Part 18

General Design and Performance Standards

§27-1801. Applicability.

For the purposes of this Chapter, the following general regulations and design standards shall apply to all uses, whether granted by right, conditional use review or special exception. These general design standards and regulations shall apply to all districts. In addition to the general standards and regulations, the following specific performance standards shall be applied when specifically required according to applicable provisions of this Chapter. In all conditional use review applications, conditional use review standards shall also be applied.

§27-1802. Parking.

For all uses, access, internal circulation and off-street parking regulations and design standards shall conform to the provisions of Part 20 of this Chapter.

§27-1803. Signs.

For all uses, sign design standards and regulations shall conform to the Sign provisions of this Chapter.

§27-1804. Projections into Required Yards.

No structure or part of a structure shall be erected within or shall project into any required yard except:

- A. Arbors and trellises less than 12 feet in height.
- B. Tool, utility sheds and similar structures 200 square feet or less, 12 feet in height or less, not located within a required front yard setback, and located a minimum of 10 feet from side or rear property lines.

- C. Egress stairs or landings serving one- or two-family dwellings, which are required by the Building Code.
- D. Stairs or landings serving a one- or two-family dwelling located within a required front yard setback and located a minimum of 10 feet from side or rear property lines.
- E. Decks, patios and similar structures serving a one- or two-family dwelling meeting the appropriate zoning district's front yard setback and located a minimum of 25 feet from rear property lines and 10 feet from side property lines.
- F. Eaves, gutters, cornices, bay windows and cantilevered fireplaces not exceeding 2 feet in overall width.

§27-1805. Fencing Standards

The following standards for fencing and screening shall be applied to all proposed uses:

- A. No fence or wall, except a retaining wall, or a wall of a building permitted under the terms of this Chapter, over 6 feet in height, shall be erected within any required yards, unless:
 - (1) No more than 50% of the vertical plane of the fence or wall which is in excess of the six feet is opaque.
- B. No fence or wall shall obstruct vision at street intersections or along streets, in accordance with applicable provisions found elsewhere.
 - C. No fence shall be placed on a property line unless; a survey has been performed, and such fence must be able to be maintained on both sides by the owner of the fence.

27-1806. Buffering Standards.

1. Buffering requirements shall be applicable where proposed commercial, industrial, office or intensive agricultural uses are to be located

adjacent to existing residential zoning districts, and when proposed multifamily uses are to be located adjacent to existing one or two-family residences. Buffering shall be provided when specifically required according to the provisions of the Historic Resource Protection regulations set forth in this Code.

- 2. Buffering requirements will be deemed to be met by the Board of Supervisors if the items to be buffered according to subsection 1. above are located greater than 200 feet from adjacent residential uses.
- 3. Landscaped buffers shall be located so that, at maturity, any building or structure with a height greater than 12 feet, or any storage, loading, or parking area of more than five spaces for the proposed uses set forth above is not visible from abutting lots and building(s) thereon in the adjacent residential zoning district. Landscaped buffers shall conform to the standards set forth in subsection 7 below.
- 4. To assure compliance with buffering requirements, the applicant shall provide graphic material to enable the Township to assess the impact of the proposed use upon the adjacent residential use and ensure that the proposed buffering will create an effective barrier at necessary points. Graphic material may include any one or a combination of the following: plot plans with view analysis, landscaping and grading plans; profiles; models; cross-sections; and photographs.
- 5. Buffers shall be established through the use of any one or a combination of the following measures, or other measures that, in the opinion of the Township Planning Commission, will provide equal or greater buffering:
 - A. Proposed planting of trees and shrubs that are effective for the intended buffering uses. Plantings that require excessive maintenance, will not be vigorous or do not sufficiently screen the intended use shall not be permitted.
 - B. Existing natural or man-made barriers such as fences and walls, when architecturally compatible with the landscaping and architectural style of the adjacent residential uses.

- C. Proposed grading of land to create mounding, berms or depressions that block visibility.
- 6. A landscaping plan utilizing appropriate native species is encouraged and preferred. Such plan incorporating the above measures shall be prepared by the applicant and approved by the Township as part of the development plan. The landscaping plan shall be designed in accordance with the following standards and conditions.
 - A. The planting shall be composed of evergreen plants and trees arranged to form both a low level and a high level buffer. The high level buffer shall consist of a combination of evergreen and deciduous trees planted with specimens no less than 6 feet in height. The low level buffer shall consist of evergreen shrubs or hedges planted at an initial height of not less than 3 feet and spaced at intervals of not more than 5 feet. The low level buffer shall be placed in alternating rows to produce a more effective barrier. The width of planting material in the buffer shall be a minimum of 25 feet.
 - B. The buffer planting shall be so placed that at maturity it will be no closer than 3 feet from any street or right-of-way.
 - C. In accordance with the provisions in this Code, a clear sight triangle shall be maintained at all street intersections and at all points where private access-ways intersect public streets.
 - D. The buffer planting shall be interrupted only at points of vehicular or pedestrian access and shall not include structures, storage areas or parking in the buffer area.
 - E. All mechanical equipment, loading areas and storage not enclosed in a building shall be fully and completely screened from view from any adjacent streets or residential districts or uses, through the use of measures set forth above, and in a manner compatible with the architectural and landscape style employed on the lot.
- 7. The landowner shall maintain the buffer planting and replace any plant material which does not live within one year of notification by the Township.

§27-1807. Outdoor Lighting

1. Purpose.

- A. To require and set minimum standards for outdoor lighting to:
 - (1) Provide for and control lighting in outdoor public places where public health, safety and welfare are issues.
 - (2) Protect drivers and pedestrians from the disabling glare of non-vehicular light sources.
 - (3) Protect neighbors and the night sky from nuisance glare and light trespass from poorly shielded, aimed, placed, applied or maintained light sources.
 - (4) Promote energy efficient lighting design and operations.
 - (5) Protect and retain the intended character of London Grove Township.

2. Applicability.

- A. All uses within the Township where there is outdoor lighting including, but not limited to residential, multi-family residential, commercial, industrial, public recreational/sports, institutional uses and signs, architectural and landscape lighting.
- B. Criteria for agricultural uses shall be in accordance with subsection 5 of this Section.
- C. Temporary decorative/seasonal lighting is exempt from all but the glare control requirements of this Section.

3. Definitions.

A. *Footcandle* – a unit of incident light quantity measurable with an illuminance meter, a.k.a. footcandle meter or light meter.

- B. Full cutoff a term that describes a lighting fixture from which no light is emitted at or above a horizontal plane through the bottom of light-emitting aperture portion of the fixture and no more than 10 percent of the lamp's intensity is emitted at any angle within 10 degrees below that horizontal plane, at all lateral angles around the fixture.
- C. *Glare* the sensation produced by excessive direct or reflected light that causes annoyance, discomfort or loss in visual performance of the eye. Sensitivity to glare increases with the viewer's age.
- D. *Illuminance* the quantity of incident light measured with a light meter in footcandles.
- E. *Light trespass* light, measured in footcandles, and projected beyond the boundaries of the property on which the installation is sited.
- F. *Lumen* in the context of this Section, the published light-output rating of a lamp.

4. Criteria.

A. Illumination Levels.

(1) Lighting, where required or permitted by this Chapter or as otherwise required by the Township, shall have intensities and uniformity ratios in accordance with the current recommended practices of the Illuminating Engineering Society of North America (IESNA).

B. Lighting Fixture Design.

(1) Fixtures shall be of a type and design appropriate to the lighting application and aesthetically acceptable to the Township.

- (2) For the lighting of predominantly horizontal surfaces such as, but not limited to, roadways, areas of vehicular and pedestrian passage, merchandising and storage areas, automotive fuel dispensing facilities, automotive sales areas, loading docks, cul-de-sacs, active and passive recreational areas, building entrances, sidewalks, paths, site entrances and parking areas, fixtures shall be aimed straight down and shall meet IESNA full criteria. Any fixture whose aggregate wattage does not exceed the output of a standard 40-watt incandescent lamp, or equivalent LED standards, e.g., 500 lumens, shall be exempt from this requirement.
- (3) For the lighting of predominantly non-horizontal surfaces such as, but not limited to, facades, landscaping, signs, fountains, displays, flags and statuary, where the use of fixtures meeting IESNA full-cutoff criteria is not practical or possible, fixtures shall be equipped with aiming and/or light-redirecting devices such as shields, visors, baffles, skirts or hoods when necessary to direct or redirect offending light distribution.
- (4) The use of floodlighting, spotlighting, non-cutoff wall-mounted fixtures, internally illuminated decorative globes and spheres, lanterns and other fixtures not meeting IESNA full-cutoff criteria shall be permitted only with the approval of the Township, based upon acceptable justification and achievement of suitable glare control. Any fixture whose aggregate wattage does not exceed the output of a standard 40-watt incandescent lamp, or equivalent LED standards, e.g., 500 lumens, shall be exempt from this requirement.
- (5) NEMA-head fixtures, a.k.a. "bam lights" or "dusk-to-dawn lights," which create nuisance glare as viewed from another property or roadway, shall not be permitted unless fitted with a reflector or shield to render them full cutoff.

- C. Control of Nuisance and Disabling Glare.
 - (1) All outdoor lighting, whether or not required or permitted by this Chapter, on private, residential, commercial, industrial, municipal, recreational or institutional property; shall be aimed, located, designed, fitted and maintained so as not to present a hazard to drivers or pedestrians by impairing their ability to safety traverse and so as not to create a nuisance by projecting or reflecting objectionable light onto a neighboring use or property.
 - (2) The use of floodlights, spotlights and omni-directional fixtures that create glare as viewed from another property or roadway shall require approval by the Township. All such fixtures, regardless of whether for residential or non-residential applications, shall be so installed or aimed that they do not project their output into the windows of neighboring residences, adjacent uses, skyward or onto a public roadway or pedestrian way.
 - (3) Lighting for commercial, industrial, public recreational and institutional uses including, but not limited to, lighting for parking areas, roadways, pathways, facades, signs and landscaping, shall be extinguished by automatic means within ½ hour after the close of business. Where after-hours lighting is deemed reasonably necessary for safety and/or security, the intensity of such lighting shall not exceed 33 percent of the intensities permitted by this Chapter during normal business hours.
 - (4) Only the United States and State flags, and no others, shall be permitted to be illuminated from dusk till dawn and such flags shall be illuminated by sources with a beam spread no greater than necessary to illuminate the flags. Flag lighting sources shall not exceed 10,000 lumens per flagpole.

- (5) Vegetation screens shall not be employed to serve as the primary means for controlling glare. Rather, glare control shall be achieved primarily through the use of such means as cutoff fixtures, shields and baffles, and appropriate application of fixture mounting height, wattage, aiming angle and placement.
- (6) In no case shall the illumination cast by a source or sources onto an adjacent residential property exceed 0.1 vertical footcandle measured line-of-sight, from any point on the adjacent residential property.
- (7) Externally illuminated signs and billboards shall be lighted by fixtures mounted at the top of the sign or billboard and aimed downward. Such lighting, when off-premises of the establishment being advertised, shall be automatically extinguished between the hours of 10 p.m. and dawn.
- (8) Directional fixtures, e.g., floodlights or spotlights, for such applications as façade, fountain, feature, sign, billboard, recreational and landscape illumination, when specifically approved by the Township for use, shall be aimed so as not to project their output beyond the objects intended to be illuminated.
- (9) Canopy lighting for such applications as gas/service stations, bank and fast-food drive-through, shall be accomplished using flat-lens, full-cutoff fixtures aimed straight down and shielded in such a manner that the lowest opaque edge of the fixture shall be below the light source.

D. Installation.

(1) Electrical feeds for fixtures mounted on poles shall be run underground, not overhead.

- (2) Poles supporting lighting fixtures for the illumination of parking areas and located directly behind parking spaces shall be placed a minimum of 5 feet outside paved area, curbing or tire stops, or on concrete pedestals at least 30 inches high above the pavement, or suitably protected by other approved means.
- (3) Except as specifically approved for recreational lighting as permitted by the Township and listed in Subdivision and Land Development Ordinance [Chapter 22], fixtures meeting IESNA full-cutoff criteria shall not be mounted in excess of 20 feet above finished grade.
- (4) Fixtures not meeting IESNA "full-cutoff" criteria, when specifically approved by the Township, shall not be mounted in excess of 16 feet above grade.

E. *Maintenance*. Lighting fixtures and ancillary equipment shall be maintained so as always to meet the requirements of this Chapter.

5. Agricultural Criteria.

- A. For agricultural uses, the following criteria shall apply:
 - (1) No lighting shall be permitted that projects glare onto an adjacent residence.
 - (2) No lighting shall be permitted that creates a hazard by projecting glare onto a public right-of-way.
 - (3) Floodlights and other directional fixtures that create glare as viewed from an adjacent residential use or street, unless required for a seasonal harvesting operation, shall be extinguished by no later than 11 p.m. or controlled by a motion sensor.

6. Plan Submission.

- A. For variance, special exception, conditional use and building permit applications where site lighting is required or proposed, lighting plans shall be submitted to the Township for review and approval where requested, and shall include:
 - (1) A site plan or plans of the site, complete with all structures, parking spaces, building entrances, traffic areas (both vehicular and pedestrian), vegetation that might interfere with lighting, and adjacent uses that might be adversely impacted by the lighting, and a layout of all proposed fixtures by location, mounting height and type. The submittal shall include in addition to area lighting, exterior architectural lighting, building-entrance lighting, landscape lighting, etc.
 - (2) 10 feet x 10 feet illuminance-grid (point-by-point) plot of maintained footcandles, plotted out to 0.0 footcandles, which demonstrates compliance with the light trespass, intensity and uniformity requirements as set forth in this Chapter or as otherwise required by the Township. The lamp lumen rating and type, maintenance (light-loss) factors and IES file names used in calculating the illuminance levels shall be documented on the plan.
 - (3) Description of the proposed equipment, including fixture catalog cuts, photometrics, glare reduction devices, lamps, on/off control devices, mounting heights, pole foundation details and mounting methods.
 - (4) Landscaping plans shall contain lighting fixture locations and shall demonstrate that the site lighting and landscaping have been coordinated to minimize conflict between vegetation and intended light distribution, both initially and at vegetation maturity.
- B. When requested by the Township, applicant shall also submit a visual-impact plan that demonstrates appropriate steps have

been taken to mitigate on-site and off-site glare and light trespass and taken to retain the Township's intended character.

7. Compliance Monitoring.

A. Safety Hazards.

- (1) If appropriate officers or agents of the Township judge a lighting installation creates a safety or personal-security hazard, the person(s) responsible for the lighting shall be notified in writing and required to take remedial action.
- (2) If appropriate corrective action has not been effected within 30 days of written notification, the Township may commence legal action.
- B. Nuisance Glare and Inadequate Illumination Levels.
 - (1) When appropriate officers or agents of the Township judge an installation produces unacceptable levels of nuisance glare, direct skyward light, excessive or insufficient illumination levels or otherwise varies from this Chapter the Township may cause written notification of the person(s) responsible for the lighting and require appropriate remedial action.
 - (2) If appropriate corrective action has not been effected within 30 days of notification, the Township may commence legal action.

8. Nonconforming Lighting.

A. Any lighting fixture or lighting installation existing on the effective date of this Section that does not conform with the requirements of this Section, shall be considered as a lawful nonconformance subject to the following:

- (1) Unless minor corrective action is deemed by the Township to be an acceptable alternative, a nonconforming lighting fixture or lighting installation shall be made to conform with the applicable requirements of this Section when:
 - (a) It is deemed by the Township to create nuisance glare, as defined in subsection 7.A (2), above as a safety hazard.
 - (b) It is replaced or relocated.
 - (c) The use is abandoned or there is a change in use of the property on which the area being illuminated is located.

§27-1808. General Storage Standards

- 1. In residential districts, no more than one recreational vehicle, travel trailer, boat, unlicensed vehicle or similar items shall be stored outside at any one time on a single lot without proper screening from adjacent lots. Storage of travel trailers when left in place and used as an extension to the building shall not be permitted in residential districts. In all other districts, no recreational vehicle, travel trailer, boat, unlicensed vehicle or other similar items shall be stored outdoors within any required yard area permitted under this Chapter.
- 2. All rubbish and substances, whether organic or inorganic, shall be stored in suitable containers and properly disposed of as soon as is practical, and on a regular basis. All garbage-like materials shall be contained in vermin-proof containers. Except for single-family and two-family dwellings, all incidental storage shall comply with the following:
 - A. All storage shall be buffered in accordance with this Part.
 - B. Outdoor storage structures for raw materials and/or finished products shall be permitted only within the buildable area of the lot and shall not exceed 10 feet in height.
 - C. Outdoor storage facilities for fuel, combustible fibers,

hazardous or toxic raw materials and/or finished products shall conform to the standards and regulations set forth elsewhere in this Part.

§27-1809. Sewage Disposal Standards.

- 1. The applicant shall demonstrate the ability to provide safe, efficient and permanent facilities for the collection, treatment and disposal of sanitary sewage generated within the tract and shall further demonstrate that the proposed system is capable of so functioning without degradation of streams, or pollution to, or diversion of the underground water table.
- 2. No building, zoning or use permits shall be issued with respect to any approved use granted hereunder until all necessary permits issued by regulatory authorities, agencies and public bodies have been issued and copies thereof furnished to the Zoning Officer. This provision shall be deemed incorporated into any approved use granted hereunder by reference whether or not actual reference thereto is made in any opinion or order.

§27-1810. Water Supply Standards.

- 1. Applicant shall demonstrate a safe and efficient permanent water supply (after treatment if necessary) capable of furnishing adequate, safe and potable water for the purposes envisioned within the proposed project. For residential uses and other uses where appropriate, in addition to evidence that the water is safe for human consumption the applicant shall demonstrate that the water supply is of such chemical composition as not to cause injury to persons or property nor corrode or damage pipes, drains or equipment.
- 2. Wells shall be constructed according to the standards established by the American Waterworks Association in "Standards for Water Wells," A-100-84. Water quality shall meet the most stringent requirements set forth in either the Regulations of the Pennsylvania Department of Environmental Protection, Chapter 109 or "Drinking Water Standards," 1962 Ed., U.S. published by the Public Health Service or applicable standards of the Chester County Health Department.
- 3. New wells shall be established prior to the issuing of a building permit.

§27-1811. Stormwater Quantity/Quality Standards

1. The applicant shall demonstrate compliance with the London Grove Township Stormwater Ordinance (Chapter 20) and Pennsylvania's Stormwater Management Act (Act 167).

§27-1812. Excavation and Earth Disturbance.

Excavation and earth disturbance activities that cause accelerated erosion, the deposition of fill and exposed subsoils shall be conducted in accordance with the regulations of the Pennsylvania Department of Environmental Protection and the Chester County Soil Conservation District, and shall also conform to the requirements of the London Grove Subdivision and Land Development Ordinance [Chapter 22].

§27-1813. Specific Performance Standard – Capacity of Road Work.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of this performance standard set forth below when the number of dwelling units in a subdivision or development plan exceeds 50 units or when more than 50,000 square feet of commercial or industrial usage is proposed.
- 2. The applicant shall submit a traffic impact study prepared according to the requirements found elsewhere in this Part demonstrating that the traffic generated by the proposed use, when superimposed upon existing traffic, plus the traffic to be generated by previously approved but yet uninstalled uses, plus the base volume upon the road network, shall not cause or contribute to the reduction of the level of service of the road network nor any part of segment thereof nor any intersection therein at peak hours below level of service C, unless improvements are proposed to be constructed that would maintain levels of service C or better.
- 3. Roadway capacity shall be determined as set forth in "Highway Capacity Manual Special Report 209," Transportation Research Board of the National Research Council, Washington, D.C. 1985. Trip generation of the proposed use shall be determined according to the standards set forth in "Trip Generation," 5th edition, Institute of Transportation Engineers, Washington, D.C., 1991. Traffic studies shall conform to the standards set forth by PennDOT in Chapter 201, "Engineering and Traffic Studies."

§27-1814. Specific Performance Standard – Impacts on the Road Network

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of this performance standard set forth below when the number of dwelling units in a subdivision or development plan exceeds 50 units or when more than 50,000 square feet of commercial or industrial usage is proposed.
- 2. The applicant shall submit a traffic impact study prepared according to the provisions found elsewhere in this Part demonstrating that, separate and apart from traffic volumes, the construction and configuration of the road network and each portion or segment thereof and each intersection therein shall be so constructed, aligned and controlled that the traffic generated from the proposed use will not damage or injure the roads nor cause or contribute to operating hazards on the public roadways. Relevant in the satisfaction of this criteria are the type and weight of the vehicles constituting the generated traffic.
- 3. The adequacy of the design shall be established according to the standards set forth by PennDOT in Chapter 441, "Access to and Occupancy of Highways by Driveways and Local Roads," and Publication 70, "Guidelines for Design of Local Roads and Streets," and PennDOT Specifications, 1987. The ability of the cartway to adequately handle the loads shall be determined by the applicable AASHTO standards and specifications.

§27-1815. Specific Performance Standard – Water Consumption.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standard set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. Applicant shall demonstrate that the proposed use of water at the premises, plus the base volume of use, plus the estimated uses of water on previously approved but not implemented projects within the aquifer, less reasonable surface recharge of groundwater, shall not exceed the safe yield of the aquifer, nor shall it adversely affect existing wells or cause the

movement of known sources of contaminated groundwater. In determining the effect upon groundwater, the underlying geology, adjacent wells, surface hydrological features shall be examined.

- 3. Quantities for estimated use shall be determined according to the provisions in Chapter 73 of the Pennsylvania Department of Environmental Protection Regulations. Estimation of aquifer yield shall be determined by the methods set forth in "Engineering Field Manual for Conservation Practices," U.S. Department of Agricultural Soil Conservation Service, Chapter 11.
- 4. The extraction of ground water for geothermal heating and/or cooling shall require a reinjection well to replace water drawn from the source well. Water drawn for geothermal purposes shall not be permitted to be injected into surface streams or stormwater management systems.

§27-1816. Specific Performance Standard – Fire Protection.

- 1. In addition to the general standards listed elsewhere in this Part, the applicant shall demonstrate compliance with every provision of the performance standard set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. All activities and all storage of flammable and explosive material at any point shall be provided with adequate safety devices against the hazard of fire and explosion, and adequate firefighting and fire-suppression equipment, and devices as detailed and specified by the laws of the Commonwealth of Pennsylvania. The applicant shall furnish a plan of fire protection approved by the Township Fire Marshall, demonstrating that firefighting facilities are available to fight fires or similar casualties any place within the subject premises to the extent that the peril may there be found. Where, owing to the height or location of buildings or the activities to be conducted therein, the fire company having first call jurisdiction cannot reach or effectively combat the foreseeable fire or casualty, the applicant shall provide adequate in-place facilities for such emergencies. The plan shall include sufficient explanatory materials to demonstrate compliance with this Section.
- 3. All fire protection facilities and documentation shall conform to the standards set forth by the National Fire Protection Association (NFPA)

as administered by the office of the State Fire Marshal. All buildings and structures and activities within such buildings and structures shall conform to the Building Code, the Fire Prevention Code, and other applicable Township Ordinances. Any explosive material shall conform to the requirements of Chapter 211, Title 25, Rules and Regulations, Pennsylvania Department of Environmental Protection for storing, handling and use of explosives.

§27-1817. Specific Performance Standard – Noise.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standard set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. Contractors (excluding Township and State authorized or emergency construction) generating noise shall only occur between 7:00 a.m. and 10:00 p.m.
- 3. The sound level of any operation, excluding off-site transportation facilities, temporary construction and demolition activities and emergency alarm signals, shall not exceed the following decibel level in the designated octave bands. All sound pressure levels shall be measured at the property lines of the receiving land use. For any source of sound which emits an impulsive sound (a sound of short duration, with an abrupt onset and rapid decay and an occurrence of not more than one time in any 15 second interval) the excursions of sound pressure level shall not exceed 20 dBA over the ambient sound level, regardless of time of day or night or receiving land use. The maximum permissible sound pressure levels for smooth and continuous noise measured at the receiving land use shall be as follows:

Maximum Permitted Sound Pressure Levels

Frequency Band Cycles Per Second	Maximum Permitted Sound Pressure - Level (Decibel)
0-149	67
150-299	59
300-599	52
600-1199	46
1200-2399	40
2400-4799	34
4800 and above	32

The sound levels set forth in the above Table shall be adjusted to account for differing receiving land uses and times of day as set forth in the following Table, when measured at or within the property boundary of the receiving land use.

Continuous Sound Levels by Receiving Land Use

Receiving Land Use Category	Time Frame	Sound Level Adjustment
Residential, Public, Space, Open Space	1) 7:00 a.m. – 10:00 p.m.	0 dBA
Agricultural or Institutional	2) 10:00 p.m. – 7:00 a.m. plus Sundays and legal Holidays	-10 dBA
Commercial or Business	1) 7:00 a.m. – 10:00 p.m.	+5 dBA
	2) 10:00 p.m. – 7:00 a.m. plus Sundays and legal holidays	0 dBA
Industrial	At all times	+10 dBA
All uses	Less than 5 percent of any hour	+5 dBA

Sound pressure levels shall be determined using the "fast" meter characteristic of a Type II meter, meeting the ANSI specifications S1.4-1971, according to the methods set forth in "Octave, Half Octave and Third Octave Band Filter Sets," S1.11 1966,R1971, American National Standard Institute, Inc. New York, NY.

§27-1818. Specific Performance Standard – Dust.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standard set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. No dust or particulate matter shall be emitted from any chimney, quarry, factory or other operation having a visible gray opacity greater than No. 1 on the Ringleman Smoke Chart, except that smoke of a shade not darker than No. 2 on the Ringleman Chart may be emitted for not more than 4 minutes in a 30 minute period. The emission of dirt, dust, or fly ash, in sufficient quantities which may cause any damage to human health, to animals, to vegetation or to property, or which can cause soiling or staining of persons or property at any point beyond the lot lines of the use creating the emission is prohibited. No emission of liquid or solid particles from any chimney or other source shall exceed 3/10 grains per cubic foot of the carrying gas at any point beyond the lot line of the use creating the emission. For measurement of the amount of particles and gases resulting from combustion, standard correction shall be applied to a stack temperature of 500°F and 50 percent excess air in stack at full load.
- 3. Smoke and dust generation shall be measured according to the standards set forth in the "Ringleman Smoke Chart," U.S. Bureau of Mines. The standards for air pollution set forth in the Air Pollution Control Act, 35 P.S. §§4001-4015 and the DEP Regulations promulgated thereunder and Title 2, Pa. Code, Chapters 1 through 143, shall apply in determining emission of particulate matter. The emission of fumes and gasses shall conform to all applicable provisions of the Pennsylvania Air Pollution Control Laws, including the standards set forth in Chapter 123 (Standards for Contaminants) and Chapter 131 (Ambient Air Quality Standards), Part 3, Title 25, Pennsylvania Department of Environmental Protection Rules and Regulations.

§27-1819. Specific Performance Standard – Odor.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standards set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. No use other than extensive and intensive agricultural uses shall emit odors, gases or other odorous matter in such quantities as to be offensive at any point on or beyond its lot lines on a consistent and sustained basis. The occurrence of odors normally incident to extensive or intensive arming shall only be permitted pursuant to utilizing the least offensive methods reasonably available in current practice.
- 3. The guide for determining offensive odors shall be the 50 percent response level of Table 1 (Odor Thresholds in Air), "Research on Chemical Odors": Part I-Odor Thresholds for 53 Commercial Chemicals, October, 1968, Manufacturing Chemists Association, Inc., Washington, D.C. If not specifically referenced in the preceding document, odor shall be determined according to the most restrictive provisions of Table III in Odor Threshold Chapter 5 of "Air Pollution Abatement Manual," Copyright 1951, American Chemists Association, Inc., Washington, D.C.)

§27-1820. Specific Performance Standard – Heat.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standards set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. Heat shall be defined as a perceptible increase above the ambient temperature due to the activities of the use. No use shall produce heat beyond its lot lines. There shall be no emission or transmission of heat or heated air so as to be discernible at the lot line.

§27-1821. Specific Performance Standard – Glare.

1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance

standards set forth below when specifically referred to in the applicable provisions of this Chapter.

- 2. No direct or sky-reflected glare, whether from floodlights or high temperature processes such as combustion or welding or otherwise, shall be permitted so as to be visible at the lot line. No use shall produce any strong or blinding light or direct specular reflection thereof beyond its lot lines. Exterior lighting shall be directed downward and the actual light source shall be shielded from view above 45 degrees from horizontal. Direct or indirect lighting measured at the property line shall not exceed the levels set forth elsewhere in this Part.
- 3. Glare shall be defined as a source of bright light within 45 degrees of the horizon when measured at the property line, such source emitting light that is over three times the ambient light level that would exist if there was no source of glare.

§27-1822. Specific Performance Standard – Vibrations.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standards set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. Except for vibrations produced as a result of construction activities upon the premises, no use shall cause earth vibrations or concussions detectable beyond its lot lines without the aide of instruments. All blasting operations in extractive industries shall be matted and so controlled as to avoid damage from vibrations to persons or property beyond its lot lines or impair the use and enjoyment of adjacent lands and uses. A combination of screening, fencing and buffer areas shall be utilized sufficient to demonstrate compliance with this standard.
- 3. Vibration shall be defined as that level of earth movement measured at the property line equivalent to Level 1 on the Richter Scale for seismic measurements.

§27-1823. Specific Performance Standard – Storage and Waste Disposal.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standards set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. The applicant shall demonstrate a safe, convenient and effective plan for the collection, storage, treatment and disposal of industrial waste generated by any use upon the property. No materials or waste shall be deposited upon a lot in such a form or manner that they may be transported from approved storage areas by natural causes or forces. There shall be no discharge at any point into any public or private sewerage system, or onto adjacent properties or roads or into any streams, lakes or ponds. Leachate or any other pollutant shall not enter the ground or water table in such a way as will contaminate the aquifer or otherwise cause the emission of hazardous materials into the environment. Any facility accepting discarded products containing environmentally hazardous substances shall comply with all Federal and State regulations regarding storage and disposal of such substances. All outdoor storage of hazardous materials shall be fully enclosed by an approved fence with a self-closing and self-locking gate. All storage of materials or chemicals causing fumes or which may attract rodents or insects or are flammable shall be stored in enclosed containers adequate to eliminate such hazards. In addition to a fence, bulk storage tanks shall be enclosed by a moat or berm to contain potential spillage. Open sedentary lagoons shall not be deemed acceptable method of storage, treatment or disposal of industrial waste.
- 3. Storage of waste shall conform to the regulations set forth in the Solid Waste Management Act and other applicable laws of the Commonwealth of Pennsylvania, and specifically Chapters 73, 75, 95 and 97, Title 25 Pennsylvania Department of Environmental Protection Rules and Regulations. The evidence of compliance shall include, but need not be limited to, appropriate permits issued by the Department of Environmental Protection under the Solid Waste Management Act and Regulations issued by the Department of Environmental Protection promulgate under this Act.

§27-1824. Specific Performance Standard – Radioactivity or Electrical Disturbances.

- 1. In addition to the general standards listed herein, the applicant shall demonstrate compliance with every provision of the performance standards set forth below when specifically referred to in the applicable provisions of this Chapter.
- 2. There shall be no activities which emit dangerous radioactivity, or radioactive substances at any point. There shall be no radio or electrical interference adversely affecting the operation of equipment belonging to someone other than the generator of such interference.
- 3. If any use is proposed which incorporates the use of radioactive material, equipment or supplies, such use shall be in strict conformity with Chapters 211, 223, 227 and 229, Title 25, Part 5, Pennsylvania Department of Environmental Protection Rules and Regulations. Electrical interference shall be defined as interference with normal functioning of electrical equipment occurring directly as a result of the operations of the generator of such interference.

§27-1825. Impact Statements.

- 1. *Applicability*. The following impact statements, found herein, shall be required for all preliminary applications for development when any of the following are proposed for a property:
 - A. Residential development of 50 dwelling units or more.
 - B. Institution or life care facility of 50 or more bedrooms or residential units.
 - C. Industrial, commercial and/or office development of 50,000 square feet of floor area or greater, or a subdivision of 50 or more lots/units.
 - D. Intensive agriculture when the total area for the intensive agriculture use (including all buildings and storage areas) exceeds 1.25 acres.

§27-1826. Traffic Impact Study

- 1. *Purpose*. A traffic impact study shall be required for any development proposed pursuant to the standards found above. Such study shall enable the Board of Supervisors to assess the likely impact of a proposed development in the various components of the transportation system in the Township. The purpose of said study shall be to identify any traffic problems likely to emanate from egress, road capacities, and off-site traffic flow, and to determine its impact on public transportation and pedestrian and non-vehicular circulation in the area. The applicant shall retain a qualified professional traffic engineer to prepare the traffic impact study. Four purposes of this provision a qualified traffic engineer shall be deemed any individual holding a degree from an accredited university in traffic engineering specialty, or any individual holding a university degree who also possesses membership in the Institute of Transportation Engineers, or any individual who conforms to the definition for a "municipal traffic engineer" preferred in 67 Pa. Code, Chapter 612, as amended, entitled "Municipal Traffic Engineering Certification."
- 2. The study area shall be the road network as defined by the traffic engineer, which represents the area that is likely to be affected (from a traffic impact standpoint) by the development. Prior to identifying the study area, the traffic engineer shall discuss the possible study area boundaries with the applicant and the Township. Specific intersections to be included in the study shall be mutually agreed upon prior to initiating work.
 - 3. A traffic impact study shall contain the following information:
 - A. General Site Description. The size description shall include the size, location proposed land uses, construction staging, and completion date of the proposed development. A brief description of other major existing uses and approved recorded development plans that as agreed upon by the Township, and the traffic engineer, have bearing on the development's likely traffic impact shall be included as source data. The Township may, in addition, require consideration of development proposals not yet approved and recorded, but with sufficient status and probably impact to warrant inclusion.
 - B. *Transportation Facilities Description*. Said description shall contain a full documentation of the proposed internal and external

circulation system within the study area. Said description shall include:

- (1) Proposed internal vehicular, bicycle, and pedestrian circulation; all proposed ingress and egress locations; all internal roadway widths and rights-of-way; existing and proposed parking conditions; traffic channeling; and any traffic signals or other intersection control devices at all intersections within the project site.
- (2) Said description shall include all major elements of the existing external roadway system within the study area. All major existing and proposed public transportation services and facilities within the study area also shall be documented. All future highway improvements, including proposed construction and traffic signaling, shall be noted. This information shall be obtained from the Pennsylvania Department of Transportation.
- C. Existing Traffic Conditions. Existing traffic conditions shall be documented for all major roadways and intersections established as part of the study area under subsection 3.A above. Existing traffic volumes for average daily traffic, peak hour(s) traffic shall be recorded. Mechanical or manual traffic counts at major intersections in the study area shall be conducted encompassing the peak highway and development generated hour(s), and documentation regarding said traffic counts shall be included in the traffic engineer's report. A volume capacity analysis based upon existing volumes shall be performed during the peak highway hour(s) and the peak development generated hour(s) for all roadways and major intersections within the study area. The capacity analysis shall be conducted according to methods of analysis acceptable to the Pennsylvania Department of Transportation. The existing level of service associated with each major roadway and intersection evaluated shall be recorded. Data about the most recent available accident levels within the study area shall be indicated.
- D. *Impact of Development on Area Circulation*. Estimates of vehicle trips to result from the proposed development shall be completed for the design-day peak highway hour(s) and peak

development generated hour(s). In order to obtain vehicle trip generation base data, the traffic engineer shall consult either his firm's data bank, or the most current edition of the Institute of Transportation Engineers Trip Generation report. All turning movements associated with the proposed improvement generated hour(s) shall be computed and contained in the study. Traffic volumes generated by the proposed use shall be distributed and assigned to existing roadways and intersections throughout the study area for which existing conditions were recorded. Documentation of all assumptions used in distribution and assignment of traffic shall be provided. Any characteristics of the site that are likely to cause particular traffic management problems shall be noted.

E. Analysis of Traffic Impact. The traffic engineer shall evaluate the likely impact of the proposed development in the area's circulation system. Included shall be an evaluation of the proposal's likely impact on existing and planned public transportation improvements, the expected impact on pedestrian and non-vehicular circulation, an evaluation of the capacity of existing roadways within the study area to accommodate site-generated traffic, as well as total future traffic demand. (Total future traffic demand shall be defined to include existing vehicular volumes and traffic volumes associated with approved developments within the study area.) This demand shall consist of a combination of the existing traffic expanded to the completion year (using an annual traffic rate available from Delaware Valley Regional Planning Commission), the development-generated traffic, and the traffic generated by other proposed developments in the study area. The traffic engineer shall render an opinion regarding the capacity of the existing roadway system to accommodate future traffic demand. Should the traffic engineer conclude that the existing roadway system cannot accommodate anticipated traffic demand, said engineer shall proffer a recommendation regarding what improvements are necessary to the area's roadway system. Said traffic engineer shall identify the relationship of site-generated traffic associated with the proposed development's impact on overall demand and shall further identify the development's proportional relationship to the traffic system improvements that are likely to be required, in part, due to the development. The volume/capacity analysis performed in accordance with subsection 3.C, above, shall be updated to include a volume/capacity analysis using the total

future demand and future roadway capacity. In addition, if staging of the proposed development is anticipated, calculations for each stage of completion vis-à-vis the volume/capacity analysis shall be performed. The analysis shall be conducted, on a design day, during the peak-highway hour(s) and at major intersections in the study area which are projected to be affected by the proposed development. All access points and pedestrian crossings shall be examined as to the need for and feasibility of installing traffic signals or other traffic control devices. To do this, the traffic engineer shall evaluate access points and pedestrian crossings pursuant to Pennsylvania Department of Transportation specifications for traffic signal warrants.

- F. Conclusions and Recommended Improvements. Projected levels of service for all roadways and intersections shall be identified at the conclusion of each phase of the development. All roadways and/or intersections showing a level of service which is deemed deficient by the traffic engineer during peak hours of the day (peak hour defined to include peak hour of traffic on the particular roadway and peak hour of traffic of development generated traffic) shall be identified. Specific recommendations for elimination of traffic problems associated with the proposed development shall be identified. (Levels of service are defined in the 1965 Highway Capacity Manual, Highway Research Board, National Academy of Sciences, Special Report 87.) A listing of recommended improvements shall include the following elements:
 - (1) *Internal Circulation Design*. Site access locations and design, improvements and road widening; traffic signal installation and operation, including signal timing; transit design improvements; and reduced intensities of use. All physical roadway improvements shall be shown in sketches as a part of the report.
 - (2) The listing recommending improvements for vehicular, pedestrian, non-vehicular, and transit modes shall include, for each improvement, the party proposed to be responsible for the improvement, the cost and funding of the improvement (to the extent possible).

4. The Township, with the assistance of its own traffic engineer, shall review the methodology, assumptions, findings, and recommendations of the applicant's traffic engineer. The Board may impose upon the applicant additional improvements deemed necessary to accommodate impacts of the development.

§27-1827. Utilities Impact Study

- 1. A utilities impact study must be submitted by the applicant and shall be prepared by a registered professional engineer indicating the likely impact of the proposed development on the existing sewer, water, groundwater, solid waste and drainage systems serving the Township pursuant to §27-1825 above. Said impact analysis shall identify the existing capacity of facilities which would serve the development, the prospects of those facilities being able to provide service to it, and any improvements that might be required as a direct result of the proposed development.
- 2. Additionally, the study should identify the likely ability of sewer, water, solid waste and drainage systems to continue to provide efficient and economic service to existing residents and businesses within the Township, considering added service requirements of the proposed development. The study shall indicate what alternatives have been considered for sewage treatment and disposal, as well as measures to be initiated toward waste recycling and water conservation.

§27-1828. Recreation Impact Study.

- 1. The recreation impact study must be submitted by the applicant pursuant to standards found in this Part and shall analyze the demand for recreational facilities which the proposed development will generate and determine whether adequate facilities exist or are planned or proposed. As a minimum, the study should include the following:
 - A. A description of the projected age breakdown of the residents of the proposed development.
 - B. A description of any recreational facilities to be provided by the developer.

- C. A description of who the responsible party(s) will be for ownership and maintenance (public or private) of any recreational facilities to be provided by the developer.
- D. A description of existing municipal recreational facilities and the impact of the proposed development on these facilities. Accepted standards for required recreation shall be indicated in the Township Open Space and Recreation Study, as may be amended from time to time.
- E. Discussion of potential for any recreational facilities to be provided by the developer to compensate for any anticipated deficiencies of the Township's recreational facilities.
- F. A description of accessibility of developer proposed facilities to general Township residents.
- G. A description of any contributions the developer plans to make for Township recreation to compensate for expected impacts.

§27-1829. Fiscal Impact Analysis.

- 1. Applicability. The requirement of a fiscal impact analysis shall apply only to uses permitted by conditional use review or special exception, to all proposed zoning changes, and to all applications meeting the criteria of the standards found herein.
- 2. Format. The Board shall consider the impact of the proposed use on the Township and on the facilities and systems as listed hereafter. When required by the Board, the applicant shall provide all of the information, data and studies needed to allow the Board to reach conclusive evaluation of the areas set forth hereafter, which are applicable to the use proposed. The impact statement should be one written document. Necessary maps, charts, etc., should be labeled as consecutively numbered exhibits and properly referenced throughout the text of the written document. The statement should be written in a manner and style that clearly focuses the information, data, and analysis on the issues and objectives requested by the Board. The source of all data should be appropriately documented.

- 3. Content. A final impact analysis shall identify the likely impact of the development on the Township's tax structure and expenditure patterns. Included shall be a determination of the revenue to accrue to the Township as a result of a proposed development, as well as an identification of the costs associated with delivering services to the proposed development. The fiscal impact analysis shall deal with the impact of the proposed development on the ability of the Township to deliver fire, police, administrative, public works and utility services to the development on the Township's economy. In order to prepare the analysis, the applicant shall utilize a methodology proffered in "The Fiscal Impact Handbook" (Rutgers Center for Urban Policy Research, 1978, as modified from time to time), adapted as appropriate and to the Board's satisfaction. The case study method shall be the preferred alternative; in reviewing methodologies with the applicant, however, the Board may authorize a different methodology if the applicant can demonstrate to the Board's satisfaction substantial advantages in results achieved and/or efficiencies realized. The Township shall serve as the key provider of local information for this analysis. Particular aspects of the Township's service delivery capability to be analyzed shall include:
 - A. *Public Works*. This includes potential effects on the maintenance, repair and upkeep of roads, signal systems, sewer, water and drainage systems, open space and recreation areas or any other applicable function of this department. This study shall address projected cost increases for the above-mentioned items in terms of administration, personnel, equipment and materials.
 - B. *Administration*. This includes time that would be required by the Board of Supervisors and clerical personnel to process the application and handle the project during construction, as well as long term administrative demands. This should include, but not be limited to, the handling of plans, contracts, various legal instruments or agreements, permits, special problems, and escrow. Added demands on the code administration staff also shall be projected.
 - C. Fire and Emergency Services. The analysis shall incorporate the development's impact on fire company capabilities including, but not limited to, municipal water supply, pumping capacity, specialized equipment and training requirements.

18-31

- D. *Schools*. The analysis shall incorporate the developments impact on the public school system. As a minimum, the expected number of school age children shall be projected, along with the anticipated costs expected to be incurred by the school district and any other specific impacts proposed students will have on the operations of the School District.
- E *Police*. The study shall project the overall effects of the proposed development on existing police personnel numbers, equipment, vehicles and working space. The plan should include whatever facilities or assistance the development will provide to handle emergencies, criminal investigation, armed robbery, or other security-related problems.
- 4. Any costs incurred by the Township as agreed to by the applicant, to study plans and/or studies submitted either by the Township's consulting engineer or a professional specifically retained for this purpose, shall be reimbursed to the Township before any use and occupancy permit is issued.

§27-1830. Environmental Assessment Report.

- 1. All applicants meeting the criteria of the standards found herein shall prepare an environmental assessment report in accordance with the provisions of this Section. The format and contents of the environmental assessment report shall be as follows:
 - A. *Description of Existing Conditions*. This Section shall present a description of existing characteristics of the property with respect to geology, topography, ground and surface water hydrology, soils, vegetation, fauna and existing improvements and uses.
 - B. Description of the Proposed Action. This Section shall describe the proposed action including types, locations and phasing of proposed site disturbances and construction, as well as proposed future ownership and maintenance of the property and the proposed improvements. Plans describing the proposed action may either be included within or accompany the environmental assessment report.
 - C. Proposed Measures to Control Potential Adverse Environmental Impacts. This Section shall describe all measures

proposed by the applicant to control all adverse impacts which may occur as a result of the proposed action. It shall address all impacts cited by the Township Engineer in his report on the application, in accordance with procedures described in this Section.

- D. List and Qualifications of Preparers. The names, addresses, telephone numbers and qualifications of persons directly responsible preparing the environmental assessment shall be provided.
- E. *Appendices*. Any additional information which the applicant wishes to provide may be included in one or more appendices to the report.
- 2. The environmental assessment report must be received by the Township no later than 30 days prior to consideration by the Township. The report shall be submitted in six copies to the Township. The Township engineer shall review the report and submit his findings in a memorandum to the Board. A copy of the memorandum shall be forwarded to the applicant.
- 3. Following the receipt of the environmental assessment report, the Board shall either approve the application, approve with conditions, or reject it, and shall do so within any applicable time period unless a request to extend the time period is mutually agreed upon in writing.
- 4. Where compliance with this Section is required as part of an application for subdivision or land development approval, the Board's decision on whether compliance has been achieved shall be made as part of its decision on the subdivision or land development application.
- 5. Where the application is part of a request for a zoning permit, the zoning officer shall issue no such permit until the terms of this Section, and any conditions imposed upon the use of the property at the time of subdivision or land development approval, are satisfied.

§27-1831. Agricultural Sanitary and Safety Regulations.

The following provisions shall apply to all types of agriculture:

- A. Well, Well House and Pump House. If a favorable site for a water well is determined to be closer than 50 feet from a lot line, such well, together with the associated well or pump house, shall be exempt from the setback requirements for accessory structures and facilities, providing that the location of the well meets the requirements of the Chester County Health Department.
- B. *In-Ground Liquid Waste Facilities*. Pits, ponds, trenches, lagoons, or other open, in-ground facilities for the collection, storage processing of liquid wastes or manure from any type of agricultural use shall comply with the following:
 - (1) Each such in-ground facility, unless located in an enclosed building with doors that are kept locked when not attended, shall be completely surrounded, except as provided in subparagraph (2) below, with a sturdy fence or wall no less than 5 feet in height with an additional three strands of barbed wire running above the fence in the same plane as the fence or wall. Said fence or wall shall be situated as close as practicable to the in-ground facility, but in no case at a distance greater than 100 feet.
 - (2) Each opening in the required fence or wall shall be fitted with a gate at least as high as the fence (including the distance to the top of the barbed wire) and such gate shall be kept locked at all times when it is not attended.
 - (3) The minimum distance from the in-ground facility to any lot line or to any dwelling on the lot where said facility is located shall be 250 feet.
 - (4) In-ground liquid waste facilities shall comply with the requirements and regulations of all Federal and State agencies having jurisdiction over such facilities.
 - (5) The required fence or wall shall be maintained to keep it in good structural condition, and an area at least 10 feet in width outside the fence shall be kept mowed so

that vegetation adjacent to the fence does not exceed 12 inches in height.

- C. *Insect and Vermin Control*. Insects, rats and other vermin shall be controlled in accordance with the current regulations of the Chester County Health Department.
- D. *Manure Storage*. Areas and structures used for the storage of manure shall be at least 100 feet from wells, springs, lakes and streams, and shall not be in any areas designated as floodplain. Land adjacent to such areas and structures shall be graded so as to divert run-off away from said wells, springs, lakes and streams, as well as away from streets, and adjacent lots. Manure storage shall be in with the current recommended practices and/or regulations of the PA DEP.
- E. Run-Off from Feed Lots. Land adjacent to feed lots shall be graded so as to divert run-off away from wells, springs, lakes and streams, as well as away from streets and adjacent lots.
- F. Composting Processing Operations. All composting operations and Agricultural Composting processing operations shall be governed by the standards set forth elsewhere in this Part.
- G. Outdoor Storage of Combustible Fibers. Outdoor storage of combustible fiber materials shall be limited to piles of 100 feet by 35 feet by 20 feet high in dimension, with a minimum separation of 25 feet with minor deviations between piles and/or any structure due to varying bale sizes.
- H. The provisions of the Stormwater Management Ordinance `shall apply to all Intensive Agricultural Operations (including the storage of material and preparation of mushroom growing substrate).

§27-1832. Keeping of Animals.

In any district, dogs, cats, fowl, rabbits, goats, sheep, cows, swine, ponies, horses and other animals of similar character and impact shall be kept only according to the following standards:

1. *Purpose*. This Section has been designed to establish reasonable regulations governing the keeping of animals in order to protect human and animal health, prevent unsightly and erosion-prone land use conditions, prevent the contamination of ground and surface waters, and reduce the safety hazards of straying animals.

2. General Standards for Keeping of Animals.

- A. No animals of any kind shall be kept in any structure or enclosure or elsewhere on a property which will result in unhealthy or unsanitary conditions for humans or animals or cause excessive noise, objectionable odors, or pollution of groundwater or storm water runoff to neighboring properties.
- B. All animals shall have appropriate and adequate facilities for food and water. Permanent shelter shall be provided for all animals not kept in the residence including dogs, rabbits, poultry, swine, and other small domestic animals. Horses, cattle, sheep, and goats shall have loafing sheds, covered feeding areas, or other appropriate facilities.
- C. Side and rear yard setbacks shall be maintained for all structures except that buildings for more than two cows, horses, sheep, or goats, or similar animals shall be constructed or placed at least one hundred feet from any property line.
- D. All permanent shelters shall be designed for ease of manure removal and handling.
- E. A fenced or otherwise enclosed outside area shall be provided which is capable of containing the animals kept and is of sufficient size and property located for good sanitation practices. Materials used for fencing shall be of sufficient sturdiness and properly designed, installed and maintained so as to prevent straying.
- F. No uncovered manure storage shall be permitted one hundred (100) feet uphill of any lot line or stream. No manure may be stored within a swale or drainage-way.

3. Standards for keeping of animals on properties of less than ten (10) acres.

An individual owning less than ten acres shall comply with the general standards found herein and the following:

- A. Up to four (4) adult canines and domestic cats or like numbers or other small domestic animals of similar character and impact may be kept without regard to the standards of this subsection. Greater numbers of such animals may be kept only in accordance with these standards. No commercial kennels shall be permitted and no more than one canine may be left outside the home or a soundproof canine building at night.
- B. One horse, cow, pig, three sheep or goats, or an additional adult canine or cat, may be kept for each acre of continuous pasturage in excess of the required minimum lot area for single-family detached lots, or in the case of such lots in the AR District in excess of 1.5 acres of yard area. The pasturage available to the animal(s) shall be less than a twenty percent (20%) grade, fenced (or yard area for dogs and cats), and contain no other use. Ten (10) fowl or rabbits may be kept for each acre in excess of the applicable minimum lot size, or 1.5 acres of yard area in the AR District, up to a maximum of twenty (20).
- C. All pasturage must consist of well-maintained grasses. Muddy, or dusty, un-grassed areas shall be stabilized to prevent erosion and unsightliness.
- D. Any permanent building placed or constructed on a property shall be designed to serve only that number of animals which is permitted on the owned property per the standards found herein above. Land leased for a term of less than twenty (20) years shall not be considered in the sizing of such a building.
- 4. Standards for keeping of animals on properties larger than ten (10) acres.
 - A. The general standards of Section 1832.2 shall be met on all properties.

- B. The general standards of this Part shall apply to all cattle, horses, and swine on less than twenty (20) acres.
- C. No canines in excess of those permitted by the standards found in this Part shall be permitted except in kennels or in facilities maintained for the benefit of a member supported, fox hunting association. Kennels or other suitable shelter for six (6) or more canines shall not be permitted nor located within five hundred (500) feet of any adjoining property unless permitted by Special Exception of the Zoning Hearing Board, which Board shall ensure that soundproofing, waste treatment facilities, food preparation and storage facilities, and running water are provided and that the facility will be landscaped to prevent viewing from public roads or neighboring residences.
- D. Structures for the housing of poultry or swine in excess of the number permitted in this Part shall be at least three hundred feet from any property line.

5. Nonconformities.

- A. Any nonconformity that results in pollution of ground or surface waters shall be eliminated.
- B. Any existing building which is used for the keeping of animals and which does not meet setback standards or other standards may continue in use so long as it is not expanded.
- C. Canines, domestic cats, horses on a property at the date of passage of this Ordinance in excess of those permitted by this Ordinance may be kept by the owner provided the general standards of this Ordinance are met. If the general standards are violated, the property owner will have a maximum of one year from the time of citation in which to eliminate the violation(s) or dispose of the animals. Owners of animals normally raised for food shall have six months from the passage of this Ordinance to meet the animals per acre of pasturage or total animal standards.

§27-1833. Junkyards and Automobile Grave Yards

This Section shall regulate junkyards, junkyard dealers, automobile grave yards, scrap yards, and the sale of refuse, scrap, automobile salvage parts, and the like. It shall also regulate these facilities and the conditions for their safe operation; prescribe the remedies for violations and authorize revocation of licenses for noncompliance with the Section's provisions. Junkyards and automobile grave yards shall only be permitted in the ISU Zone.

- A. No person shall engage in business as a junk dealer, or maintain a junkyard without first having obtained approval from the Board of Supervisors under a conditional use review, for which a fee in accordance with the separate fee schedule shall be paid to the Township for the use of the Township. The fee shall be made for the 12-month period beginning July 1, and ending June 30 of the following year, and each approval must be renewed annually on or before the first day of July.
- B. Application. The approval provided for in this Chapter shall be issued by the Board of Supervisors after written application shall have been made therefore by the person desiring to be approved. Such approval shall state the name to whom such approval is issued and the premises on which such business is to be conducted, or such junkyard is to be maintained. Such approval shall be posted conspicuously upon the premises thereunder. The written application for approval hereinabove mentioned shall be accompanied by a form, every question of which must be answered, which form will be supplied by the Board of Supervisors. The applicant shall also submit therewith a plot of the premises used or to be used in connection with such approval.
- C. *Issuance of Approval*. Upon receipt of an application by the Board of Supervisors, it shall issue an approval or shall refuse to issue an approval to the person applying therefore after an examination of the application and taking into consideration the suitability of the property proposed to be used for the purposes intended, the character of the properties located adjacent, and the effect of the proposed use upon the Township, both economic and

aesthetic. In the event the Board of Supervisors shall issue an approval, it may impose upon the approval and the person applying therefore such terms and conditions in addition to the regulations herein contained and adopted pursuant to this Chapter as may be deemed necessary to carry out the spirit and intent of this Chapter.

- D. *Limitation*. No person with an approval under this Chapter shall, by virtue of one approval, keep more than one place of business within the Township or maintain more than one junkyard, or the like, for the purpose of buying, selling and dealing in junk. No person shall engage in business as a junk dealer in any place other than the place designated upon the license, or maintain a junkyard in any place other than the place designated which shall only be located in the ISU Zone.
- E. *Transfer of Approval*. No approval issued by the Board of Supervisors shall be transferable by the applicant to any other person unless such transfer is authorized by the Board of Supervisors. Any person desiring to transfer the approval shall notify the Board of Supervisors in writing, which notification shall be accompanied by an application for a re-approval, as described in paragraph B. above, by the transferee.
- F. Approval and Transfer Fees. In the event an applicant is approved, renewed, or transferred, the applicant shall immediately pay to the Township the appropriate fee in accordance with the separate fee schedule, available at the Township building.
- G. Every person, licensed under this Chapter, shall provide and shall constantly keep a book, in which shall be fairly written down in the English language at the time of purchase of any junk, a description of every article or material purchased with a photo ID of the person selling materials or received by him, the date and hour of such purchase and the person from whom such article or material was purchased, received or handled by such person shall at all times be subject to the inspection of any official of the Township.
- H. *Delay in disposal*. Every person, licensed under this Chapter, shall keep and retain upon the premises, for a period of 48 hours after the purchase or receipt thereof, all junk received or

purchased by him, and he shall not disturb or reduce the same or alter the original form, shape or condition until such period of 48 hours shall have elapsed.

- I. *Regulations*. Every person licensed under this Chapter shall constantly maintain the premises in accordance with any special provisions imposed by the Board of Supervisors and in the manner prescribed by this Section and the applicable Sections of Part 18.
 - (1) Such premises shall at all times be maintained so as not to constitute a nuisance or menace to the health of the community or of residents nearby or a place for the breeding of rodents and vermin or insects.
 - (2) No garbage or other organic waste shall be stored on such premises.
 - (3) Whenever any motor vehicle shall be received on such premises as junk, all gasoline and oil shall be drained and removed there from. Gasoline in an amount not exceeding 10 gallons may be stored above ground in said junkyard provided the same is placed in containers approved by the Board of Supervisors. All other gasoline which is kept on the premises shall be stored underground, which underground storage must be approved by the Board of Supervisors.
 - (4) The manner of storage and arrangement of junk, and the drainage facilities of the premises shall be such as to prevent the accumulation of stagnant water upon the premises, and to facilitate access for firefighting purposes.
 - (5) All junk kept, stored, or arranged on the licensed premises shall at all times be kept, stored and arranged as per the application for approval hereunder, and as limited under paragraph I (4) above.

(6) The premises to be approved shall have the following setback distances and screening characteristics:

Setback from all rights-of-way lines 50 feet Setback from all property lines 100 feet

Screening at the setback line shall consist of a fence and evergreen plantings determined during the conditional use proceedings. The setback area shall be kept free of all refuse and/or junk at all times. Dead plantings shall be replaced immediately or at the beginning of the next growing season following their death.

- J. No vehicles shall be ground up or shredded for metal resale outside of a fully enclosed structure.
- K. *Violations*. Any person who shall violate any of the provisions of this Chapter shall, upon conviction thereof, be sentenced to pay a fine, per a separate schedule, and costs of prosecution, and, in default of payment of such fines and costs, to imprisonment for not more than 30 days. Provided, each day's continuance of a violation, after notice thereof, shall constitute a separate offense.
- L. Abatement of Nuisances. In addition to the remedies provided in paragraph J., above, any continued violations of this Chapter which shall constitute a nuisance in fact or which shall in the opinion of the Board of Supervisors constitute a nuisance may be abated by proceeding against the violator in a court of equity for relief.

§27-1834. Regulated Adult Uses.

1. Intent.

A. Buildings and establishments operated as adult uses as defined by this Part are determined to be detrimental and harmful to the health, safety and general welfare of a community. This Section is intended to restrict adult uses to nonresidential, nonbusiness, and noncommercial areas of London Grove Township and otherwise

regulate their operation. Wherever the operational characteristics of adult uses increases the deleterious impact on a community when such uses are concentrated, this Section is intended to promote the health, safety and general welfare and good order of the residents of London Grove Township by regulating the concentration of such use to minimize the deleterious effect on the aesthetics and economics of the areas in which these uses are located, and to avoid the promotion of an atmosphere conducive to violence, sexual harassment, public intoxication, prostitution, and the spread of sexually transmitted disease.

- 2. *Designation of Uses*. Regulated adult uses are uses not otherwise considered obscene as defined and prohibited by Chapter 13, Part 1 of the Township of London Grove Code of Ordinances and including:
 - A. Adult book stores.
 - B. Adult mini-motion-picture theaters.
 - C. Adult motion-picture theaters.
 - D. Cabarets.
 - E. Massage parlors.
 - F. Drug paraphernalia stores.
- 3. *Standards of Conduct*. All regulated adult uses shall comply with the following standards:
 - A. Regulated adult uses shall be located a minimum of 1,000 feet from another existing regulated adult use; and/or
 - B. Regulated uses shall be located a minimum of 200 feet from any residentially zoned district or residentially used property, or any of the following residentially related uses:
 - (1) Churches, monasteries, chapels, synagogues, convents, rectories, religious article or religious apparel stores.
 - (2) Schools up to and including the twelfth grade and their adjunct play areas.
 - (3) Public playgrounds, public swimming pools, public parks and libraries.

- (4) Medical facilities, or other facilities which children are likely to visit.
- C. No such regulated use shall be located in any zoning district except the Industrial District, subject to all regulations of that district.
- D. For the purposes of this Section, spacing distances measure as follows:
 - (1) From all property lines of any regulated use in paragraph B. above.
 - (2) From the outward line of boundary of all residential zoning districts.
 - (3) From all property lines of any residentially related use.
- 4. *Signs and Other Visible Messages*. All regulated adult uses shall be permitted signs and visible messages based on the available sign area of the zoning district in which they are located, provided that:
 - A. *Signs*. Sign messages shall be limited to verbal description of material or services available on the premises.
 - B. *Other Visible Messages*. Messages which are visible or intended to be visible from outside the property, such as on or within doors or windows, shall not display materials, items, publications, pictures, films or printed material available on the premises, or pictures, films or live presentations of persons performing or services offered on the premises.

5. Special Exception Permits.

A. No uses described in this Section shall be established until the issuance of a special exception by the Zoning Hearing Board of London Grove Township. Application for a special exception shall consist of a description of the premises for which the permit is sought, a plain and concise statement of the use which is proposed and such additional information as may be reasonable required by the Zoning Hearing Board.

B. Should any regulated adult use listed above cease or discontinue operation for a period of 90 or more consecutive days, it may not resume nor may it be replaced by any other regulated use unless it complies with all the requirements as set forth herein.

§27-1835. Residential Density and Open Space Determination Using the Net Tract Area Approach.

Determination of the maximum number of permitted dwelling units for the AP Agricultural Preservation District, RR Residential Rural District, AR District, RM Residential Medium District, MH Mobile Home District, and RH Residential High District shall be based upon the net tract area of the site.

A. Net tract area shall be calculated as follows:

- (1) Determine the sum of the acreage of the features described in clause (a)-(f) below. Where two or more features overlap, the area shall be counted only once. This sum shall be inserted on Line 2 in the Table below.
 - (a) Any existing road right-of-way, public or private. For the purpose of this computation, a private road shall be deemed to have a right-of-way equal to that required for a public road of the same classification with the centerline of each being congruent.
 - (b) Existing easements burdening the tract, including, but not limited to, utility easements, above or on the ground, railroad rights-of-way and private easements, including rights-of-way for overhead high tension lines.

(c)	Land under an existing conservation easement.
(d)	Floodplain and floodway.
(e)	Wetlands.

- (f) Prohibitive steep slopes (25 percent or greater).
- (2) Calculate net tract area. Net tract area shall equal the gross tract area minus the constrained lands, as calculated in the following chart:

1	Insert Gross Tract Area	acres
2	Subtract the sum of (a)-(f) in Subsection A (1) above	acres
3	Net Tract Area	acres
4	Maximum Density is the Net Tract Area divided by 43,560 sq	ftmax units
	e balance of the net tract area not or ermitted will be the net open space a	1 0

§27-1836. Communication Towers.

All communication towers constructed in the Township that are sixty (60) feet or higher from ground level shall comply with the following standards and regulations.

- A. Purpose. The purposes of these standards and regulations are:
- (1) To accommodate the need for communication devices/towers in the Township.

- (2) To require joint use of communication towers to reduce the number in the Township.
- (3) To ensure proper engineering, safety and siting of the communication devices/towers.
- B. *Prerequisites and Conditions*. Any tower request must use an existing tower so long as:
 - (1) Height and location on the existing tower fulfills needed coverage and/or capacity gaps.
 - (2) Space and structural capability on the existing tower exists to safely contain the transmitting and receiving devices proposed by any additional user.
 - (3) Interference with existing users and hazards to the Township are not created.

Any future co-user of an existing Communication Tower shall secure a Building Permit from the Township authorizing the installation of its equipment on the Tower, as well as the installation or construction of any equipment shed/building. In connection with equipment to be placed in the Tower, any Building Permit application by a co-user must be accompanied by studies and/or reports required by the Pennsylvania Construction Code, demonstrating that the Communication Tower, together with all of its structural components, has the structural capacity to accommodate the co-user's proposed equipment. At such time as any equipment installed on the tower is no longer operational, such non-operational equipment shall be removed as soon as possible by the user of the equipment and/or the owner of the Communication Tower.

C. Standards and Regulations. "Communication Towers" for purposes of this Section shall be defined as self-supporting towers that are sixty (60) feet or higher from ground level and that contain or support electronic equipment for wireless transmission and/or reception of any communication signals. All communication towers sixty (60) feet or higher must:

- (1) Meet the standards set forth under the Pennsylvania Uniform Construction Code (UCC).
- (2) Conform to FCC and FAA regulations and present applicable FCC and FAA licenses and permits to the Township.
- (3) Be enclosed by an eight (8) foot or higher steel chain link fence with three (3) strands of barbed wire, angled out at 45 degrees from perpendicular. The fence perimeter shall include essential accessory building(s) and related operating infrastructure.
- (4) Be readily accessible for only authorized personnel via a stone or paved roadway.
 - (5) Be centrally monitored 24/7.
- (6) Affirm the tower maintenance program, with responsibility to immediately correct any faults. The latest inspection report will be provided to the Township annually.
- (7) Be dismantled and cleared from the site the earlier of six (6) months after cessation or abandonment of operation, or upon such time as directed by the federal agency having jurisdiction over the subject matter.

Nothing herein is intended to affect, revoke or alter any present or future Township Ordinance regulating communication towers which are less than sixty feet (60') in height, or any Ordinance regulating the installation, construction or use of any antennas, discs, receivers, transmitters and/or any other equipment or structures in connection with wireless transmission of any communication signals which are not governed by this Ordinance and are not located on, or involving, communication towers sixty feet (60') or greater in height.

D. Conditional Use. Communication Towers shall be permitted by Conditional Use in the Industrial District and the Industrial Special Use District, and additionally, they shall be permitted within the Commercial District where the tower will be utilized in whole or in part by State, County, and/or local government services, subject to the following terms and conditions:

- (1) Satisfaction of all standards of this Part.
- (2) Exclusively commercial communication towers shall be restricted to a height of 150 feet. However, one communication tower shall be permitted within the Township to a maximum of 200 feet, provided that the tower shall be utilized by State, County and/or local government services as well as commercial communication users. The communication tower will reduce the propagation of small towers and/or other electronic communications equipment in the Township.
- (3) Except for the height of the towers herein provided, all Area and Bulk regulations for the underlying zoning district shall apply, provided further that communication towers shall be subject to the same setback requirements from boundary lines and right-of-way lines applying to buildings in the underlying Zoning District.
- (4) Existing vegetation shall be preserved to the maximum extent possible. Landscaping shall be required to screen and buffer as much of the communication tower and related buildings as possible, the fence surrounding the communication tower and any other ground level features of the communication tower from the abutting properties.

§27-1837. Composting Processing Operations, Commercial Composting Processing Operations and Agricultural Composting Operations.

Composting Processing Operations including either Commercial Composting Processing Operations and Agricultural Processing Operations, where authorized as a conditional use in any zoning district, are permitted provided the Board of Supervisors determine that the proposed use and activity complies with the following.

- A. The conditional use procedures and criteria contained in this Chapter.
- B. The applicant must satisfy the criteria contained in this Section and provide the following information:

- (1) Compliance with all State, Federal and County standards and regulations.
- (2) An Environmental Assessment Report prepared and submitted in accordance with Federal, State and County regulation and with the provisions of this Chapter.
- (3) A water feasibility study demonstrating that the proposed use will not adversely affect any well within 1,000 feet from any portion of the proposed use. In the event that the information does not adequately and reasonably demonstrate a lack of adverse impact on any well within 1,000 feet, the Board of Supervisors may require the applicant to install a monitoring well, or wells, at such locations as is reasonably determined necessary to determine the status of those wells within 1,000 feet of any part of the proposed use. The applicant must comply with the Chester County Conservation District Standards. If there is a conflict between this Section and the provisions in the Chester County Conservation District Standards, the Chester County Conservation District Standards shall prevail.
- (4) All driveways onto the site must be paved for a distance of not less than 100 feet from the street right-of-way line. The applicant shall also install gravel access for a distance of 100 feet from the terminus of the blacktop to minimize the impact on any public street.
- (5) Minimum setback from the lot lines for any structure, storage or use in this process shall be 250 feet.
- (6) Screening. In addition to the location of the screening requirements in this Section, the Board may determine and require such types and number of screenings as to prohibit the view of the operations from any adjacent public road or property.
- (7) The applicant shall comply with the stormwater management requirements of this Chapter and Storm Water Management Ordinance.
- C. Design and Operation of Compost Processing Operations. With regard to all activities, including the processing, preparation, curing,

loading, material handling, unloading and storage (long and short-term), the applicant must demonstrate compliance and construct all facilities according to the following:

- (1) Design of All Facilities and Processes in the Operations.
- (a) All processes must occur on an asphalt, concrete, or other impermeable surface, which prevents the release of leachate.
- (b) The site must be graded to prevent the pooling of water where agricultural waste or compost is received, processed or stored.
- (c) The site must be designed to prevent run-off materials/water from entering the areas where waste or compost is received, processed or stored.
- (d) The site must include covered and enclosed (on all sides) storage for organic materials, except unprocessed baled straw or hay.
- (e) The site must include an enclosed building with an aerated floor, designed to ensure the compost is maintained in an aerobic condition, and with a negative pressure differential between the inside and outside of the building in which the composting process occurs with air emissions directed to collection and treatment in this Section.
- (f) The site must include an air emission collection and treatment system for each part of the process. This system shall be designed and certified by a registered professional engineer, whose specialty includes the design of these types of systems and shall consist of a wet scrubber and biofilter to reduce air contaminants to a concentration that will minimize odor and pollution.
- (2) The plan and compost processing operation shall comply with the following operations and standards:

- (a) Pre-wetting of straw, hay or any other substance, may occur only as follows:
 - i. On an aerated floor.
 - ii. In a dunk tank within an enclosed storage facility as required in subparagraph (1) (e) and (f).
- (b) Pre-wet straw, hay or other substance must be stored in an enclosed aerated floor.
- (c) Any mixture of wetted straw, hay or other organic materials and gypsum and nitrogen rich material must be moved into the enclosed building described in subparagraph (1) (e) and (f) within the same day on which the mixture occurs.
- (d) All other stages of the composting process, after mixture of the straw, hay or other organic materials with the nitrogen rich material, shall occur in the enclosed building described in subparagraph (1) (e) and (f).
- (e) The applicant shall provide proof of compliance with all applicable Federal, State and Township rules, laws and requirements.
- F. The Board of Supervisors may require the applicant to provide financial security in an amount determined to be reasonably necessary for the removal of any substances utilized as part of the compost processing operations should the operator fail to remove all materials and/or substances upon termination of this operation. The owner and/or operator shall maintain this security on an annual basis, with reasonable annual increases as are then necessary to assure the removal, and provide proof of insurance on or before the annual anniversary of the issuance of a certificate of occupancy.

§27-1838 Solar Energy Systems

1. Purpose. The purpose of this Part is to allow for the safe use of solar energy systems within the Township while providing simple guidelines to minimize any negative impact on citizens throughout the Township. The proper application of zoning and land use controls helps to ensure the safety

of those involved with solar systems and to protect the aesthetic appeal of neighboring properties, without hindering the ability of citizens to supplement their energy supply through the proper use of solar energy systems. Use of solar energy systems, in accordance with these regulations, is supported and encouraged within the Township. Solar energy systems shall be maintained in accordance with the London Grove Township Property Maintenance Code [Chapter 5, Part 2].

- 2. The following development and design standards shall be applied to the construction and installation of any solar energy system:
 - A. Solar energy systems are permitted in all zoning districts as an accessory use, except that in the R-H and R-M Districts, a special exception is required for the installation of any ground mounted solar energy system on any property less than 8,000 square feet.
 - B. A zoning permit and a building permit are required for the installation of all solar energy systems.
 - C. A solar energy system may be placed on the roof (roof mounted) or on the ground (ground mounted).
 - (1) A roof mounted solar energy system may be mounted on a principle or accessory building. The system must be set back three (3) feet along the roof's ridgeline. For sloped roofs and flat roofs the system may not extend higher than five (5) feet above the roof where the system is mounted. The solar energy system may not be higher than the maximum allowable height for buildings in the underlying zoning district. Front roof placement is discouraged unless this represents the only location where a solar system would be functional and only on a roof that meets the necessary slope for a functional roof mounted solar system as defined and certified by a professional engineer in the State of Pennsylvania and experienced in the area of solar energy systems. A front roof is defined as parallel to a front yard as defined in the Definitions of this Ordinance.
 - (2) A ground mounted solar energy system must adhere to the same setback requirements as an accessory building in the

underlying zoning district. The system may not be taller than 20 feet from the ground.

- D. The surface area of a ground mounted system, regardless of the mounted angle, shall be calculated as part of the overall lot coverage. The total coverage of a lot with ground mounted solar panels cannot exceed the greater of 25 percent lot coverage or the maximum allowable coverage for the district in which they are located.
- E. Ground mounted solar energy systems may not be located in the front yard unless a special exception as defined in this Ordinance of London Grove Township is granted by the Zoning Hearing Board.
- F. All wiring for ground mounted solar energy systems shall be buried underground. Conduit runs to a roof mounted system shall be kept 10 inches below the roof decking. All wiring shall comply with the Pennsylvania Uniform Construction Code.
- G. All solar mechanical equipment associated with and necessary for the operation of the solar energy system shall comply with the following:
 - (1) Solar mechanical equipment shall be screened from any adjacent property that is residentially zoned or used for residential purposes. The screen shall consist of shrubbery, trees or other non-invasive plant species which provides a visual screen. In lieu of a planting screen, a decorative fence meeting the requirements of this Chapter may be used.
 - (2) Solar mechanical equipment shall not be located within the minimum front yard setback of the underlying zoning district unless a special exception is granted by the Zoning Hearing Board.
 - (3) Solar mechanical equipment shall comply with the setbacks specified for accessory structures in the underlying zoning district.

- H. Solar panels shall be placed such that concentrated solar radiation or glare shall not be directed onto nearby properties or roadways.
- I. Solar panels shall not be placed in the vicinity of any airport in a manner that would interfere with airport flight patterns. Acknowledgment from the Federal Aviation Administration may be necessary.
- J. The owner of the solar energy system shall provide the Township with written confirmation and approval by the public utility company to which the system will be connected. Contacting the local public utility company is not necessary for off-grid systems.
- K. Advertising on solar energy systems, outside of reasonable identification of manufacturer and operator, is prohibited. This includes any signage, streamers, ribbons, flags, banners or similar materials but does not include the posting of appropriate warning signs.
- L. All solar systems shall be manufactured and installed in accordance with the Pennsylvania Uniform Construction Code.
- M. The manufacturer's or installer's identification and appropriate warning signage shall be posted on or near the panels in a clearly visible manner.
- N. Any solar energy system installed to be used by someone other than the owner of the property requires an affidavit or evidence of agreement between the lot owner and facility's owner or operator confirming the facility owner or operator has permission of the property owner to install and utilize solar panels.
- 3. Solar energy systems installed before this Part is enacted are not required to meet the regulations. However, any expansion of these systems at any point shall then require the updated portion of the system to be in adherence to this Part.

- 4. The following standards shall be applied to the installation and construction of any solar farm:
 - A. Solar farms are a permitted primary use in the Industrial Special Use and Industrial District, but cannot be installed on more than one (1) acre of prime farmland soils that include Class 1 through Class 3 soils.
 - B. All solar farms shall adhere to the area and bulk requirements of the underlying zoning district.
 - C. A security fence of at least six (6) feet in height must be installed in accordance with buffering and screening requirements as defined in the London Grove Township Zoning Ordinance.
 - D. All appropriate signage shall be clearly posted at the site.
 - E. The manufacturer's or installer's identification and appropriate warning signage shall be posted at the site in a clearly visible manner.
 - F. All wiring and on-site power lines shall be placed underground, to the maximum extent practicable. Any wiring carrying live current that is above ground should be clearly labeled as such.
 - G. All solar panels and solar energy collectors shall be located so as to not create any additional heat load upon neighboring properties.
 - H. All installers must be on the official list of registered installers (DEP Solar Sunshine) or be able to prove that they meet the standards of the registered installers' North American Board of Certified Energy Practitioners (NABCEP) Certified.
 - I. No solar farm shall be installed until evidence has been given to the Township that the public utility company, to which the system will be installed, has been informed and approved of the owner's intent to install a grid connected system.

- J. Written permission by the owner of a solar farm must be provided to the Township by an installer or operator of the solar farm to apply for the necessary construction and/or operating permits.
- K. The following should be included on all permit applications:
 - (1) Zoning and building permit applications must be on forms supplied by London Grove Township.
 - (2) An application for a solar farm that is to be connected to the electric grid may not be approved until evidence has been given to the Township that the public utility company, to which the system will be installed, has been informed and approved of the owner's intent to install a grid connected system.
 - (3) A decommissioning plan, detailing the expected duration of the solar farm and the deconstruction of the solar farm when it is no longer in use.
- L. If any solar farm has stopped operating for longer than one (1) year, the facility shall be decommissioned at the owner's expense. Upon removal, the site shall be cleaned, restored, and re-vegetated to blend with the existing surrounding vegetation at the time of abandonment. If removed by the owner, a demolition permit shall be obtained and the facility shall be removed. If an owner of a solar farm has been notified by the Township to remove the farm and has not done so six (6) months after receiving said notice, the Township may remove such system and place a lien upon the property for the cost of the removal and the cost for the site to be cleaned, restored, and revegetated to blend with the existing surrounding vegetation at the time of abandonment.

§27-1839 Small Wind Energy Systems

1. The purpose of this Part is to allow for the safe use of small wind energy systems within the Township while providing simple guidelines to minimize any negative impact on citizens throughout the Township. The proper application of zoning and land use controls helps to ensure the safety of those involved with small wind energy systems and to protect the

aesthetic appeal of neighboring properties, without hindering the ability of citizens to supplement their energy supply through the proper use of small wind energy systems. Use of small wind energy systems, in accordance with these regulations, is supported and encouraged within the Township. Small wind energy systems shall be maintained in accordance with the London Grove Township Property Maintenance Code [Chapter 5, Part 2].

- 2. The following development and design standards shall be applied to the construction and installation of any small wind energy system:
 - A. Only small wind energy systems will be allowed in the Township.
 - B. Small wind energy systems are permitted in all zoning districts as an accessory use, except when they are located in the front yard or on a front roof in which event a special exception must be obtained from the Zoning Hearing Board.
 - C. All small wind energy systems shall adhere to the area and bulk requirements of the underlying zoning district.
 - D. A zoning permit and a building permit are required for the installation of all small wind energy systems. Zoning and building permit applications must be on forms supplied by the Township. A special exception must be obtained for a small wind energy system to be located in a front yard or front roof.
 - E. A small wind energy system may be placed on the roof (roof mounted) or on the ground (ground mounted).
 - (1) A roof mounted small wind energy system may be mounted on a principle or accessory building. The system should in no place hang off of or extend beyond the edge of the roof. For sloped roofs and flat roofs, the system may not extend higher than 10 feet above the roof where the system is mounted and may not be higher than the maximum allowable height for buildings in the underlying zoning district. Front roof placement is discouraged unless this represents the only location where a small wind energy system would be functional as defined and certified by a professional engineer licensed in the State of

Pennsylvania and experienced in the area of small wind energy systems. A front roof is defined as parallel to a front yard as defined in Chapter 27, of the Codified Ordinances of London Grove Township.

- A ground mounted small wind energy system shall be set back by the greater of the underlying zoning district setbacks or the height of the structure above grade level. Minimum distance between the undisturbed ground at the base of the device and any protruding blade shall be 15 feet, as measured at the lowest point of arc of the blades. There is no minimum distance required for vertical axis turbines and undisturbed ground, because of the need to have the blades/panels of those type of devices closer to the ground. A ground mounted small wind energy system shall be located at least 1.1 times the height of the turbine with the blade tip at its highest point, or more, from an occupied structure on adjoining property and 80 percent total tower height or more from occupied structure on subject property measured from wind tower base. Only one ground mounted small wind energy system will be allowed on parcels that are ½ acre or less of land. All such systems will be required to have a ground shut-off devise. For parcels with additional area above a ½ acre, one additional ground mounted small energy system will be allowed for every additional ½ acre of land.
- F. The audible sound from a small wind energy system shall not exceed 60 dBA measured at the property line.
- G. Compliance with FAA Regulations. A small wind energy system shall not be artificially lighted unless such lighting is required by the FAA. No small wind energy system shall be constructed, altered, or maintained so as to project above any of the imaginary airspace surfaces described in FAR Part 77 of the FAA guidance on airspace protection; and must be in compliance with the Airport Zone as defined in the Airport Zone Chapter of the Codified Ordinances of London Grove Township.
- H. Small wind energy systems shall not be climbable up to 15 feet above grade level for ground mounted systems.

- I. All wiring and on site power lines for ground mounted small wind energy systems shall be buried underground. All wiring shall comply with the applicable provisions of the Pennsylvania Uniform Construction Code.
- J. The local power company should be contacted concerning the connection of a system to the grid and to address any further issues. Contacting the local power company is not necessary for off-grid systems.
- K. Advertising on small wind energy systems, outside of reasonable identification of manufacturer and operator, is prohibited. This includes any signage, streamers, ribbons, flags, banners, or similar materials but does not include the posting of appropriate warning signs.
- L. All ground mounted electrical and control equipment shall be labeled and secured to prevent unauthorized access.
- M. All small wind energy systems shall be manufactured and installed in accordance with the Pennsylvania Uniform Construction Code.
- N. The manufacturer's or installer's identification and appropriate warning signage shall be posted on or near the small wind energy system in a clearly visible manner.
- O. Any small wind energy system installed by someone other than the owner of the property required evidence or an affidavit that facility's owner or operator has permission from the property owner to install and utilize a small wind energy system.
- 3. Small wind energy systems installed before this Part is enacted are not required to meet the regulations. However, any expansion of these systems at any point shall then require the updated portion of the system to be in adherence to this Part.

§27-1840. Surface Land Uses Affiliated with Transmission Pipelines

1. Use Provisions; Procedure:

- A. Surface land uses affiliated with transmission pipelines shall be permitted as a principal use by Condition in the C Commercial District, I Industrial District and the ISU Industrial Special Use Zoning District where underground pipelines exist or are proposed. Such uses shall meet the dimensional requirements, including but not limited to, area and bulk standards of the C, I or ISU Districts as applicable. Facility Developers are required to demonstrate to the satisfaction of the Township that all requirements of this Section, standards for surface land uses affiliated with transmission pipelines, shall be met.
- B. Surface land uses affiliated with transmission pipelines shall be prohibited in AP Agricultural Preservation District, AR Agricultural Residential District, RH Residential High, MHP Mobile Home Park, any residential or agricultural zoning districts including residential uses within the C, I or ISU District, Steep Slope Conservation District, Flood Hazard and Flood and Water Hazard Soils Districts, any property where an historic resource identified on the Township Historic Resources Map is located and any property subject to a conservation, agricultural or other easement restricting development.
- C. All other uses ancillary or accessory to surface land uses affiliated with transmission pipelines are prohibited unless otherwise permitted in the zoning district in which the use is located.
- D. Compliance with the requirements of this Section shall be demonstrated in a zoning permit and building permit application filed by the Facility Developer in accordance with the Township Zoning Ordinance and Building Code. No building permit shall be issued by the Township Code Official unless all requirements of this Section have been met. In addition, conditional use approval shall be obtained by the Facility Developer per the Condition Use requirements of this Code.
- 2. Standards for Surface Land Uses Affiliated with Transmission Pipelines.

The following standards will be considered by the Township prior to permitting surface land uses affiliated with transmission pipelines. These standards shall be in addition to any other requirement of Township Ordinances and any other law or regulation of any governmental entity that has jurisdiction over surface land uses affiliated with transmission pipelines. In the event of a conflict between the provisions of this Section and any other federal, state or local laws, ordinances or regulations, the more restrictive provision shall apply.

A. Setbacks. Unless otherwise approved by the Board of Supervisors by conditional use upon recommendation of the Township Planning Commission, the Facility Developer shall demonstrate that the setbacks for surface land uses affiliated with transmission pipelines and all supporting equipment and structures from any property line or right-of-way shall be consistent with the minimum setback in the applicable zoning district. In addition, surface land uses affiliated with transmission pipelines and all supporting equipment and structures shall be set back a minimum of seven hundred and fifty (750) feet from residential buildings and uses and all commercial, industrial and institutional uses or a minimum of five hundred (500) feet from the nearest lot line, whichever is greater.

Setbacks may be increased by the Township pursuant to the type of material being managed at the surface land use affiliated with transmission pipelines and whether the use is adjacent to areas of high on-site population. The Township shall, as part of the conditional use process, determine whether increased setbacks are warranted consistent with the "Potential Impact Radius" (PIR), defined by the relationship between the diameter of the adjacent pipeline (and appurtenances) and its maximum operating pressure, whether high on-site populations are located in close proximity, and whether more than one transmission pipeline (such as coupled lines) will be managed at the surface land use affiliated thereto. The PIR approach is applicable only to surface land uses affiliated with "gas" or "petroleum gas" transmission pipelines as defined by Title 49, Code of Federal Regulation, Section 192.3. Surface land uses affiliated with transmission pipelines carrying "hazardous liquids" as defined by Title 49, Code of Federal Regulation, Section 195.2, shall adhere to setback standards contained in this subsection.

- B. Landscaping: All surface land uses affiliated with transmission pipelines shall be screened and buffered from view from adjacent properties and public and private roads by landscaping. The Facility Developer shall provide a plan prepared by a landscape architect licensed in Pennsylvania showing landscaping proposed to be installed to screen and buffer surface land uses affiliated with transmission pipelines. The landscape plan shall incorporate the use of an eight-foot decorative fence surrounded by a mix of native vegetation, including evergreens, shrubbery and trees, which shall not be less than the height of the fence and shall be of sufficient density to screen the facility. Existing vegetation in proximity to surface land uses affiliated with transmission pipelines shall be preserved to the greatest extent possible. All proposed landscaping shall comply with the requirements of the Township's Subdivision and Land Development Ordinance. Facility Developers shall submit a visual survey from vantage points specified by the Township in order to support the proposed landscaping plan's mitigation of visual impacts.
- C. Noise: Sound produced by the surface land use affiliated with transmission pipelines shall not result in noise or vibration clearly exceeding the average intensity of noise or vibration occurring from other causes at the property line; in no case shall the sound pressure level exceed 60 dB (A) (according to the American National Standards Institute (ANSI) "a" weighted scale) at the property line closest to the land use.
- D. Odors: Odor, vapors or particulate matter produced by the surface land use affiliated with transmission pipelines shall not exceed the average emission of such substances occurring from other causes at the property line. Specific contaminants shall be regulated by PA Code, Title 25, Environmental Protection, Part 1, Subpart C. Article III, Air Resources.
- E. Signage: All signs, other than utility identification signs, appropriate warning signs, or owner identification signs, shall be prohibited. Signs shall be limited to four (4) square feet in area. There shall be no antennae, advertising, or other items or material affixed to or otherwise placed on surface land uses affiliated with

transmission pipelines or on the property where the use is located, except as permitted by the Township.

- F. Parking: If the surface land use affiliated with transmission pipelines is fully automated, adequate parking shall be required for maintenance workers. If the site is not automated, the number of parking spaces shall be equal to the number of people on the largest shift. Parking spaces shall be located within the decorative fence and landscape buffer area so they are substantially concealed when viewed from surrounding properties.
- G. Lighting: No surface land use affiliated with pipeline utilities shall be artificially lighted except as required for emergency night-time access. Any such lights shall be equipped with full cut-off shields so as to prevent intrusion upon nearby properties.
- H. Engineered drawing submission: Applications for a land use affiliated with pipeline utilities shall be accompanied by engineering drawings prepared by an engineer licensed in Pennsylvania. The Facility Developer shall show that all applicable Commonwealth of Pennsylvania and Federal standards for the construction, operation, and maintenance of the proposed facility have been met.
- I. Design: The Facility Developer proposing a surface land use affiliated with transmission pipelines must demonstrate that the structure has been designed to blend in with or mimic existing structures in the landscape such as residential outbuildings, farm structures, or other uses permitted in the applicable zoning district.
- J. Visual impact: Any surface land use affiliated with transmission pipelines shall be designed and constructed so as to mitigate the visual impact from public roads and nearby uses. In addition, the color and other visual features of the land use affiliated with pipeline utilities shall be designed and installed in such a manner so as to create the least visual impact practicable. The Facility Developer shall demonstrate compliance with this section, by among other things, providing photographic perspectives of the proposed site from all sides of the property, adjacent road ways and neighboring properties (with permission of the owners).

- K. Need: The Facility Developer for a surface land use affiliated with transmission pipelines is required to demonstrate, using scientific and technological evidence, that the facility must be located where it is proposed in order to satisfy its function in the company's pipeline system and demonstrate that there is a need for this facility at the location where it will be located. All alternative options to the proposed location must be presented.
- L. State and Federal regulations: All Facility Developers, whether commercial pipeline companies or otherwise, must demonstrate the submission of sufficient filings and/or receive sufficient approvals, as required, through the Federal Energy Regulatory Commission (FERC), the Pipeline and Hazardous Materials Safety Administration (PHMSA, and the Commonwealth of Pennsylvania [the Pennsylvania Department of Environmental Protection (PADEP) and/or the Pennsylvania Public Utilities Commission (PA PUC)]. Such documentation is not required as part of the initial application to the Township, but must be provided prior to the issuance of the building permit.
- M. Removal of surface land uses affiliated with transmission pipelines: Any surface land uses affiliated with transmission pipelines that are no longer licensed or active shall be removed and the site restored to its original condition at the Facility Developer's expense within sixty (60) days of the last date that the facility was licensed by the PADEP and FERC. A bond or escrow account shall be posted with the Township in an amount sufficient to ensure such removal and site restoration prior to the construction of the facility. The Facility Developer shall have prepared and submit to the Township, to accompany the bond or escrow account, an estimate of the cost necessary to remove the surface land use facility associated with the pipeline and restore the site to its preconstruction condition.
- N. For the purpose of providing clarity to these provisions, the following terms and definitions are applicable:

Facility Developer – Individuals or entities proposing to construct and/or operate surface land uses affiliated with transmission pipelines.

Pipeline – As defined by Title 49, Code of Federal Regulations, Sections 195.2 and 192.3.

Surface land uses affiliated with transmission pipelines –

Above-ground transmission pipeline facilities including, but not limited to, compressor stations, pumping stations, regulator stations, launcher/receiver station, and other surface pipeline appurtenances.

Transmission Pipelines – Transmission pipelines include, but are not limited to, pipelines designed for the transmission of a "gas" or "petroleum gas", except a "service line", as those terms are defined by Title 49, Code of Federal Regulation, Section 192.3; also included are pipelines designed for the transmission of a "hazardous liquid", as defined by Title 49, Code of Federal Regulations, Section 195.2.

§27-1841. Indoor Shooting Range.

All indoor shooting ranges constructed in the Township, in addition to complying with all requirements of the underlying zoning district, shall comply with the following regulations.

- A. No alcohol is permitted on the premises.
- B. The hours of operation shall be from 7 a.m. to 10 p.m.
- C. Compliance with the most recent version of the National Rifle Association's Range Source Book, especially with regard to design criteria for ventilation, lighting, backstops, walls, ceilings and floors, firing positions and shooting booths.