility review will be processed according to the provisions of Section 210 and 220 of this ordinance.

**281.3** Within one (1) year of the completion of the feasibility review by the Township Planning Commission, the applicant shall submit a Final Plan in accordance with the requirements of Section 320 of this ordinance. An extension of time may be granted by the Board of Supervisors upon written request. Otherwise, the plan submitted may be considered as a feasibility review.

**281.4** The final plan submission shall be processed according to the provisions of Section 250 and 260.

**281.5** If the plan receives final approval, the provisions of Section 270 shall apply.

**282 Advisory report for the conveyance of agricultural conservation easements.** (Ord. 93-1)

**282.1 Purpose**

**282.11** The purpose of the advisory report is to enlighten, educate and inform the landowner in advance of any conveyance of any agricultural conservation easement covering an area less than the perimeter of the tract or tracts in question. The possible effects of such a conveyance and the potential for being unable to develop the remainder of the tract by reason of existing Federal, State or Municipal Laws, regulations and ordinances will be discussed.

**282.2 Application**

**282.21** Whenever a landowner proposes to convey an agricultural easement covering an area less than the perimeter of the landowner's tract, the landowner shall obtain an advisory report from the township pursuant to this section and such advisory report shall be submitted to the Lehigh County Conservation Easement Administrator.

**282.3 Procedure**

**282.31** Submission - The submission shall consist of the maps prepared for use by the County of Lehigh in its conservation easement program or, in the event of the unavailability of said maps, then, the landowner shall comply with the requirements for a feasibility plan pursuant to the provisions of this ordinance. Specifically, the landowner's submission shall designate the entire proposed agricultural conservation easement area as well as that portion of such additional area which will be reserved from the grant of the agricultural conservation easement by the landowner.

**282.32** Advisory Report requirements - Within sixty (60) days from the date the administrator accepts the landowner's proposal for review, the planning commission shall prepare and submit to the Board of Supervisors an advisory report which shall comment on the following:

(1) The present suitability of the reserved land for development.

(2) The requirement that the land will have to be suitable for the location of an on-lot sewage disposal system or other appropriate means of treating sewage generated by the lot under regulations as shall apply at the time the area is proposed to be developed.

(3) The existence of certain other provisions in the township ordinances dealing with flood plains, high water tables, wetlands, steep slopes and the like which may have limiting effects on the ability to develop the land. (Ord. 94-4)

(4) The existence of other requirements such as the necessity to obtain a highway occupancy permit from either the Pennsylvania Department of Transportation or the municipality to obtain access to the subject area.

(5) The existence of zoning ordinances and state regulations which are subject to alteration and change which may or may not render the area suitable for the landowner's intended purpose in the future.

(6) The fact that the advisory report does not constitute subdivision approval under the provisions of this ordinance.

(7) Any other relevant municipal comments which pertain to the matter before the township.

**282.33** Review by the Board of Supervisors - If the Board of Supervisors concurs with the comments of the commission, it shall approve the recommended advisory report and forward it to the Lehigh County Conservation Easement Administrator and the landowner. Otherwise, the Board of Supervisors shall prepare its own advisory report and submit it to the said county official and the landowner.

**282.34** Filing of Advisory Report - A copy of the report shall be attached to the deed or other document which conveys the agricultural conservation easement and as such shall be recorded with the document filed with the Recorder of Deeds Office.

## SECTION III - PLAN REQUIREMENTS

### **300** Feasibility Review

**301** Before submission of the Preliminary Plan by the developer, maps and materials shall be submitted by the developer to the Township. This material will enable the Township to determine the potential of the proposed subdivision or land development tract for development and the general feasibility of the developer's plans for the tract. The feasibility review submission will include the following maps and materials.

**301.1** A key map, for the purpose of locating the property being subdivided, drawn at a scale not smaller than one (1) inch equals two thousand (2,000) feet and showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all streets, roads, and the township boundaries existing within one (1) mile of any part of the property. The key maps shall be based on USGS quad sheet maps.

**301.2** A map illustrating an analysis of natural drainage patterns and water resources within the proposed subdivision tract, including delineation of streams, natural drainage swales, ponds and lakes, wetlands, flood plains subject to a one hundred (100) year flood frequency, and permanent and seasonal high water table areas. The map shall be based on USGS quad sheets, County Soil Survey Maps, and the flood boundary and flood way map from the Township Flood Insurance Study, when available.

**301.3** A map illustrating an analysis of types of soils present within the proposed subdivision tract. The map should include delineation of prime agriculture soil areas, soils with shallow depth to bedrock, soils most susceptible to erosion, soils most suitable for urban development, and soils generally suitable for on-lot sewage disposal. The map shall be based on the Lehigh County Soil Survey.

**301.4** A topographic map of the site based on USGS quad sheets.

**301.5** A map delineating additional significant physical features within the proposed subdivision tract, such as woodland areas, large trees, rock outcroppings and scenic views. The map shall be based on USGS quad sheets and on-site survey work.

**301.6** Where feasible and legible, the analysis involved in Sections 301.1 through 301.5 may be illustrated on one or a combination of composite maps.

The combined impact of the natural characteristics upon the development potential of the tract shall be clearly illustrated on the map or maps.

**301.7** A letter of intent and a sketch of the proposed subdivision or land development tract at a scale of one (1) inch equals one hundred (100) feet explaining and illustrating the developer's general development concepts for the tract. The type of development, density of development, form of ownership, circulation patterns, and means of providing major utility service should be explained and illustrated. The sketch may be based on deed and tax map information.

**301.8** For tracts located in the Conservation District, the applicant shall submit an existing resources and site analysis plan and shall include the information described in Section 800 Sub-Sections 822.1 to 822.12 of this Ordinance. The purpose of this plan is to familiarize the Township Planning Commission and Board of Supervisors with existing conditions on the tract and within the immediate vicinity and to provide a complete and factual reference for the officials in making any site inspections. This plan shall form the basis for the development design. (Ord. # 2002-2)

**310** Preliminary Plan

**311** The Preliminary Plan of a proposed subdivision shall be clearly and legibly drawn to a scale of one (1) inch equals fifty (50) feet or one (1) inch equals one hundred (100) feet.

**312** The original drawing and all submitted prints shall be made on sheets of one of the following sets of dimensions.

**312.1** Eighteen (18) inches by twenty-four (24) inches;

**312.2** Twenty-four (24) inches by thirty-six (36) inches;

**312.3** Thirty-six (36) inches by forty-eight inches.

**313** If the Preliminary Plan requires more than one sheet, a key diagram illustrating relative location of the several sections shall be drawn on each sheet.

**314** The Preliminary Plan shall indicate the following data:

**314.1** Name and address of record owner;

**314.2** Name and address of developer if different from owner;

**314.3** Name of the proposed subdivision;

**314.4** Name of the municipality or municipalities within which subdivision is proposed;

**314.5** Names of all adjoining subdivisions, if any, and the names of owners of all adjacent unplotted land;

**314.6** Name, address, license number, and seal of registered engineer or surveyor responsible for the subdivision plan;

**314.7** North point, graphic scale, written scale, and date including the month, day and year that the original drawing was completed, and the month, day and year that the original drawing was revised, for each revision;

**314.8** A key map, for the purpose of locating the property being subdivided, drawn at a scale not smaller than one (1) inch equals two thousand (2000) feet and showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all streets, roads and township

boundaries, within one (1) mile of any part of the property;

**314.9** Total tract boundaries of the property being subdivided showing bearings and distances, and a statement of total acreage of the property;

**314.10** Tax map sheet, block, and lot numbers within the proposed subdivision tract obtained from the county tax assessor's office;

**314.11** The zoning district or districts within which the proposed subdivision is located;

**314.12** All existing buildings or other structures within the proposed subdivision tract;

**314.13** All existing streets, including streets of record (recorded but not constructed), on or adjoining the tract, including names, right-of-way widths, pavement widths and approximate grades;

**314.14** All existing sewer lines, storm sewers, water lines, fire hydrants, utility transmission lines, culverts, bridges, railroads, or other man-made features within the proposed subdivision tract and within two hundred (200) feet of the boundaries of the proposed subdivision tract;

**314.15** Location, width, and purpose of existing easements and utility rights-of-way within two hundred (200) feet of the proposed subdivision tract;

**314.16** Contour lines at vertical intervals of not more than two (2) feet for land with average natural slope of five (5) percent or less, and at intervals of not more than five (5) feet for land with average natural slope exceeding five (5) percent. Location and elevation of the data to which contour elevations refer shall be the closest United States Geologic Survey established benchmark, where available.

**314.17** If the tract does not front on an improved street, existing streets providing access from the tract to the nearest improved street, including names, rights-of-way, widths, streets surface and lineal feet of all such streets. (Ord. 1981-2)

**315** The full plan of proposed development, including;

**315.1** Location and width of all street and rights-of-way, with a statement of any conditions governing their use;

**315.2** Suggested street names;

**315.3** Utility easement locations;

**315.4** Building setback lines along each street;

**315.5** Lot lines with approximate dimensions;

**315.6** A statement of the intended use of all non-residential lots and parcels;

**315.7** Lot numbers, a statement of total number of lots and parcels and the lot size in square feet or acres for each lot;

**315.8** Sanitary and/or storm sewers (and other drainage facilities), with the size and material of each indicated, and any proposed connection with existing facilities.

**315.9** Parks, playgrounds and other areas dedicated reserved for public or common use, with any conditions governing such use;

**315.10** Location, width, and purpose of proposed easements and utility rights-of-way;

**315.11** Copies of the proposed deed restrictions and protective and restrictive covenants referenced to the Preliminary Plan.

**316** The Preliminary Plan shall be accompanied by the following supplementary data unless the Township Planning Commission has determined that the submission of such data is not necessary:

**316.1** Preliminary profiles, typical cross-sections and specifications for proposed street, sanitary sewer, water system improvements, and storm drainage in accordance to the design standards of Sections 430, 440, 450, and 460, respectively;

**316.2** A completed planning module for land development including soil and representative percolation tests, where applicable, and information necessary for the Board of Supervisors to make a

decision on revising or supplementing the Official Plan for sewage facilities;

**316.3** A storm drainage plan for the proposed subdivision tract which conforms to design requirements for storm drainage set forth in Section 460;

**316.4** A landscape plan, where applicable, according to the standards set forth in Section 492.4, Tree Preservation and Planting;

**316.5** In the case of subdivision or land development plans to be developed in stages or sections, over a period of time, a map delineating each stage or section of the proposed subdivision or land development consecutively numbered so as to illustrate phasing of development and a schedule indicating the approximate time for which application for final approval of each stage or section are intended to be filed; (Ord. 94-4)

**316.6** Preliminary designs of any bridges or culverts which may be required. Such designs shall meet all applicable requirements of the Pennsylvania Department of Environmental Resources - Division of Dams and Encroachments and/or the Pennsylvania Department of Transportation;

**316.7** A map illustrating the entire contiguous holdings of the landowner indicating the area or scope of ultimate proposed subdivision and delineating the area which the Preliminary Plan encompasses;

**316.8** A sketch map of the proposed road system for the remainder of the area not included in the Preliminary Plan.

**316.9** A preliminary grading plan depicting proposed contours, excepting the grading associated with the proposed structures.

**316.10** For tracts located in the Conservation District, the applicant shall submit an existing resource and site analysis plan satisfying all requirements set forth in Section 800 of this Ordinance. The preliminary plan shall be reviewed to determine the likely impact of the subdivision upon the existing resources within the Conservation District. The Planning Commission can recommend and the Board of Supervisors may require any changes and/or modifications, as it deems necessary to protect the natural resources of the tract and surrounding area. (Ord. #2002-2)

## **320** Final Plans

**321** The final plans shall conform to the standards and data requirements set forth for Preliminary Plans in Sections 311 through 315 of this Ordinance.

**322** It shall not be necessary to resubmit supporting maps and data submitted with the Preliminary Plan, as set forth in Section 316 of this ordinance, provided that no change has occurred.

**323** The following additional data shall be illustrated on the Final Plan:

**323.1** The latest source of title to the land as shown by the deed, page number and book of the County Recorder of Deeds;

**323.2** The total tract boundary lines of the area being subdivided with accurate distances to hundredths of a foot and bearings to fifteen (15) seconds. These boundaries shall be determined by accurate survey in the field, to an error of closure not to exceed one (1) foot in ten thousand (10,000) feet. The tract boundary shall be subsequently closed and balanced. The boundary (s) adjoining additional unplotted land of the subdivider (for example, between separately-submitted Final Plan sections), however, are not required to be based upon field survey, and may be calculated. The location and elevation of all boundary line (perimeter) monuments shall be indicated, along with a statement of the total area of the property being subdivided. In addition, the engineer or surveyor shall certify to the accuracy of the survey, the drawn plan, and the placement of the monuments;

**323.3** All lot lines shall be completely dimensioned in feet if straight, and by designating length of arc and radius (in feet) and central angle (in degrees, minutes, and seconds) if curved. All internal angles within the lots shall be designated to within fifteen (15) seconds;

**323.4** The proposed building setback or the proposed placement of each building;

**323.5** All easements or rights-of-way where provided for or owned by public services and any limitations on such easements or rights-of-way. Rights-of-way shall be shown and accurately identified on the plan. Easements shall either be shown or specifically described on the plan. Easements should be located in cooperation with the appropriate public utilities;

**323.6** Such private deed restrictions as may be imposed upon the property as a condition to sale, together with a statement of any restrictions previously imposed which may affect the title to the land being subdivided;

**323.7** If the subdivision proposes a new access point to a state legislative route, the feasibility report from PennDOT for the highway occupancy permit shall be attached;

**323.8** A certification of ownership based on the language contained in Appendix C, acknowledgment of plan and offer of dedication shall be lettered on the plan, and shall be duly acknowledged and signed by the owner of the property and notarized;

**323.9** A signature block for certification of review of the plan by the Township Planning Commission and approval of the plan by the Township Board of Supervisors, based on the language contained in Appendix C. The signature block will be located along the lower edge of the sheet in such a manner as to facilitate the affixing of the Township Seal thereto; (Ord. 94-4) (Ord. 99-1)

**323.10** A signature block for certification of review of the plan by the Lehigh Valley Planning Commission based on the language contained in Appendix C; (Ord. #97-7)

**323.11** Space shall be left along the lower edge of the sheet, in order that the County Recorder of Deeds may acknowledge receipt and recording of the plan when it is presented; (Ord. 94-4)

**323.12** If the Final Plan requires more than one sheet, a key diagram showing the relative location of the several sections shall be drawn on each sheet.

**323.13** All final plans proposing residential development or residential uses within or bordering on an agricultural district as established by the Lynn Township Zoning Ordinance, must contain, in conspicuous form, the following language:

"WARNING: THE DWELLING LOT OR LOTS PROPOSED BY THIS FINAL PLAN ARE WITHIN OR BORDERING ON AN AGRICULTURAL DISTRICT. THE PRIMARY USE OF SUCH DISTRICT IS AGRICULTURAL AND RESIDENTS MUST EXPECT CERTAIN THINGS SUCH AS THE SMELL OF FARM ANIMALS AND THE MANURE THEY PRODUCE, SLOW MOVING VEHICLES ON LOCAL ROADS, TOXIC CHEMICALS, AND OTHER BY-PRODUCTS OF AGRICULTURAL ACTIVITY." (Ord. 93-1)

**323.14** All final plans proposing storm water drainage facilities and/or easements must contain a plan note as follows: The Township has the right, but not the duty to inspect, alter, repair, and maintain the drainage facilities shown within the easements. (Ord. #99-1)

**323.15** For tracts located in the Conservation District, the applicant shall submit an existing resource and site analysis plan satisfying all requirements set forth in Section 800 of this Ordinance. The applicant shall submit, in separate documents, which shall be recorded, the following, but not limited to; covenants, restrictions, descriptions and plans for easements of perpetual protection. (Ord. #2002-2)

**324** The Final Plan shall be accompanied by the following:

**324.1** Plans showing:

**324.011** Location, size, materials, and invert elevation of all sanitary sewer, water distribution and storm drainage systems and the location of all manholes, and culverts;

**324.012** Final profiles, cross-sections, and specifications for proposed streets, sanitary sewers, water distribution systems, and storm drainage systems shall each be shown on one or more separate sheets.

**324.2** Documentation from the Sewage Enforcement Officer that each lot has been found suitable for on-lot sewage disposal systems (where applicable).

**324.3** A copy of the Department of Environmental Resources acceptance or approval of the planning module.

**324.4** A copy of the permit granted by the Pennsylvania Department of Environmental Resources for a private centralized sanitary sewer system, where applicable.

**324.5** A copy of an agreement document with the governmental authority or public authority which is to provide the water supply for the public water supply system (where applicable).

**324.6** A copy of a permit granted by Pennsylvania Department of Environmental Resources for a private centralized water system (where applicable).

**324.7** A completed and executed copy of the Subdivision Improvement Agreement as agreed upon by the developer and the Board of Supervisors, public utility or municipal authority (Ord. 1981-2)

**324.8** A performance guarantee in the amount of one hundred ten (110%) percent of the cost of all required improvements, as set forth in Section 520 as estimated in accordance with the provisions set forth in the Pennsylvania Municipalities Planning Code, as amended, in a form and with surety in accordance with the guaranteeing the construction and installation of all such improvements within a stated period which shall not be longer than one (1) year from the date on the Final Subdivision Approval. Where the Final Plan is submitted in stages or sections, the amount of the guarantee may also be provided in stages if acceptable to the Board of Supervisors, public utility or municipal authority. (Ord. 1981-2)

**324.9** A maintenance guarantee in an amount of not less than fifteen (15%) percent of the actual cost of the installation of the improvements as set forth in Section 520. This guarantee assures the structural integrity of the improvements as well as the functioning of said improvements in accordance with the design and specifications as depicted on the final plat for a period not to exceed eighteen (18) months after the acceptance of all such improvements by the Board of Supervisors, public utility, or municipal authority. (Ord. 1981-2)

**324.10** An erosion and sedimentation control plan developed in accordance with Part IV, paragraph 44 of the Soil Erosion and Sedimentation Control Manual issued by the Department of Environmental Resources, and approved by the Lehigh County Conservation District. A copy of a soil erosion and sediment control permit from the Department of Environmental Resources (where applicable).

**324.11** A legal description of all areas offered for dedication. (Ord. 94-4)

**325** In the case of a subdivision or land development proposed to be developed in stages or sections over a period of years, Final Plan requirements as listed in Section 321 through 324 shall apply only to the stage or section for which Final Approval is being sought. However, the Final Plan presented for the stage or section must be considered as it relates to information presented for the entire subdivision or land development in the application for Preliminary Approval.

## SECTION IV - DESIGN STANDARDS

### 400 Application

**401** The design standards and requirements outlined in this section will be utilized by the Township Planning Commission and Board of Supervisors in determining the adequacy of all plans for proposed subdivisions and land developments.

**402** Development shall be planned, reviewed, and carried out in conformance with all township, state, and other applicable laws and regulations.

**403** Whenever other township ordinances or regulations impose more restrictive standards and requirements than those contained herein, such other regulations shall be observed.

### 410 General Standards

**411** Land shall be suited to the purpose for which it is to be subdivided. Land with unsafe or hazardous conditions such as open quarries, unconsolidated fill, steep slopes, or flood prone areas shall not be subdivided unless the subdivision plan provides for adequate safeguards which are approved by the Township Planning Commission and Board of Supervisors.

**412** Consideration shall be given to applicable provisions of the Lynn Township Comprehensive Plan and the LVPC's Comprehensive Plan for Lehigh and Northampton Counties, emphasizing future school sites, recreation sites, water supply and sewage treatment systems, highway alignments, and other public facilities. However, consideration must be given to the need for the facilities and utilities mentioned above whether or not they are proposed as part of a comprehensive plan. (Ord. #97-7)

**413** The development of the proposed subdivision shall be coordinated with adjacent existing development so that the area, as a whole, may develop harmoniously.

**414** These design standards and requirements may be altered by the Board of Supervisors for the purpose of achieving economy and ingenuity in design in accordance with modern and evolving principles of site planning and development upon presentation of evidence that the intent of such standards and requirements shall be substantially achieved.

## **420** Block and Lot Design Standards

### **421** Block Layout

**421.1** The length, width and shape of blocks shall be determined with due regard to:

**421.11** Provisions of adequate sites for buildings of the type proposed;

**421.12** Township zoning requirements;

**421.13** Topography;

**421.14** Requirements for safe and convenient vehicular and pedestrian circulation, including the reduction of intersections with arterial streets.

### **422** Block Length

**422.1** Residential blocks shall ordinarily be no less than five hundred (500) feet in length and no more than eighteen hundred (1800) feet in length.

**422.2** In the design of blocks longer than one thousand (1000) feet, special consideration shall be given to the requirements of satisfactory fire protection.

**422.3** Where practicable, blocks along arterial and collector streets shall not be less than one thousand (1,000) feet long.

### **423** Block Depth

**423.1** Single family residential blocks shall be of sufficient depth to accommodate two tiers of lots, except:

**423.11** Where reverse frontage lots are required or

**423.12** Where prevented by the size, topographical conditions or other inherent conditions of property, in which case the Township Planning Commission and Board of Supervisors may approve a single tier of lots.

#### **424 Commercial and Industrial Blocks**

**424.1** Blocks in commercial, industrial, multi-family and planned residential developments may vary from the elements of design detailed above if required by the nature of the use. In all cases, however, adequate provision shall be made for traffic and pedestrian circulation, off-street parking, and loading areas.

#### **425 General Lot Design Standards**

**425.1** Within the requirements of the Township Zoning Ordinance, the size, shape, and orientation of lots shall be appropriate for the type of development and use contemplated.

**425.2** Insofar as practical, side lot lines shall be at right angles to straight street lines or radial to curved street lines.

**425.3** Where feasible, lot lines shall follow Township boundaries rather than cross them, in order to avoid jurisdictional problems.

**425.4** Generally, the depth of residential lots shall be not less than one (1) nor more than three (3) times their width. In Conservation District the depth to width ratio of a lot shall not be greater than 5 to 1. (Ord. # 2002-2)

**425.5** Depth and width of parcels intended for non-residential uses shall be adequate for the use proposed and sufficient to provide satisfactory space for on-site parking, loading and unloading, setbacks, and landscaping.

**425.6** If, after subdividing, there exists remnants of land, they shall be either:

**425.61** Incorporated in existing or proposed lots, or

**425.62** Legally dedicated to public use, if acceptable to the Township.

**425.7** Building areas shall be sited to provide access for emergency vehicles. (Ord. 1981-2)

## **426 Lot Frontage**

**426.1** All lots shall front on an existing improved road, whether public or private, meeting the street design requirements of this ordinance.

**426.2** Double or reverse frontage lots may be required to provide separation of residential development from arterial streets or to overcome specific disadvantages of topography or other natural features of the proposed subdivision tract.

**426.3** All residential reverse frontage lots shall have a rear yard with a minimum depth of seventy-five (75) feet, measured along the shortest distance from the proposed dwelling unit to the ultimate right-of-way and shall, within such rear yard and immediately adjacent to the right-of-way, have a planting screen easement of at least ten (10) feet in width, across which there shall be no right of vehicular access.

## **427 Lot Access**

**427.1** Residential lots having direct access to an arterial street shall be avoided whenever possible. Where direct access to an arterial street cannot be avoided, adequate turnaround space shall be provided behind the right-of-way line.

**427.2** Where access is permitted to a state road or highway, authorization from the Pennsylvania Department of Transportation must be proven by the display of a valid highway occupancy permit. Driveways to single family residences shall intersect streets at angles of no less than sixty (60) degrees. All other driveways or access roads shall intersect streets at right angles, where practicable, and in no case less than seventy-five (75) degrees.

**427.3** Widths of access roads or driveways shall be in accordance with the following standards:

**427.31** Access roads for multi-family residential and all non-residential subdivisions shall be no less than twenty-four (24) feet in width, shall not exceed thirty (30) feet in width at the street line and shall be clearly defined by use of curbing:

**427.32** Driveways for single family residential subdivisions shall be no less than ten (10) feet in width but shall not exceed twenty (20) feet in width at the street line.

**427.4** To provide safe and convenient ingress and egress, access road and driveway entrances shall be rounded at the following minimum radii:

**427.41** Access road entrances for multi-family residential developments, mobile home parks, and all non-residential subdivisions shall be rounded at a minimum radius of ten (10) feet;

**427.42** Driveway entrances for single-family residential subdivisions shall be rounded at a minimum radius of five (5) feet.

**427.5** Access road grades or driveway grades shall not exceed four (4) percent within twenty-five (25) feet of intersection with the ultimate right-of-way line.

**427.6** Access road or driveway grades shall not exceed eleven (11) percent at any point.

**427.7** The centerline of an access road or driveway at the point of access to a street shall not be located closer to a street intersection than the following distances:

**427.71** Fifty (50) feet for single-family residential units;

**427.72** For multi-family residential developments, mobile home parks, and all non-residential subdivisions;

**427.721** One hundred fifty (150) feet if either street is an arterial street;

**427.722** One hundred (100) feet if either street is a collector street;

**427.723** Fifty (50) feet if both streets are local streets.

**427.8** All streets providing access to and from the tract of land to be subdivided to the nearest improved street, shall be adequate and safe to bear the average daily traffic and fire apparatus and other emergency vehicles. For purposes of this provision, a street meeting the minimum requirements or standards for a local access highway or street (rural) average daily traffic 50/200 as per PennDOT Publ. No. 70 "Guidelines for Design of Local Roads and Streets" or amendments thereto shall be considered adequate. (Ord. 1981-2)

## **430** Street Design Requirements

### **431** General Requirements

**431.1** Proposed streets shall be properly related to the road and highway plans of the state, county and Township. Streets shall be designed to provide adequate vehicular access to all lots or parcels and with regard to topographic conditions projected volumes of traffic, and further subdivision possibilities in the area.

**431.2** The street system of a proposed subdivision or land development shall be designed to create a hierarchy of street functions which includes collector and local streets.

**431.3** The street system of a proposed subdivision or land development shall be designed so as to minimize street intersections and pedestrian-vehicular conflict points.

**431.4** Proposed local streets shall be designed so as to discourage through traffic and excessive speeds. However, the developer shall give adequate consideration to provision for the extension and continuation of arterial and collector streets into and from adjoining properties.

**431.5** Where, in the opinion of the Township, it is desirable to provide for street access to adjoining property, streets shall be extended by dedication to the boundary of such property. Distances between access points to adjoining property shall be based on Block Length Standards set forth in Section 422.

**431.6** Where a subdivision abuts an existing street of improper width or alignment, the Township may require the dedication of land sufficient to widen the street or correct the alignment.

**431.7** Where a subdivision abuts or contains an existing or proposed arterial traffic street, the Township may require marginal access streets, reverse frontage lots, or other such treatment as will provide protection for abutting properties, reduction in the number of intersections with the arterial street, and separation of local and through traffic.

**431.8** Private streets (streets not to be offered for dedication) may be approved by the Township only if they meet the street design standards and improvement standards set forth in this Ordinance as set forth in Sections 430 to 439 inclusive.

**431.9** If the lots in the development are large enough for resubdivision, or if a portion of the tract is not subdivided, suitable access and street openings for such an eventuality shall be provided.

**431.10** Each subdivider or developer of lands along an existing street which is not improved to minimum standards will be required to construct improvements on his half of the street's right-of-way. Because this could lead to a "patchwork" type of road improvement, especially along presently unpaved roads, the following alternatives may be considered by the Board of Supervisors:

**431.101** The Board of Supervisors will determine the dollar value of full improvements which could be required for each lot in question.

**431.102** The subdivider may make a cash payment into a Township Special Fund in the amount determined in Section 431.101 to compensate the Township for future road improvements, or;

**431.103** The subdivider may be requested to construct an equivalent dollar value of transportation improvements which might extend beyond the limits of the lots being proposed. (Ord. 1981-2)

## 432 Street Right-of-Way and Cartway Widths

**432.1** Street right-of-way and cartway widths in proposed subdivisions and/or land developments shall conform to these general standards:

### STREET DESIGN STANDARDS

For Residential Submissions  
< 4 D. U. /Net Acre

#### STREET CLASSIFICATIONS

	LOCAL (1)	COLLECTOR (1)	ARTERIAL
Right-of-Way Width	50'	60'	80'
Pavement Width	24'	24'	24'
Shoulder Width	6'	8'	10'
Min. Horizontal Clearance (2)	4'	8'	10'
Traffic Lane Width	12'	12'	12'
Parking Lane Width (3)	8' (when required)	10' (when required)	10' (when required)
Curbing	(required)	(required)	(required)

(Ord. 93-1) (Ord. 94-4) (Ord. #97-7)

For Residential (>4 D. U. /Net Acre)

Industrial & Commercial Submissions: (Ord. #81-2) (Ord. 94-4)

Pavement Width	30'	36'	44'
Curbing	Required	Required	Required
Sidewalk Width (4)	4' (when required)	5' (when required)	5' (when required)
Min. Horizontal Clearance (2)	4'	4'	4'

- (1) Table values assume two traffic lanes. These values shall be used unless exceeded by PennDot requirements.
- (2) Minimum horizontal clearance is defined as the distance beyond edge of shoulder or face of curb to an obstruction such as a utility pole or tree.
- (3) The main variables in determining whether parking lanes should be required are the amount of traffic generated from the type of development proposed, the density of development proposed, and the amount of off-street parking provided.
- (4) The main variables in determining whether sidewalks should be required are the density and type of proposed development, nature of adjacent development, the presence of sidewalks in adjacent developments, and whether the developer provides an interior pedestrian walkway system as an alternative to sidewalks. (Ord. 94-4)

**432.2** The general standards set forth in Section 432.1 may be modified by the Board of Supervisors upon the recommendations of the Township Engineer or PennDOT when an analysis of proposed development densities, provisions for off-street parking, and projected traffic volumes indicate a need for such modification. The burden of proof shall be upon the developer to justify the adequacy of rights-of-way or cartway widths which are less than those set forth in Section 432.1.

**432.3** Curbs shall be installed in accordance with the following specifications and shall be the vertical type. Transition from one type of curb to another shall be made only at a street intersection, and adequate provision shall be made for driveway entrances.

**432.31** The subgrade shall be substantially dry, unfrozen, firmly compacted soil. Thorough compaction shall be attained by using an approved pneumatic compactor or self-contained compactor capable of delivering 800-1000 pounds at the shoe.

**432.32** Forms shall be made of approved substantial material, preferably of steel, and shall be smooth, free of warp, and sufficiently rigid and supported to resist springing out of shape. These forms shall be of a depth equal to that of the proposed curb. Prior to pouring the concrete, all forms and templates shall be thoroughly cleaned and treated with an approved material to prevent the concrete from adhering thereto. Material which will adhere to the forms and not discolor the concrete shall be used.  
(Ord. 94-4)

**432.33** Concrete shall meet the requirements of P. D. H. form 408, latest revision, Sections 704 of Class A cement concrete. No concrete shall be mixed or placed when air temperature is below 35 degrees F.

**432.34** Curbs shall be carefully poured monolithically without segregation of constituents, tamped and screeded true to grade and section, eliminating all voids and bringing sufficient mortar to the surface for finishing in a smooth, neat, even manner using approved tools.

**432.35** Each curb section shall be constructed in lengths of ten (10) feet where practicable; in no case shall a section be less than five (5) feet long. Each section shall be separated when pouring by a 1/8 inch steel template equal to the full depth of the curb. Expansion joints of approved 1/2 inch premolded bituminous material shall be placed for the full curb depth at all points of tangency of street returns and intersecting curbs, and in no case more than thirty (30) feet apart.

**432.36** Forms may be removed no earlier than twelve (12) hours after placement of the concrete. All construction joints shall then be filled with approved dry, sharp sand. Minor defects and honeycombing shall be corrected by patching with mortar; no plastering will be permitted. All exposed concrete shall be rubbed to a smooth surface and edges at joints finished with a suitable tool.

**432.37** Curing shall be performed in an approved manner for a period of five (5) days.

**432.38** Backfilling shall be accomplished immediately after the curing period is completed; with approved material, thoroughly tamped in six (6) inch layers with approved compactors as herein specified.

**432.39** Where unusual or unique conditions prevail with respect to prospective traffic and/or safety of pedestrians, different standards of improvements than those set forth in the previous paragraphs may be required. Crosswalks may be required when deemed necessary by the Township Board of Supervisors. (Ord. 94-4)

**432.310** Prior to laying of street surface, adequate subsurface drainage for streets and underground utilities shall be provided and installed by the developer.

**432.311** In all respects in which standards for required improvements are not set forth herein, the applicable standard requirements of the Pennsylvania Department of Transportation shall govern, and all work shall be performed in the manner prescribed in the standard specifications for road construction of the department.

**432.312** Curb detail is shown in Appendix D.  
(Ord. 93-1)

#### **432.4 Sidewalks**

**432.41** Subgrade - The subgrade shall substantially be dry, unfrozen, firmly compacted soil. Thorough compaction shall be attained by using an approved pneumatic compactor or self-contained compactor capable of delivering 800 to 1000 pounds at the shoe.

**432.42** Base - A stone bed shall be placed and thoroughly compacted to a depth of three (3") inches using the above-mentioned compactors. The stone shall be AASHTO No. 57.  
(Ord. 94-4)

**432.43** Forms - Forms shall be made of approved substantial material, preferably of steel, and shall be smooth, free of warp and substantially rigid and supported to resist springing out of shape. These forms shall be of a depth equal to that of the proposed sidewalk. Prior to pouring the concrete, all forms and templates shall be thoroughly cleaned and treated with an approved material to prevent the concrete

from adhering thereto. Material which will adhere to or discolor the concrete shall not be used.

**432.44** Concrete - Concrete shall meet the requirements of PennDOT form 408, latest revision, Section 704 for a Class A cement concrete. No concrete shall be mixed or placed when the air temperature is below 50 degrees F or above 90 degrees F.

**432.45** Pouring - Sidewalk shall be carefully poured monolithically without segregation of constituents to a depth of five inches (5") and cross-overs six inches (6"), and screeded true to grade and sections, eliminating all voids and bringing sufficient mortar to the surface for finishing in a smooth, neat, even manner using approved wood floats.

**432.46** Construction - Sidewalk shall slope toward the street at the rate of 1/4" per foot. It shall be constructed in separate slabs of thirty feet (30') in length, except for closures. These slabs shall be separated for their full depth by expansion joints of approved 1/2 inch premolded bituminous material. This premolded material shall also be placed longitudinally at the joint where sidewalk slabs abut concrete curb and existing sidewalk. Between the transverse expansion joints, the slabs shall be divided into blocks five feet (5') in length by using 1/8" steel templates equal in depth to that of the slab. Where existing light standards, poles, fire hydrants, etc., are within the sidewalk area, concrete around such structures shall be scored to a depth of 1/4 the slab thickness, in a block eight inches (8") wider than the maximum dimension of the structure at a sidewalk elevation. Prior to placing the concrete, 1/4 inch premolded expansion joints shall be placed completely around the structures for the full depth of the sidewalk. All joints shall be edged with an edger having a 1/4 inch radius.

**432.47** Handicapped Ramp - At all intersections, sidewalks shall be extended through the planting strip to abut depressed concrete curbing on the curve return, to facilitate a handicapped ramp to the cartway. Detail is shown in Appendix E. (Ord. 93-1)

## **432.5 Streets**

**432.51 Grading** - Streets shall be graded to the full width of the right-of-way, surfaced and improved to the grades and dimensions shown on the plans, profiles and cross-sections submitted by the developer and approved by the Board of Supervisors. In subdivisions or land developments where sidewalks are not required, the sidewalk area shall be graded in the same manner as if sidewalks were to be constructed.

**432.52 Subbase and Underdrain** - A three inch (3") compacted subbase consisting of Type "C" or better No. 2A stone shall be constructed on a properly prepared subgrade for all roads. Subbase shall be constructed in accordance with the requirements of Section 350 PennDOT Form 408, latest revision. Where subgrade conditions dictate, the use of underdrain may be required when specified by the township engineer. Where required, underdrain shall be constructed in accordance with Section 610 of PennDOT Form 408, latest revision.

**432.53 Base Course** - For all classifications of streets, base course shall be constructed of five (5") inches compacted depth bituminous concrete base course B.C.B.C. constructed in accordance with Section 305 of PennDOT Form 408, latest revisions. Unless full depth stone backfill is used for underground utilities construction, a four (4) month lag time shall be required between completion of utilities and placement of the base course. (Ord. 94-4)

### **432.54 Surface Course**

**Tack Coat** - Tack coat conforming to Section 460 of PennDOT Form 408, latest revision, shall be required on all B.C.B.C. surfaces prior to placement of surface course(s) paving, if in the opinion of the township engineer, the base course has become nonadherent.

**Arterial Streets** - The surface course shall consist of two inches (2") compacted depth binder course and 1 ½ inches compacted depth wearing course as specified in Section 420 and 421 of PennDOT Form 408, latest revision.

Collector Streets - The surface course shall consist of 1 ½ inches compacted depth binder course and one inch (1") compacted depth wearing course as specified in Sections 420 and 421 of PennDOT Form 408, latest revision.

Local Roads - The surface course shall consist of 1 ½ inches compacted depth wearing course as specified in Section 420 of PennDOT Form 408, latest revision. No binder course shall be required. (Ord. 93-1)

### **433 Horizontal Curves**

**433.1** Whenever street centerlines are deflected more than five (5) degrees within five hundred (500) feet, connection shall be made by horizontal curves.

**433.2** Horizontal curves shall be designed to produce the following minimum sight distances;

**433.21** Local streets - one hundred fifty (150) feet;

**433.22** Collector streets - three hundred (300) feet;

**433.23** Arterial streets - six hundred (600) feet.

**433.3** A minimum tangent of one hundred (100) feet shall be required between reverse curves on a street and between a curve and a street intersection where one of the intersecting streets is a collector or an arterial street.

### **434 Street Grades**

**434.1** There shall be a minimum centerline grade on all streets of seventy-five hundredths (0.75) percent.

**434.2** Unless approval is obtained from the Township upon recommendation from the Township Engineer, centerline grades shall not exceed the following:

**434.21** Local streets - eleven (11) percent;

**434.22** Collector streets - eight (8) percent;

**434.23** Arterial streets - six (6) percent.

**434.3** Intersections shall be approached on all sides by leveling areas. Such leveling areas shall have a minimum length of seventy-five (75) feet (measured from the edge of the cartway of the intersecting road), within which no grade shall exceed a maximum of four (4) percent.

#### **435** Vertical Curves

**435.1** Vertical curves shall be used in changes of grade exceeding one (1) percent.

**435.2** Vertical curves shall be designed to meet minimum sight distances according to "Guidelines for Design of Local Roads and Streets" - PennDOT Publication #70: Latest Edition.

#### **436** Street Intersections

**436.1** Streets shall intersect at right angles whenever practicable. When local streets intersect collector or arterial streets the angle of intersection at the street centerlines shall in no case be less than seventy-five (75) degrees. No two streets shall intersect with an angle of intersection at the centerlines of less than sixty (60) degrees.

**436.2** Multiple intersections involving the junction of more than two streets shall be prohibited.

**436.3** Two streets intersecting a third street from opposite sides shall either intersect with a common centerline or their centerlines shall be offset according to the following distances:

**436.31** The two streets shall be separated by a distance of one hundred fifty (150) feet between centerlines measured along the centerline of the street being intersected when all three streets involved are local streets;

**436.32** The two streets shall be separated by a distance of three hundred (300) feet between centerlines measured along the centerline of the street being intersected when one or more of the streets involved is a collector street;

**436.33** The two streets shall be separated by a distance of five hundred (500) feet between centerlines measured along the centerline of the street being intersected when one or more of the streets involved is an arterial street.

**436.4** Street curb intersections shall be rounded by a tangential arc with a minimum radius of:

**436.41** Twenty (20) feet for intersections involving only local streets;

**436.42** Thirty (30) feet for all intersections involving a collector street;

**436.43** Forty (40) feet for all intersections involving an arterial street.

**436.5** Street right-of-way lines shall be parallel to (or concentric with) curb arcs at intersections.

**436.6** Clear sight triangles shall be provided at all street intersections. Within such triangles no object greater than two and one-half (2 ½) feet in height and no other object that would obscure the vision of the motorist shall be permitted. Such triangles shall be established from a distance of:

**436.61** Seventy-five (75) feet from the point of intersection of the centerlines of two streets where both are local streets;

**436.62** One hundred (100) feet from the point of intersection of the centerlines of two streets where one is a collector street;

**436.63** One hundred fifty (150) feet from the point of intersection of the centerlines of two streets where one is an arterial street.

**436.7** Wherever a portion of the line of such triangles occurs within the proposed building setback line, such portion shall be shown on the Final Plan of the subdivision, and shall be considered a building setback line.

## **437 Cul-de-sacs**

**437.1** Dead-end streets are prohibited unless designed as cul-de-sac streets or designed for future access to adjoining properties. (Ord. 1981-2)

**437.2** Any dead-end street which is constructed for future access to an adjoining property or because of authorized stage development, and which is open to traffic and exceeds two hundred (200) feet in length, shall be provided with a temporary, all-weather turning circle or "T" type turnaround. The turning circle or "T" type turnaround shall be completely within the boundaries of the subdivision and the use of the turnaround shall be guaranteed to the public until such time as the street is extended.

**437.3** Cul-de-sac streets, permanently designed as such, shall not exceed one thousand (1,000) feet in length and shall not furnish access to more than twenty-five (25) dwelling units. In the case of the industrial parks, a cul-de-sac shall not furnish access to more than one hundred (100) employees. Exemptions from these requirements may be granted where necessary due to unique characteristics of the site.

**437.4** All cul-de-sac streets, whether permanently or temporarily designed as such, shall be provided at the closed end with a fully-paved turning circle. The turning circle may be offset to the left but turnarounds offset to the right shall be discouraged.

**437.41** If parking will be prohibited on the turning circle, the minimum radius to the pavement edge or curb line shall be forty (40) feet and the minimum radius of the right-of-way line shall be fifty (50) feet. (Ord. 1981-2)

**437.42** If parking will be permitted on the turning circle, the minimum radius to the pavement edge or curb line shall be fifty (50) feet, and the minimum radius of the right-of-way line shall be sixty (60) feet.

**437.5** The centerline grade on a cul-de-sac street shall not exceed eleven (11) percent, and the grade of the diameter of the turnaround shall not exceed five (5) percent.

#### **438 Half Streets**

**438.1** The dedication of new half streets at the perimeter of a new subdivision is prohibited.

**438.2** The subdivider shall provide the entire required right-of-way, or as much thereof as is possible, within his property, along all existing streets which traverse or abut the property.

#### **439 Street Names and Street Signs**

**439.1** Proposed streets which are in alignment with others already existing and named shall bear the name of the existing streets.

**439.2** In no case shall the name of a proposed street duplicate an existing street name in the Township and in the postal district, irrespective of the use of the suffix street, road, avenue, boulevard, driveway, place, court, lane, etc.

**439.3** All street names shall be subject to the approval of the Board of Supervisors.

**439.4** Street signs shall be provided at the intersection of all streets. The type, height, and design shall be approved by the Board of Supervisors.

#### **440** Sanitary Sewage Disposal

**441** The developer shall provide the most effective type of sanitary sewage disposal consistent with the official plan for sewage facilities prepared in accordance with the Pennsylvania Sewage Facilities Act (Act 537) and Chapter 71 of the Pennsylvania Department of Environmental Resources Regulations.

**442** Connection to a public sanitary sewer system shall be required where such a system is proposed by the Township's official plan for sewage facilities, can feasibly be provided to the proposed subdivision tract, and where such a system can adequately fulfill the sewage disposal needs of the subdivision or land development.

**443** In order for a private centralized sanitary sewer system to be approved, the Board of Supervisors must revise the official plan for sewage facilities by resolution indicating that the system concept is approved.

**444** In subdivision/land developments where neither connection to a public sewage system nor a private centralized sewage system is contemplated, on-lot sewage disposal systems shall be provided for all lots in accordance with the Pennsylvania Sewage Facilities Act, Chapter 73 of DEP Regulation and the requirements of the Township sewage Enforcement Officer.

**445** Sanitary sewerage systems shall be located and/or designed to minimize flood damage and minimize or eliminate infiltration of flood waters into the system or discharges from the system into flood waters.

**446** On-lot sewage disposal systems shall be located and/or designed to avoid impairment to them or contamination from them during flooding.

## **450** Water Supply and Distribution Systems

**451** The developer shall provide a water supply and distribution system to service the proposed subdivision through one of the following methods:

**451.1** Connection shall be made to a public water supply system where such a system can feasibly be provided to the proposed subdivision tract and where the capacity of such a system can adequately fulfill the water supply demands of the proposed subdivision. A distribution system shall be designed to furnish an adequate supply of water to each lot. A copy of the approval document for such a system by the appropriate public authority or utility company shall be submitted with the Final Plan.

**451.2** Where a public water supply system is planned to serve the proposed subdivision area within ten (10) years, a centralized water system will be provided by the developer where the subdivision involves twenty (20) or more dwelling units unless the average residential lot size is one (1) acre or larger. Whenever such a system is provided, the water distribution lines should be dedicated to the appropriate public authority and the authority will require other parts of the water supply system such as wells, pumps and storage tanks that can be integrated into the public water system. This will take place after the improvements are completed so that the system can be operated by the public authority. A copy of the approval of such a system by the appropriate public authority should be submitted with the Final Plan. Also, such a system shall be designed and constructed in a manner that would permit adequate connection to the public water supply system in the future. Design and construction standards for centralized water systems are set forth in Appendix A. The standards of Appendix A are modified by Section 487.1 and 487.8 for systems serving mobile home parks.  
(Ord. 94-4)

**451.3** Whenever water is to be supplied other than by a private on lot well owned and maintained by the individual lot owner, the applicant shall provide evidence that the subdivision is to be supplied by a certificated public utility, a bona fide cooperative association of lot owners or by a municipal corporation, authority or utility. (Ord. 1989-5)

## **460** Storm Drainage Systems

**461** Storm drainage systems shall be provided in order to:

**461.1** Permit unimpeded flow of natural watercourses except as modified by storm water detention facilities required by Section 463 or open channels pursuant to Section 462.8;

**461.2** Ensure adequate drainage of all low points along the line of streets;

**461.3** Intercept storm water runoff along streets at intervals related to the extent and grade of the area drained;

**461.4** Provide positive drainage away from on-site sewage disposal systems;

**461.5** Take surface water from the bottom of vertical grades, lead water from springs and avoid excessive use of cross-gutters at street intersections and elsewhere;

**461.6** Prevent overloading of drainage systems and watercourses downstream as a result of increased rate of runoff caused by the proposed development.

**462** General Requirements

**462.1** A site drainage plan for the proposed subdivision tract shall be prepared which illustrates the following information:

**462.11** Mapping of the watershed area or areas in which the proposed subdivision is located;

**462.12** Calculations of runoff for all points of runoff concentration within the site;

**462.13** Complete drainage systems for the subdivision. All existing drainage features which are to be incorporated in the design shall be so identified. If the subdivision is to be developed in stages, a general drainage plan for the entire subdivision shall be presented with the first stage and appropriate development stages for the drainage system shall be indicated.

**462.2** The existing points of natural drainage discharge onto adjacent property shall not be altered without the written approval of the affected landowners.

**462.3** No storm water runoff or natural drainage shall be so diverted as to overload existing drainage systems, or create flooding or the need for additional drainage structures on other private properties or public lands, without approved provisions being made by the developer for properly handling such conditions.

**462.31** No person, corporation, or other entity shall block, impede the flow of, alter, construct any structure, or deposit any material or thing, or commit any act which will affect normal or flood flow in any stream without having obtained prior approval from the Pennsylvania Department of Environmental Resources, Division of Dams and Encroachments.

**462.4** Storm drainage systems through the subdivision/land development shall be designed to convey the peak runoff that will occur when all tributary areas upstream are developed to the extent reasonably projected during the next forty (40) years. The calculation of this runoff rate shall take into account the land use and development regulations including runoff controls in effect in the tributary areas.

**462.5** Where a subdivision is traversed by watercourses other than permanent streams, there shall be provided a drainage easement conforming substantially with the line of such watercourse. The width of the easement shall be adequate to provide for unimpeded flow of storm runoff based on calculations made in conformance with Section 464 and to provide a freeboard allowance of one-half (0.5) foot above the design water surface level. The terms of the easement shall prohibit excavation, the placing of fill or structures, and any alterations which may

adversely affect the flow of storm water within any portion of the easement. Also, periodic cutting of vegetation in all portions of the easement shall be required.

**462.6** Drainage facilities that are located on State highway rights-of-way shall be approved by the Pennsylvania Department of Transportation and a letter indicating such approval shall be directed to the Township Planning Commission.

**462.7** All streets shall be designed so as to provide for the eventual discharge of surface water away from their rights-of-way.

**462.8** When it can be shown to the satisfaction of the Township Engineer that, due to topographic conditions, natural drainage swales on the site cannot adequately provide for drainage, open channels may be constructed conforming substantially to the line and grade of such natural drainage swales. Capacities of open channels shall be calculated using the Manning equation as explained in Appendix B.

**462.9** Storm drainage facilities and appurtenances shall be so designed and provided as to minimize erosion in watercourse channels and at all points of discharge.

#### **463** Storm water Detention

**463.1** Storm water detention facilities shall be used whenever increased runoff from the land development would overload drainage systems or cause significant increases in flood levels in any watercourses downstream. This will be determined by comparing the increase in runoff caused by the land development with the existing runoff rates and capacity of downstream drainage systems and watercourses.

**463.2** Whenever detention facilities are required under Section 463.1, facilities will be designed to provide that the peak runoff rate at all points of discharge from the site, when developed, will not exceed the peak runoff rate at each of those points prior to development.

**463.3** Where detention facilities are included as part of the storm drainage system, the following provisions will apply:

**463.31** Detention ponds shall be designed so that they return to normal conditions within approximately twelve (12) hours after the termination of the storm, unless the Township Engineer finds that downstream conditions may warrant other design criteria for storm water release;

**463.32** The developer shall demonstrate that such ponds are designed, protected and located to assure that public safety is maximized and health problems are prevented;

**463.33** The developer shall verify that the operation of the detention facilities will not aggravate potential downstream peaking conditions;

**463.34** Emergency overflow facilities shall be provided for detention facilities to handle runoff in excess of design flows;

**463.35** If the lands of the proposed land development will remain in common ownership, the developer shall provide written assurances to the Township that the detention ponds will be properly maintained;

**463.36** If the lands of the proposed land development will be conveyed to two or more separate owners, the developer shall provide written assurances to the Township that the detention ponds will be properly maintained, or dedicate the land on which the detention ponds are located to the Township which shall then be responsible for maintaining the detention ponds.

## **464** Calculations of Runoff and Design Storm Frequency

**464.1** Storm drainage systems required by this Ordinance shall be designed to provide protection from a ten (10) to one hundred (100) year storm as determined by the Township Planning Commission. A ten (10) year design storm would be appropriate where a storm in excess of the design storm would have minor impact such as inconvenience to traffic on local streets. A twenty-five (25) year design storm would be appropriate where a storm in excess of the design storm would cause major inconvenience to people and traffic in high use areas such as business districts and major highways. A one hundred (100) year design storm would be appropriate where a storm in excess of the design storm would cause damage to existing or future structures or their contents.

**464.2** Storm water runoff from watersheds of 640 acres (1 square mile) or less shall be calculated by the rational method as described in Manual Number 37 of the American Society of Civil Engineers or other appropriate method acceptable to the Township Engineer. The rational method of runoff calculation is explained in Appendix B.

**464.3** Storm water runoff from watersheds of more than two hundred (200) acres may be calculated using the soil cover complex method developed by the Soil Conservation Service or other appropriate method acceptable to the Township Engineer.

**464.4** The Manning equation explained in Appendix B shall be used in calculating capacities of watercourses and storm sewers, except culverts which shall be designed using methods acceptable to the Township Engineer.

**464.5** Complete detailed drainage calculations and applicable charts and nomographs certified by the design engineer shall be submitted to the Township.

## **465 Improvement Specifications**

**465.1** Inlets shall be designed and located to prevent hazardous conditions for vehicles, bicycles or pedestrians.

**465.11 Swales Adjacent to Roadway Shoulders**  
When swales are provided in cut areas, the water shall not encroach upon the shoulder during a 10 year frequency storm. The maximum velocity as determined by Manning's equation shall not exceed the allowable velocity. The allowable velocity for specific type of swale material is specified in Appendix B. Inlets shall be provided to control the shoulder encroachment and water velocity.

**465.12 Curbed Roadways**  
The maximum encroachment of water on the roadway pavement shall not exceed half of a through traffic lane or 1" less than the depth of curb during a 10 year frequency storm. Inlets shall be provided to control the encroachment of water on the pavement.

**465.13 Shoulders in Roadway Cut Areas (without swales)**  
This type of substandard roadway section is not generally permitted under the design criteria. However, if conditions require that this type of section be used, water flowing in the shoulder shall not encroach more than two thirds the shoulder width during a 10 year frequency storm. Inlets shall be provided to control the shoulder encroachment and water velocity.

**465.14** Inlets shall be PennDOT types C, M or S unless otherwise approved by the Township Engineer.

**465.2** Storm sewers shall have a minimum diameter of 15 inches. Sewers shall be designed to provide a minimum velocity of 3 ft./sec. when flowing full, and shall have at least 1 foot of cover within the roadway.

**465.3** Materials requirements and construction methods shall be in conformance with PennDOT Specifications Form 408 current edition. (Ord. 1981-2)

## **470** Underground Utilities and Utility Easements

**471** In accordance with the Pennsylvania Public Utility Commission Investigation Docket No. 99, as amended from time to time, all electric utility distribution lines shall be installed underground in subdivisions or land developments of five (5) or more dwelling units. In addition, the following design requirements shall be observed:

**471.1** Established public utility and state and federal governmental agency design standards shall be observed in preparing the utility plan;

**471.2** Utility lines to be installed within street rights-of-way shall be located according to Township or Township authority requirements;

**471.3** Whenever practicable, telephone and cable TV utilities shall be installed underground in connection with the installation of electric utility distribution lines;

**471.4** Street lighting, where required shall be provided at each intersection of the development and at intervals not to exceed three hundred fifty (350) feet between intersections;

**471.5** Utility lines shall be installed at the rough grade phase of construction. Utility lines shall be installed according to their depth, with the utility line installed at the greatest depth being installed first.

## **472** Utility Easements

**472.1** Utility easements shall be provided for all utility lines servicing the abutting lots when such utility lines are installed outside street rights-of-way. No structures or trees shall be placed within such easements. The location of utility easements shall be acceptable to the appropriate public utility or Township authority.

**472.2** Whenever practicable all utility lines to be installed outside street rights-of-way shall share a common utility easement.

**472.3** Utility easements shall be located either:

**472.31** Abutting the street right-of-way. In this case a minimum easement width of ten (10) feet shall be required;

**472.32** Along rear or side lot lines. In this case a minimum easement width of twenty (20) feet, ten (10) feet on each side of the lot line, shall be provided. Where the lot line coincides with the subdivision boundary a minimum easement width of fifteen (15) feet may be required by the Board of Supervisors.

**473** Petroleum and Natural Gas Transmission Lines

**473.1** No company intending to install any petroleum, petroleum product or natural gas transmission line shall be allowed to construct the line on less than a fifty (50) foot right-of-way. Such lines are to be installed in the center of the right-of-way, and shall comply with the applicable standards imposed by State and Federal laws and regulations.

**473.2** There shall be a minimum distance of twenty-five (25) feet, measured from the right-of-way line, between any proposed dwelling unit and any petroleum, petroleum products or natural gas transmission line which traverses the subdivision.

**474** Floodproofing

**474.1** Facilities for gas, electric and communication utilities shall be elevated or flood proofed to a level at least one foot above the 100-year flood elevation.

## **480** Mobile Home Parks

### **481** Applicable Standards and Requirements

**481.1** The design and development of mobile home parks shall conform to all the general standards and requirements set forth for subdivision and land developments in this Ordinance in addition to the specific design standards set forth herein (Section 480).

### **482** Permits

**482.1** It shall be unlawful for any person to maintain, construct, alter, or extend any mobile home park or any of the facilities thereof within the limits of the Township unless he holds a valid permit required and issued in his name for such purposes or purpose by the Board of Supervisors.

**482.2** An application for a mobile home park permit shall be approved by the Board of Supervisors only after all requirements of this Ordinance are met and a mobile home park permit has been issued by the Department of Environmental Resources pursuant to the provisions of Chapter 179.

**482.3** Application for renewal of a mobile home park permit shall be made to the Board of Supervisors at least thirty (30) days prior to the expiration date of a permit. The renewal of a mobile home park permit shall be issued by the Board of Supervisors upon furnished proof by the applicant that the park continues to meet the standards and requirements for the issuance of an original permit.

**482.4** The Township Zoning Officer, Administrator, and other officials designated by the Board of Supervisors may inspect the mobile home park at reasonable times so as to determine compliance with this ordinance.

### **483** Internal Roads and Off-street Parking Areas

**483.1** A safe and convenient vehicular access shall be provided from abutting streets or roads.

**483.2** Access to internal streets of mobile home parks shall be designed to minimize congestion and hazards at the entrance or exit and allow free movement of traffic on adjacent streets. Streets shall have a minimum road pavement width of thirty-six (36) feet where parking is permitted on both sides, or a minimum road pavement width of twenty-eight (28) feet where parking is limited to one side. Where the primary entrance road is more than one hundred (100) feet long and does not provide access to abutting mobile home lots within such distance, the minimum road pavement width may be twenty-four (24) feet, provided parking is prohibited on both sides. The above listed street widths may be reduced by two (2) feet if an adjacent sidewalk is provided.

**483.3** Within one hundred (100) feet of an intersection, streets shall be at approximately right angles. A distance of at least one hundred fifty (150) feet shall be maintained between center lines of offset intersecting streets. Intersections of more than two (2) streets at one point shall be avoided.

**483.4** Off-street parking areas shall be provided in all mobile home parks for the use of park occupants and guests. A minimum of two (2) off-street parking places for each mobile home unit shall be required.

**483.5** Required car parking spaces shall be so located as to provide convenient access to the mobile home, but shall not exceed a distance of two hundred (200) feet from the mobile home that they are intended to serve.

#### **484 Pedestrian Walkways**

**484.1** All parks should provide safe, convenient, all-season pedestrian access between individual mobile homes, the park streets, and all community facilities provided for park residents. Sudden changes in alignment and gradient shall be avoided.

**484.2** Where a common walk system is provided and maintained between locations, and where pedestrian traffic is concentrated, such common walks shall have a minimum width of three and one-half (3 ½) feet.

**484.3** All mobile home stands shall be connected to common walks, streets, driveways or parking spaces connecting to a paved street. Such individual walks shall have a minimum width of two (2) feet.

**485** Mobile Home Sitting

**485.1** Mobile Home Stand Construction

**485.11** The area of the mobile home stand shall be improved to provide an adequate foundation for the placement of the mobile home.

**485.12** The stand shall be constructed from either concrete, asphalt concrete or other material sufficient to adequately support the mobile home and to prevent abnormal settling or heaving under the weight of the home. The corners of the mobile home shall be anchored to prevent wind overturn and rocking with tie-downs such as concrete "dead men", screw augurs, arrowhead anchors, or other devices suitable to withstand a tension of at least two thousand eight hundred (2,800) pounds.

**485.13** After a mobile home has been anchored to the mobile home stand, the hitch which is employed for the transportation of the unit shall be removed if of bolted construction, and there shall be a decorative skirt installed around the base of the unit. (Ord. 1981-2)

**486** Common Open Space

**486.1** At least twenty (20) percent of the usable site area of the mobile home park must be in common open space. The usable site is that area which is free of water surfaces, severe high water table, quarries, or slopes over twenty (20) percent.

**486.2** Whenever possible the common open space shall be designed as a contiguous area with pedestrian and visual accessibility to all residents of the mobile home park.

**486.3** Recreation areas and facilities shall be provided to meet the anticipated needs of the residents of the park. Not less than ten (10) percent of the usable site area, exclusive of lands within the required setback area, shall be devoted to recreation. Preferably recreation areas should be of a size, shape and relief that is conducive to active play.

## **487 Utilities**

### **487.1 Water Supply**

**487.11** The water supply shall be capable of supplying a minimum of one hundred fifty (150) gallons per day per mobile home at a pressure not less than twenty (20) pounds per square inch under normal operating conditions.

**487.12** The source of supply and distribution system shall also be adequate for fire protection and shall comply with the National Fire Protection Association Standard NFPA No. 501A.

**487.13** All water storage reservoirs shall be covered, watertight and constructed of impervious material. Overflows and vents of such reservoirs shall be effectively screened. Manholes shall be constructed with overlapping covers, so as to prevent the entrance of contaminated material. Reservoir overflow pipes shall discharge through an acceptable air gap.

### **487.14 Individual Water Connections**

**487.141** Individual water-riser pipes shall be located within the confined area of the mobile home stand at a point where the water connection will approximate a vertical position, thereby insuring the shortest water connection possible and decreasing susceptibility to water pipe freezing.

**487.142** The water-riser pipe shall have a minimum inside diameter of three-quarter (3/4) inch and terminate at least four (4) inches above the ground surface. The water outlet shall be provided with a cap when a mobile home does not occupy the lot.

**487.143** Adequate provisions shall be made to prevent freezing of service lines, valves and riser pipe and to protect risers from heaving and thawing actions of ground during freezing weather. Surface drainage shall be diverted from the location of the riser pipe.

**487.144** A shut-off valve below the frost line shall be provided near the water-riser pipe on each mobile home lot. Underground stop-and-waste valves are prohibited unless the type of manufacture and method of installation are approved by the Township Engineer.

## **487.2** Individual Sewer Connections

**487.21** Each mobile home stand shall be provided with at least a four (4) inch diameter sewer riser pipe. The sewer riser pipe shall be so located on each stand that the sewer connection to the mobile home drain outlet will approximate a vertical position.

**487.22** The sewer connection shall have a nominal inside diameter of not less than four (4) inches, and the slope of any portion thereof shall be at least one-fourth (1/4) inch per foot. All joints shall be watertight.

**487.23** All materials used for sewer connections shall be semi-rigid, corrosion resistant, non-absorbent and durable. The inner surface shall be smooth.

**487.24** Provision shall be made for plugging the sewer riser pipe when a mobile home does not occupy the site. Surface drainage shall be diverted away from the riser. The rim of the riser pipe shall extend at least one-half (1/2) inch above ground elevation.

## **487.3** Electrical Plan

**487.31** Every mobile home park shall contain an electrical wiring system, consisting of wiring, fixtures, equipment and appurtenances which shall be installed and maintained in accordance with the specifications of the public utility supplying the service and the National Electric Code.

**487.32** All power lines shall be located underground.

**487.33** All direct burial conductors or cable shall be buried at least eighteen (18) inches below the ground surface and shall be insulated and specially designed for the purpose. Such conductors shall be located not less than (1) foot radial distance from water, sewer, gas or communications lines.

#### **487.4** Required Electrical Grounding

**487.41** All exposed non-current-carrying metal parts of mobile homes and all other equipment shall be grounded by means of an approved grounding conductor run with branch circuit conductors and other approved methods of grounded metallic wiring. The neutral conductor shall be used as an equipment ground for mobile homes or other equipment.

#### **487.5** Natural Gas Systems

**487.51** Natural gas piping systems when installed in mobile home parks shall conform to the rules and regulations of the American Gas Association.

**487.52** Each mobile home lot provided with piped gas shall have an approved shut-off valve installed upstream of the gas outlet. The outlet shall be equipped with a cap to prevent accidental discharge of gas when the outlet is not in use.

#### **487.6** Liquefied Petroleum Gas Systems

**487.61** Liquefied petroleum systems provided for mobile homes, service building or other structures shall be installed and maintained in conformity with the rules and regulations of the National Fire Protection Association Standards NFPA Nos. 57 and 58.

**487.62** Systems shall be provided with safety devices to relieve excessive pressures and shall be arranged so that the discharge terminates at a safe location.

**487.63** Systems shall have at least one accessible means for shutting off gas. Such means shall be located outside the mobile home and shall be maintained in effective operating condition.

**487.64** All liquefied petroleum gas piping outside of the mobile homes shall be well supported and protected against mechanical injury. Undiluted liquefied petroleum gas shall not be conveyed through piping equipment and systems in mobile homes.

**487.65** Vessels of more than twelve (12) and less than sixty (60) U.S. Gallons gross capacity may be installed on a mobile home lot and shall be securely but not permanently fastened to prevent accidental overturning.

**487.66** No liquefied petroleum gas vessel shall be stored or located inside or beneath any storage cabinet, carport, mobile home or any other structure.

#### **487.7 Fuel Oil Supply Systems**

**487.71** All fuel oil supply systems for mobile homes, service buildings, and other structures shall be installed and maintained in conformity with the rules and regulations of the National Fire Protection Association Standard NFPA No. 31.

**487.72** All piping from outside fuel storage tanks or cylinders to mobile homes shall be securely, but not permanently, fastened in place.

**487.73** All fuel oil supply systems provided for mobile homes, service buildings, and other structures shall have shutoff valves located within five (5) inches of storage tanks.

**487.74** All fuel storage tanks or cylinders shall be a minimum of five (5) feet from any mobile home exit.

**487.75** Storage tanks located in areas subject to traffic shall be protected against physical damage.

**487.8** Fire Hydrants

**487.81** Fire hydrants shall be installed as part of the centralized water system. All fire hydrant thread connections are to comply with Township requirements.

**487.82** The water supply source shall permit the operation of a minimum of two (2) one and one-half (1 ½) inch hose streams. (Ord. 1981-2)

**487.83** Each of two nozzles, held four (4) feet above ground, shall deliver at least seventy-five (75) gallons of water per minute at a flowing pressure of at least thirty (30) pounds per square inch at the highest point of the park, for a period of at least twenty (20) minutes.

**487.84** Fire hydrants shall be located within five hundred (500) feet of any mobile home, service building or other structure in the park.

**490 Environmental Protection and Common\* Open Space Preservation \*(Ord. # 2002-2)**

**491 Erosion and Sedimentation Control**

**491.1** All earthmoving activities shall be conducted in such a way as to prevent accelerated erosion and the resulting sedimentation.

**491.2** No earth-moving or soil disturbance may take place until an erosion and sedimentation control plan has been developed in accordance with Chapter 102, Erosion Control, P.L. 1987. Such a plan is to be maintained on the construction site until all disturbed areas are finally stabilized.

**491.3** The erosion and sedimentation control plan shall be developed in the form outlined in the Soil Erosion and Sedimentation Control Manual, issued by the Department of Environmental Resources.

**491.4** All erosion and sedimentation control plans shall be submitted with the final plan as set forth in Section 324.10 of this Ordinance.

**491.5** When it has been determined that an earth-moving permit is required the application for such a permit must be filed with the Lehigh County Conservation District.

**491.6** The Township may require the submission of the erosion and sedimentation control plan to the Lehigh County Conservation District for review and recommendations, whether a permit for earth-moving is required or not.

**492 Natural Feature Preservation**

**492.1** The design and development of all subdivisions and land developments shall preserve, whenever possible, natural features which will aid in providing adequate common\* open space for recreation and conditions generally favorable to the health, safety, and welfare of the residents. Some of these natural features are the natural terrain of the site, woodland areas, large trees, natural watercourses and bodies of water, wetlands, rock outcroppings, and scenic views. More detailed standards concerning the preservation of specific natural features are set forth in the following sections. \*(Ord. # 2002-2)

## **492.2 Flood Plain Regulations**

**492.21** A map illustrating flood elevations for the tract for a 100-year flood, where applicable, shall be submitted as part of the feasibility review materials as set forth in Section 300. The flood elevation map shall be based on the Lynn Township flood insurance rate map (FIRM). When not available, the map shall be based on estimated 100-year flood elevations or estimated areas subject to flooding based on best available data.

**492.22** A developer shall adhere to the following standards within areas developed as regulatory flood ways and flood fringe areas on the flood elevation map.

**492.221** No buildings are to be constructed in regulatory flood ways. Other encroachments may be permitted provided that the encroachments will not cause any increase in the 100-year flood elevation at any point. Consideration of the effects of a proposed use shall be based on a reasonable assumption that there will be an equal degree of encroachment extending for a significant reach on both sides of the stream.

**492.222** Structures may be permitted in flood fringe areas provided that the lowest floor (including basement) is elevated at least one and one half (1 ½) foot above the 100-year flood elevation and that the proposed improvements will not increase the water surface elevation of one hundred (100)-year flood by more than one (1) foot at any point. The lowest floor of non-residential structures may be constructed below the substantially impermeable to the passage of water and is designed with structural components having the capability of resisting forces caused by flood waters. (Ord. 94-4)

### **492.3 Lake, Stream, and River Frontage Preservation**

**492.31** Lake, stream, and river frontage shall be preserved as open space whenever possible. This area may be credited toward the open space requirement set forth in Section 493.

**492.32** Access to the water and maintenance easement area shall be provided at intervals of not more than one-half (0.5) mile. These access points shall not be less than one hundred (100) feet in width.

### **492.4 Tree Preservation and Planting**

**492.41** Trees six (6) inches or more in diameter (measured at a height four and one-half (4 ½) feet above grade) shall not be removed unless they are located within the proposed cartway or sidewalk portion of a street right-of-way, or within fifteen (15) feet of the foundation area of a new building, the access drive and parking area or the on-lot sewage disposal system. Areas in which trees are retained shall remain at original grade level and undisturbed wherever possible. The Board of Supervisors may, at its discretion, permit additional tree removal in conjunction with a grading plan, where such action is necessary for the proper development of the lot.

**492.42** A landscape plan shall be drawn for all commercial, industrial, mobile home park, and multi-family developments and all residential subdivisions of four or more lots (including the remaining parcel) or which involve the provision of any new street or easement of access. The plan shall show existing and proposed vegetative cover. (Ord. 1981-2) (Ord. #99-1)

**492.43** The landscape plan shall include trees in addition to those required along the street rights-of-way. The following standards are to be used as a guide to the number, not the spacing or location, of additional trees required.

**492.431** One tree per dwelling unit;

**492.432** One tree per fifty (50) linear feet of newly constructed streets.

**492.44** Where the species and size of the plantings is not additionally controlled by the provisions of a landscaping ordinance, consideration shall be given in the species selection to disease and storm resistance.

**492.45** No trees shall be planted within any ultimate right-of-way.  
Trees planted in accordance with Section 492.432 shall, as nearly as possible, be spaced an equal distance apart and be placed in a line parallel to the ultimate right-of-way line, within the provisions of the Lynn Township Zoning Ordinance Section 446.3.  
(Ord. #97-7)

**492.46** Trees planted under the requirements of Section 492.43 shall be of the following type:

Elm	London Plane or Sycamore
Maple	Green or White Ash
Oak	Honey locust
Zelkova	Linden

Trees planted in accordance with provisions of Section 492.432 shall be of the following types:

Hawthorn	Amelanchier (service berry)
Hornbeam	Flowering Cherries
Mountain Ash	Flowering Pear
Scholartree	Golden Raintree
Sweetgum	Crabapples (disease resistant varieties only)
Birch	

At the sole discretion of the Board of Supervisors, to meet the requirements of Section 492.431 and 492.432, trees of another type, with substantially similar characteristics may be substituted for the above listed types on a case by case basis.  
(Ord. #97-7)

**492.47** Notwithstanding any other provision of this Ordinance, no shade tree plantings, or shade tree escrow accounts, are required for any subdivision which does not require a landscape plan under the provisions of Section 492.42.  
(Ord. #99-1)

## **492.5 Topography**

**492.51** The natural terrain of the proposed subdivision tract will be retained wherever possible with cut and fill operations being kept to a minimum. Areas with slopes greater than fifteen (15) percent shall generally not be planned for development. If such land is planned for development, the natural slope of the building site or sites shall be fifteen (15) percent or less. The building site shall be at least fifty (50) feet by eighty (80) feet.

## **492.6 Topsoil Protection**

**492.61** Topsoil shall not be removed from the development site or used as fill. Topsoil shall be removed from the areas of construction and stored separately. The topsoil shall be stabilized to minimize erosion during storage. Upon completion of the construction, topsoil must be uniformly redistributed on the site.

## **493 Common Open Space and Recreation Land or Area (Ord. # 2002-2)**

**493.1** In proposed subdivisions, The Township shall require the public dedication of land suitable for recreational use, the construction of recreational facilities, the payment of fees in lieu thereof, the private reservation of land, or a combination thereof, for park or recreation purposes as a condition precedent to final plan approval. Recreational Land shall mean a parcel of real estate or any part thereof which is intended to be used solely or in conjunction with any other ancillary or subordinate use, for the purpose of active physical activity which shall include, but not be limited to a park, playground, pedestrian walking track, etc., or a passive recreation use which shall include, but not be limited to, bird watching, nature observation, etc., or any combination thereof.

Recreation facilities shall mean physical improvements or modification to the Recreational Land, including, but not limited to pathways, sports facilities, playground equipment, playground structures, or other athletic facilities.

**493.2** In order to meet the recreation needs of future residents of proposed dwelling units, or occupants of commercial and industrial facilities, areas meeting the criteria for Recreational Lands set forth in the following standards shall be offered for dedication to the township, subject to approval of the Board of Supervisors. The developer shall offer to the Township a minimum of 1,500 square feet of land based on a multiple of the greater of:

- (a) the number of lots, or
- (b) the number of dwelling units.

For example: (1) if the development has fifty (50) lots, but one hundred (100) dwelling units proposed, then the dedication shall be one hundred fifty thousand (150,000) square feet of land; (2) if the development has fifty (50) lots a dwelling unit or commercial or industrial structure existing on one of the lots of the proposed subdivision or land developments, that lot, and only that lot, will be EXEMPT from this land dedication requirement or payment of cash in lieu of land dedication. (In order to qualify for the exemption, the dwelling unit, or the industrial or commercial structure must be in actual use at the time of the subdivision application.) Likewise, if the application is solely for a boundary line adjustment with no new lot created, said application shall be exempt.

### **493.3 Land Dedication Standards**

- a. The Recreational Land shall be readily accessible to occupants or residents of the subdivision or land development.
- b. The size, surface conditions, shape, topography and location of the parcels shall be suitable for the intended recreational purposes, and be such that recreation use is feasible. Designated purposes are subject to Township approval. No recreation areas shall measure less than one (1) acre.
- c. Provisions shall be made for access to the Recreational Land by maintenance equipment, when deemed necessary by the Township.
- d. No more than fifty (50%) percent of the Recreation Land required for dedication shall be land with a slope of over fifteen (15%) percent and/or land with high water table or seasonal high water table. Specifically, land designated as "wetlands" or any land within two hundred (200) feet of any electrical transmission power line, or thing one hundred (100) feet of a pipeline or other surface or sub-surface transmission line shall be deemed unsuitable.
- e. Other than those Recreational Lands to remain in existing condition, Recreation Lands shall be improved and equipped to a usable stage in accordance with plans to be approved by the Township. Such improvements and equipping shall be guaranteed through the Subdivision and Land Development Improvements Agreement.
- f. The Township, with the consultation of the Recreation Board and/or the Planning Commission, and/or the Township Engineer, shall determine what improvements shall be made and/or facilities added to or removed from the recreational areas. In reaching its decision, the Board of Supervisors shall consider the following standards and criteria:

1. The suitability of the land for particular recreational purposes (example: athletic field, if flat terrain, or hiking trails, if otherwise).
2. Existing recreation use and facilities in proximity to land in question.
3. Short term and long term projected use of surrounding lands or land development.
4. Accessibility of Recreational Land to vehicles and pedestrian traffic.
5. The recreational needs of the Township residents.
6. The preservation of natural man-made habitats for attracting wildlife for passive recreational observation.
7. The cost versus possible benefit to be derived from making improvements.
8. The long range maintenance cost of such improvements.
9. Any other relevant factor that would impact upon the practical use of the facility by Township residents.

**493.4** Cash in lieu of Recreational Land dedication may be offered by a developer, subject to the approval of the Board of Supervisors, as follows:

1. The cash in lieu shall be in an amount set by Resolution of the township Board of Supervisors, multiplied by the greater of the following factors:
  - a. The number of lots, or
  - b. The number of dwelling units.

For example: (1) If the development has fifty (50) lots, but one hundred (100) dwelling units, and the Board of Thousand (\$35,000) Dollars;(2) if, under the same conditions, the development has fifty (50) lots and fifty (50) dwelling units, then the cash payments shall be Seventeen Thousand Five Hundred (\$17,500) Dollars.

2. The cash will be paid according to the designated fee schedule:

For subdivisions with less than five (5) dwelling units making a cash in lieu of Recreational Land contribution, the total fee shall be paid by the owner or developer at the time of Final Plan approval by the Board of Supervisors.

For subdivisions with five (5) or more dwelling units making a cash in lieu of Recreational Land dedication, the total fee shall be paid by the owner or developer at the time of the Final Plan approval by the Board of Supervisors, unless otherwise secured through an approved Subdivision Improvements Agreement, with security adequate to assure payment of said fees and with the further proviso that a proportionate amount shall be paid upon the sale of individual lots and the entire fee shall be paid prior to acceptance by the Township of any improvements to be dedicated, or reduction in the amount of security held by the Township.

3. In a Conservation District, the open space required to be set aside as part of the cluster development or resource protected land shall be provided in addition to the recreation land required by Section 493.2 (Ord. # 2002-2)

**493.5** A fee authorized under this Ordinance shall, upon its receipt by Township, be deposited in an interest-bearing account, clearly identifying the specific recreation facilities for which the fee was received.

Interest earned on such accounts shall become funds of that account.

Funds from such accounts shall be expended only in properly allocable portions of the cost incurred to construct the specific recreation facilities

for which the funds were collected.

**493.6** Upon request of any person who paid any fee under this Ordinance, the Township shall refund such fee, plus interest accumulated thereon from the date of payment, if Township had failed to utilize the fee paid for the purposes set forth in this Ordinance

**493.7** It is the declared intent of the township that these provisions shall apply to all subdivisions and land use developments even where recreation is not a permitted primary use.

**493.8** The subdivider or developer may make arrangements to provide Recreational Land by private reservation in lieu of dedication or cash contribution, subject to the approval by the Board of Supervisors. Such an arrangement must include provisions to assure perpetual ownership and maintenance of recreation areas. The Board of Supervisors specifically reserve the right to insist upon dedication, improvements, cash in lieu of, or any combination thereof at the sole discretion of the Board of Supervisors. Such reservations shall make adequate

provisions for the perpetual maintenance of said recreational areas so that the maintenance of same shall not become a burden to the township. Said reservation shall include a covenant running with the land comprising all lots in the subdivision guaranteeing the perpetual maintenance of the private Recreational land, plus cash or security determined according to the MPC, should said covenantors default. The subdivider shall post adequate security in a form provided by the MPC to guarantee perpetual maintenance. The funds for maintenance shall likewise be segregated from the general Township funds; however, the funds may be co-mingled in an interest-bearing account titled "Lynn Township Private Recreational Land Maintenance Fund". The interest and principal may be used at the Township's discretion for maintenance of the private Recreational Land in the event of a default by the covenantors. (Ord. 1989-5) (Ord. #97-7)

## SECTION V - IMPROVEMENT SPECIFICATIONS

### 500 General Requirements

**501** Physical improvements to the subdivision/land development tract shall be provided, constructed and installed as shown on the Record Plan, in accordance with the requirements of the Board of Supervisors.

**502** As a condition to review of a Final Plan by the Township Planning Commission, the developer shall agree with the Board of Supervisors, public utility or municipal authority as to installation of all improvements shown on the Plan and required by this Ordinance. Before the Record Plan may be endorsed by the Board of Supervisors, the developer shall submit a completed and executed original copy of the Subdivision Improvements Agreements and performance and maintenance guarantees in the amount required by Section 520. (Ord. 1981-2)

**503** All improvements installed by the developer shall be constructed in accordance with the design specifications of the Board of Supervisors, public utility or municipal authority. In cases where no applicable municipal specifications exist, the required improvements shall be constructed to the specifications set forth in this Ordinance. (Ord. 1981-2)

**504** Observation of the installation of those improvements required by Section 510, shall in all cases be the responsibility of the Board of Supervisors and Municipal Engineer. (Ord. 1981-2)

## **510** Required Improvements

**511** Improvements shall be provided, constructed, and installed by the developer as stated in the Improvements Agreement, shown on the Record Plan, and in accordance with the design standards set forth in Section IV of this Ordinance. The following improvements will be required in all applicable cases:

**511.1** Street excavating, grading, subgrade preparation, base course paving and surface course paving installed according to Township specifications.

**511.2** Concrete curbing of the vertical type, or stabilized shoulder and drainage swale with no curbing installed according to township specifications.

**511.3** Concrete sidewalks or interior walkways installed according to Township specifications.

**511.4** Sanitary sewer system improvements installed according to the specifications of the Township, and the Pennsylvania Department of Environmental Resources; (Ord. 94-4)

**511.5** Water supply and distribution system improvements installed according to the specifications of the Township, the appropriate governmental authority, and the Pa. Department of Environmental Resources;

**511.6** Storm drainage system improvements installed according to Township specifications;

**511.7** Monuments shall be installed;

**511.71** Permanent stone or concrete monuments shall be accurately placed at the intersection of all lines forming angles and at changes in directions of lines in the boundary (perimeter) of the property subdivided and along one side of all road rights-of-way at all points of tangency and as directed by the Township Engineer.

**511.72** Monuments shall be of reinforced concrete with minimum dimensions of four (4) inches by four (4) inches by thirty (30) inches or stone with minimum dimensions of six (6) inches by six (6) inches by thirty (30) inches. Concrete monuments shall be scored on top of the copper or brass dowel (with an indented cross); stone monuments shall be marked on top with a proper inscription. (Ord. 1981-2)

**511.73** All monuments shall be placed by a Registered Professional Engineer or Surveyor so that the scored point shall coincide exactly with the point of intersection of the line being monumented.

**511.74** Monuments shall be set with their top level with the finished grade of the surrounding ground except:

**511.741** Monuments which are placed within the lines of existing or proposed sidewalks shall be so located (preferably beneath the sidewalks) that their tops will not be affected by lateral movement of the sidewalks, and

**511.742** Where monuments are located beneath a sidewalk, proper access shall be provided for their use.

**511.743** Where sidewalks are existing, a stone point (a four (4) inch square chisel cut in the sidewalk with a drill hole in (center) may be substituted for a monument.

**511.8** Fire hydrants installed according to the specifications of the Township.

**511.9** Street lights in accordance with conditions to be agreed upon by the developer, the Board of Supervisors, and the appropriate public utility;

**511.10** Street signs installed according to Township specifications.

**511.11** Shade trees planted according to Township specifications.

## **520** Improvements Guarantee Procedure

**521** Before the Board of Supervisors approves any Final Plan and as a prerequisite for approval, the developer shall deliver to the Board of Supervisors, public utility or municipal authority, a performance guarantee in the amount of one hundred ten (110) percent of the cost of all improvements required by this Ordinance, as determined in accordance with the procedures set forth in the Pa. Municipalities Planning Code as amended, in a form and with a surety as determined in accordance with the procedures set forth in the Pa. Municipalities Planning Code as amended, guaranteeing the construction and installation of all such improvements within one (1) year of the date noted on the Final Subdivision Plan as the date that the improvements are to be completed. Upon written application signed by both the obligor and surety of a performance guarantee in a form approved by the Township Solicitor, the Board of Supervisors, public utility or municipal authority may at their discretion extend said period by not more than three (3) additional years. If the party posting the financial security requires more than one (1) 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 ten (10) percent for each one year period beyond the first anniversary date from posting of financial security or to an amount not exceeding one hundred ten (110) percent of the cost of completing the required improvements as reestablished on or about the expiration of the preceding one year period by using the above bidding procedure. In the event of default under a performance guarantee, the proceeds of the performance guarantee received by the municipality, public utility or municipal authority shall be used to construct and install the improvements. (Ord. 1981-2)

**522** Before the Board of Supervisors approves any Final Plan and as a prerequisite for approval, the developer shall deliver to the Board of Supervisors, public utility or municipal authority a maintenance guarantee in an amount of not less than fifteen (15) percent of the actual cost of the installation of all improvements required by this Ordinance, guaranteeing acceptance of all such improvements by the Board of Supervisors, public utility or municipal authority. (Ord. 1981-2)

**530 Approval of Improvements and Release of Performance Guarantee by the Board of Supervisors**

**531** When the developer has installed or constructed all or part of the required improvements as set forth in Section 510, the developer shall notify the Board of Supervisors, public utility or municipal authority in writing, by certified or registered mail, of the completion of the aforesaid improvements and shall send a copy thereof to the Township Engineer. The Board of Supervisors, public utility, or municipal authority shall, within ten (10) days after receipt of such notice, direct and authorize the Township Engineer to inspect all of the aforesaid improvements. The Township Engineer shall thereupon file a report, in writing, with the Board of Supervisors, public utility or municipal authority and shall promptly mail a copy of the same to the developer by certified or registered mail. The report shall be made and mailed within thirty (30) days after receipt by the Township Engineer of the aforesaid authorization from the Board of Supervisors, public utility or municipal authority, said report shall be detailed and shall recommend approval or rejection of said improvements, either in whole or in part, and if said improvements or any portion thereof, shall not be recommended for approval by the Township Engineer, said report shall contain a statement of reasons for such non-approval or rejection. (Ord. 1981-2)

**532** The Board of Supervisors shall notify the developer, in writing by certified or registered mail, of the action of said Board of Supervisors with relation thereto.

**533** If the Board of Supervisors or the Township Engineer fails to comply with the time limitation provisions contained herein, all improvements will be deemed to have been approved and the developer shall be released from all liability, pursuant to its performance guarantee bond.

**534** If any portion of the said improvements shall not be approved or shall be rejected by the Board of Supervisors, the developer shall proceed to complete the same and, upon completion, the same procedure of notification as outlined herein, shall be followed.

**535** Nothing herein, however shall be construed in limitation of the developer's right to contest or question by legal proceedings or otherwise, any determination of the Board of Supervisors or the Township Engineer.

**536** In the event that any improvements which may be required have not been installed as provided in this Ordinance or in accord with the approved Final Plan, the Board of Supervisors is hereby granted the power to enforce any corporate bond, or other security by appropriate legal and equitable remedies. If proceeds of such bond, or other security are insufficient to pay the cost of installing or making repairs or corrections to all the improvements covered by said security, the Board of Supervisors may, at its option, install part of such improvements in all or part of the subdivision or land development and may institute appropriate legal or equitable action to recover the monies necessary to complete the remainder of the improvements. All of the proceeds, whether resulting from the security or from any legal or equitable action brought against the developer, or both, shall be used solely for the installation of the improvements covered by such security, and not for any other Township purpose.

SECTION VI  
ADMINISTRATION

**600** AMENDMENTS

**601** Amendments to the Subdivision and Land Development Ordinance shall become effective only after a public hearing held pursuant to public notice in the manner prescribed for enactment of a subdivision and land development ordinance as provided in Sections 505 and 506 of the Pennsylvania Municipalities Planning Code. (Ord. 1989-5)

**601.1** A copy of the proposed amendment shall be submitted to the Lehigh Valley Planning Commission at least thirty (30) days prior to the date fixed for the public hearing for its review and recommendations. In addition, in case of an amendment other than that prepared by the Planning Commission, the Board of Supervisors shall submit each such amendment to the Planning Commission for recommendations at least thirty (30) days prior to the date fixed for the public hearing on such amendment.  
(Ord. 1989-5) (Ord. #97-7)

**601.2** Within thirty (30) days after adoption of an amendment a certified copy shall be sent to the Lehigh Valley Planning Commission.  
(Ord. 1989-5) (Ord. #97-7)

**610** APPEALS

**611** The decisions of the Board of Supervisors with respect to the approval or disapproval of Subdivision or Land Development Plans may be appealed directly to the court in the same manner and within the same time limitations as is provided for in the zoning appeals in Article X-A of the Pennsylvania Municipalities Planning Code. (Ord. 1989-5) (Ord. 94-4)

## 620 ENFORCEMENT REMEDIES

**621** Any person, partnership, or corporation who or which being the owner or agent of any lot, tract, or parcel of land shall lay out, construct, open or dedicate any street, sanitary sewer, storm sewer, water main or other improvements for public use, travel or other purposes or for the common use of occupants of buildings abutting thereon or who sells, transfers, or agrees or enters into an agreement to sell any land in a subdivision or land development whether by reference to or by other use of a plan of such subdivision or land development or otherwise, or erect any building thereon, unless and until a final plan has been prepared in full compliance with the provisions of this Ordinance and of the regulations adopted hereunder and has been recorded as provided herein, shall upon being found liable therefor in a civil enforcement proceeding commenced by the Township, pay a judgment of not more than \$500 plus all court costs, including reasonable attorneys fees incurred by the Township as a result thereof. No judgment shall commence or be imposed, levied or payable until the date of the determination of the violation by the district justice. If the defendant neither pays nor timely appeals the judgment, the Township may enforce the judgment pursuant to the applicable rules of civil procedure. Each day that a violation continues shall constitute a separate violation, unless the district justice determining that there has been a violation further determines that there was a good faith basis for the person, partnership or corporation violating the ordinance that believed that there was no such violation, in which event there shall be deemed to have been only one such violation until the fifth (5th) 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 a cause shown, totaling the per diem judgment pending a final adjudication of the violation in judgment. Nothing contained in this section shall be construed or interpreted to grant to any person or entity other than the Township the right to commence any action for enforcement pursuant to this section. (Ord. 1989-5) (Ord. 94-4)

**622** The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the seller or transferor from the remedies herein provided. (Ord. 1989-5)

**630** Validity, Conflicts and General Repealer

**631** Should any action or provisions of this Ordinance be declared by the courts to be invalid, such decision shall not affect the validity of the Ordinance as a whole, nor the validity of any other section or provision of the Ordinance than the one so declared.

**632** Whenever there is a conflict between minimum standards or requirements set forth in this Ordinance and those contained in other Township ordinances and regulations, or other applicable laws and regulations, the most stringent standard or requirement shall apply.

**633** All ordinances and parts of ordinances which are inconsistent with this ordinance are hereby repealed, but only insofar as they are inconsistent herewith.

**634** The Lynn Township Subdivision Regulations of 1968 and the Lynn Township Planned Residential Development Ordinance of 1972 are specifically hereby repealed.

## 640 Fees

**641** The subdivider or developer shall pay the initial subdivision fees customarily charged by the Township according to the Township's fee schedule which schedule shall be set from time to time by Resolution of the Board of Supervisors and the Subdivider or Developer shall also reimburse the Township for Engineering services, and legal fees incurred in the processing of the subdivision map, improvements and maintenance agreement and recording costs as well as any other incidental expenses reasonably incurred by the Township respecting the subdivision. The Township may, at any time during the course of the plan's review, require the subdivider or developer to reimburse the Township for costs incurred to given times, or at the Township's option, require the subdivider or developer to place a sufficient sum in escrow (said sum to be determined solely by the Township) to cover the costs and fees, as herein above provided, which the Township estimates it will reasonably incur during the processing and review of the subdivision application and plan. Any amounts which have been placed in escrow in excess of the amounts herein above referred to, shall be returned to the individual or entity from which the funds were received, following final plan approval.

**642** If an applicant disputes the amount of any review fees, the applicant shall, within ten days of the billing date, notify the Township that such fees are disputed, in which case the Township shall not delay or disapprove a subdivision or land development application due to the applicant's request over disputed fees. In the event that the Township and the applicant cannot agree on the amount of review fees which are reasonable and necessary, then the applicant and the Township shall follow the procedure for dispute resolution set forth in section 510 (g) of the Pennsylvania Municipalities Planning Code. (Ord. 1989-5)

## SECTION VII

### DEFINITIONS

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

**701** Words in the singular include the plural and those in the plural include the singular.

**702** Words in the present tense include the future tense.

**703** The words "person", "developer", "subdivider", and "owner" include a corporation, unincorporated association, a partnership, or other legal entity, as well as an individual.

**704** The word "building" includes structure and shall be construed as if followed by the phrases "or part thereof".

**705** The words "should" and "may" are permissive, the words "shall" and "will" are mandatory and directive.

**710** Other terms or words used herein shall be interpreted or defined as follows:

**710.1 Acres Protected** - The resource protected land in acres multiplied by the resource protection factor. The product is calculated to the nearest one hundredth (0.01) acre.

**711 Administrator** - The Township official charged with administering the subdivision applications.

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

**712.1 Application for Development** - Every application whether a Feasibility review, Preliminary or Final Plan required to be filed and approved prior to the start of construction or development including but not limited to all supporting documents and a building permit for the approval of a subdivision plan or development plan. (Ord. 1989-5)

**712.13 Authority** - A body politic and corporate created pursuant to the Act of May 2, 1945 (P. L. 382) known as the "Municipalities Authorities Act of 1945". (Ord. 1989-5)

**713 Block** - Property bounded on one side by a street, and other three sides, by a street, railroad right-of-way, waterway, unsubdivided areas, or other definite barrier.

**713.1 Boulder** - A prominent free standing block of stone greater than 256 mm or 10 inches, according to the US Geological Survey National Park Service, Department of the Interior. (Ord. # 2002-2)

**713.2 Boulder Field** - An area, not individually mapped, consisting mostly of boulders that have little or no vegetation and having a contiguous area greater than 500 square feet. This term shall be interpreted in the same manner as this term is interpreted under the Zoning Ordinance. (Ord. # 2002-2)

**714 Building, Accessory** - A detached subordinate building, the use of which is customarily incidental and subordinate to that of the principal building, and which is located on the same lot as that occupied by the principal building.

**715 Building, Principal** - A structure enclosed within exterior walls or fire walls; built, erected, and framed of component structural parts; designed for the housing, shelter, enclosure, and support of individuals, animals, or property of any kind; main structure on a given lot.

**716 Building Setback Line** - The line within a property defining the minimum required front yard distance between any building to be erected, and an adjacent right-of-way as defined by the Lynn Township Zoning Ordinance.

**717** Deleted (Ord. #99-1)

**718** Clear Site Triangle - An area of unobstructed vision at street intersections defined by lines of sight between points at a given distance from the intersection of the street center lines.

**719** Common Open Space - A parcel or parcels of land, an area of water, or a combination of land and water within a development site designed and intended for the use of residents of the development, not including streets, off-street parking area, private yard space, and areas set aside for non-residential and public facilities. Common open space shall be substantially free of structures but may contain such improvements as are appropriate for recreational use by the residents.

**720** Comprehensive Plan - The maps, charts, and textual material adopted by the Lynn Township Board of Supervisors in accordance with the Pennsylvania Municipalities Planning Code and designated, as a whole and in its several parts, as a Comprehensive Plan for the continuing development of Lynn Township.

**721** County Conservation District - The Lehigh County Conservation District.

**722** Cut - An excavation. The difference between a point on the original ground and a designated point of lower elevation on the final grade. Also, the material removed in excavation.

**723** 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.

**724** Double or Reverse Frontage Lot - A lot extending between and having frontage on two generally parallel streets with vehicular access from only one street.

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

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

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

**728** Erosion - The removal of surface materials by the action of natural elements.

**729** Erosion and Sedimentation Control Plan - A plan designed to prevent on-site accelerated erosion and off-site sedimentation through the use of vegetative or mechanical controls. Control measures must be designed to fit the topography, soils, rainfall, and land use of the area they are to protect. The plan includes as a minimum (a) a map or maps describing the topography of the area, the proposed alteration to the area and the specific erosion and sedimentation control measures and facilities; and (b) a narrative report describing the project and giving the purpose and the engineering assumptions and calculations for control measures and facilities.

**730** Flood, One Hundred (100) Year - The flood having a one (1) percent chance of being equaled or exceeded in any given year.

**731** Flood Fringe - Flood prone areas which are not designated as a regulatory flood way on the flood boundary and flood way map in the Lynn Townships flood insurance study prepared by the Federal Insurance Administration.

**732** Flood Plain - The area of normally dry land along a natural watercourse which is periodically inundated by water therefrom.

**733** Flood way, Regulatory - The channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the one hundred (100) year flood. The regulatory flood way is designated on the flood boundary and flood way map of the Lynn Townships flood insurance study prepared by the Federal Insurance Administration.

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

**735** Lehigh Valley Planning Commission (LVPC) - The Planning Commission of Lehigh and Northampton Counties, Pennsylvania. (Ord. #97-7)

**736** Land Development - (1) The improvement of one or more contiguous lots, tracts or parcels of land for any purposes involving (a) a group of two or more buildings, or (b) the division or allocation of land between or among two

or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, building groups or other features; (2) a division of land into lots for the purpose of conveying such lots singly or in groups to any person, partnership or corporation for the purpose of the erection of buildings by such persons, partnership or corporation; (3) any non-residential proposed use where the tract involved exceeds one (1) acre. (4) The following shall be excluded when land improvements consist of: (i) the conversion of an existing single-family detached dwelling or single family semi-detached dwelling into not more than three residential units, unless such units are intended to be a condominium; or (ii) the addition of an accessory building, including farm buildings, on a lot or lots subordinate to an existing principal building. (Ord. 1989-5)

**737 Landowner** - The legal or beneficial owner or owners of land including the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition), a lessee having a remaining term of not less than forty (40) years, or other person having a proprietary interest in land, shall be deemed to be a landowner for the purpose of this Ordinance.

**738 Lot** - A designated parcel, tract or area of land established by a plat or plan or otherwise as permitted by law and to be used, developed or built upon as a unit intended for transfer of ownership, use, development and/or dedication. (Ord. 1989-5)

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

**740 Maintenance Guarantee** - Security in a form in accord with the provisions set forth in the Municipalities Planning Code as amended, which insures the structural integrity of the improvements (as well as the functioning of said improvements) in accordance with the design and specifications as depicted on the final plan for a period not to exceed eighteen (18) months after the acceptance of said improvements by the Board of Supervisors, public utility or municipal authority. (Ord. 1981-2)

**741 Marker** - A metal pin or pin of at least three-quarter (3/4) inch outside diameter and at least twenty-four (24) inches in length.

**741.1 Mobile Home** - A transportable, single family dwelling

intended for permanent occupancy, contained in one unit, or in two or more units designed to be joined into one integral unit capable of again being separated for repeated towing, which arrives at a site complete and ready for occupancy except for minor and incidental unpacking and assembly operations, and constructed so that it may be used without a permanent foundation. (Ord. 1989-5)

**741.2 Mobile Home Lot** - A parcel of land in a mobile home park, improved with the necessary utility connections and other appurtenances necessary for the erections thereon of a single mobile home. (Ord. 1989-5)

**742 Mobile Home Park** - A parcel or contiguous parcels of land under single ownership which has been designated, planned and improved for the placement of two (2) or more mobile homes, occupied for dwelling and for non-transient use. (Ord. 1989-5)

**743 Mobile Home Stand** - That part of an individual lot which has been reserved for the placement of the mobile home, appurtenant structures or additions.

**744 Monument** - A stone or concrete monument with a flat top at least four (4) inches in diameter or square. It is recommended that the bottom sides or radius be at least two (2) inches greater than the top to minimize movements caused by frost. The monument should contain a copper or brass dowel and be at least thirty (30) inches in length.

**744.1 Municipal Engineer** - A professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the engineer for a municipality, planning agency or joint planning commission. (Ord. 1989-5)

**745 Official Plan - Sewage Facilities** - A comprehensive plan for the provision of adequate sewage systems adopted by Lynn Township and submitted to and approved by the State Department of Environmental Resources as provided by the Pennsylvania Sewage Facilities Act, and Chapter 71, Rules and Regulations promulgated thereunder.

**745.1 Open Space** - Land which is the remaining usable site area but not developed as part of a cluster development. This land shall be protected from development in perpetuity. (Ord. # 2002-2)

**746 Pavement Width (Roadway)** - The portion of a street right-of-way, generally paved, intended for vehicular use.

**747 Performance Guarantee** - Security in a form in accord with the provisions set forth in the Municipalities Planning Code as amended, to guarantee that the proper construction of improvements be made by the developer as a condition for the approval of the plan.  
(Ord. 1981-2)

**748 Plan, Feasibility Review** - An initial submission, by the developer, of maps and other materials analyzing the natural features of the site as they relate to its development potential. The proposed concept for development of the submission.

**749 Plan, Preliminary** - A tentative plan, in lesser detail than a Final Plan, showing proposed streets and lot layout and such other information as required by this Ordinance.

**750 Plan, Final** - A complete and exact plan prepared for official recording as required by this Ordinance to define property rights, streets and other proposed improvements.

**751 Plan, Record** - The copy of the Final Plan which contains the original endorsements of the Lehigh Valley Planning Commission, the Board of Supervisors and the Township Planning Commission and which is intended to be recorded with the County Recorder of Deeds.  
(Ord.#97-7)

**751.1 Planning Agency** - The Lynn Township Planning Commission. (Ord. 1989-5)

**751.2 Plat** - The map or plan of a subdivision or land development, whether feasibility, preliminary or final.  
(Ord. 1989-5)

**751.3 Public Grounds** - Includes: (1) parks, playgrounds, trails, paths and other recreational areas and other public areas; (2) sites for schools, sewage treatment, refuse disposal and other publicly owned or operated facilities; and (3) publicly owned or operated scenic and historic sites. (Ord. 1989-5)

**751.4 Public Hearing** - A formal meeting held pursuant to public notice by the governing body or planning agency, intended to inform and obtain public comment, prior to taking action in accordance with this Ordinance.  
(Ord. 1989-5)

**751.5 Public Meeting** - A forum held pursuant to notice under the Act of July 3, 1986 (P.L. 388, No. 84), known as the "Sunshine Act". (Ord. 1989-5)

**751.6 Public Notice** - Notice published once each week for two (2) successive weeks in a newspaper of general circulation in Lynn Township. Such notice shall state the time and place of the hearing and the particular nature of the matter to be considered at the hearing. The first publication shall not be more than thirty (30) days and the second publication shall not be less than seven (7) days from the date of the hearing. (Ord. 1989-5)

**752 Planning Module for Land Development** - A document to be prepared by the developer or subdivider, accepted by the Township, and submitted to Pennsylvania Department of Environmental Resources to provide proposed development data in order to supplement or revise the Township's Official Plan for sewage facilities.

**752.1 Recreation Areas** - The area of land within that portion of "common\* open space area" not characterized by wetness or slopes over 15 percent, or subject to flooding during a 100-year storm which is to be used for leisure activity including but not be limited to outdoor swimming pools, baseball fields, tennis courts, playground equipment. (Ord. 1989-2) \*(Ord. # 2002-2)

**752.2 Resource Protected Land** - The sum of all resource protected land within the subdivision tract that has been mapped and measured for the purpose of determining the amount of land needed to be protected, because of the unique and natural features of the land. The resource protected area can be included in the lot area. The area is reported to the nearest one hundredth (0.01) acre. The resource protected land shall include but not limited to the following; right-of-way for existing or proposed overhead utilities and existing streets, wetlands, lakes, ponds, quarries, streams, springs, flood way, 100 year flood plain and flood soils. Also included but not limited to are rock outcropping, boulder fields, steep slope of 15% or more, wooded area and area cleared by logging or for logging purposes. (Ord. # 2002-2)

**753 Resubdivision** - Any replatting or resubdivision of land, limited to changes in lot lines on approved Final Plans or Recorded Plans as specified in this Ordinance. Other replattings shall be considered as constituting a new subdivision of land. (See also Subdivision).

**754 Right-of-Way** - The total width of any land reserved or dedicated as a street, sidewalk, or for other public or quasi-public purposes, as prescribed by the Lynn Township Zoning Ordinance.

**755** Runoff - Water that is derived directly from precipitation and passes over the ground into watercourses.

**756** Sanitary Sewage Disposal, Public - A sanitary sewage collection system in which sewage is carried from individual lots by a system of pipes to a central treatment and disposal plant, generally serving a major portion of a municipality or municipalities, and operated by a governmental agency, governmental authority, or public utility company.

**757** Sanitary Sewage Disposal, Centralized - A sanitary sewage collection system in which sewage is carried from individual lots by a system of pipes to a central treatment and disposal plant, commonly called a "package treatment plant", generally serving a single land development subdivision, or neighborhood, and operated by a governmental agency, governmental authority, public utility company, or a developer.

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

**759** Sedimentation - The process by which mineral or organic matter is accumulated or deposited by moving wind, water, or gravity. Once this matter is deposited (or remains suspended in water), it is usually referred to as "sediment".

**760** Sewage Enforcement Officer - The Lynn Township Official who issues and reviews permit applications and conducts investigations and inspections as are necessary to implement Act 537 and the rules and regulations thereunder.

**761** Sight Distance (Stopping) - The required length of roadway visible to the driver of a motor vehicle at any given point on the roadway when the view is unobstructed by traffic. Sight distance measurements shall be made from a point 3.75 feet above the centerline of the road surface to a point 0.5 feet above the centerline of the road surface.

**762** Slope - The face of an embankment or cut section; any ground whose surface makes an angle with the plane of the horizon. Slopes are usually expressed in a percentage based upon vertical differences in feet per one hundred (100) feet of horizontal distance.

**762.1 Specimen Vegetation or Specimen Tree** - Any plant life on the PA DEP or US EPA protected or endangered species list. Any tree, which has been determined by a Pennsylvania Department of Conservation and Natural Resources (DCNR) Forester to be of high value because of its particularly impressive or unusual example of a species due to its size, shade, age, or any other trait, that epitomizes the character of the species. (Ord. # 2002-2)

**763 Street** - A strip of land, including the entire right-of-way (i.e., not limited to the cartway) intended for use as a means of vehicular and pedestrian circulation to provide access to more than one (1) lot. The word "street" includes street, avenue, boulevard, road, highway, freeway, parkway, alley, viaduct, and any other ways used or intended to be used by vehicular traffic or pedestrians whether public or private. Streets are further classified according to the functions they perform:

**763.1 Arterial Street** - A street serving a large volume of comparatively high-speed and long-distance traffic, including all facilities classified as main and secondary highways by the Pennsylvania Department of Transportation.

**763.2 Collector Street** - A street which, in addition to providing access to abutting properties, intercepts local streets to provide a route giving access to community facilities and/or other collector and arterial streets (streets in industrial and commercial subdivisions shall generally be considered collector streets);

**763.3 Improved Street** - A street which meets the minimum design requirements for a local access road (50/200 average daily traffic) or an existing State or Township paved, or non-gravel road. (Ord. 1981-2)

**763.4 Local Street** - A street used primarily to provide access to abutting properties;

**763.5 Cul-de-Sac Street** - A local street intersecting another street at one end, and terminating in a vehicular turn-around at the other;

**763.6 Half (Partial) Street** - A street, generally parallel and adjacent to a property line, having a lesser right-of-way width than normally required for improvement and use of the street;

**763.7 Marginal Access Street** - A local street, parallel and adjacent to a major street (but separated from it by a reserve strip) which provides access to abutting properties and control of intersections with the major street;

**763.8 Service Street (Alley)** - A minor right-of-way providing secondary vehicular access to the side or rear of two or more properties.

**764 Storm water Detention Facilities** - Basins, ponds, ponding areas, depressions or other structures or features used to temporarily store rainfall and release it at a controlled rate.

**765 Storm Drainage Systems** - All facilities and features such as pipes, culverts, open channels, ditches, swales, storm water detention facilities, etc. used to transmit or temporarily store surface water runoff.

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

**767 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 sub-division by lease of land for agricultural purposes into parcels of more than ten acres, not involving any new street or easement of access of any residential dwelling, shall be exempted. In addition, any subdivision by lease of land for any purpose for any uninterrupted cumulative period of less than thirty (30) years shall be exempted.  
(Ord. 2003-2)

**767.1 Substantially Completed** - Where, in the judgment of the Township engineer, based on the cost of the required improvements for which financial security was posted pursuant to Section 521, at least ninety (90%) percent of those improvements required as a condition for final approval have been completed in accordance with the approved plan, so that the project will be able to be used, occupied or operated for its intended use.  
(Ord. 1989-5) (Ord. 94-4)

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

**769** Swale - A low lying stretch of natural or man-made land which gathers or carries surface water runoff.

**770** Testing On-Lot Sanitary Sewer Systems - Soil tests and percolation tests conducted by the Municipal Sewage Enforcement Officer in compliance with Chapter 73 of Pa. Department of Environmental Resources Regulations in order to determine whether a permit may be issued for installation of on-lot sewage disposal system.

**771** Topsoil - Surface soils and subsurface soils which presumably are fertile soils and soil material, ordinarily rich in organic matter or humus debris. Topsoil is usually found in the uppermost soil layer called the A Horizon.

**771.1** Usable Site Area - The area remaining that can be used for development after subtracting the resource protected and from the lot area. The usable site area shall be rounded upward to the nearest acre.  
(Ord. # 2002-2)

**772** Watercourse - A natural or man-made permanent stream, river, brook, creek, channel, swale or ditch for water.

**773** Water Supply and Distribution System, Public - A system for supplying and distributing water from a common source to dwellings and other buildings, generally serving a major portion of a municipality or municipalities, and operated by a governmental agency, governmental authority, or a public utility company.

**774** Water Supply and Distribution System, Centralized - A system for supplying and distributing water from a common source to two or more dwellings and/or other buildings, generally serving a single land development, subdivision, or neighborhood, and operated by a governmental agency, governmental authority, public utility company or a developer.

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

**776** Zoning Officer - The duly constituted Township Official designated to administer and enforce the provisions of the zoning ordinance.

## SECTION VIII

### CONSERVATION DISTRICT

#### **800** Application

**801** The design standards and requirements, outlined in this section, will be utilized by the Township Planning Commission and Board of Supervisors in determining the adequacy of all plans for proposed subdivision and land development only within the Conservation District.

**802** Development shall be planned, reviewed and carried out in conformance with all township, state and other applicable laws and regulations.

**803** Whenever other township ordinances or regulations impose more restrictive standards and requirements than those contained herein, such other shall be observed.

#### **810** General Standards

**811** Land shall be suited to the purpose for which it is to be subdivided. Land with environmentally unique features, unsafe or hazardous condition, such as, but not limited to, open quarries, unconsolidated fill, steep slopes, or flood prone areas shall not be subdivided for residential uses. The Environmental Protection and Common Open Space Standards as defined in Section 490 shall be met for all lots in the Conservation District.

**812** Consideration shall be given to applicable provisions of the Township's current Comprehensive Plan and to the Lehigh Valley Planning Commission Comprehensive Plan.

**813** The Board of Supervisors may alter the design standards and requirements within this ordinance upon presentation of evidence that the intent of such standards and requirements shall be substantially achieved. Reasons for such action could be for the purpose of achieving economy and ingenuity in design, in accordance with modern and evolving principles of site planning and development.

#### **820** Existing Resources and Site Analysis Plan Requirements are as follows:

**822.1** The plan shall be clearly and legibly drawn to a scale of one (1) inch equals one hundred (100) feet for sites under 100 acres and one (1) inch equals two hundred (200) feet for sites over 100 acres. If additional plans are needed to show unique details of the site that scale shall be one (1) inch equals fifty (50) feet.

**822.2** The plan shall show the relationship of the subject property to natural and man-made features existing within 1,000 feet of the site. The use of county aerial survey maps will be acceptable.

**822.3** The plan shall include topography, from USGS maps. The topographic plan shall have two (2) foot contour intervals, interpolated from USGS maps. The Planning Commission may specify greater or lesser intervals on steep or flat sites. Slopes between 15 and 25 percent and exceeding 25 percent shall be clearly indicated.

**822.4** The plan shall include streams, woodlands, (woodlands over ½ acre from aerial photographs where available), ridge lines, public and private roads and trails.

**822.5** The plan shall show natural drainage patterns, water resources, drainage swales, ditches, drains, ponds, quarries, lakes, flood plains, flood ways, wetlands, permanent and seasonal high water table areas.

**822.6** The plan shall show soil types and provide a soil description of all the soils present on the site. The soil analysis shall include prime agricultural soil areas, soils with shallow depth to bedrock, soils most susceptible to erosion, soils most suitable for urban development, flood plain soils, wetland soils and soils generally suitable for on-lot sewage disposal. The plan shall be based on information from the latest Lehigh County Soil Survey.

**822.1** The plan shall show geologic formations, including rock outcroppings, boulder fields, cliffs and visible sinkholes.

**822.7.1** The plan shall show vegetative cover including, but not limited to, cultivated land, permanent grassland, meadow, pasture, woodland, wetland, tree and canopy lines.

**822.8** The plan shall identify watershed boundaries.

**822.9** The plan shall identify all existing man-made features.

**822.10** The plan shall show all historically significant sites and structure, including but not limited to, cellar holes, stone walls, and marked graves.

**822.11** The plan shall identify all recorded utility easements, rights-of-way, public or private, public land and land protected under conservation easements.

**822.12** The plan shall include a wetland delineation plan and report by a qualified person.

**822.13** The plan shall include all surveys, dimensions, locations and size of resource protected land, and calculations of resource protected land, and calculations of resources protected area, photographs and any other data as proof of the inventory.

**822.14** The plan shall include the total tract area, and the resource protected area, including the supporting calculations.

**822.15** The plan shall include an inventory table and location of all resource protected land listed in Appendix F, Table 1.

**822.16** The plan, maps and supporting documentation shall bear the name, signature, address, professional seal and telephone number of the qualified professional preparing the plan.

### **830 Design Standards**

**831** All subdivisions or land developments proposed in the Conservation District shall conform to the requirements of Section 491 Erosion and Sedimentation Control, Section 492 Natural Feature Preservation, and Section 493 Common Open Space and Recreation Areas, including all sub-sections of the Lynn Township Subdivision and Land Development Ordinance, latest revision.

**832** The design of all subdivision and land developments, within the Conservation District shall strictly minimize the disturbance of resource protected land listed in Appendix F, Table I. Demonstration by the applicant that these features will be protected shall be prerequisite to approval of the preliminary plan and final plan. The existing resources and site analysis plan submitted to the Township for the subdivision serves as part of that demonstration.

**833** Appendix F, Table 1 provides protection factors for each resource protected land. These factors are to be used to calculate the resource protected land which will determine the usable site area, See Appendix F, Table 2 for an example calculation.

**834** If a portion of the tract is underlain by more than one natural feature subject to a protection factor, that acreage shall be subject to the most restrictive protection factor.

**835** The maximum number of permitted dwelling units (DU) shall equal the density permitted in the Lynn Township Zoning Ordinance for the Conservation District. The calculated value is rounded downward to the nearest whole number.

**836** Resource protected land shall be protected from development in perpetuity. The perpetual preservation of resource protected land shall be in accordance with the Lynn Township Zoning Ordinance.

**837** The subdivision or land development is the sum of all contiguous land used or zoned for the same use. Non-contiguous land shall be treated as a separate subdivision.

### **840 Woodland Disturbance**

**841** This shall be in addition to the requirements under Section 492.4. Whenever other township ordinances or regulations impose more restrictive standards and requirements than those contained herein, such other shall be observed.

**842** For purposes of this section, the extent of any area of woodland disturbance shall be measured to include the entire area within the drip line of any tree. Any part of the area within the drip line of said tree is subject to woodland disturbance.

**843** Woodland disturbance, including alteration or removal of any hedgerows shall be minimized. Hedgerows shall not be removed if they are on the property line. Within 150 feet of any permitted structure, dead, injured, noxious weed and/or diseased vegetation may be removed.

**844** No specimen vegetation, which appears on a list of protected or endangered species maintained by the Commonwealth of Pennsylvania or the United States Government or which provides a habitat for protected or endangered animal species on such lists shall be removed from any lot or tract. Except, where applicant demonstrates to the satisfaction of the Board of Supervisors that such removal is essential to eliminate hazardous conditions, diseased or blighted specimen vegetation, or to otherwise permit lawful use of the lot or tract. Where permitted, removal of specimen vegetation shall be minimized. Specimen trees to be retained within the area to be disturbed shall be credited toward any tree replacement.

**845** If the woodland disturbance exceeds 20,000 square feet for each permitted use or each special exception use, including driveways, woodland replacement shall be required in accordance with Section 850.

**846** For each accessory use and clear sight triangle, the permitted removal of specimen vegetation and woodland disturbance shall not exceed 5,000 square feet for each accessory use and clear sight triangle. If the woodland disturbance exceeds 5,000 square feet for any one of these uses, woodland replacement shall be required in accordance with Section 850.

**847** The property owner may request an additional clear area around the permitted and accessory structures in wooded areas. This additional area shall be only for creating a fire safety zone or fire protection zone between the wooded area and the structures. A plan must be submitted to and reviewed by the Township at the same time a building permit application is submitted to the Township. Woodland replacement may be required in accordance with Section 850. The Township, based on the individual site features, will determine if woodland replacement is necessary.

**848** In determining where necessary woodland disturbance shall occur, the applicant shall consider the following:

**848.1** The location and benefit of conservation of healthy mature woodland stands.

**848.2** The impacts in terms of functions and values to wildlife of separating, dividing and/or encroaching on wildlife travel corridors and/or extensive habitat area, especially woodlands exceeding ten (10) acres in area.

**848.3** In areas of permitted woodland disturbance and areas adjacent to permitted woodland disturbance, care shall be exercised to protect remaining trees from damage. The following procedures shall be utilized during construction in order to protect remaining trees:

**848.31** Where existing trees are to remain, no change in existing grade shall be permitted within the drip line of the trees.

**848.32** Roots shall not be cut within the drip line of any trees to remain, except as necessary for the installation of wells, septic systems and underground utilities.

**848.33** Trees within 25 feet of a building or 15 feet bordering entrances or exits to building sites, shall be protected by a temporary barrier to be maintained in place throughout the duration of construction activity.

**848.34** Construction materials, equipment, soil and/or debris shall not be stored nor disposed of within the drip lines of trees to remain, except for mulched vegetative matter used to prevent soil compaction.

**847.35** Tree trunks, limbs and exposed roots damaged during construction shall be protected from further damage by being treated immediately in accordance with accepted professional landscape procedures.

## **850** Woodland replacement

**851** Where woodland disturbance involves more than 5,000 square feet or 20,000 square feet, as specified in this ordinance. One tree, four and one half (4 ½) inch caliper minimum (measured 3 ½ feet above grade) and two shrubs 24 to 30 inches in height, minimum, shall be planted for each 500 square feet, or fraction, in excess of the permitted woodland disturbance area. All specimen trees to be retained within the area proposed for disturbance shall be credited toward any tree replacement requirement, at a ratio of three trees credited for each individual specimen tree retained.

**852** Plantings and their measurement shall conform to the standards of the publication American or USA Standard for Nursery Stock, ANSI or U.S.A.S. Z60.1 of the American Association of Nurserymen, as amended.

**853** All plant material used on the site shall have been grown within a similar or hardier USDA zone as the site and shall be nursery grown.

**854** Species of replacement plantings selected and planting locations shall reflect careful site evaluation and in particular the following considerations:

**854.1** Existing and proposed site conditions and their suitability for the plant materials, based upon the site geology, hydrology, soils and microclimate.

**854.2** Specific functional and design objectives of the plantings, which may include but not necessarily be limited to: replacement of woodland area removed, enhancement of existing woodland or old field areas, reforestation of riparian buffer areas, provision for landscape buffer, visual screening habitats and aesthetic values.

**854.3** Maintenance considerations such as hardiness, resistance to insects and disease, longevity and availability.

**854.4** Because of the many benefits of native plants, ease of maintenance, longevity, wildlife habitat the use of nursery grown free fruiting native trees and shrubs is strongly encouraged. Species selection should reflect species diversity characteristic of the native woodland. Use of non-native and invasive planting is not permitted.

## **860** Woodland Management

**861** The applicant shall include as part of the preliminary plan and final plan submission, provision for the long-term management of any woodland area not subject to woodland disturbance and any area selected for introduction of replacement plantings in accordance with this ordinance. Where applicable, preliminary plan and final plan submission shall include a statement of woodland management objectives.

**862** Also the plans shall demonstrate, to the satisfaction of the Board of Supervisors, the feasibility of intended management practices, aiming to ensure the success of stated objectives, including the viability of introduced plantings, deterrence of invasive species, and means to minimize any future woodland disturbance.

**863** Applicants are strongly encouraged to seek woodland management assistance through the Pennsylvania Forest Stewardship Program administered by the Pennsylvania Bureau of Forestry.

## **870** Replacement Guarantee

**871** All plantings new or replacement and any other required landscaping shall be guaranteed and maintained in a healthy and/or sound condition for at least twelve (12) months or shall be replaced.

**872** The costs of landscape material and installation shall be considered in determining the amount of any performance guarantee required. At the Township's discretion, the applicant may be required to escrow sufficient additional funds for the maintenance and/or replacement of the proposed vegetation during the 12-month replacement period. In addition, an escrow may be required for the removal and replacement of specimen vegetation damaged during construction.

SECTION IX

**900** Effective Date

**901** This ordinance shall become effective on the fifth day following the adoption hereof.

DULY ORDAINED AND ENACTED by the Board of Supervisors of the Township of Lynn, Lehigh County, Pennsylvania, in lawful session, assembled this 4<sup>th</sup> day of Sept., 1980.

TOWNSHIP OF LYNN,  
BOARD OF SUPERVISORS

## APPENDIX A

### DESIGN AND CONSTRUCTION STANDARDS FOR CENTRALIZED WATER SYSTEMS

#### I. GENERAL REQUIREMENTS

A. Centralized water systems shall be developed and maintained so as to meet the standards of the Pennsylvania Department of Environmental Resources under Chapter 109 - Safe Drinking Water, of its rules and regulations and the Public Water Supply Manual - Bureau of Community Environmental Control, Division of Water Supplies, latest revision. (Ord. 93-1)

B. Where a centralized water system is contemplated in a new subdivision or land development, a feasible water supply and distribution system shall be proposed before preliminary approval of the subdivision or land development. Detailed plans and specifications for the water system shall be submitted to and be approved by the Township engineer before final approval. A permit for the system must be granted by Pennsylvania Department of Environmental Resources before final approval.

#### II. WATER SUPPLY

##### A. QUANTITY

1. The water supply shall be drawn from an adequate and reliable source which can supply in combination with storage facilities the water demands of the proposed service area, at all times. The water source in combination with storage facilities shall be capable of meeting fire flow demands according to Section II.C. of this Appendix as well as average daily consumption, except that in systems not required to provide fire flow the source in combination with storage facilities shall be capable of meeting the peak hour demand.

2. The water source shall be capable of supplying 110 gallons per day per person (GPCD) and/or 400 GPD per dwelling unit, for the design population of the development or the service area. Testing procedures to determine the reliable capacity of the water source are set forth in Section VI of this Appendix.

3. Water service to commercial or industrial developments shall demonstrate adequacy to meet projected demand from the specific project.

## B. SOURCE

Source shall conform to the water quality requirements of the Pennsylvania Department of Environmental Resources as set forth in their Public Water Supply Manual Bureau of Community Environmental Control. Treatment of the water supply shall be done in accordance with requirements set forth in the Public Water Supply Manual, latest revision. (Ord. 93-1)

## C. RELIABILITY CRITERIA

All Utilities shall have a standby pump or pumps adequate to insure that the system can operate normally with the largest pump out of service. In addition, the following storage and equipment requirements shall be met by centralized water supply systems according to the size of the system.

1. Small Utilities servicing less than fifty customers shall have sufficient storage facilities to supply demand for a twenty-four hour time period with the source cut off.
2. Utilities serving greater than fifty but less than one hundred customers shall maintain a minimum distribution storage capability of 100 percent of the maximum twenty-four hour demand.
3. Utilities serving greater than one hundred but less than two hundred customers shall maintain a minimum distribution storage capacity of 100 percent of the maximum twenty-four hour demand and an auxiliary power generation source.
4. Utilities servicing greater than two hundred customers shall provide elevated storage facilities of sufficient capacity to meet National Insurance Services Office recommendations for fire protection, shall provide fire hydrants, and shall meet design standards of the American Water Works Association.

The NISO minimum requirements for low or medium value residential and commercial areas are indicated in the table below:

Zone	Rated Capacity GPM	Time Duration (Hours)	Residual Pressure at Rated Capacity
Residential	500	2	20 PSI
Commercial	1000	2	20 PSI

### III. DISTRIBUTION SYSTEMS

#### A. ACCEPTABLE PIPE MATERIALS

Pipe selected for distribution systems shall have been manufactured in conformance with latest standard specifications issued by the American Water Works Association. The following are generally acceptable materials for water main use:

- 1) Cast iron pipe (cement lined)
- 2) Ductile iron pipe (class 52) (Ord. 93-1)

#### B. MAIN SIZES

Water distribution mains shall be a minimum of six inches inside diameter laid out in a well-gridded system. Whenever fire protection capability is provided, main sizes shall be adequate so the system can meet the water quantity and pressure standards in Sections II.A. and II.C. of this Appendix. Supply mains not adequate for fire-fighting shall not be connected to fire hydrants and can only be considered for use as special water service lines.

#### C. WATER PRESSURE

A minimum static pressure during peak hourly flow of 50 pounds per square inch is desirable, but the minimum static pressure during peak hourly flow shall not be less than 30 pounds per square inch. A minimum of 20 pounds per square inch should exist at any point in the system during periods of fire flow.

#### D. CUSTOMER CONNECTIONS

1. All service connections from the main to a single dwelling unit shall be a minimum of 1 inch ID. The diameter of service connections to multiple units shall meet the approval of the Township engineer.
2. Customer service connections shall be one of the approved materials for mains. Heavy wall copper may be used for service connections where soils are not permeated or subject to acidic ground drainage waters.
3. A curb stop shall be furnished for each customer service connection.
4. Cross connections - A cross connection is any physical connection, direct or indirect, which provides a potential opportunity for non-potable water to enter a conduit, pipe or receptacle containing potable water. Such cross connections are prohibited.

#### E. LEAKAGE TEST

1. No installation shall be approved until the leakage is less than the number of gallons per hour as determined by the formula:

$$L = \frac{SD \sqrt{P}}{133,200}$$

where:

- L = allowable leakage in gallons per hour.
- S = length of pipe tested.
- D = nominal diameter of the pipe in inches.
- P = the average test pressure during test.

2. Leakage tests shall be conducted concurrently with the pressure test. The hydrostatic pressure test of one hundred fifty (150) pounds per square inch measured at the lowest elevation shall be applied for not less than one (1) hour. (Ord. 93-1) (Ord. 94-4)

#### IV. WATER STORAGE AND PUMPING STATIONS

A. Storage for finished water should be provided as an integral part of each water supply system. Standards set forth in Part 14 of the Public Water Supply Manual - Tanks, Standpipes, and Pressure Tanks, shall be used in designing water storage systems. Equipment selected shall have been manufactured in conformance with the latest standards and specifications issued by the American Water Works Association.

B. Pumping stations within centralized water systems shall comply with standards and specifications set forth in Part 13 of the Pennsylvania Department of Environmental Resources Public Water Supply Manual.

V. WELL CONSTRUCTION AND LOCATION

A. Well construction shall take place according to the standards set forth in Part 3 of the Pennsylvania Department of Environmental Resources Public Water Supply Manual.

B. The centralized water system well source shall be centrally located within an open space water protection zone a minimum of one (1) acre in size. No structure other than water system pumping stations, standpipes, etc. shall be located within the protected zone. No on-lot sewage disposal system shall be constructed within 200 feet of the water source well.

VI. WELL CAPACITY TESTING PROCEDURES

A. A dynamic recovery rate and draw-down test shall be conducted to determine the capacity and safe daily yield of the well source. The test procedures shall be conducted as follows:

1. A water pump, capable of variable output, having sufficient capacity to exceed the Dynamic Recovery Rate of the water source shall be employed for said test. It is recommended that the capacity of the source pump be such that draw-down to within 20 feet of the source pump be achieved in a maximum of three (3) hours.
2. A suitable calibrated water meter capable of measuring the water output shall be connected to the water source pump outlet.
3. The exact location of the water source pump with respect to the bottom of the well shall be recorded and maintained constant for the duration of the test.
4. The water source pump shall be operated at maximum capacity and output for the first six (6) hours of the test or until the water level in the source well reaches a point 20 feet above the water source pump. The elapsed time and rate of pumping shall be recorded at 60-minute intervals on the log data sheet form supplied.

5. Draw-down of the source well in feet shall be recorded at 60-minute intervals as well as the water draw-down of any required peripheral test hole wells\* on the log data form.
6. Reduce the maximum rate of pumping by 10 gallons per minute (GPM) and continue pumping for the next two (2) hours of test or until the water level reaches a point 20 feet above the water source pump. The elapsed time, rate of pumping and draw-down of the source well and, where required, the peripheral test hole wells\* shall be recorded on the log data forms at 60 minute intervals.
7. Continue the above procedure using the two (2) hour time periods or the criteria of water level above the source pump until the conditions are such that the Dynamic Recovery Rate of the water source equals the pumping rate (dynamic equilibrium). The Township Engineer may increase the increment of GPM reduction where on site review of the data warrants such action. Note, as the Dynamic Recovery Rate is approached, the increment of GPM reduction will need to be reduced from 10 GPM to 8 GPM to 5 GPM -- to n GPM -----> 0. At this point, no detectable change in draw-down will occur. If any change in draw-down is detected, either plus or minus, dynamic equilibrium has not been achieved.
8. When said Dynamic Recovery Rate is reached, record elapsed time, pumping rate and draw-down on log data sheet and continue pumping at this rate for the remainder of the 72-hour test time or a minimum of 24 hours, whichever is the greater time. Elapsed time, pumping rate and draw-down of the source well, and where required, the peripheral test wells\*, shall be recorded hourly.
9. Measurements of static water level recovery shall be made on the source well and peripheral test hole wells\*, where required. Measurements shall be taken hourly and the data recorded for a minimum time period of 24 hours upon cessation of the dynamic recovery rate test.

10. Calculations of Specific Capacity and safe daily yield of the source well shall be submitted to the Township Engineer and the Pennsylvania Department of Environmental Resources by the registered professional engineer employed by the Utility or developer for review and analysis.

\* Peripheral test hole wells may be required in order to determine the area of influence of the source well and the capacity of the source well aquifer. Peripheral test hole wells will generally be required in geological areas with slate and shale formations. The test hole wells shall be situated according to figure 1 and have a minimum diameter of 6 inches.

## VII. IMPROVEMENTS REQUIREMENTS

A. Where a centralized water system is to be installed within a proposed subdivision or land development, the improvement procedures and requirements set forth within the Lynn Township Subdivision and Land Development Ordinance shall be followed. Improvements agreements, guarantees, inspections, and guarantee releases shall include consideration of the centralized water company in carrying out the procedures and requirements of the Lynn Township Subdivision and Land Development Ordinance.

B. Final specifications for the design and installation of the centralized water system shall be included as part of the improvements agreement between the developer and the Board of Supervisors. Final approval of the subdivision or land development plan shall not take place until such specifications are finalized within the improvements agreement and until the necessary improvements and maintenance guarantees are posted. Engineering review of the specifications for the water system by an engineer independent of the design engineer shall take place before signing of the improvements agreement and before approval of the final development plan.

## APPENDIX B

### STORM DRAINAGE RUNOFF CALCULATION

#### A. Rational Formula

The rational formula used in calculating runoff is  $Q=CIA$ . In this equation, Q is the peak runoff in cubic feet per second, C is a runoff coefficient which depends on the nature of the land cover, I is the intensity of rainfall in inches per hour for a duration equal to the time of concentration for the drainage area involved, and A is the watershed area in acres. The time of concentration is the time required for runoff from the upper reaches of the watershed to reach the point for which runoff rates are being calculated.

##### 1. Values of Coefficient "C"

Runoff coefficients used in the Rational Formula shall be consistent with Table A-1.

##### 2) Values of Rainfall Intensity "I"

Rainfall intensities to be used in the Regional Formula shall be consistent with the Intensity-Duration-Frequency (I-D-F) Curves as shown in Figure A-1. Time of concentration values to be used with the I-D-F curves shall be based upon a segmental velocity/travel time calculation along the most remote path. The flow path should be broken down into flow type (overland, shallow concentrated, open channel) based upon site evaluation and velocities and travel times calculated with methods acceptable to the Township Engineer. The time of concentration would be the sums of the segmental travel times.

## B. Manning's Equation

1. Manning's equation to determine the velocity of flow in open channels and closed drains not under pressure is listed below. The second equation is used to determine the capacity after the velocity has been determined.

$$V = \frac{1.486}{n} \left( \frac{a}{p} \right)^{2/3} s$$

$$Q = va$$

v = velocity in feet per second.

n = coefficient of roughness.

a = cross-sectional area of flow in square feet.

p = wetted perimeter, the length of the line of contact between the water and the bottom and sides of the channel or pipe around the cross-section in feet.

s = slope of the channel or pipe in feet per foot.

q = capacity of the channel or pipe in cubic feet per second.

2. The coefficient of roughness used shall be as follows unless different coefficients are approved by the municipal engineer.

0.015 for concrete pipes and paved channels

0.021 for corrugated metal pipes

0.035 for earth ditches

0.040 for vegetated channels

## C. Maximum Stream Velocities in Open Channels

Maximum permissible velocities in channels shall be based upon the DEP Soil Erosion and Sedimentation Control Manual, latest revision.

PERMISSIBLE VELOCITIES FOR CHANNELS \*

CHANNEL LINING

PERMISSIBLE CHANNEL  
VELOCITY (FEET PER SECOND)

Vegetation

Alfalfa	2.5	-	3.5
Bermuda grass	4	-	8
Crabgrass	2.5	-	3.5
Crown vetch	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	.5	-	3.5

Bare Earth, Easily Eroded

Fine Sand	1.5
Sand Loam	1.75
Silt Loam or Alluvial Silt, Loose	2
Firm Loam	2.25

Bare Earth, Erosion Resistant

Fine Gravel	2.5
Stiff Clay or Alluvial Silt, Firm	3
Loam to Cobbles (graded)	3.75
Silt to Cobbles (graded or Coarse gravel)	4
Cobbles and Stones or Shales and Hardpans	5
Durable Bedrock	8

Other

Plastic	4
6" Rip Rap	6
Asphalt	7
9" Rip Rap	8
12" Rip Rap or Wood	9
Concrete or Steel	12

\*These values, if applied to uniform, straight channels, may be considered in accordance with Chapter 102.12 of the Erosion Control Rules and Regulations. However, slope, soil condition, climate and management must be considered in channel design. If different channel linings exist in a channel, and size and slope do not change, design the channel for the lining with the lower velocity listed. Where velocity ranges are listed, the lower velocity is for design with easily eroded soils and slopes greater than 10%. The higher velocity is for design with erosion resistant soils and slopes and slopes less than 5%. Filtration and/or sedimentation in the channel is encouraged. However, this must be considered for velocity determination in the design of the channel cross-section.

Source: Department of Environmental Resources, Soil Erosion and Sedimentation Control Manual, latest revision.

(Ord. 93-1)

APPENDIX C

INFORMATION - MAJOR AND MINOR SUBDIVISIONS

OWNER'S CERTIFICATION

MAJOR

We Certify, that we are the owners of the property shown hereon in peaceful possession and there are no suits pending affecting the title of same, that we will properly grade all individual lots and provide adequate surface drainage so that no low spots or water pockets will be created and that the concrete monuments indicated will be placed upon completion of grading.

\_\_\_\_\_  
\_\_\_\_\_

MINOR

We the undersigned being duly sworn according to law depose and say that we are the sole owners of the tract shown hereon in peaceful possession of the same and that there are no suits or actions pending or affecting the same.

\_\_\_\_\_  
\_\_\_\_\_

NOTARIZATION

Sworn and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, A.D.  
20\_\_\_\_\_.

( legible ) \_\_\_\_\_  
(impression of) Notary Public  
(notary seal) My Commission Expires:

PLANNING COMMISSION REVIEW (Ord. 1981-2)

On \_\_\_\_\_ the within plot or plan of land located in Lynn Township,  
Lehigh County, Pennsylvania, was reviewed by the Planning Commission of Lynn Township.

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Secretary



APPENDIX D  
CURBING DETAIL  
STANDARD DETAIL  
FOR  
VERTICAL CURB

APPENDIX E  
STANDARD DETAIL  
FOR  
HANDICAPPED RAMP

**APPENDIX F**

TABLE 1 - These Resource Protected Land Factors shall apply to the Conservation District

RESOURCE PROTECTED LAND	FACTOR
Land with the rights-of-way for existing or proposed overhead utilities & existing private streets	1.0
Wetlands, lakes, ponds, quarries, streams and springs (1)	1.0
Flood way, 100 year flood plain and flood plain soils (2)	1.0
Extensive outcroppings and boulder fields of 500 square feet or more	1.0
Steep slopes of 25% or more	1.0
Steep slopes of more than 15% but less than 25%	0.5
Existing mature wooded area having a total canopy cover of 10,000 square feet or more and consisting of 50% of the trees having a 10-inch or greater diameter at a 4 ½' height.	0.5
Existing young woodland having a total canopy area of 10,000 square feet or more and consisting of 70% of the trees having 2.5 inch or greater diameter at a 4 ½ foot height.	0.5
Land which has been cleared by logging or for logging purposes (3)	0.5

1. No development, filling, piping or diverting shall be permitted except for required roads as approved by the DEP.
2. Roads may cross the flood plains and flood plain soils where design approval is obtained from the DEP.
3. This is included in effect in order to prevent circumventing resource protection through logging.

**APPENDIX F**

TABLE 2 - Example calculation of Usable Site Area in the Conservation District

RESOURCE PROTECTED LAND	FACTOR	ACRES WITH RESOURCE	= ACRES PROTECTED
Land with the rights-of-way for existing or proposed overhead utilities & existing private streets	1.0	0.00	0.00
Wetlands, lakes, ponds, quarries, streams and springs	1.0	8.01	8.01
Flood way, 100 year flood plains and flood plain soils	1.0	1.00	1.00
Extensive outcroppings and boulder fields of 500 square feet or more	1.0	2.01	2.01
Steep slopes of 25% or more	1.0	25.80	25.80
Steep slopes of more than 15% but less than 25%	0.5	10.50	0.00 (4)
Existing mature wooded area having a total canopy cover of 10,000 square feet or more and consisting of 50% of the trees having a 10-inch or greater diameter at a 4 ½ ' height	0.5	10.50	5.25
Existing young woodland having a total canopy area of 10,000 square feet or more and consisting of 70% of the trees having 2.5 inch or greater diameter at a 4 ½ foot height	0.5	2.01	0 (5)
Land which has been cleared by logging or			

for logging purposes RESOURCE PROTECTED AREA			

Total Tract Area = 100.00 acres  
 Minus Resource Protected Area = 47.07 acres  
 Usable Site Area = 52.93 acres

Total Usable Site Area = 53 acres

4. Since this portion of the tract is 15 to 25% steep slope and mature woodland, that acreage is subject to the woodland protection factor only.

5. Since this tract of woodland is underlain by part of the boulder field, that acreage is subject to the boulder field protection factor only.