

**SUBDIVISION AND LAND DEVELOPMENT  
ORDINANCE  
UPPER NAZARETH TOWNSHIP  
NORTHAMPTON COUNTY, PENNSYLVANIA**



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## **ARTICLE 1**

### **GENERAL PROVISIONS**

**100 TITLE**

An Ordinance providing for the regulation and control of the subdivision of lots and the development of land; the approval of plans, plots or replots of land laid out in building lots; standards for the design of streets, lots, easements, blocks and other improvements; minimum improvements and construction standards on all streets and required dedications; the administration of this Ordinance and penalties for the violation of this Ordinance.

**110 SHORT TITLE**

This Ordinance shall be known and may be cited as The Upper Nazareth Township Subdivision and Land Development Ordinance of 2005 and may be referred to as SALDO.

**120 APPLICATION**

121 No subdivision or land development of any lot, tract or parcel of land shall be made, and no street, sanitary sewer, storm sewer, water main, gas, or electric transmission line, or other improvements in connection therewith shall be laid out, constructed, opened or dedicated for public use or travel or for the common use of occupants of buildings abutting thereon, except in accordance with this Ordinance.

122 No lot in a proposed subdivision or land development may be sold, and no final permit to erect any building upon land in a subdivision or land development may be issued unless and until a final plan has been approved and recorded, and either the Township has been assured by means of an Improvements Agreement acceptable to the Board of Supervisors that the improvements will subsequently be installed or the required improvements in connection therewith have been constructed.

123 This Ordinance shall apply to all subdivisions and land developments excepting subdivisions which have received preliminary plan approval from the Board of Supervisors between the effective date of this Ordinance and a date five years prior to the effective date of this Ordinance. Notwithstanding the provisions of Sections 121 and 122, the excepted subdivisions shall comply with the requirements of the Subdivision and Land Development Ordinance in effect at the date of the preliminary plan approval for a five year period commencing at the date of the preliminary plan approval. After the expiration of the five-year period, the provisions of this Ordinance shall be applicable to said subdivision or land development.

**130 EFFECTIVE DATE OF ORDINANCE**

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

**140 REPEALER**

The Upper Nazareth Township Subdivision and Land Development Ordinance No. \_\_\_\_ adopted \_\_\_\_\_, and all amendments thereto are hereby repealed. This Ordinance does not repeal provisions of other laws or ordinances except those specifically repealed by this Ordinance.

Duly ordained and adopted this \_\_\_\_\_.

Township of Upper Nazareth

By

Carol Keller  
Chairman, Board of Supervisors

Attest:

\_\_\_\_\_  
Township Secretary



## ARTICLE 2

### DEFINITIONS

- 200 Unless otherwise expressly stated, the following terms shall, for the purpose of these regulations, have the meanings indicated:
- 201 Words in the singular include the plural and those in the plural include the singular.
- 202 Words in the present tense include the future tense.
- 203 The words "person", "developer", "subdivider", and "owner" include a corporation, unincorporated association, a partnership, or other legal entity, as well as an individual.
- 204 The word "building" includes structure and shall be construed as if followed by the phrase "or part thereof".
- 205 The words "should" and "may" are permissive; the words "shall" and "will" are mandatory and directive.
- 206 The word "Township" means Upper Nazareth Township, Northampton County, Pennsylvania.
- 207 The term "Board of Supervisors" means the Board of Supervisors of Upper Nazareth Township.
- 208 The term "Planning Commission" means the Planning Commission of Upper Nazareth Township.
- 209 The term "Board" means the Zoning Hearing Board of Upper Nazareth Township.
- 210 If a word is not defined in this Ordinance, but is defined in the Township Zoning Ordinance, as amended, the definition in that Ordinance shall apply. If a word is defined in both this Ordinance and another Township Ordinance, each definition shall apply to the provisions of each applicable Ordinance.
- 211 Any word or term not defined in this Ordinance or in the Township Zoning Ordinance, as amended, shall have its plain and ordinary meaning within the context of the Section. A standard reference dictionary should be consulted.
- 212 The words "such as", "includes", "including" and "specifically" shall provide examples. These examples shall not, by themselves, limit a provision to the examples specifically mentioned if other examples would otherwise comply with the provision.
- 213 All undefined terms used in this ordinance which are defined in the Pennsylvania Storm Water Management Act of 1978, or the Stormwater Management Ordinance of Upper Nazareth Township as adopted in 2005, shall have the meaning defined in said Act or Plan. In the event that terms are defined both in this ordinance, and in the Act or

Stormwater Ordinance, the definitions contained in this Ordinance shall prevail over the definitions contained in the Act and the Stormwater Ordinance. Other terms or words used herein shall be interpreted or defined as follows:

**ACCESSORY BUILDING.** A building which is subordinate and accessory to a principal building on the same lot and which is used for purposes that are clearly customarily incidental to the uses of the principal building. Any portion of a principal building used for an accessory use shall not be considered to be an accessory building.

**ACCESSORY STRUCTURE.** A structure, such as a private garage or private swimming pool, serving a purpose customarily incidental to the use of the principal building and located on the same lot as the principal building.

**ACCESSORY USE.** A use separated from, subordinate to and customarily incidental to the use of the principal building and situate on the same lot.

**ALLEY.** A public or private thoroughfare, which affords only a secondary, means of access to abutting property and not intended for general traffic circulation.

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

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

**BUILDING.** Any structure having a permanent roof and intended for the shelter, work area, housing or enclosure of persons, animals, equipment or materials and that a total area under roof of greater than 16 square feet. "Building" is interpreted as including "or part thereof." See the separate definition of "structure". Any structure involving a permanent roof (such as a covered porch or a carport) that is attached to a principal building shall be considered to be part of that principal building.

**BUILDING SETBACK LINE.** A line, which designates the minimum distance between any building and the adjacent street right-of-way or property line, whichever is closer. This line shall be measured from a point or points formed by the intersection of a vertical building wall with the ground (or in the case of a cantilevered building, at the vertical plane which coincides with the most projected surface), to the street right-of-way or property line, whichever is closer.

**Front Yard Building Setback Line.** The line parallel to the public or private street right-of-way line at a distance equal to the minimum depth of the front yard designated for each district in the Upper Nazareth Township Zoning Ordinance. All yards adjacent to a public or private street right-of-way shall be considered front yards, except in double frontage lots.

**Side Yard Building Setback Line.** The line parallel to the side lot line and equal to the minimum depth of the side yard designated for each district in the Upper Nazareth Township Zoning Ordinance.

**Rear Yard Building Setback Line.** The line parallel to the rear lot line and equal to the minimum depth of the rear yard designated for each district in the Upper Nazareth Township Zoning ordinance.

**CARTWAY.** The paved portion of a street designed for vehicular traffic and on-street parking, but not including the shoulder of the street.

**CLEAR SIGHT TRIANGLE.** An area of unobstructed vision at street intersections defined by the center lines of the streets and by a line of sight between points on their center lines at a predetermined distance from the intersection of the center lines, measured at two (2) feet in height.

**CLOSED DEPRESSION.** A part of the land surface of a lot, parcel or tract which drains internally, and which generally has sunk to a variable depth and is generally characterized by a downward movement of soil into bedrock voids without breaking the ground surface.

**COMPREHENSIVE PLAN.** The document entitled the “Upper Nazareth Comprehensive Plan,” or any part thereof, adopted by the Board of Supervisors, as amended.

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

**DESIGN STORM.** The magnitude of precipitation from a storm event measured in probability of occurrence (e.g. 50-year storm) and duration (e.g. 24 hour), and used in computing storm water management control systems.

**DETENTION BASIN.** A basin designed, intended or used to retard storm water runoff by temporarily storing the runoff and releasing it at a predetermined rate.

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

**DWELLING UNIT.** A room or group of rooms located within a residential building and forming a single habitable unit with facilities, which are used or intended to be used for living, sleeping, cooking and eating by one family.

**EASEMENTS.** A liberty, privilege or advantage which one has in the lands of another for a precise and definite purpose, subordinate to, but not inconsistent with, the owner's general property rights.

**ENGINEER.** A Professional Engineer licensed by the Commonwealth of Pennsylvania.

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

**FILL.** Any act by which earth, sand, gravel, rock or any other material is placed, pushed, dumped, pulled, transported or moved to a new location above the natural surface of the ground or on top of the stripped surface and shall include the conditions resulting therefrom. The

difference in elevation between a point on the original ground and a designated point of higher elevation on the final grade. The material used to make a fill.

**FLAG LOT.** An irregularly shaped lot characterized by an elongated extension from a street to the principal part of the lot. The flag shape of the lot is normally intended to provide for access to an otherwise landlocked interior parcel.

**FLOOD PLAIN.** A relatively flat or low lying area adjoining a river, stream or watercourse which is subject to partial or complete inundation during a 100-year design frequency storm or an area subject to the accumulation or runoff of surface waters from any source, as more fully defined by the current edition of the Upper Nazareth Township Flood Insurance Rate Map and associated Flood Plain Study.

**GRADING.** Changing existing topography through cutting or filling by one (1) foot or more in elevation over an area exceeding 1,000 square feet or any land disturbance of 4,000 square feet or greater.

**HYDRIC SOILS.** Poorly drained soils that can support hydrophytic plants, but may not necessarily do so.

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

**IMPROVEMENTS GUARANTEE.** See performance guarantee.

**KARST.** A type of topography that is formed over limestone, dolomite, or gypsum by bedrock solution, and that is characterized by closed depressions or sinkholes, caves and underground drainage.

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

- (a) The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving:
  - (i) a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or
  - (ii) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features.
- (b) A subdivision of land.
- (c) Development in accordance with Section 503.1.1 of the Municipalities Planning Code, as amended.

**LANDOWNER.** The owner of a legal or equitable interest in land, including the holder of a written, signed and active option or contract to purchase or a leasee (if authorized under the lease to exercise the right of the landowner), or authorized officers of a partnership or corporation that is a "landowner" or other person having a proprietary interest in land. A person who has clearly received formal notarized powers of attorney relating to a landowner may act in the capacity of the landowner, if legally authorized.

**LEHIGH VALLEY PLANNING COMMISSION.** The Planning Commission of Lehigh and Northampton Counties.

**LOT.** A separate parcel of land that is recorded or that will be recorded after Township approval in the office of the County Recorder of Deeds. A parcel under common ownership that is completely separated into two parts by a public street shall be considered to be one tract but two lots.

**LOT AREA.** The horizontal land area contained within the lot lines of a lot (measured in acres or square feet). Lot area shall not include the following:

- A. Areas within future or existing street rights-of-way.
- B. Areas that are currently or will be dedicated as common open space or,
- C. For residential lots only, areas within rights-of-way intended for overhead electrical lines of 35 kilovolts or higher capacity.

**MAINTENANCE GUARANTEE.** Any security which may be accepted by the Board of Supervisors to insure the structural integrity of accepted 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 of eighteen (18) months.

**MARKER.** A metal pipe or pin of at least three-quarters (3/4) inches outside diameter and at least thirty (30) inches in length.

**MOBILE/MANUFACTURED HOME PARK.** A parcel of land under single ownership which has been planned and improved for the placement of 2 or more mobile/manufactured homes for nontransient residential use. The individual manufactured homes may be individually owned. A development of mobile/manufactured homes that is subdivided into individual lots shall be regulated in the same manner as a subdivision of site-built homes, and shall not be considered to be a "mobile home park."

**MONUMENT.** A stone or concrete monument with a flat top at least four (4) inches in diameter or square. The bottom sides or radius shall be at least two (2) inches greater than the top to minimize movements caused by frost. The monument shall contain a steel dowel and be at least thirty (30) inches in length.

**OPEN SPACE.** That part of a lot, parcel or tract which is unoccupied and unobstructed by any structure or impervious cover, except recreational and utility structures, which are permitted. The term "open space" shall not include any area designed, maintained or used for streets, roads, highways, driveways or parking areas.

**OPEN SPACE, COMMON.** A parcel or parcels of land, within a tract which meets all of the following standards:

- (a) is designed, intended and suitable for active or passive recreation by residents of a development or the general public,
- (b) is covered by a system that ensures perpetual maintenance, if not intended to be publicly owned,
- (c) will be deeded to the Township and/or deed restricted to permanently prevent uses of land other than “common open space” and non-commercial recreation, and
- (d) does not use any of the following areas to meet minimum open space requirements:
  - 1) existing or established future street rights-of-way,
  - 2) vehicle streets or driveways providing access to other lots,
  - 3) land beneath building(s) or land within 20 feet of a building (other than accessory buildings and pools clearly intended for noncommercial recreation and other than agricultural buildings and a farmstead which are permitted within land approved by the Township for agricultural preservation),
  - 4) off-street parking (other than that clearly intended for noncommercial recreation),
  - 5) area(s) needed to meet a requirement for an individual lot,
  - 6) area(s) deeded over to an individual property owner for his/her own exclusive use, except for land approved by the Township for agricultural preservation,
  - 7) land beneath or within 50 feet of each side of each of the following: a) overhead electrical transmission lines of 35 kilovolts or greater capacity, b) the towers/poles supporting such lines,
  - 8) for land intended to be open to the public, that does not have provisions for entry with a 20 feet minimum width by pedestrians from a street open to the public or from an adjacent common open space area that has access to such a street,
  - 9) land that includes a stormwater detention basin, except for a basin or portions of a basin that the applicant proves to the satisfaction of the Board of Supervisors would be reasonably safe and useful for active or passive recreation during the vast majority of weather conditions,
  - 10) portions of land that have a width of less than 20 feet,
  - 11) land that includes commercial recreation uses, except as may specifically be permitted to be counted towards a common open space requirement by a specific provision of this Ordinance, and
  - 12) land that includes a central sewage treatment plant or a stormwater facility, except as provided for above.

**PA DEP.** The Pennsylvania Department of Environmental Protection, or its successors, and its subparts.

**PENNDOT.** The Pennsylvania Department of Transportation, or its successor, and its subparts.

**PERFORMANCE GUARANTEE.** Any security which may be accepted by the Board of Supervisors to guarantee that the proper construction of improvements be made by the developer as a condition for the approval of the Plan.

**PLAN, FINAL.** A complete and exact plan, with professional engineer's seal and/or professional land surveyor's seal affixed and prepared for official recording as required by this Ordinance to define property rights, streets and other proposed improvements.

**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.

**PLAN, RECORD.** The copy of the Final Plan which contains the original endorsements of the Lehigh Valley Planning Commission and the Township Planning Commission and which is intended to be recorded with the County Recorder of Deeds.

**PLAN, SKETCH.** An informal plan, indicating salient existing features of a tract and its surroundings and the general layout of the proposed subdivision. A sketch plan is not mandatory and is not a preliminary plan.

**PUBLIC NOTICE.** Notice as required by the Municipalities Planning Code.

**RECREATION LAND.** Land dedicated to the Township or other entity approved by the Township for the use of the Township's residents, which is suitable for active uses such as playing fields. Recreation lands shall not include areas within the 100 year flood plain, power line or pipeline rights-of-way, quarries, road rights-of-way, buffer zones, or stormwater management facilities. Recreation lands shall not include areas characterized by wetlands, hydric soils, slopes in excess of five (5%) percent, or woodlands.

**REVERSE FRONTAGE LOT.** A parcel designed such that individual residential uses abut a street on both the front and the rear, with vehicular access from only one street. A lot will only be deemed a reverse frontage lot if access is from a local street.

**RIGHT-OF-WAY.** Land reserved for the public or others for use as a street or other purpose. Unless otherwise stated, "right-of-way" shall mean the future street right-of-way line.

**RUNOFF.** That part of precipitation which flows over the land.

**SALDO.** The Upper Nazareth Township Subdivision and Land Development Ordinance of 2005.

**SANITARY SEWAGE DISPOSAL, ON-LOT.** An "on-lot" septic tank disposal system generally providing for disposal of effluent for only one building or a group of buildings on a single lot, and provided in compliance with Pennsylvania Department of Environmental Resources' regulations or regulations of the Township, whichever may be more stringent.

**SANITARY SEWAGE DISPOSAL SYSTEM, PUBLIC.** A public or private utility system designed to collect, centrally treat and dispose of sewage from more than one customer, in compliance with Pennsylvania Department of Environmental Resources' regulations or regulations of the Township, whichever may be more stringent.

**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".

**SIGHT DISTANCE.** 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 between a point 3.5 feet above the centerline of the road surface and a point 3.5 feet above the centerline of the road surface.

**SINKHOLE.** A localized sinking of land surface to a variable depth generally characterized by a roughly circular outline and a downward movement of soil into bedrock voids.

**SLOPE.** The vertical change of an area of land divided by the horizontal change, measured in percent.

**SOIL STABILIZATION.** Chemical or structural treatment of a mass of soil to increase or maintain its stability or otherwise improve its engineering properties.

**STORM SEWER.** A system of pipes or other conduits which carries intercepted surface runoff, street water and other wash waters, or drainage, but excludes domestic sewage and industrial wastes.

**STORM WATER MANAGEMENT PLAN.** The plan for managing storm water runoff adopted by Northampton County for the Monocacy Creek Watershed and the Bushkill Creek Watershed as required by the Act of October 4, 1978, P.L. 864, (Act 167), and known as the "Storm Water Management Act".

**STREET.** A strip of land intended for use as a means of vehicular or pedestrian traffic, whether public or private.

**ARTERIAL STREET.** A major regional highway designed to carry heavy vehicular traffic onto, out of, or through the regional area; subject to necessary control of entrances, exits and curb use.

**COLLECTOR STREET.** A street designed to carry a moderate volume of traffic to intercept local streets, to provide routes to arterial roads and to community facilities and to provide a limited amount of access to the abutting properties.

**CUL-DE-SAC.** A local street intersecting another street at one end, and terminating in a vehicular turn-around at the other.

**DEAD END STREET.** A street with a single connection with the surrounding road network, which fails to meet the definition of "stub street."

**EXPRESSWAY.** A major highway designed for large volumes and high speed traffic with access limited to grade separated intersections.



**LOCAL STREET.** A street whose function is to provide for local traffic movement with relatively low volumes and direct access to abutting properties.

**LOOP STREET.** A street which intersects only with itself, except for a single connection with the surrounding road network.

**MARGINAL ACCESS STREET.** A local street which is parallel to and adjacent to an expressway, or an arterial road, and which provides access to abutting properties and protection from through traffic.

**PUBLIC STREET.** A street which has been accepted for dedication by Upper Nazareth Township for public use.

**STUB STREET.** A street or road within a subdivision terminating at the subdivision boundary with no permanent vehicular turnaround. Stub streets are provided to permit adjacent undeveloped parcels of land to be developed later with an adequate connecting street system.

**STREET RIGHT-OF-WAY LINE.** The dividing line between the street and the lot. The street line shall be the same as the legal right-of-way line provided that: (1) the street right-of-way line shall be not less than 16-1/2 feet from the centerline of any existing road or street, and (2) where a future right-of-way width for a road or street has been officially established, then the street right-of-way shall be the side line of the future right-of-way so established.

**STRUCTURE.** Any man-made object having an ascertainable stationary location on, below or in land or water, whether or not affixed to the land, subject to the following specific standards:

- A. The following specifically shall be considered to be structures: buildings; signs; stadiums; platforms; communications towers; walkways, porches or decks that are structurally raised above the underlying ground level or that are covered by a permanent structure; swimming pools (whether above or below ground); storage sheds; carports; and garages; post or pier mounted lights; brick or masonry piers; walls; non-portable basketball backboards; fences and gates.
- B. Any structure shall be subject to the principal or accessory setbacks of the Upper Nazareth Township Zoning ordinance, as applicable, unless specifically exempted or unless a specific setback is established for that particular type of structure by the Upper Nazareth Township Zoning ordinance.

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

**SUBDIVISION, MINOR.** A subdivision which does not by itself or in combination with previous subdivision plans, involve more than a total of three (3) lots, 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), or a boundary line adjustment between property owners where no new lots are created.

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

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

**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.

**TOWNSHIP ENGINEER.** A professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the Township Engineer.

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

**WATER SUPPLY AND DISTRIBUTION SYSTEM, ON-LOT.** An "on-lot" water supply system generally providing for an adequate supply of water for one building or a group of buildings on a single lot, and in compliance with the Pennsylvania Department of Environmental Resources, regulations or Township regulations, whichever may be more stringent.

**WATER SUPPLY AND DISTRIBUTION SYSTEM, PUBLIC.** A public or private utility system designed to transmit water from a common source to customers in compliance with the Pennsylvania Department of Environmental Resources' Regulations or the Township Regulations, whichever may be more stringent.

**WETLANDS.** Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, or as specifically described under the official Federal definition of wetland.

**WOODLAND.** Areas composed of a grove of trees forming one canopy where ten (10) or more trees measure at least six (6) inches in diameter, measured at four and one-half (4-1/2) feet from the ground.

## ARTICLE 3

### SKETCH PLAN SUBMISSION PROCEDURES AND REQUIREMENTS

#### 300 SKETCH PLAN SUBMISSIONS

301 Applicants may submit a sketch plan for the review of the Township Planning Commission. The sketch plan may be used to familiarize the Township Planning Commission with the concept of the development. The Township Planning Commission may make informal recommendations with regard to the plans. These recommendations shall not be considered to be binding upon the Township.

While a Sketch Plan is not required, it is strongly recommended as an initial submission for all subdivisions and land developments. It allows the Applicant to consult early and informally with the Planning Commission and Supervisors before preparing a Preliminary Plan and formal application for approval. The Sketch Plan can also be used to classify the submission as a Minor or Major Subdivision, Lot Line Adjustment or Land Development.

302 Applicants submitting sketch plans shall provide fourteen (14) copies of all maps and other material, plus the appropriate Application Fees as established by the Township, to the Township.

303 The Township shall provide five (5) sets of plans and material to the Township Planning Commission, one (1) set of plans and material to the Township Engineer, one (1) set of plans and material to Manager, and five (5) sets of plans and material to the Township Supervisors. The Township shall retain one (1) set of the plans and one (1) set of the supplemental material. The Township will determine if additional sets are required for the following: (1) set of plans and material to the Township Park and Recreation Commission.

304 The Applicant shall also submit two (2) reduced copies (8-1/2" x 14" size) of the Sketch Plan to the Township. The Township shall provide one (1) copy of the reduced plan to the Township Solicitor and retain one (1) copy for the Township records.

305 Applicants submitting Sketch Plan shall submit one (1) set of plans, material and fees to the following agencies:

305.1 The Lehigh Valley Planning Commission

305.2 PennDOT (where applicable)

305.3 The governing water authority (where applicable)

305.4 The governing sewer authority (where applicable)

### **310 SKETCH PLAN REVIEW**

- 311 The Township Planning Commission will consider a sketch plan submission at its next regular meeting, or at another meeting held within sixty (60) days of the next scheduled meeting, provided that the submission is received by the Planning Commission at least twenty-one (21) days prior to said meeting.
- 312 The Township Planning Commission shall review the sketch plan data to determine the development potential of the site, as indicated by the natural features analyses presented. The general development concepts of the sketch plan will be reviewed to determine their compatibility with the development potential of the site and the Upper Nazareth Township Comprehensive Plan. Also, the sketch plan 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.
- 313 In its review of the Sketch Plan, the Township Planning Commission shall consider the reports of the Lehigh Valley Planning Commission, Township Engineer and Township Solicitor, where required.
- 314 The review comments shall be presented at the meeting to the applicant and/or his representatives. In the event that an applicant and/or his representatives are not in attendance at the meeting, the sketch plan review shall be conducted at the next scheduled Township Planning Commission meeting, where the applicant or his representative are in attendance.
- 315 Upon review by the Planning Commission, the Sketch Plan may be presented to the Township Board of Supervisors, if requested by the Applicant or recommended by the Planning Commission.
- 316 No official action shall be taken on a Sketch Plan. Neither the Township nor the applicant shall be bound by comments made or not made as part of a Sketch Plan review.

### **320 SKETCH PLAN REQUIREMENTS**

The sketch plan submission should include the following data and be drawn to the following standards.

- 321 Application Review Fee of a sketch plan submission
- 322 Property boundaries (may be obtained from County Tax Map or similar sources).
- 323 General topographic contours from available data (may be obtained from United States Geological Surveys).
- 324 A letter of intent and a deed plot of the proposed subdivision or land development tract, including proposed recreation areas, proposed open space areas, and proposed detention basin sites, explaining and illustrating the developer's general

development concepts for the tract. Sketch plans shall be at a minimum scale of 1"=100'.

- 325 Site data including:
  - 325.1 Acres of entire tract.
  - 325.2 Number of lots.
  - 325.3 Zoning District of area.
  - 325.4 Name of subdivision (name can be the same as the recorded owner).
  - 325.5 Approximate acreage of proposed recreation areas and open space areas.
  - 325.6 Proposed water source and method of sanitary sewer disposal.
- 326 Magnetic north point.
- 327 Appropriate scale.
- 328 A location map, with a minimum scale of 1"=1000', showing the general location of the subdivision in relation to adjacent properties, roads and streams.
- 329 A map illustrating an analysis of natural drainage patterns and water resources within the proposed subdivision tract, including delineation of all 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 may use USGS quad sheets, County Soil Survey Maps, Wetland Inventory Maps, the flood boundary and floodway map from the municipal Flood Insurance Study, the Township Comprehensive Plan, other sources known to the applicant, as well as field inspection as the basis of the information.
- 330 A map illustrating an analysis of types of soils present within the proposed subdivision tract. The map should include delineation of prime agricultural soil areas, soils with shallow depth to bedrock, soils most susceptible to erosion, hydric soils, soils most suitable for urban development, and soils generally suitable for on-lot sewage disposal. The map may be based on the County Soil Survey among other sources. Sinkholes and closed depressions should be identified on the map.

## ARTICLE 4

### PRELIMINARY PLAN SUBMISSION PROCEDURES AND REQUIREMENTS

#### 400 PRELIMINARY PLAN SUBMISSION

401 Preliminary Plans, and all required supplementary data, for all proposed subdivisions and land developments shall be submitted to the Township.

402 Official submission of a Preliminary Plan to the Township shall comprise the following:

402.1 Submission of one (1) copy of a completed Preliminary Subdivision or Land Development Application.

402.2 Submission of twelve (12) sets of paper prints of the Preliminary Plan, which shall fully comply with provisions of this ordinance as set forth in Section 420.

402.3 Submission of five (5) copies of all required supplemental information as set forth in Section 425.

402.4 The Applicant shall also submit two (2) reduced copies (8 1/2" x 14" size) of the Preliminary Layout Plan to the Township. The Township shall provide one (1) copy of the reduced plan to the Township Solicitor and retain one (1) copy for the Township records.

402.5 The Applicant, upon filing his plan shall prepare a list of all property owners located within two hundred (200) feet of the subdivision/land development. Applicant shall mail the notification contained in Appendix "E" of this SALDO to all property owners within 200 feet of any new lots created by the subdivision or within 200 feet of any improvements proposed on the land development plan.

Notifications to such property owners must be mailed by certified mail, return receipt no later than twenty-one (21) days before the date of the Planning Commission meeting at which the subdivision/land development is to be considered for the first time.

Applicant must furnish the Township with a copy of the list of all property owners to whom notifications should be mailed prior or simultaneously with submission. Proof of mailing should be provided by supplying copies of the postmarked Certified Mail Receipts.

The Applicant shall provide the Township with the proofs of notification a minimum of three (3) days prior to the Planning Commission meeting at which the subdivision/land development is to be considered.

402.6 All plans submitted to the Township must be folded, where possible, unless the plan is of such size that makes folding impractical, i.e. extra large sheets or sets over 10 pages.

402.7 Two (2) compact discs containing the copies of the Preliminary Subdivision and Land Development drawings, in a format suitable to Upper Nazareth Township.

403 The Township shall distribute the plans and other material as follows:

403.1 Five (5) sets of the plans and one (1) set of supplemental information to the Township Planning Commission, one (1) set of plans and one (1) set of supplemental information to the Township Manager, two (2) sets of the plans and two (2) sets of supplemental information to the Township Engineer, one (1) set of plans to the Township Parks and Recreation Commission, one (1) set of plans to the Police Department, and one (1) set of plans to the Volunteer Fire Department.

403.2 The Township shall retain one (1) set of the plans and one (1) set of the supplemental material.

403.3 Whenever a proposed subdivision or land development is located adjacent to another municipality, one (1) print of the Preliminary Plan shall be submitted for each additional or adjacent municipality to the respective municipalities by the applicant, with a copy of the transmitted letter provided to Upper Nazareth Township.

404 The applicant shall submit one (1) set of plans, all supplemental material relevant to said agency, and required fees to the following agencies:

Lehigh Valley Planning Commission. If a review of conformity to an Act 167 Stormwater Management Plan is required, the number of plans and calculations should be increased to two (2).

The governing water authority (where applicable)

The governing sanitary sewer authority (where public sanitary sewer service is proposed)

Northampton County Soil Conservation District

PennDOT (whenever the property being subdivided abuts a state road).

U.S. Army Corps of Engineers (whenever the site analysis maps required by Section 425.1 indicate the presence of hydric soils or wetlands on the property).

Pennsylvania Department of Environmental Protection (whenever the site analysis maps required by Section 425.1 indicate the presence of hydric soils or wetlands on the property).

## **410 REVIEW OF PRELIMINARY PLAN**

411 By the Township Planning Commission.

411.1 When a Preliminary Plan has been submitted to the Township, such plan shall be placed on the agenda of the Planning Commission for review at a meeting to be held within sixty (60) days of the submission, provided that such submission has occurred no less than twenty-one (21) days prior to such meeting (if the 21<sup>st</sup> day falls on a holiday, it would be the next business day). The Planning Commission may hold a Public Hearing on the Preliminary Plan at this time. All submissions must be made by 3:00 p.m. of the cutoff date complete with all supplemental information and required fees. Submissions without the required information will be considered incomplete and not eligible for placement on the agenda until the information is submitted. Submission does not guarantee a spot on the agenda.

411.2 The Planning Commission shall review the Preliminary Plan to determine its conformance with the standards contained in this ordinance and other applicable municipal ordinances, and shall recommend such changes and modifications as it deems necessary.

411.3 No action shall be taken by the Township Planning Commission with respect to a Preliminary Plan until it 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 thirty (30) days after receipt of a Preliminary Plan, then the Township Planning Commission may officially act without having received and considered such report.

411.4 Within sixty (60) days after the first meeting following the submission of the Preliminary Plan, providing that such submission has occurred no less than twenty-one (21) days prior to such meeting, the Planning Commission shall recommend to the Board of Supervisors, in writing, that the Preliminary Plan be approved or disapproved together with the documented findings upon which the recommendations are based.

412 By the Board of Supervisors.

412.1 Within ninety (90) days following the date of the regular meeting of the Planning Commission following the date of the application (unless the next meeting does not fall in a thirty (30) day period following the date of the application in which case the ninety (90) day period commences on the thirtieth (30th) day 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 or disapproving the Preliminary Plan. This time period may be extended by action of the Board of Supervisors or the



Planning Commission upon the receipt of a written request for an extension of time from the applicant. The Board of Supervisors shall document the findings upon which that action is based, and communicate them to the applicant within fifteen (15) days from the date that the decision has been made. This communication shall occur within the period provided for a decision in the first sentence of this section. The decision and findings shall be communicated to:

412.1a the Applicant;

412.1b the Township Planning Commission;

412.1c the Township Solicitor;

412.1d the Township Engineer;

412.1e the Township Manager.

#### **420 PRELIMINARY PLAN REQUIREMENTS**

421 The Preliminary Plan of a proposed subdivision shall be clearly and legibly drawn to a minimum scale of one (1) inch equals fifty (50) feet.

422 The original drawing and all submitted prints shall be made on sheets having one of the following sets of dimensions:

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

422.2 Thirty (30) inches by forty-two (42) inches.

423 If the subdivision layout requires more than one (1) sheet or if the subdivision involves more than one (1) section or phase, a title sheet shall be provided. The title sheet shall include the road and lot layout plan at a minimum scale of one-inch equals two hundred (200) feet. The plan shall illustrate the boundaries of the areas covered on the different sheets, sections and phases. If the subdivision is for a section or phase of a subdivision, the relevant section or phase shall be differentiated in pattern from the remaining sections. The plan shall also indicate roads within two hundred (200) feet of the site and shall include an index of the plans.

424 The Preliminary Plan shall illustrate the following data:

424.1 Name and address of record owner; name of developer if different from owner; names of all adjoining subdivisions, if any, and the names of owners of all adjacent unplatted land, with the deed book reference, tax map, block and lot numbers where recorded.

- 424.2 Name of the proposed subdivision; name of the municipality or municipalities within which subdivision is proposed; total tract boundaries of the property being subdivided, showing bearings and distances, a statement of total acreage of the property, and certified by a registered Professional Land Surveyor.
- 424.3 Name, address, license number, and seal of registered engineer or land surveyor responsible for the subdivision plan; magnetic north point, graphic 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.
- 424.4 A key map, for the purpose of locating the property being subdivided, drawn at a scale not smaller than one (1) inch equals one thousand (1,000) feet and showing the relation of the property, differentiated by tone or pattern, to adjoining property and to all streets, streams, municipal boundaries, and recorded subdivision plans existing within two thousand (2,000) feet of any part of the property.
- 424.5 Tax map, block, and lot numbers within the proposed subdivision tract; all existing streets, including streets of record (recorded, but not constructed), on or adjoining the tract, including names, right-of-way widths, cartway (pavement) widths, and approximate grades.
- 424.6 All existing buildings or other structures within the proposed subdivision tract; all existing streets, and streets proposed in the Comprehensive Plan, including streets of record (recorded, but not constructed), on or adjoining the tract, including names; existing and future right-of-way widths, cartway (pavement) widths, and approximate grades.
- 424.7 All existing sewer lines, water lines, fire hydrants, utility transmission lines, culverts, stormwater facilities, on-lot septic systems, wells, bridges, railroads, sidewalks, or other man-made features within the proposed subdivision tract and within two hundred (200) feet of the boundaries of the proposed subdivision tract; location, width, and purpose of existing easements and utility rights-of-way within two hundred (200) feet of the proposed subdivision tract.
- 424.8 Contour lines at vertical intervals of not more than two (2) feet. Location and elevation of the data to which contour elevations refer shall be the closest United States Coast and Geodetic Survey established benchmark, where available; spot elevations for all low and high points, plus elevation for all closed contour lines.
- 424.9 The full plan of proposed development, including the following:
- a. Location and width of all streets and rights-of way, with a statement of any conditions governing their use; suggested street

names and utility easement locations; all applicable design criteria under Article 7.

- b. Front, side, and rear building setback lines for each lot.
- c. Lot lines, with computed dimensions and lot sizes (in both acres and square feet).
- d. A statement of the intended use of all nonresidential lots and parcels.
- e. Lot numbers and a statement of the total number of lots, parcels, dwelling units and density.
- f. Water, sanitary sewer and storm sewer plan and profile drawings (and other drainage facilities) with the size and material of each indicated and any proposed connections with existing facilities.
- g. Parks, playgrounds and other areas dedicated or reserved for public or common use, with any conditions governing such use and any proposed improvements.
- h. Signed certificate of ownership or equitable ownership, plus a copy of the current deed of record for the property being subdivided or developed.
- i. Copies of the proposed deed restrictions, protective and restrictive covenants, referenced to the preliminary plan map.

425 The preliminary plan shall be accompanied by the following supplementary data:

425.1 Site Analysis Maps.

(Where feasible and legible, the analysis involved in Sections 425.1a through 425.1d may be illustrated on one or a combination of composite maps. The combined impact of the natural characteristics of the tract upon the development potential of the tract shall be clearly illustrated on the map or maps).

- a. 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, flood plains, permanent and seasonal high water table areas, and closed depressions, plus a metes and bounds delineation of any on-site wetlands.
- b. A map illustrating an analysis of types of soils present within the proposed subdivision tract, based on the Northampton County Soil

Survey, the Upper Nazareth Township Comprehensive Plan and other sources. The map should include delineation of prime agricultural soil areas, hydric soils, aquifer recharge areas, unstable soils, soils most susceptible to erosion, soils most suitable for urban development, and soils suitable for on-lot sewage disposal.

- c. A map illustrating the characteristics of rock formations underlying the tract, including a delineation of aquifers (specifically those locally subject to pollution) and shallow bedrock areas.
- d. A map delineating additional significant physical features within the proposed subdivision tract, such as woodland areas, large trees, rock outcroppings, sinkholes, historical sites and features and scenic views.

- 425.2 A contour grading plan and a plan for minimizing erosion and sedimentation, in accordance with erosion and sediment control standards as set forth in Section 791; a landscape plan, according to standards as set forth in Section 792.2. A letter shall be provided from the Northampton County Conservation District which indicates that the soil erosion and sedimentation control plan conforms to the Pennsylvania Department of Environmental Protection rules and regulations.
- 425.3 Typical cross-sections for proposed streets, sanitary sewer, storm drainage and water system improvements. Preliminary street and utility plan and profile drawings and street lighting plans where required.
- 425.4 A storm drainage plan for the proposed subdivision or land development, which conforms to design requirements for storm drainage as set forth in Section 770. If the site of the subdivision or land development is within a watershed with an approved Stormwater Management Plan enacted pursuant to Act 167, the criteria in the applicable plan shall be used.
- 425.5 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 applications for final approval of each stage or section is intended to be filed.
- 425.6 Preliminary designs of any bridges or culverts which may be required. Such designs shall meet all applicable requirements of the Pennsylvania Department of Environmental Protection, the Pennsylvania Department of Transportation and the Act 167 Stormwater Management Plan, if implemented.
- 425.7 Copies of the Subdivision Sewage Disposal Report, when required according to standards as set forth in Section 750.

425.8 Certification of water supply systems.

425.81 When water service to the proposed subdivision is to be provided by an existing public system, the developer shall submit two (2) copies of a letter from the agency, authority, or utility which agrees to extend water service, subject to the execution of a service agreement.

425.82 When water service to the proposed subdivision is to be provided by an on-lot well, the developer shall submit two (2) copies of a letter from the applicable water authority that service to the site is not feasible.

425.9 Certification of sewage disposal systems.

425.91 When sewage disposal service is to be provided by an existing public system or extension thereof, the developer shall contact the controlling sewer authority regarding connections into their sewer system. Copies of all correspondence between the developer and sewer authority shall be provided to the Township.

All negotiations, designs, reviews, approvals and construction will be handled by the controlling sewer authority in accordance with their current regulations.

425.92 When sewage disposal service for the proposed subdivision or land development is to be by individual sewage disposal systems, the following requirements must be followed:

- (a) Prior to submission of a Preliminary Subdivision or Land Development Plan, the applicant or developer shall submit to the Pennsylvania Department of Environmental Protection (Department), Form ER-BWQ-359, "Application for Planning Module for Land Development," commonly known as the "postcard" submission, whereby the Department will indicate to the developer which module components to complete and make other guiding recommendations, as well as establishing a Department of Environmental Protection's code number for the project.
- (b) The developer shall then meet with a representative from the Department and the Township Sewage Enforcement Officer (SEO) to discuss the subdivision or land development with relationship to the Sewage Facilities Act "Official Plan".

- (c) The developer shall provide all information as required by the Planning Module for Land Development (PMLD). The developer shall submit the completed PMLD to the Township as part of the supporting data of the Preliminary Plan submission.
- (d) The Township shall review the PMLD and take municipal action within sixty (60) days of receipt of the completed module.
- (e) Preliminary Plan shall not be approved by the municipality until written approval of the PMLD is received from the Department of Environmental Protection. Modules will be reviewed for completeness and conformance to the requirements of the Sewage Facilities Act and Regulations promulgated thereunder, Chapters 71, 72, and 73 of PA Code Title 25. Incomplete module submissions will be returned to the applicant and will not be considered for review until complete.
- (f) The number and spacing of soil profile studies and percolation tests required for module preparation shall be sufficient to justify adequate sewage facility planning for the proposed subdivision or land development and shall contain general site suitability and soil mapping designations.
- (g) All soil testing information shall be indicated and clearly represented on plans and supporting documents, for evaluation.
- (h) The developer shall retain a soil scientist, hydrogeologist, or other competent professional to perform soil evaluations, percolation tests, and additional studies if required by the Department or Township SEO. The Township SEO will only observe the soil tests and review submitted material in accordance with this Ordinance.
- (i) Prior to plan approval, the developer shall test and locate, on each lot, a suitable primary and secondary absorption area. These areas shall be staked in the field and protected until such time as the system(s) are constructed and final grading completed on the lot. No Permit will be issued until the site is adequately marked. Any disturbance to the site by grading, equipment traffic, or material storage may be cause for Permit denial.

425.10 Whenever a proposed public improvement or on-lot septic system or

detention pond encroaches upon a utility line or easement, the applicant shall provide a letter from the utility verifying that the development will comply with all reasonable design criteria set by the utility.

425.11 Whenever a modification is requested pursuant to the provisions of Section 1060, the applicant shall provide a written request conforming to the requirements of Section 1062.

425.12 The applicant shall provide a copy of the opinion of title as issued by a title insurance company or an attorney, which shall set forth the names of all owners of property included in the plat and shall include a list of mortgages, judgments, liens, easements, contracts and agreements of record in the Recorder of Deeds office in Northampton County, Pennsylvania, which shall affect the property covered by such plats.

425.13 If the subdivision/land development involves a proposed drainage structure located on State highway rights-of-way, the applicant shall submit plans and calculations to the Pennsylvania Department of Transportation for their review and approval.

425.14 The applicant shall address the karst hazard requirements and performance standards in Section 794.

425.15 Traffic Impact Studies

- a. Any application for any of the following uses shall be required to complete a traffic study and include the findings in a written report:
  1. Residential: 30 or more dwelling units.
  2. Commercial: 10,000 square feet or more of total floor area.
  3. Office: 20,000 square feet or more of total floor area.
  4. Industrial: 30,000 square feet or more of total floor area or any truck terminal.
  5. Institutional: 20,000 square feet or more of total floor area.
  6. Any use or combination of uses that would generally result in greater than 300 trips per day.
- b. Any required traffic study shall be submitted at the same time as any preliminary plan, special exception, conditional use or construction permit application, whichever is submitted earliest.
- c. The full costs of completing the study and of a review by the Township Engineer or other Township representative shall be borne by the applicant.
- d. Prior to initiation of the traffic study, the traffic engineer or planner shall meet with the Township Engineer to establish the area to be studied. This area shall be limited to streets and intersections

within a maximum of one mile of the proposed project boundaries, except for a use projected to generate more than 3,000 trips per day which shall have a maximum study area of 2 miles from the project boundaries.

- e. Joint traffic studies between different applicants are strongly encouraged.
- f. In place of individual traffic studies, the Board of Supervisors may require that an applicant provide a fee in lieu of a study. This fee shall only be used towards the costs of traffic studies sponsored by the Township. Any such fee shall be established by resolution or ordinance of the Board of Supervisors.
- g. Any study shall include a description of the proposed development, its proposed access and the surrounding street system. If a development is proposed to occur in stages, each stage shall be described and taken into account in the study. If the applicant owns other lands within the study area, reasonable assumptions shall be made about how that land can be expected to be developed and shall be taken into account.
- h. The traffic volumes and service levels during the A.M. and P.M. peak hours shall be presented for all streets and intersections in the study area that can reasonably be expected to be significantly impacted. Traffic volumes shall be based upon actual counts that occurred within the prior two years, and not upon PennDOT estimates. The locations of all accidents reportable to the State Police within the study area during a recent two-year period shall be noted.
- i. The study shall include an estimate of the number of trips expected to be generated by the use and any future stages during the A.M. and P.M. peak hours. Such estimates shall be based upon the latest published estimates of the Institute of Transportation Engineers, or its successor entity, unless the applicant provides the Township with estimates and supporting documentation based upon actual traffic counts of closely similar developments in Pennsylvania or New Jersey.
- j. The study shall take into account not only the use proposed by the applicant, but also other uses and developments that have received building permits or preliminary subdivision or land development approval from a municipality. The study shall project A.M. and P.M. peak hour traffic volumes and levels of service on intersections and streets within the study area. If the traffic generation by the development would be more than 50 percent greater during any hour other than the A.M. or P.M. peak hour on



adjacent streets, the study shall analyze both the peak hours for the development and for adjacent streets. The study shall project what directions the traffic generated will head towards.

- k. The study shall estimate the levels of service (A, B, C, D, E and F), for key traffic movements, including turning movements, following the standards of the U.S. Department of Transportation.
- l. Heavily traveled intersections at entrances to the development and other major unsignalized intersections in the study area shall be studied to determine whether a traffic signal is warranted by PennDOT criteria. Existing traffic signals that are significantly impacted shall be studied to determine whether they are in need of upgrading.
- m. The study may take into account traffic improvements which are clearly funded and will occur within the next 2 years. The study shall include suggestions for how each congested or hazardous intersection in the study area should be improved to reduce the hazard or congestion, and a rough estimate of the cost of that improvement.
- n. The applicant shall respond to the traffic study with proposals on what traffic improvements, right-of-way dedications or commitments of financing for specific projects the applicant proposes to commit to resolve the negative traffic impacts of the proposed development. Such improvements or financing may be staged in relation to the stages of the development. The applicant may also agree to commit towards the long-term support of a program to reduce peak-hour traffic by private vehicles, through programs such as vanpooling, support of mass transit or staggered work hours, in place of certain structural improvements.
- o. Any traffic improvements that are required as a condition of any approval under this Ordinance or the Subdivision and Land Development Ordinance shall be in place or sufficient funds committed in escrow acceptable to the Township prior to the issuance of any needed occupancy permit, or within a staged process agreed to at the time of approval.

## ARTICLE 5

### FINAL PLAN SUBMISSION PROCEDURES AND REQUIREMENTS

#### 500 FINAL PLAN SUBMISSION

- 501 Unless the Final Plan submission is made within five (5) years of the date of the preliminary plan approval or unless the Board of Supervisors grant an extension, in response to a written request which is submitted within five (5) years of the date of the preliminary plan approval, the preliminary plan approval shall be considered void. A new preliminary plan submission will be required if the previous approval is void. The new plans shall conform to current regulations.
- 502 The Final Plan shall conform in all significant respects to the Preliminary Plan as previously approved, but shall incorporate all modifications required by the Board of Supervisors. The Township Planning Commission may, or may not, 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 the Preliminary Plan approval.
- 503 Official submission of the Final Plan to the Township shall comprise the following:
- 503.1 Submission of one (1) copy of a completed Final Subdivision and Land Development Application.
  - 503.2 Submission of eleven (11) sets of paper prints of the Final Plan, which shall fully comply with provisions of this ordinance as set forth in Section 530.
  - 503.3 Submission of four (4) copies of all required supplemental information as set forth in Section 425.
  - 503.4 The Applicant shall also submit three (3) reduced copies (8 ½" x 14" size) of the Final Layout Plan to the Township. The Township shall provide two (2) copies of the reduced plan to the Township Solicitor and retain one (1) copy for the Township records.
  - 503.5 All plans submitted to the Township must be folded, where possible, unless the plan is of such a size that makes folding impractical, i.e. extra large sheets or sets over 10 pages.
  - 503.6 Three (3) compact discs containing the copies of the Final Subdivision and Land Development drawings, in a format suitable to Upper Nazareth Township. The Township shall provide one (1) copy of the disc to the Solicitor and retain two (2) copies for the Township records.

- 504 The Township shall distribute the plans and other material as follows:
- 504.1 Five (5) sets of the plans and one (1) set of the supplemental information to the Township Planning Commission, two (2) sets of plans and two (2) sets of supplemental information to the Township Engineer, one (1) set of plans to the Township Solicitor, one (1) set of plans to the governing water authority and one (1) set of plans and one(1) set of supplemental information to the Township Manager.
  - 504.2 The Township shall retain one (1) set of the plans and one (1) set of the Supplemental information.
- 505 Whenever a proposed subdivision or land development is located adjacent to another municipality, one (1) print of the Final Plan shall be submitted for each additional or adjacent municipality to the respective municipalities by the Applicant, with a copy of the transmittal letter provided to Upper Nazareth Township.
- 506 The applicant shall submit plans, all supplemental material relevant to said agency, and required fees to the agencies set forth in section 404 if revisions were required by said agencies.

## **510 REVIEW OF FINAL PLAN**

- 511 By the Township Planning Commission.
- 511.1 When a Final Plan has been submitted to the Township, such plan shall be placed on the agenda of the Planning Commission for review at a meeting to be held within sixty (60) days of the submission, provided that such submission has occurred no less then twenty one (21) days prior to such meeting (if the 21<sup>st</sup> day falls on a holiday, the next business day). The Planning Commission may hold a Public Hearing on the Final Plan at this time. All submissions must be made by 3:00 p.m. of the cutoff date, complete with all supplemental information and required fees. Submissions without the required information will be considered incomplete and not eligible for placement on the agenda until the information is submitted. Submission does not guarantee a spot on the agenda.
  - 511.2 The Planning Commission shall review the Final Plan to determine its conformance with the standards contained in this Ordinance and other applicable municipal ordinances, and shall recommend such changes and modifications as it deems necessary.
  - 511.3 No action shall be taken by the Township Planning Commission with respect to a Final Plan until it 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 thirty (30) days after receipt of a Final Plan by the Township Planning Commission may officially act without having received and considered such report.

511.4 Within sixty (60) days after the first meeting following the submission of the Final Plan, providing that such submission has occurred no less than twenty one (21) days prior to such meeting, the Planning Commission shall recommend to the Board of Supervisors, in writing, that the Final Plan be approved or disapproved together with the documented findings upon which the recommendations are based. With the recommendations, the Planning Commission shall forward one (1) mylar of the record plan and three (3) paper prints of the record plan to the Board of Supervisors. The plans shall bear the signatures of the Planning Commission if the Planning Commission has voted to recommend that the plans be approved by the Board of Supervisors. One (1) complete set of plans and one (1) set of all supplemental material shall also be forwarded to the Board of Supervisors.

512 By the Township Board of Supervisors.

512.1 Within ninety (90) days following the date of the regular meeting of the Planning Commission following the date of the application (unless the next meeting does not fall in a thirty (30) day period following the date of the application in which case the ninety (90) day period commences on the thirtieth (30th) day 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 or disapproving the Final Plan. This time period may be extended by action of the Board of Supervisors or the Planning Commission upon the receipt of a written request for an extension of time from the applicant. The Board of Supervisors shall document the findings upon which that action is based, and communicate them to the applicant within fifteen (15) days from the date that the decision has been made. This communication shall occur within the period provided for a decision in the first sentence of this section. The decision and findings shall be communicated to:

- a. the Applicant;
- b. the Township Planning Commission;
- c. the Township Engineer;

Action by the Board of Supervisors to approve the Final Plan shall be made in the form of a resolution which is duly passed by the Board. The resolution shall include stipulations as to the terms of approval

including the improvements agreement if one is called for. No subdivision plan shall be approved unless the review fees, recreation fees, and other fees required under the terms of this Subdivision and Land Development Ordinance have been paid in full, and unless the improvements agreement, if one is called for, has been executed.

The applicant shall sign the resolution agreeing to the stipulations as to the terms of approval not less than five (5) days before the end of the statutory review period. Failure to sign the resolution by the applicant shall void the resolution forthwith. The Board of Supervisors shall then act to disapprove the application.

- 512.2 Action by the Board of Supervisors to approve or disapprove the Final Plan shall be made in the form of a motion which is duly passed by the Board.
- 512.3 If approved, the motion passed by the Board shall include stipulations as to the terms of approval, including the improvements agreement if one is called for. The conditions for approval shall be made in writing and conveyed to the applicant.
- 512.4 If disapproved, the motion passed by the Board shall include the reason(s) for disapproval and shall be conveyed, in writing, to the Applicant.
- 512.5 No Final Subdivision Plan shall be signed and processed for recording unless the review fees, and other fees required under the terms of this ordinance have been paid in full, and unless the improvements agreement, if one is called for, has been executed.

## **520 FINAL PLAN RECORDING**

- 521 Within thirty (30) days of the execution of the resolution approving the subdivision, the applicant shall supply two (2) mylar reproducible print and four (4) paper prints of each plan in the set of final plans to the Township.
- 522 The Township shall distribute the plans for signature by the Board of Supervisors, the Township Planning Commission, and the Lehigh Valley Planning Commission.
- 523 Upon the placement of the signatures on the plan as required by Section 522 and within ninety (90) days of the approval of the subdivision or land development, the Township shall file the plan at the Northampton County Recorder of Deeds office in the form prescribed by the Recorder of Deeds. Proof of recording shall be furnished by the Township.

- 524 The Township shall retain the mylar set of plans and shall distribute one (1) set of the approved plans each to the Township Planning Commission, the Board of Supervisors, and the Township Engineer.
- 525 A completed and executed copy of the Subdivision and/or Land Development Improvements Agreement shall be supplied prior to plan recording.

**530 FINAL PLAN REQUIREMENTS**

- 531 The Final Plans shall conform to standards and data requirements as set forth for Preliminary Plans in Section 420 of this Ordinance.
- 532 It shall not be necessary to resubmit supporting maps and data submitted with the Preliminary Plan, provided there has been no change.
- 533 The following additional data shall be illustrated on the Final Plan.
- 533.1 The latest source of title to the land, as shown by the deed, page number, and book of the Northampton County Recorder of Deeds.
- 533.2 The total tract boundary lines of the area being subdivided, with accurate distances to hundredth of a foot and bearings to the nearest second. 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. However, the boundary or boundaries adjoining additional unplotted land of the subdivider (for example, between separately-submitted Final Plan sections) are not required to be based upon field survey and may be calculated. The location 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 surveyor shall certify to the accuracy of the survey, the drawn plan, and the placement of the perimeter monuments.
- 533.3 The following data for all proposed and existing streets:
- a. the name, proposed name, or number of the street;
  - b. the cartway width of the street;
  - c. the right-of-way width and right-of-way lines of the street;
  - d. locations of all required street and traffic signs.
- 533.4 Block and lot numbers, and a statement of the total number of lots; all lot lines shall be completely dimensioned in feet if straight, and if curved by designating length of arc and radius (in feet) and chord bearing and distance. All internal angles within the lots shall be designated to within

the nearest second. The proposed front, side and rear building setback lines, and the proposed placement of each building and driveway shall be shown. The area of each lot shall be noted in both square feet and acres.

- 533.5 Officially established house/building numbers for street addresses as assigned by the Township Engineer.
- 533.6 All easements or rights-of-way and any limitations on such easements or rights-of-way. Rights-of-way shall be shown and accurately identified on the plan, and easements shall either be shown or specifically described on the Plan, including geometric location on the Plan. Easements should be located in cooperation with the appropriate public utilities; the exact location of all utility line installations also shall be shown. The terms of all easements or rights-of-way shall be stated in notes on the Plan.
- 533.7 Such covenants, conditions and deed restrictions as may be imposed upon the grantees, their heirs, executors and assigns, together with a statement of any restrictions previously imposed which may affect the title to the land being subdivided or developed. All such covenants and restrictions shall be summarized in notes on the record plan and shall include, as a minimum, the following:
- a. After their construction, grantees shall repair and be responsible for maintaining all swales and detention ponds. Once established and approved, the extent and grades of all swales and detention ponds shall be maintained in perpetuity. Maintenance shall include, but not be limited to, regular lawn mowing, removal of trash/debris, plus repair of all sinkholes.
  - b. All drainage swales within street rights-of-way and drainage/utility easements shall be maintained in a grassed or otherwise improved conditions in accordance with the grades and designs shown on the approved plans. All these easements and roadside drainage swales shall be kept free of all obstructions including but not limited to such obstructions such as fill, temporary or permanent structures, and landscaping materials (other than grass).
  - c. All electric, telephone, and cable TV utility distribution lines shall be installed underground.
- 533.8 A statement of the intended use of all non-residential lots or parcels, with reference to restrictions of any type which exist or will exist as covenants in the deed for the lots or parcels contained in the subdivision, and if covenants are recorded, including the book and page number of the Northampton County Recorder of Deeds.

533.9 If the subdivision fronts on a State Route, a note reading as follows shall be placed on the plan. "A highway occupancy permit is required pursuant to Section 420 of the act of June 1, 1945 (P.L. 1242, No 428), known as the "State Highway Law," before driveway or roadway access to a State highway is permitted.

533.10 The location of all existing and proposed street monuments, as required by Section 915; a certification of ownership, acknowledgment of plan, and offer of dedication and an acceptance clause for the Board of Supervisors shall be lettered on the plan, duly acknowledged and signed by the owner of the property, and notarized; a certificate for approval of the Plan by the Township Board of Supervisors shall be provided; a certificate for the recommendation for approval by the Township Planning Commission shall be provided; a certificate indicating review of the Plan by the Lehigh Valley Planning Commission shall be provided; space shall be left along the lower edge of the sheet, in order that the Northampton County Recorder of Deeds may acknowledge receipt and recording of the Plan when it is presented; 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.

533.11 The final subdivision or land development plan shall contain the following legend:

Prior to the issuance of a building permit or commencement of construction for any individual lot or parcel shown hereon, the applicant shall submit to the Township Engineer for review and approval, three copies of a final grading plan drawn at a scale of 1"=20'. The grading plan shall be sealed by the Professional Engineer or Land Surveyor responsible for the preparation of the plan. The plan shall contain the following information:

- a. Lot lines with bearings and distances, lot area, locations of all existing and proposed lot corner monumentation, and tax parcel identification number for the subject property.
- b. Existing and proposed contour elevations at intervals of 2 feet, including the subject lot, adjoining street(s) and fifty (50) feet beyond the subject property, as approved on the final grading plan. If the average slope of the property is less than 3%, contour elevations at intervals of 1 foot shall be provided.
- c. Spot elevations for the first floor level of any structure, primary on-lot sewage disposal systems (where applicable), finished road elevations at point of entry, and any other area as deemed necessary by the Township Engineer.



- d. North reference, building restriction lines, easements and rights-of-way within or adjacent to the subject property.
- e. Location, size and elevations of all existing or proposed storm drainage structures within or adjacent to the subject property.
- f. All property adjoiners and names of adjoining street(s).
- g. Locations of all percolation test holes and soil probes and the locations and dimensions of primary and secondary on-lot sewage disposal systems, where applicable.
- h. The exact location and dimensions of any proposed structure, appurtenant structure, road or driveway, with tie-in dimensions to property line.
- i. Individual lot soil erosion and sedimentation controls in accordance with the approved subdivision plan or current conservation district standards.
- j. All covenants and conditions from the plan of record, if the subject property is part of an approved and recorded subdivision plan.

534 The Final Plan shall be accompanied by the following:

534.1 A Plan showing the following information:

- a. Location, size and invert elevation of storm drainage systems, and the location of all manholes, inlets and culverts, and where applicable, all sanitary sewer and water distribution systems.
- b. Final plan and profile drawings, typical sections and specifications for proposed streets, storm drainage systems, and where applicable, sanitary sewers and water distribution systems each shown on one or more separate sheets.
- c. A contour grading plan and a plan for minimizing erosion and sedimentation, in accordance with erosion and sediment control standards as set forth in Section 791; a landscape plan, according to standards as set forth in Section 792.2.

534.2 A completed and executed copy of the Subdivision and/or Land Development Improvements Agreement shall be in place before recording of the plan.

- 534.3 Financial security to cover the costs set forth in the improvements agreement. The financial security shall conform in all respects to the requirements of Section 930.
- 534.4 A copy of the highway occupancy permit for any road or driveway requiring access to a State Route which is appropriate for the type of access required.
- 534.5 The original deed for any areas proposed for dedication in relation to the subdivision or land development.
- 534.6 An analysis establishing traffic signing and speed limits for any roads created by the subdivision. All traffic and street signage shall be shown on the final plan.
- 534.7 A completed and executed copy of the Capital Improvement Fee Agreement shall be in place prior to recording of the final plan. This agreement shall conform to the requirements in Section 1050.
- 535 In the case of a subdivision or land development proposed to be built in stages or sections over a period of years, Final Plan requirements as listed in Sections 534.1 through 534.4 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.
- 536 Prior to the commencement of construction, there shall be a pre-construction conference with all necessary agencies, including but not limited to, Upper Nazareth Township, Northampton County Soil Conservation District, all applicable utilities, governing water authority, contractors, subcontractors, PADOT, PADEP, and Engineers to discuss the construction process/schedule. The Township reserves the right to add or delete attendees and to waive this requirement.

## **ARTICLE 6**

### **MINOR SUBDIVISION AND BOUNDARY LINE ADJUSTMENT SUBMISSION PROCEDURES AND REQUIREMENTS**

- 600** In the case of any proposed residential subdivision which does not, by itself, or in combination with previous subdivision plans, involve more than a total of three (3) lots, 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), or in the case of boundary line adjustments between property owners where no additional lots are created, the following procedures will apply.
- 601 The plan submission procedures of Section 500 will apply.
- 602 The plan review procedures of Section 510 shall apply.
- 603 The plan recording procedures of Section 520 shall apply.
- 604 The submission shall comply with the drawing requirements and the applicable submission requirements of Sections 420 and 530 and Article 7, except as is noted in Section 604.1.
- 604.1 The boundaries of any residual tract which is greater than ten (10) acres may be determined by deed. The boundaries of any residual tract which is ten (10) acres or less shall be determined by accurate field survey.

## ARTICLE 7

### DESIGN STANDARDS

#### 700 APPLICATION

- 701 The design standards and requirements outlined in this section will be utilized in determining the adequacy of all plans for proposed subdivisions and land developments.
- 702 Development shall be planned, reviewed and carried out in conformance with all Township, County, State, Federal and other applicable laws and regulations.
- 703 Whenever other ordinances and regulations impose more restrictive standards and requirements than those contained herein, the more restrictive standards and regulations shall apply. Whenever the standards and requirements contained herein are more restrictive than those imposed in other ordinances and regulations, the more restrictive standards and regulations herein shall apply.

#### 710 GENERAL STANDARDS

- 711 Land shall be suited for the purpose for which it is to be subdivided. Land with unsafe, environmentally sensitive, or hazardous conditions such as may have been identified in the Upper Nazareth Township Comprehensive Plan, though not limited to those features or mapping therein shall not be subdivided unless adequate mitigation measures eliminate or protect against these conditions.
- 712 Consideration shall be given to applicable provisions of the Township and County Comprehensive Plans, 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.

#### 720 BLOCK DESIGN STANDARDS

##### 721 Block Layout

- 721.1 The length, width and shape of blocks shall be determined with due regard to:
- 721.11 Provision of adequate sites for buildings of the type proposed.
  - 721.12 Township zoning requirements.
  - 721.13 Topography.

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

722 Block Length

722.1 Residential blocks shall be no less than five hundred (500) feet in length or no more than sixteen hundred (1,600) feet in length.

722.2 Blocks along arterial and collector streets shall not be less than one thousand (1,000) feet in length.

723 Block Depth

723.1 Residential blocks shall be of sufficient depth to accommodate two tiers of lots, except;

723.11 Where reverse frontage lots are required; or

723.12 Where prevented by the size, topographical conditions or other inherent conditions of the property.

724 Commercial, Industrial and Planned Industrial Commercial Development Blocks

724.1 Blocks in commercial, industrial and planned industrial commercial 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 circulation, off-street parking and loading area.

**730 LOT DESIGN STANDARDS**

731 General Standards

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

731.2 Side lot lines shall be at right angles to street lines or radial to curved street lines.

731.3 Lot lines shall follow municipal boundaries rather than cross them, in order to avoid jurisdictional problems.

731.4 The depth of residential lots shall be not less than one (1) nor more than three (3) times their width, except as otherwise required by the current

Zoning Ordinance.

731.5 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, landscaping, etc.

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

731.61 Incorporated in existing or proposed lots, or

731.62 Legally dedicated to public use, if acceptable to the Township.

732 Lot Frontage

732.1 All lots shall have direct access to a public street or to a private street. All streets shall be built to the street standards of this Ordinance.

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

732.3 All residential reverse frontage lots (and all corner lots with a lot line along a street where reverse frontage is required) 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, with 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 access. A landscape plan, showing a double row of mixed evergreen plantings within this easement, shall be prepared and submitted for all reverse frontage lots. The landscape plantings shall be in accordance with the buffer requirements of the Township Zoning Ordinance.

733 Lot Access (Other than PennDOT Roadways)

733.1 Where direct access to an arterial or collector street cannot be avoided, adequate turnaround space shall be provided behind the right-of-way line.

733.2 Driveways or access roads shall intersect streets at right angles, where practicable, and in no case less than seventy-five (75) degrees.

733.3 Widths of private access roads or driveways as measured within the public right-of-way shall be in accordance with the following standards:

- 733.31 All private access roads or driveways intended for one-way use shall have a minimum width of twelve (12) feet and a maximum width of fifteen (15) feet.
  - 733.32 Single family residential driveways intended for two-way use shall have a maximum width of twenty (20) feet and a minimum width of twelve (12) feet.
  - 733.33 Two-way access roads and driveways for multi-family residential and all non-residential uses shall have a minimum width of twenty-four (24) feet and a maximum width of thirty (30) feet.
- 733.4 To provide safe and convenient ingress and egress, access road and driveway entrances shall be constructed as follows:
- 733.41 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.
  - 733.42 Single family residential driveway entrances shall be rounded at a minimum radius of five (5) feet.
- 733.5 Access road grades and driveway grades shall not exceed twelve (12) percent between the future street right-of-way line and any other point within the confines of the lot area being served. However, the initial twenty (20) feet from the edge of the street cartway shall not exceed six (6) percent.
- 733.6 The centerline of an access road or driveway, at the point of access to a street, shall not be located closer to the centerline of a street intersection than the following distances, unless the lot is entirely within the prescribed distances (in which case the driveway shall be separated from the intersection by the greatest distance possible).
- 733.61 For single family dwellings:
    - 733.611 One hundred fifty (150) feet, if either intersection street is an arterial street.
    - 733.612 One hundred (100) feet, if either street is a collector street.
    - 733.613 Seventy-five (75) feet, if both streets are local streets.

733.62 For all other development:

733.621 Three hundred (300) feet, if either street is an arterial street.

733.622 Two hundred (200) feet, if either street is a collector street.

733.623 One hundred fifty (150) feet, if both streets are local streets.

733.7 On corner lots that have frontage on streets of different classifications, the access to such lots shall be from the street of lower classification.

734 Access on PennDOT Roadways

734.1 All lot driveways accessing onto State roadways shall be designed in accordance with Pennsylvania Department of Transportation standards.

734.2 PennDOT Highway Occupancy Permits will be required for all lot driveways accessing onto State roadways.

**740 STREET DESIGN STANDARDS**

741 General Requirements

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

741.2 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.

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

741.4 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.

741.5 Where it is desirable to provide for street access to adjoining property, streets shall be extended by dedication to the boundary of such property.



The streets shall meet the requirements of Section 747.2.

- 741.6 Where a subdivision or land development abuts an existing road with a right-of-way and/or cartway width not meeting the requirements of Section 742.1, sufficient right-of-way should be dedicated so that the distance between the edge of the right-of-way and the road centerline equals one-half of the required width, and/or the cartway will be widened as per the specifications of this Ordinance so that the distance between the edge of the cartway and road centerline equals one-half of the required width. Where a subdivision or land development abuts an existing road not meeting the requirements of Section 743 or 746, sufficient right-of-way to correct the alignment deficiency should be dedicated. A deed covering the land to be dedicated shall be provided along with an opinion of title from a title insurance company or an attorney which indicates that clear title exists for the land being dedicated.
- 741.7 Where a subdivision or land development abuts or contains an arterial road, the use of marginal access streets, reverse frontage lots, or other such treatment as will provide protection for abutting properties, reduction in number of intersections with the arterial street, and separation of local and through traffic shall be required.
- 741.8 Private streets (streets not to be offered for dedication) shall meet the street design and improvement standards set forth in this Ordinance. In addition, when a private street is proposed, the developer shall indicate on the plan of record the proposed deed covenants obliging the owners of all lots to be served by the street to provide, at their expense, perpetual street maintenance including timely snow removal.
- 741.9 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. The openings shall be at intervals consistent with the Block Length Standards of Section 722.
- 741.10 Where a Subdivision or Land Development abuts an existing collector, arterial or expressway classified street, the applicant will be required to install curbing along the street side abutting the Subdivision or Land Development, unless otherwise waived by the Township Board of Supervisors.

742 Street Right-of-Way and Cartway Width

- 742.1 Street right-of-way as per the Township Zoning Ordinance and cartway width in proposed subdivisions shall conform to the standards in the following table:

Type of Road	----- Local -----		Collector	Arterials and Expressways
Land Use	Single Family Detached Dwellings	All Other Uses	All Uses	All Uses

Lots less than 1 acre

Cartway Width/ROW	32 Feet/50 Feet	32 Feet/50 Feet	36 Feet/60 Feet
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American Association of State Highway Transportation officials (AASHTO) and PennDOT design standards may be required.

Lots greater than or equal to 1 acre

Cartway Width/ROW	28 Feet/50 Feet	32 Feet/50 Feet	36 Feet/60 Feet
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743 Horizontal Curves

743.1 Street centerlines shall not be deflected without the use of horizontal curves.

743.2 Horizontal curves shall have the following minimum centerline radii:

743.21 Local streets - two hundred (200) feet.

743.22 Collector streets - three hundred (300) feet.

743.23 Arterial streets and expressways - as per current American Association of State Highway and Transportation officials (AASHTO) standards.

743.3 A minimum tangent of one hundred (100) feet shall be required between reverse curves on all streets. A minimum tangent of one hundred (100) feet shall separate horizontal curves from intersections, as measured from the point of intersecting centerlines.

744 Street Grades

744.1 There shall be a minimum centerline grade on all streets of one (1.00) percent.

744.2 Centerline grades shall not exceed the following:

744.21 Local streets - twelve (12) percent.

744.22 Collector streets seven (7) percent.

744.23 Arterial streets as per current AASHTO standards.

744.3 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 intersection of the center lines), within which no grade shall exceed a maximum of four (4) percent.

744.4 Cross-slopes for roadways and parking lanes shall be two (2) percent and cross-slopes for paved shoulders shall be six (6) percent.

745 Vertical Curves

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

745.2 Vertical curves shall be designed to produce the following minimum sight distances:

745.21 Local streets - two hundred (200) feet.

745.22 Collector streets - four hundred (400) feet.

745.23 Arterial streets and expressways - as per current AASHTO standards.

746 Street Intersections

746.1 Streets shall intersect at right angles whenever practicable. However, in no instances shall the angle of intersection at the street centerlines be less than seventy-five (75) degrees.

746.2 Intersections involving the junction of more than two streets shall be prohibited.

746.3 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 standards.

746.31 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.

- 746.32 The two streets shall be separated by a distance of four hundred (400) feet between centerlines measured along the centerline of the street being intersected when one or more of the streets involved is a collector street.
- 746.33 The two streets shall be separated by a distance of one thousand (1000) feet between centerlines measured along the centerline of the street being intersected when one or more of the streets is an arterial street.
- 746.4 Street intersection pavement shall be rounded by a tangential arc with a minimum radius of:
  - 746.41 Thirty-four (34) feet for intersections involving only local streets.
  - 746.42 Thirty-seven (37) feet for all intersections involving a collector street.
  - 746.43 Forty (40) feet for all intersections involving an arterial street.
- 746.5 Street right-of-way lines, whenever possible, shall be parallel to (concentric with) pavement radii at intersections.
  - 746.51 Street right-of-way lines at intersections shall be rounded by a tangential arc with a minimum radius of twenty-five (25) feet.
- 746.6 Sight distances at intersections (clear sight triangles) shall be established in accordance with the regulations within the Township zoning ordinance.
- 746.7 Wherever a portion of the line of the clear sight 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. Signs and landscaping which would obscure vision shall not be placed within the clear sight triangle area.
- 746.8 The record plan shall contain a note stating that nothing shall be erected, placed or planted within a clear sight triangle that will impede vision between a height of two (2) feet to ten (10) feet above the centerline grades of the intersecting streets.

747 Cul-De-Sacs, Dead End Streets and Stub Streets

- 747.1 Dead-end streets are prohibited except those meeting the standards of Section 747.2.
- 747.2 Stub streets may be constructed for future access to an adjoining property or a subsequent section of the development. Stub streets shall be built to the standards of Section 742.1. The length of stub streets shall not exceed the depth of one lot. No more than one lot shall front on each side of the stub street. These lots shall also have full frontage along another public street.
- 747.3 Cul-de-sacs (temporary and permanent), loop roads, and other street networks which have a single point of access to the surrounding road network shall not serve more than twenty-five (25) dwelling units and shall have a minimum length of three hundred (300) feet and shall not exceed a total length of more than one thousand (1,000) feet as measured from the centerline of the intersection at the single point of access to the farthest point served.
- 747.4 All cul-de-sac streets, whether permanently or temporarily designed as such, shall be provided at the closed end with a fully paved turnaround. The turnaround may be concentric or offset to the left, but turnarounds offset to the right shall be prohibited.
- 747.41 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.
- 747.42 The radius of the right-of-way line return between the bulb and stem of cul-de-sacs shall be a minimum of one hundred fifty (150) feet. The curb line or pavement edge radius shall be a minimum of one hundred sixty (160) feet.
- 747.5 Islands, whether containing plantings or not, shall be prohibited within the bulb of the cul-de-sac.
- 747.6 The grade of the cul-de-sac bulb shall not exceed five (5) percent as measured from the center of the cul-de-sac bulb to any perimeter point of the bulb. The minimum cross-slope shall be two (2) percent.
- 747.7 There shall be a minimum centerline grade on all cul-de-sac streets of one (1) percent.
- 747.8 All cul-de-sac streets intended for dedication to the Township shall be provided with an easement at the end of the bulb and designated for snow plowing use. The easement beginning at the edge of cartway, shall have a minimum width of thirty (30) feet, (measured fifteen (15)

feet on either side of the street centerline extended). The easement shall extend radially from the edge of pavement to a depth of thirty (30) feet. The record plan shall contain a note stating that no driveways, landscaping, mailboxes or other structures shall be placed within the limits of this easement.

747.9 Temporary cul-de-sacs may be permitted to allow connection to an adjoining property or a subsequent section. Temporary cul-de-sacs shall meet the following standards.

747.91 The lots along the bulb of the cul-de-sac shall meet the lot width and lot size requirements of the zoning ordinance, after the bulb has been removed and the road has been extended.

747.92 The temporary cul-de-sac shall extend to the edge of the adjoining property to which future access is to be provided.

748 Street Names

748.1 Proposed streets which are in alignment with others already existing and named, shall bear the names of existing streets.

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

748.3 All street names shall be subject to the approval of the Township Supervisors and local Post Office. The developer shall be responsible for the submission of proposed street names to the local Post Office for their approval. A copy of the local Post Office's approval of the proposed names shall be provided to the Township prior to recording of the plan.

749 Sidewalks and Curbs

749.1 In subdivisions or land developments where curbing and sidewalks are required, they shall be provided on both sides of all streets. Sidewalks and curb shall be required adjacent to parking areas in multi-family developments.

749.2 Sidewalks shall be located within the street right-of-way, no closer than one (1) foot from the right-of-way line, and shall be a minimum of four and one-half (4 ½) feet wide, except along collector and arterial streets, and adjacent to shopping centers, schools, recreation areas, and other community facilities, where they shall be a minimum of five (5) feet wide.

- 749.3 Generally, a grass planting strip a minimum of four (4) feet in width should be provided between the curb and sidewalk.

## **750 SANITARY SEWER DISPOSAL STANDARDS**

Each proposed building lot or proposed land development shall be provided with sanitary sewage disposal in accordance with the following requirements.

### **751 Public Sanitary Sewage Systems**

#### **751.1 Existing Public Sanitary Sewage Systems**

751.11 Each subdivision, not a minor subdivision, any portion of which is within one thousand (1,000) feet of an existing public sanitary sewage system, shall be connected by the developer to such system, unless such connection is not technically feasible, or the subdivision is located in an area not designated for public sanitary sewer service in the Township's Sewage Facility Plan.

751.12 Any such connection shall be in accordance with the provisions of the controlling Sewer Authority, and the sanitary sewer disposal regulations of the Pennsylvania Department of Environmental Protection.

751.13 In the event a public sewer connection is not required under Section 751.11, each proposed building lot shall instead be provided with an on-lot sewage disposal system in accordance with Section 752 of this Ordinance.

#### **751.2 Proposed Public Sanitary Sewage Systems**

751.21 Each proposed subdivision, not a minor subdivision, or proposed land development any portion of which is within one thousand (1,000) feet of:

751.211 Any proposed public sanitary sewage system for which the controlling sewer authority has indicated in writing to the developer its intention to extend any portion thereof to within one thousand (1,000) feet of any lot or portion thereof within five (5) years.

751.212 Any portion of any proposed public sanitary sewage system in the Upper Nazareth Township Sewage Facility Plan, or

751.213 Any portion of any other public sanitary sewage system proposed by the Upper Nazareth Township Board of Supervisors to be constructed within five (5) years;

751.22 Shall, unless ultimate connection to the proposed public sanitary sewage system would be technically unfeasible, be connected to a "dry" sanitary sewage system, including lateral connectors as will be necessary to provide service to each lot, suitably capped until connection to the public sanitary sewage system can be made.

751.23 Any such connection shall be in accordance with the standards of:

- a. The Subdivision Improvements Agreement (see Article 9 of this Ordinance).
- b. Section 425.9 of this Ordinance.
- c. The sanitary sewage disposal regulations of the Pennsylvania Department of Environmental Protection.

751.24 In the event a "dry" sewer connection is required under Section 751.22, each proposed building lot shall, until ultimate public sewer connection, be provided with an on-lot sewage disposal system in accordance with Section 752 of this Ordinance.

## 752 On-Lot Sewage Disposal Systems

752.1 An on-lot sewage disposal system shall be provided for each lot that:

752.11 Is not required to be connected to an existing public sanitary sewage system under Section 751.11 or to a proposed sanitary sewage system under Section 751.22.

752.12 Will be connected to a "dry capped" sanitary sewage system under Section 751.22, but only until connection to the public sanitary sewage system can be made.

752.2 Any such on-site sewage disposal system shall be in accordance with the standards of:

752.21 The Subdivision Improvements Agreement (see Article 9 of this Ordinance).

752.22 Section 425.9 of this Ordinance.



752.23 The sanitary sewage disposal regulations of the Pennsylvania Department of Environmental Protection.

752.3 Certification of a percolation test for each proposed building lot, satisfying the requirements of the Pennsylvania Department of Environmental Protection for the on-lot sewage disposal system, shall be submitted as part of the Preliminary Plan. (See also Section 425.9).

752.4 Each Preliminary and Final Plan shall include an annotation expressly imposing a covenant running with the land, respecting each proposed building lot for which an on-lot sewage disposal system is proposed, stating that:

752.41 Upper Nazareth Township makes no warranty or representation that on-lot sewage disposal will be available for such lots.

752.42 No construction upon the property or occupancy of the property shall be permitted until sewage disposal facilities complying with Sections 751 or 752 of this Ordinance and the Township On-Lot Sewage Disposal Ordinance #113, as amended, are provided to such lots.

## **760 WATER SUPPLY SYSTEMS**

Each proposed building lot or proposed land development shall be provided with water supply in accordance with the following requirements:

### **761 Public Water Supply Systems**

761.1 Each subdivision, not a minor subdivision, any portion of which is within one thousand (1,000) feet of an existing public water supply system, shall be connected by the developer to such system.

761.2 Any such connection shall be in accordance with the provisions of:

761.21 Applicable conditions of the governing water authority or other governing authority;

761.22 Section 425.8 of this Ordinance;

761.23 The water quality regulations of the Pennsylvania Department of Environmental Protection.

761.3 In the event a public water supply connection is not required under Section 761.2, each proposed building lot shall instead be provided with an on-lot water supply system in accordance with Section 762 of this ordinance.

761.4 Fire hydrants with water supply for fire protection, within three hundred (300) feet of all structures and on the same side of the road if a collector or arterial road, shall be provided in all subdivisions and land developments connected to a public water supply system. The connecting threads used on the hydrants shall be compatible with the equipment of the Upper Nazareth Fire Department.

761.5 All proposed building lots for all multifamily residential, commercial and industrial uses shall be provided, by the developer, with an adequate public water supply.

762 On-Lot Water Supply Systems (Wells)

762.1 An on-lot water supply system (well) shall be provided only for each lot that cannot feasibly be connected to an existing public water supply system under Section 761.1.

762.2 Any such on-site water supply system shall be in accordance with the standards of:

762.21 The Subdivision Improvements Agreement (see Article 9 of this ordinance).

762.22 Section 425.8 of this Ordinance; and

762.23 Any water quality regulations of the Pennsylvania Department of Environmental Protection.

762.3 Each Preliminary and Final Plan shall include an annotation expressly imposing a covenant running with the land, respecting each proposed building lot for which an on-lot water supply system is proposed, stating that:

762.31 Upper Nazareth Township makes no warranty or representation that on-lot water supply will be available for such lots; and

762.32 Occupancy of the property shall not be permitted until water supply facilities complying with Section 762 of this ordinance are provided to such lots.

**770 STORM DRAINAGE SYSTEMS**

771 Storm drainage systems shall be provided in order to:

771.1 Permit unimpeded flow of natural watercourses, except as may be modified by storm water detention pond requirements in Section 774 or open channels pursuant to Section 772.7.

- 771.2 Ensure adequate drainage of all low points along the line of streets.
- 771.3 Intercept storm water runoff along streets at intervals related to the extent and grade of the area drained.
- 771.4 Provide positive drainage away from on-site sewage disposal systems.
- 771.5 Take surface water from the bottom of vertical grades, to lead water from springs and to avoid excessive use of crossgutters at street intersections and elsewhere.
- 771.6 Prevent overloading of downstream drainage systems, closed depressions, and watercourses as a result of increased rate of runoff caused by the proposed development.
- 771.7 Ensure that the extent of ponded water is not increased within downstream closed depressions as a result of additional runoff volume.

772 General Requirements

- 772.1 A site drainage plan for the proposed subdivision or land development tract shall be prepared which illustrates the following information:
  - 772.11 Mapping of the watershed area or areas in which the proposed subdivision or land development is located.
  - 772.12 Calculations of runoff for all points of runoff concentration.
  - 772.13 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 or land development 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.
  - 772.14 Sufficient mapping of existing offsite drainage features located downstream from the proposed subdivision or land development points of runoff discharge. Mapping features shall include closed depressions, streams, watercourses and storm sewer systems on the downstream properties.
- 772.2 The existing points of natural drainage discharge and the mode of drainage conduct onto adjacent property shall not be altered, unless:
  - 772.21 Written consent of affected landowner is obtained by the applicant; or

772.22 The applicant demonstrates that no damage to any adjacent landowner or infringement of the public safety for conditions up to and including a 100 year storm event will result.

772.3 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 safe and adequate provisions being made by the developer for properly handling such conditions, and the applicant obtaining the written consent of the downstream landowners.

772.4 Where a subdivision is traversed by watercourses other than permanent streams, there shall be provided on the subdivision plan, a drainage easement conforming substantially with the line of such watercourse which shall be offered to the Township for dedication. The width of the easement shall be adequate to provide for unimpeded flow of storm runoff based on calculations made in conformance with Section 773 and to provide a freeboard allowance of one-half (0.5) foot above the design water surface level.

772.5 Drainage structures that are located on State highway rights-of-way shall be approved by the Pennsylvania Department of Transportation and a letter from that office indicating such approval shall be obtained prior to final plan approval.

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

772.7 When 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 shall be calculated using the Manning equation as explained in Appendix A.

772.8 Storm drainage facilities and appurtenances shall be so designed and provided as to minimize erosion in watercourse channels and at all points of discharge as per the requirements of the Pennsylvania Department of Environmental Protection and the Northampton County Conservation District.

### 773 Calculation of Storm Runoff and Design Storm Frequency

773.1 Storm drainage systems required by this Ordinance shall be designed to provide protection from a two (2) to one hundred (100) year storm as determined by the Township. If the site of the subdivision or land development is within a watershed with an approved Storm Water Management Plan enacted pursuant to Act 167, the criteria in the applicable plan shall be used.

- 773.11 A twenty-five (25) year design storm is appropriate where a storm in excess of the design storm will cause major inconvenience to people and traffic in high use areas such as business districts and along local collector or arterial roads.
- 773.12 A one hundred (100) year design storm is appropriate where a storm in excess of the design storm will cause damage to existing or future structures or their contents.
- 773.13 The design or analysis of all major natural or man-made overland drainage systems shall have adequate capacity for the twenty-five (25) to one hundred (100) year return storm, and shall further consider the two (2) year storm event for velocity. Permissible velocities are as indicated in SCS criteria.
- 773.2 Storm water runoff from watersheds of two hundred (200) or less acres shall be calculated by the Rational Method as described in Manual Number 37 of the American Society of Civil Engineers, except as the watershed size criteria may be modified by an approved Act 167 Storm Water Management Plan. The rational method of runoff calculation is explained in Appendix A.
- 773.3 Storm water runoff from watersheds of more than two hundred (200) acres shall be calculated using the soil cover complex method developed by the Soil Conservation Service or other appropriate method acceptable to the Township Engineer.
- 773.4 The design of any detention facility shall be verified by routing the proposed post-development hydrograph through the basin using a storage-indication technique.
- 773.5 The Manning equation explained in Appendix A shall be used in calculating capacities of watercourses and storm sewers, except culverts which shall be designed using methods acceptable to the Township Engineer.
- 773.6 Complete detailed drainage calculations and applicable charts and nomographs certified by the design engineer shall be submitted to the Township Engineer.

774 Storm Water Detention

774.1 Stormwater shall be governed by the following provisions:

- 774.21 Post-development rates of runoff for the two (2) through one hundred (100) year storm events shall not exceed

pre-development rates.

774.22 Within watersheds for which there is an approved Act 167 Storm Water Management Plan, the detention facilities shall at minimum be designed to discharge post-development peak runoff rates consistent with the Plan criteria.

774.23 Within watersheds for which there is not an approved Act 167 Storm Water Management Plan, the detention facilities shall be designed to provide that the peak rate of runoff at all points of discharge from the site, when developed, will not exceed the peak rate of runoff at each of those points prior to development.

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

774.31 Detention ponds shall be designed so that they return to normal conditions within approximately twenty-four (24) hours after the termination of the storm, unless the Township Engineer finds that downstream conditions may warrant other design criteria for storm water release;

774.32 The developer shall demonstrate that such ponds are designed, protected and located to assure that public safety is maximized and health problems are prevented. The following minimum criteria shall apply:

- a. Top berm width shall be a minimum of six (6) feet;
- b. On all ponds having a maximum depth of four (4) feet, the side slopes shall be four (4) horizontal to one (1) vertical or flatter. On all ponds having a maximum total depth greater than four (4) feet, the side slopes shall be five (5) horizontal to one (1) vertical or flatter.
- c. All ponds shall incorporate an impervious clay liner having a minimum depth of one (1) foot or an impermeable geosynthetic liner. The design analysis of the required pond liner shall be incorporated into the required geologic/Karst features report.
- d. Ponds shall be designed with a minimum freeboard of one (1) foot above the maximum water elevation.
- e. All ponds shall be designed with a minimum bottom slope of one (1) percent.

- f. In all detention ponds having surface discharge, the outfall end section and outside toe of berm shall be located a minimum of twenty (20) feet from the adjoining, downstream property line.

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

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

774.35 A drainage easement, described by bearings and distances, shall be provided around all detention basins. The easement shall encompass the limits of the pond berm and the 100 year water surface elevation plus the basin outflow to the point of offsite discharge.

774.36 Since the detention pond will remain in common ownership, the developer shall provide an annotation on the Record Plan imposing a covenant running with the land requiring perpetual maintenance and repair of the detention pond and all appurtenances, by the respective lot owner(s). The covenant shall also state that no structures, fences, trees or other landscaping materials (other than grass) shall be placed or planted within the detention pond.

## 775 Stormwater Collection and Conveyance Systems

775.1 Inlets. The placement of inlets shall be governed by the following design criteria:

775.11 Inlets shall be placed at points of abrupt changes in the horizontal or vertical directions of storm sewer pipes and drainage swales and on both sides of a street at all designed low points.

775.12 On streets with centerline grades of two (2) percent or less, inlets shall be spaced at a maximum distance of four hundred (400) feet apart. On streets with centerline grades greater than two (2) percent, inlet spacing shall not exceed six hundred (600) feet.

775.13 Inlets shall be depressed two (2) inches below the grade of the gutter or ground surface, and shall be provided with bicycle-safe grates.

- 775.14 Capacity calculations shall be provided for all inlets. The calculations shall account for all by-pass surface runoff from upstream inlets, where applicable.
- 775.15 Storm sewer manholes may be substituted for inlets at locations where inlets are not required to handle surface runoff.
- 775.16 Inlets shall be placed at street intersections to limit the cross-gutter flow from upstream areas.
- 775.2 Roadside Drainage Swales. The construction of roadside drainage swales shall be in accordance with the following requirements:
- 775.21 On all non-curbed streets, drainage swales will be required along both sides of the street.
- 775.22 On all local collector and arterial streets, the roadside swales shall be designed to convey the runoff from a twenty-five (25) year storm event.
- 775.23 As a minimum, the depth of all roadside swales shall be six (6) inches. The swales shall be designed to convey the runoff from the required storm event within the street right-of-way.
- 775.3 Storm Sewer Pipe. The design of storm sewer pipe systems shall be in accordance with the following requirements:
- 775.31 All storm sewer lines shall be designed with a minimum 0.005 ft/ft (0.50%) slope.
- 775.32 Storm sewer lines within street rights-of-way shall be parallel to the centerline as far as practical. A sufficient number of structures (inlets or manholes) shall be provided to eliminate unnecessary crossings of other utility lines and passage beneath curbs.
- 775.33 Storm sewer shall be designed on the basis of inlet or outlet control, as applicable, unless a more detailed backwater analysis is deemed necessary by the Township Engineer.
- 775.34 No storm sewer headwalls or endwalls shall be constructed within any street right-of-way.
- 775.35 Safety grating shall be installed across the openings of all storm sewer pipe inlet headwalls.



- 775.36 Underdrain pipe systems may be required where soil conditions warrant their installation.
- 775.37 All stormsewer within street cartway areas shall be reinforced concrete pipe, Class III or better, with “O”-ring gasket joints. Stormsewer located outside street cartway areas shall be either reinforced concrete pipe, Class III or better, with “O”-ring gasket joints or high density polyethylene pipe, smooth interior, with water-tight couplings.
- 775.38 When there is a change in pipe size within a stormsewer structure, the elevation for the top of pipes shall be the same, or the top elevation of the inflow pipe (s) can be set higher as necessary.

775.4 Curbed Street Drainage. On streets constructed with curbing, the surface runoff collection system shall be in accordance with the following requirements:

- 775.41 On local streets, the inlet spacing and gutter capacities shall be designed to convey the runoff from a twenty-five (25) year storm event.
- 775.42 On collector and arterial streets, the inlet spacing and gutter capacities shall be designed to convey the runoff from a fifty (50) year storm event.
- 775.43 The maximum encroachment of water on the roadway pavement shall not exceed one-half of a traffic lane during the design year storm event.

## **780 UNDERGROUND UTILITIES, EASEMENTS AND STREET LIGHTING**

### **781 Electric Utility Easement Lines**

In accordance with a Pennsylvania Public Utility Commission order of July 8, 1970, 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 standards shall be observed:

- 781.1 Telephone and cable TV utilities shall also be installed underground.
- 781.2 Underground electric and communication utility lines shall be installed within the same utility trench.
- 781.3 All utility lines servicing commercial and industrial developments shall be installed underground.

782 Utility Easements

782.1 Utility easements shall be provided for wire, conduits, sanitary and storm sewers, gas and water mains and/or other utility lines intended to service the abutting lots. No structures shall be placed within such easements, except structures associated with the utilities.

782.2 Utility easements shall be located at all of the following:

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

782.22 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 or land development boundary, a minimum easement width of ten (10) feet is required.

783 Petroleum Transmission Lines

783.1 No company intending to install any petroleum, petroleum products or natural gas transmission lines shall be allowed to construct the line on less than a fifty (50) foot right-of-way, such line 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.

783.2 There shall be a minimum distance of twenty-five (25) feet between any proposed dwelling unit and any petroleum, petroleum products or natural gas transmission right-of-way line which traverses the subdivision, but in no event less than fifty (50) feet from any petroleum or natural gas transmission line.

784 Cable Systems

784.1 Notification to Cable Operators. In extending lines to new subdivisions and/or land developments with the Township, each cable operator shall accept from the developer only those easements which provide a non-exclusive right to operate a cable system within such subdivision and/or land development. No such easement shall prevent any other cable operator authorized to operate within the Township, then or in the future, from using such easement to extend other and further lines to such subdivision and/or land development. In each new subdivision and each new land development, the developer shall, upon notifying public utilities of the opportunity to serve such subdivision or land development, also notify all cable operators licensed to operate a cable system in the Township, of the opportunity to install cable facilities to

serve the subdivision or land development. Each owner of a separate tract of land of record in such subdivision or land development and all persons within the Township shall have the right to freely choose any cable operator permitted in the Township to serve such person with such cable operator's cable system.

784.2 Changes Required by Public Improvements. The cable operator shall, upon reasonable notice, and at its reasonable expense, temporarily disconnect, relocate and remove from the street or other public place any of its property when required by the Township by reason of traffic conditions, public safety, street vacation, street construction, installation of sewers, drains, water pipes, or any other type of structure or improvements by public agencies.

784.3 Requests for Removal or Change. The cable operator shall, on the request of any person holding a building moving permit, temporarily raise or lower its wires to permit the moving of said building. The expense of such temporary removal, raising or lowering of wires shall be paid by the person requesting the same, and the cable operator shall have the authority to require such payment in advance. The cable operator shall be given not less than fifteen (15) days advance written notice of any move contemplated to arrange for temporary wire changes.

#### 785 Easement Maintenance

All surface and subsurface easements required by this ordinance or shown on the record plan shall be kept clear of any and all structures and obstructions including, but not limited to, buildings, trees, shrubs, driveways and berms. On surface drainage swale easements, fences shall not be constructed within the limits of the 100 year storm water surface elevation. Grades, once established on the approved plan, shall not be altered without approval by the Board of Supervisors. A covenant shall be added to the Record Plan which contains the above maintenance note. Please refer to section 533.11(J) for additional requirements for individual lot grading plans.

#### 786 Street Lights

All residential developments shall incorporate a lighting design for internal streets, intersections and common areas. The proposed lighting shall be designed in accordance with the following standards:

786.1 As part of the preliminary plan process, a street lighting design shall be prepared and submitted to the Township.

786.2 Design and installation of the street lights and power supplies shall be in accordance with all current and applicable Met-Ed standards.

- 786.3 All poles shall be black fiberglass having a twelve (12) foot height above finish grade. The poles shall be provided from the Shakespeare Company Model #BS16-01N1BE09, or approved equal.
- 786.4 Light fixtures shall be a four (4) sided colonial style as supplied by GE Lighting Systems Model #T10R10S1N2AMS3BLT, or approved equal. Light source shall be a 100 watt minimum high pressure sodium vapor lamp.
- 786.5 Pole locating shall be incorporated in the required lighting and landscaping plan. The plans shall include iso-footcandle distribution patterns for each light.
- 786.6 All lights shall be services via underground power sources. Underground wiring shall be placed within non-metallic conduit conforming to current Met-Ed and National Electric Code (NEC) standards.
- 786.7 The lighting plans shall include the design specifications necessary for Met-Ed to determine available sources for the street light feeds.
- 786.8 The applicant shall provide the Township with documentation from Met-Ed indicating their acceptance of the proposed street lighting design.
- 786.9 As part of the final plan approval, the installation of street lights shall be included in the developers improvements agreement. This agreement shall specify the responsibilities for payment, installation and maintenance of the street lighting systems. All current and applicable Met-Ed standards shall be incorporated into this agreement.

## **790 ENVIRONMENTAL PROTECTION**

### **791 Erosion and Sediment Control**

#### **791.1 General Standards**

- 791.11 No changes shall be made in the contour of the land; no grading, excavating, removal or destruction of the topsoil, trees or other vegetative cover of the land shall be commenced within a proposed subdivision or land development tract until such time that a plan for sedimentation control and minimizing erosion has been reviewed and found satisfactory by the Northampton County Soil and Water Conservation District and reviewed and approved by the Township, or there has been a determination by the Township, upon recommendation by the Northampton County Soil and Water Conservation District, that such plans are not necessary.

- 791.12 Measures used to control erosion and reduce sedimentation shall meet the standards and specifications of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual, as amended. The Township Engineer, or other officials as designated, shall ensure compliance with the appropriate specifications, copies of which are available from the Northampton County Conservation District.
- 791.2 Performance Principles: The following measures are effective in minimizing erosion and sedimentation and shall be included where applicable in the control plan:
- 791.21 Stripping of vegetation and grading shall be kept to a minimum.
- 791.22 Development plans shall preserve significant natural features, keep cut and fill operations to a minimum, and ensure conformity with topography so as to create the least erosion potential and adequately handle the volume and velocity of surface water runoff.
- 791.23 Whenever feasible, natural vegetation shall be retained, protected and supplemented.
- 791.24 The disturbed area and the duration of exposure shall be in accordance with the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual.
- 791.25 Disturbed soils shall be stabilized by permanent vegetation and/or by mechanical erosion control and drainage measures as soon as practicable in the development process.
- 791.26 Temporary vegetation and/or mulching shall be used to protect exposed critical areas during development.
- 791.27 Provisions shall be made to effectively accommodate the increased runoff caused by soil and surface conditions during and after development. Where necessary, the rate of surface water runoff will be mechanically retarded.
- 791.28 Sediment in the runoff water shall be trapped until the disturbed area is stabilized by the use of debris basins, sediment basins, silt traps, or similar measures.

791.3 Grading for Drainage: In order to provide more suitable sites for building and other uses, improve surface drainage and control erosion, the following requirements shall be met:

- 791.31 All lots, tracts or parcels within a proposed subdivision or land development shall provide proper drainage away from buildings and dispose of surface water without ponding, except where an alternative drainage system is approved. Natural drainage patterns shall be preserved wherever possible.
- 791.32 Cut and fill slopes shall not be steeper than 3:1 unless stabilized by a retaining wall or cribbing.
- 791.33 Adequate provisions shall be made to prevent surface water from damaging the cut face of excavations of the sloping surfaces of fills.
- 791.34 Cut and fills shall not endanger adjoining property.
- 791.35 Fill shall be placed and compacted so as to minimize sliding or erosion of the soil.
- 791.36 All cuts and fills within 100 year floodplain areas must be in accordance with the Township's Floodplain ordinance. Fills placed adjacent to constructed channels shall have suitable protection against erosion during periods of flooding.
- 791.37 Grading will not be done in such a way as to divert water onto the property of other landowners without the written consent of the landowners.
- 791.38 During grading operations, necessary measures for dust control will be exercised.
- 791.39 No equipment shall alter or damage the bed and banks of any stream, unless approved by the Pennsylvania Department of Environmental Protection. Equipment shall cross streams only at approved crossings utilizing culverts or bridges.

792 Natural Feature Preservation

The design and development of subdivisions and land developments shall be in harmony with the natural features of the site and shall respect the development limitations of the natural features. Subdivision and land development design shall be integrated with the natural terrain of the site, wooded areas, large trees, natural watercourses, rock outcroppings and scenic views.

792.1 Areas with Development Limitations

792.11 The filling or development of wetlands and areas of hydric soils shall conform to the regulations of the Zoning Ordinance, and shall not proceed until relevant U.S. Army Corps of Engineers and PA Department of Environmental Protection permits have been granted.

792.2 Tree Preservation and Planting

792.21 Trees six (6) inches or more in diameter (measured at a height of four (4) feet above grade) shall not be removed unless they are located within the proposed cartway, driveway, or sidewalk portion of a street right-of-way, or within twenty-five (25) feet of the foundation area of a new building. Areas in which trees are retained shall remain at original grade level and undisturbed wherever possible.

792.22 All existing trees six (6) inches or more in diameter (measured at a height of four (4) feet above grade) shall be located and identified on the plan. The Township may waive this requirement in densely wooded areas and tree rows.

792.23 In all subdivisions and land developments containing property line tree rows, a minimum ten (10) foot wide easement shall be established along the lot lines having existing tree rows. A protective covenant shall be added to the plan stating that no trees shall be removed nor grades altered within these easements without approval by the Board of Supervisors.

792.24 In subdivisions or land developments where street trees are proposed, they shall be planted outside of street right-of-way lines, with underground utilities being located a minimum of 10 feet from the trees.

792.25 In particular, but not in limitation, approved trees for street planting include the following:

792.25a *Acer rubrum* - Red Maple

792.25b *Acer saccharum* - Sugar Maple

792.25c *Fraxinus americana* - White Ash

792.25d *Fraxinus pennsylvanica lanceolata* - Green Ash

792.25e *Gleditsia tricanthos inermis* - Moraine Locust

- 792.25f Ginkgo biloba - Ginkgo (male)
- 792.25g Liquidambar styraciflua - Sweet Gum
- 792.25h Liriodendron tulipifera - Tulip Tree
- 792.25i Phellodendron amurense - Amur Cork Tree
- 792.25j Quercus alba - White Oak
- 792.25k Quercus borealis - Red Oak
- 792.25l Quercus coccinea - Scarlet Oak
- 792.25m Quercus phellos - Willow Oak
- 792.25n Tilia-Linden - All species hardy to the area
- 792.25o Zelkova Serrata - Japanese Zelkova

792.26 For all land developments and for all subdivisions not a minor subdivision, a Landscape Plan shall be developed. The plan shall show the plant cover which exists, and on the same or separate sheet, that which will exist when the landscaping is completed.

792.3 Topsoil Protection

792.31 Topsoil shall be removed from the areas of construction and stored separately.

792.32 The topsoil shall be stabilized to minimize erosion during storage. upon completion of the construction, the topsoil must be uniformly redistributed on the site.

792.4 Stream Frontage Maintenance

792.41 An easement for maintenance purposes, a minimum of twenty (20) feet in width, shall be provided along all stream banks.

792.42 Any grading, excavation or other work within these easements shall be in accordance with the Township Floodplain Ordinance or Zoning Ordinance, as applicable.

793 Open Space and Recreation Areas



The establishment, maintenance and protection of open space and recreation shall be in accordance with the guidelines contained within "The Comprehensive Plan of Upper Nazareth Township and the Upper Nazareth Township Park, Recreation and Open Space Plan."

793.1 Recreation Areas

793.11 Areas meeting the criteria for recreation lands as set forth in the definitions shall be offered for dedication to the Township, subject to the approval of the Board of Supervisors. The Board of Supervisors shall consider the offer relative to the following factors:

793.11a The suitability of the size, shape and landform of the tract for appropriate recreational facilities. No recreation area shall measure less than two (2) acres in size.

793.11b Accessibility.

793.11c Conformity with the parks and recreation element of the Comprehensive Plan.

793.11d Ability of nearby recreation facilities to serve the subdivision.

793.12 Access to recreation areas dedicated to the Township pursuant to Section 793.11 shall be as follows:

793.12a At least one (1) side of the recreation area shall front on a public street. Frontage on two (2) or more public streets is preferred. The above requirements are not necessary if the area proposed for dedication adjoins lands currently utilized by the Township for recreation purposes.

793.12b Additional access may be provided by rights-of-way connecting the recreation area with public streets.

793.12c Rights-of-way providing access to a recreation area shall have a minimum width of fifty (50) feet. Each right of-way shall be part of the dedicated recreation area and contain at least one (1), eight (8) foot wide macadam path, constructed to Township standards, connecting the recreation area to the public street.

793.13 Cash in lieu of recreation land dedication may be offered, subject to the approval of the Board of Supervisors.

794 Karst Hazards

794.1 Purpose

The purpose of this section is to recognize the potential for damage to public and private improvements, human injury or death, and the disruption of vital public services which may arise by the potential for sinkholes and/or subsidence within areas of carbonate geology. A further purpose of this section is to minimize the potential for such sinkhole and/or subsidence occurrence and to protect the ground water resource. Should the regulations of this and other applicable regulations conflict, the most stringent regulations shall apply.

794.2 Disclaimer of Liability

Whereas the exact occurrence of sinkholes and/or subsidence is not predictable, the administration of these regulations shall create no liability on behalf of the Township, the Township Engineer, Township employees, or Township agencies as to damages which may be associated with the formation of sinkholes or subsidence. That is, compliance with these regulations represents no warranty, finding, guarantee, or assurance that a sinkhole and/or subsidence will not occur on an approved property. The municipality, its agencies, consultants and employees assume no liability for any financial or other damages which may result from sinkhole activity.

794.3 Procedures

794.31 As part of the Preliminary Plan requirements for all subdivisions and land developments, the applicant shall engage a qualified professional to review the existing aerial photos, soils geological and related data available to him as it may pertain to the subject inspection of the property.

794.32 A site inspection by the applicant's professional, using all available data and with such assistance as is needed, shall determine the presence or absence of Karst surface features of the site, and locate the same if present on a site plan at a scale no smaller than 1" = 100'. In particular, the following features shall be located, if present, on the site:

794.32a Closed depressions;

794.32b Open sinkholes;

- 794.32c Seasonal high water table indicators;
  - 794.32d Unplowed areas in plowed field;
  - 794.32e Surface drainage into ground;
  - 794.32f Quarries or borrow pits;
  - 794.32g Rock outcrops and other Karst features
- 794.33 The applicant must provide the Township with a map at a scale of 1" = 100' that show the Karst features listed in Section 794.32.
- 794.34 Based upon the site inspection, the applicant's professional shall determine what further testing should be done by the applicant to ensure compliance with the performance standards set forth in Section 794.4. Testing methodology shall be reasonable under the circumstances, including (1) the scale of the proposed development; and (2) the hazard revealed by examination of available data and site inspection.
- 794.35 The applicant shall cause the additional testing, if any, to be effected and shall submit test results to the Township Engineer.
- 794.36 The Township Engineer shall report to the Planning Commission, with a copy to the applicant, his opinion concerning the adequacy of the report submitted based upon the scale of the development and the hazards revealed by the report, and shall make recommendations to the Planning Commission based upon the report submitted concerning site development, including storm water management, the layout of utility lines, and building location. The Township Engineer may require the applicant to perform such additional testing as may be appropriate.
- 794.4 Performance Standards
- 794.41 All applicants for subdivisions or land developments shall comply with the requirements of this ordinance regarding Karst hazards.
- 794.42 No storm water detention facility shall be placed within one hundred (100) feet of the features listed in Section 794.32, unless a detailed geotechnical solution to the subsidence, pollution and safety problems of the Karst feature has been presented by a competent professional in carbonate geology.

- 794.43 No storm water swale with design flows in excess of ten (10) cubic feet per second for the ten (10) year flood may be constructed within one hundred (100) feet of the features listed in Section 794.32, unless a detailed geotechnical solution to the subsidence, pollution and safety problems of the Karst feature has been presented by a competent professional in carbonate geology.
- 794.44 No storm sewer pipe shall be constructed within one hundred (100) feet of the features listed in Section 794.32 unless it is concrete pipe utilizing O-ring joints.
- 794.45 No principal or accessory building, no structure, and no impervious surface shall be located closer than one hundred (100) feet from the edge of the features listed in Section 794.32, unless a detailed geotechnical solution of the subsidence, pollution and safety problems of the Karst feature has been presented by a competent professional in carbonate geology.
- 794.46 No septic system or tile field, no swimming pool, no solid waste disposal area, transfer area or facility, no oil, gasoline, salt or chemical storage area, and no blasting for quarrying or well enhancement activities shall occur within one hundred (100) feet of the features listed in Section 794.32 unless a detailed geotechnical solution to the subsidence, pollution and safety problems of the Karst feature has been presented by a competent professional in carbonate geology.
- 794.47 Soil Erosion and Sedimentation Control plans filed with the Northampton County Conservation District shall detail safeguards to protect identified Karst features.
- 794.48 All storm sewer lines located in a Karst area shall be so constructed as to not permit the flow of water along the utility line trench, and shall be imperviously diked at thirty (30) foot intervals.
- 794.49 When a proposed public water or sanitary sewer line is located in an identified Karst area, the applicant shall demonstrate to the Township that the appropriate utility authority has been notified of this fact and that the applicant will comply with the authority's recommendations concerning provisions to prevent the flow of water along the utility line trench.

## **ARTICLE 8**

### **MOBILE HOME PARK REQUIREMENTS**

#### **800 PERMITS**

- 801 It shall be unlawful for any person to operate, maintain, construct, alter or extend any mobile home park within the Township unless the person holds a mobile home park permit issued by the Township.
  
- 802 Permits for new mobile home parks, or any alterations to or expansion of mobile home parks, shall be issued after the land development plans have been approved subject to the requirements of this Ordinance. The land development plans shall comply with the submission and procedural requirements of this Ordinance, the design criteria of Article 7, and the improvements requirements of this Ordinance.

#### **810 DESIGN STANDARDS**

- 811 The mobile home park site shall meet the criteria of Section 792.1 relating to the development of areas with environmental limitations.
  
- 812 Storm drainage management shall be provided consistent with the requirements of Section 770.
  
- 813 Site grading shall occur in conformance with the requirements of Section 791.3.
  
- 814 No part of the mobile home park shall be used for non-residential purposes excepting such uses necessary for the management and maintenance of the park, recreation facilities, and utility appurtenances.
  
- 815 A landscaping plan consistent with the requirements of Section 792.2 shall be developed.
  
- 816 The private street system shall be designed and built to the Township standards.
  - 816.1 The roads shall meet the design standards of Section 740 for local roads.
  - 816.2 The roads shall be built to the standards contained in the Township local road construction specifications.
  
- 817 Off-street parking shall be provided as required by the Township Zoning ordinance.
  
- 818 Pedestrian walkways meeting the following standards shall be provided.
  - 818.1 All parks shall 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.

818.2 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 (3-1/2) feet.

818.3 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.

819 Mobile homes shall be sited on mobile home stands in conformance with the following provisions:

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

819.2 The stand shall be constructed from either 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 augers, arrowhead anchors, or other devices suitable to withstand a tension of at least two thousand eight hundred (2,800) pounds. The anchorage shall be adequate to withstand wind forces and uplift in accordance to applicable requirements in the Uniform Construction Code, as amended.

819.3 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, and there shall be a decorative skirt installed around the base of the unit.

## **820 WATER SUPPLY**

821 Water service to all mobile home parks shall be supplied by connection to the public water supply system. The adequacy of the distribution system and the availability of service (as per Section 425.8) shall be demonstrated.

822 Fire hydrants in accord with the requirements of Section 761 shall be provided.

## **830 SEWAGE DISPOSAL**

831 All mobile home parks shall be connected to the public sanitary sewer system upon construction or expansion. The availability of service and the adequacy of the distribution system shall be certified as required by Section 425.9.

- 831.1 All materials used for sewer connections shall be semi rigid, corrosion resistant, non-absorbent and durable. The inner surface shall be smooth.
- 831.2 Provisions shall be made for plugging the sewer riser pipe when a mobile home does not occupy the lot. 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.

**840 ADDITIONAL REQUIREMENTS**

841 Electrical Distribution System

841.1 General Requirements

Every mobile home park shall contain an electrical wiring system, consisting of wiring, fixtures, equipment and appurtenances which shall be installed in accordance with Pennsylvania Power and Light Company or Metropolitan Edison Company specifications regulating such systems and the National Electric Code.

841.2 Power Distribution Lines

All power lines shall be located underground.

842 Refuse Handling

Refuse disposal containers shall be provided in paved areas. The containers shall be suitably screened.

## **ARTICLE 9**

### **IMPROVEMENTS SPECIFICATIONS**

#### **900 GENERAL REQUIREMENTS**

- 901 All rights-of-way of existing or new streets within the boundaries of a subdivision or land development should be conveyed to the Township free and clear of all liens and encumbrances, with good and marketable title which is insurable by a reputable title company doing business in Pennsylvania. All Township rights-of-way shall be conveyed in "Fee Simple" and all PennDOT rights-of-way in permanent easements.
- 902 Physical improvements to the proposed subdivision or land development tract shall be provided, constructed and installed as shown on the Final Plan and in accordance with the requirements of this ordinance.
- 903 As a condition for the approval of the Final Plan, the developer shall execute an agreement with the Board of Supervisors as to the installation of all improvements shown on the plan and required by this Ordinance. Before the final plan may be endorsed by the Board of Supervisors, the Subdivision Improvements Agreement shall be executed by the developer and the Board of Supervisors.
- 904 All improvements installed by the developer shall be constructed in accordance with the design specifications as may be referenced in Article 9 of this Ordinance or as may be otherwise approved by the Board of Supervisors, subject to the recommendations of the Township Engineer.
- 905 The supervision of the installation of the improvements as required by this ordinance shall be the responsibility of the Township Engineer, except that the installation of those improvements which are to be dedicated to governmental entities other than the Township shall be supervised by engineers representing those entities.

#### **910 SPECIFICATION REFERENCES**

The following improvements shall be provided, constructed and installed by the developer as shown on the final plan and in accordance with the "Upper Nazareth Township Standards For Improvements Construction," hereinafter to be known as the "Township Standards," adopted and amended from time to time by Resolution of the Board of Supervisors.

- 911 Streets, curbs and sidewalks shall be constructed in accord with the Township Standards.
- 912 Sanitary sewers and all related appurtenances shall be constructed in accord with the specifications as may be adopted from time to time by the appropriate Authority which are made part of the Township Standards by reference.



- 913 Water supply and distribution related improvements including fire hydrants, shall be constructed in accord with the specifications as may be adopted from time to time by the governing water authority or successors, which are made part of the Township Standards by reference.
- 914 Storm water management plan related improvements shall be constructed in accord with the Township Standards.
- 915 Monuments and markers shall be placed in accord with the Township Standards.
- 916 Street lights, where required, shall be installed in accord with the Township Standards.
- 917 Street and traffic signs shall be installed in accord with the Township Standards.
- 918 Tree planting and landscaping shall be accomplished in accord with the Township Standards.

**920 CONTRACTS**

Before the Board of Supervisors shall endorse its approval on the final plan of any subdivision or land development involving improvements as may be required by this ordinance, the developer shall enter into a written agreement with the Board of Supervisors in the manner and form set by the Township Solicitor, where the developer agrees as follows:

- 921 To construct or cause to be constructed at his or her own expense, all streets, curbs, sidewalks, sanitary sewers, water supply and distribution systems, fire hydrants, storm water management facilities, monuments and markers, street lights, street signs, tree planting and landscaping, recreation facilities, and any other improvements shown on the final plan as otherwise approved, and in accordance with the requirements of this ordinance.
- 922 To maintain at his or her own cost, the said streets, curbs, sidewalks, sanitary sewers, water supply and distribution systems, fire hydrants, storm water management facilities, monuments and markers, street signs, tree planting and landscaping, recreation facilities, and any other improvements shown on the final plan until the same are accepted by Resolution of the Township Board of Supervisors and/or public authorities and for a period of eighteen (18) months thereafter and to repair the same as directed by the Board of Supervisors and/or public authority for reason of lack of structural integrity or failure to properly function.
- 923 To pay the Township's inspection, other engineering and legal fees as related to the creation and enforcement of said agreement.

- 924 To obtain any easements or releases from all damages which may be necessary for the construction of any improvement which traverses lands of persons other than the developer. Said releases shall insure to the benefit of the Township and/or public authority as well as to the developer.
- 925 Whenever a traffic signal is required for traffic control to a single nonresidential lot or development, the owner of said lot or development will be required to install, operate and maintain the signal(s) in perpetuity, at no cost to the Township. The perpetual operation and maintenance shall include the signal lights, support structures, controllers, pavement markings, payment of electricity costs and other items essential to the traffic signal. All signalization controls shall meet the requirements of all applicable PennDOT Publications and Township Standards within Appendix "F" of this ordinance.

Owner shall provide the Township with an agreement which states that the owner, his heirs, or assigns will be responsible for the operation and maintenance of the traffic signal(s). Additionally, the owner shall provide an agreement indicating that the traffic signal and appurtenances will be maintained by a company qualified and bonded in the maintenance of traffic signals. All agreements required for private ownership and maintenance of traffic signals shall be recorded in the office for the Recorder of Deeds in and for Northampton County.

### **930 IMPROVEMENTS GUARANTEE PROCEDURE**

- 931 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, and/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, plus five (5) percent of the cost of all improvements for Engineering/Layout plus five (5) percent of the cost for Inspection, as determined in accordance with the procedures set forth in the Pennsylvania Municipalities Planning Code (53PS10509 and following) as amended, and as is in effect at the time of the filing, in a form and with a surety as determined in accordance with the procedures as set forth in the Pennsylvania Municipalities Planning Code as amended, guaranteeing the construction and installation of all such improvements on or before the date fixed in the formal action of approval or accompanying agreement for completion of the improvements. The terms of the agreement may be extended as provided for in the Pennsylvania Municipalities Planning Code as amended. 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 as provided for in the Pennsylvania Municipalities Planning Code as amended. In the event of default under a performance guarantee, the proceeds of the performance guarantee received by the Townships, public utility, or municipal authority shall be used to construct and install the improvements.
- 932 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,

and/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, and/or municipal authority.

**940 APPROVAL OF IMPROVEMENTS AND RELEASE OF PERFORMANCE  
GUARANTEE BY THE TOWNSHIP BOARD OF SUPERVISORS**

941 The procedure for inspecting and approving the improvements and for the release of the performance guarantee by the Board of Supervisors shall be in accord with the Pennsylvania Municipalities Planning Code as amended.

942 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.

## **ARTICLE 10**

### **ADMINISTRATION**

#### **1000 AMENDMENTS**

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 by the Pennsylvania Municipalities Planning Code. In addition, in case of an amendment other than that prepared by the Planning Commission of the Township, the Board of Supervisors shall submit each such amendment to the Township planning agencies for recommendations at least thirty (30) days prior to the date fixed for the public hearing on such proposed amendment.

#### **1010 APPEALS**

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 of Common Pleas as is provided for in the Pennsylvania Municipalities Planning Code.

#### **1020 REMEDIES**

The preventative remedies and enforcement remedies as stipulated in the Pennsylvania Municipalities Planning Code shall apply.

#### **1030 SEVERABILITY AND CONFLICTS**

1031 Should any action or provision 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.

1032 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.

#### **1040 FEES**

1041 The Township Board of Supervisors shall establish, by resolution, a collection procedure and schedule of fees to be paid by the developer at the time of filing of the Sketch, Preliminary and Final Plans. No plan shall be accepted for filing unless the required number of plans have been submitted with the supplemental material required in Sections 420 and 530 as relevant, accompanied by the required review fee.

- 1042 Charges for field inspection as required by Township Supervisors for public improvements shall be based on actual costs incurred for such inspections.
- 1043 No final plan shall be approved unless all accrued fees and charges are paid in full.
- 1044 No plan shall be filed at the Recorder of Deeds Office unless all fees and charges are paid in full.

**1050 CAPITAL IMPROVEMENTS FUND FEES**

- 1051 All development within the Township imposes additional burdens upon the infrastructure of the Township, including, but not limited to, fire protection services, police facilities, sewer facilities and emergency services. To ensure that each new subdivision and land development bears its fair share of these additional facilities, a reasonable capital improvements fee shall be charged for every subdivision and land development in accordance with the following provisions.
  - 1052 Calculation of fee.
    - 1052.1 In the case of a residential lot, the charge shall be pursuant to a per dwelling unit fee established by resolution of the Board of Supervisors.
    - 1052.2 In the case of a commercial or nonresidential development, the charge shall be pursuant to a charge per cubic foot of building volume as established by resolution of the Board of Supervisors. The total building volume shall be calculated by the Zoning Officer and shall be based upon outside dimensions of the building.
- 1053 These capital improvements fees shall be paid at the time the lot owner applies for a building permit for the lot in question. No building permit shall be issued, unless the capital improvements fee applicable to said lot or development has been paid to the Township.
- 1054 All such capital improvements fees shall be deposited into a separate account controlled by the Board of Supervisors of the Township.

**1060 MODIFICATIONS**

- 1061 The Board of Supervisors may grant a modification of the requirements of one or more provisions of this ordinance if the literal enforcement will exact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modifications will not be contrary to the public interest and that the purpose and intent of this ordinance is observed.

- 1062 All requests for a modification shall be in writing and shall accompany and be a part of the preliminary plan application for development. The request shall state in full the grounds and facts of unreasonableness or hardship on which the request is based, the provision or provisions of the ordinance involved, and the minimum modifications necessary.
- 1063 The Board of Supervisors, in considering requests for modification, shall consider the recommendations of the Planning Commission in regard thereto.
- 1064 The Board of Supervisors shall keep a written record of all action on all requests for modifications.
- 1065 If the Board of Supervisors grants any waivers from the requirements of this ordinance, the plan of record shall list all the sections of this ordinance that were waived, plus the date(s) the modifications were approved by the Board of Supervisors.

**APPENDIX A**

**STORM DRAINAGE RUNOFF CALCULATION**

## APPENDIX A

### STORM DRAINAGE RUNOFF CALCULATION

The following guidelines shall be used for subdivisions and land developments within watersheds that do not have an approved Act 167 Storm Water Management Plan. In subdivision and land developments that are within an approved Act 167 area, the requirements of that plan shall be followed.

#### 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.

$$V = \frac{1.486}{n} \times r^{2/3} \times S^{1/2}$$

$$q = va$$

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



$r = \text{hydraulic radius} = a/p$

$s = \text{slope of the channel or pipe in feet per foot}$

$q = \text{capacity of the channel or pipe in cubic feet per second}$

2. The coefficient of roughness used shall be in accordance with the United States Department of Transportation Hydraulic Design Series #3.

C. Maximum Stream Velocities in Open Channels

Maximum permissible velocities in channels shall be based upon the DEP Erosion and Sediment Pollution Control Program Manual, as amended.

**APPENDIX B**  
**STANDARD PLAN NOTATIONS**



B. OWNER'S STATEMENT

I/We, the owner(s) of this plat of land being duly sworn according to law, depose and state that I am/we are the sole owner(s) of this property in peaceful possession of it and that there are no suits pending affecting the title of same. I/we do further depose and state that I/we do have complied with all the requirements and provisions of the Upper Nazareth Township Subdivision and Land Development Regulations and shall save the Township harmless and indemnify the Township of Upper Nazareth against any liability or loss resulting from the subdivision of this plat for whatever reason present or future.

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
Owner's Signature

SWORN TO AND SUBSCRIBED BEFORE ME  
THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_\_.

SEAL

\_\_\_\_\_  
Notary Public

\* \* \* \* \*

C. OWNER'S CONSENT FOR ON-SITE INSPECTION

Owner(s) hereby give(s) consent to and authorizes the Township Board of Supervisors, the Township Planning Commission, the Township Engineer, the Township Solicitors and other Township personnel, agents, representatives, officials and officers to conduct or perform an on-site inspection of the real property which is the subject matter of the within Site Plan, Subdivision or Land Development during the pendency of the Site Plan, Subdivision or Land Development Plan before the Township.

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
Owner's Signature

D. OFFER OF DEDICATION – Model Form.

The undersigned Owner(s) offer to dedicate to the Township of Upper Nazareth for public use the following: the street rights-of-way for the following street(s):  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_; shown on the approved plans; and all public improvements to be constructed within their limits and within any proposed public open spaces and all other improvements stated as proposed to be public on the plans or accompanying documents or required to be dedicated under Township requirements.

\_\_\_\_\_  
Owner's Signature Date

\_\_\_\_\_  
Owner's Signature Date

\*\*\*\*\*

E. PROFESSIONAL ENGINEER'S STATEMENT

I, \_\_\_\_\_, do hereby certify that I am a professional Engineer licensed and registered to practice engineering in the Commonwealth of Pennsylvania, pursuant to the Pennsylvania Professional Engineers Registration Law, Act of May 23, 1945, P.L. 913, as amended, as found at 63 P.S. Section 148 et seq., and that the engineering aspects of the Plan are true and correct to the best of my knowledge, information and belief, and I do further certify that the Plan complies with the requirements of the Subdivision and Land Development Ordinance of Upper Nazareth Township.

\_\_\_\_\_  
Professional Engineer's Signature

\_\_\_\_\_  
License Number

\_\_\_\_\_  
Address

SEAL

\_\_\_\_\_

F. PROFESSIONAL LAND SURVEYOR'S STATEMENT

I, \_\_\_\_\_, do hereby certify that I am a professional Land Surveyor licensed and registered to perform land surveys in the Commonwealth of Pennsylvania, pursuant to the Pennsylvania Professional Engineers Registration Law, Act of May 23, 1945, P.L. 913, as amended, as found at 63 P.S. Section 148 et seq., and do hereby certify that the Plan, prepared from field survey, correctly represents the proposed lot(s) as surveyed by me for the owners and that the Plan complies with the requirements of the Subdivision and Land Development Ordinance of Upper Nazareth Township.

\_\_\_\_\_  
Professional Land Surveyor's Signature

\_\_\_\_\_  
License Number

\_\_\_\_\_  
Address

SEAL

