

## ARTICLE V. PERFORMANCE STANDARDS

### Section 500 Compliance

All uses and activities shall comply with the standards of this Article.

#### A. GENERAL PERFORMANCE STANDARDS

### Section 501 Site Capacity Calculations

The following site capacity calculations shall be submitted with all applications for subdivision or land development. Through these calculations, the net buildable site area, the maximum number of dwelling units, the maximum amount of impervious surfaces, and the required open space shall be determined.

- a. Base Site Area - Calculate the base site area. From the total site area subtract future road rights-of-way; existing utility rights-of-way; land which is not contiguous or which is separated from the parcel by a road, railroad, or major stream which acts as a major barrier to common use; or land shown on previous subdivision or land development plans as reserved for open space.

Total Site Area = \_\_\_\_\_ acres  
- \_\_\_\_\_ acres  
Base Site Area = \_\_\_\_\_ acres

- b. Land with Resource Restrictions and Resource Protection Land - Calculate the land with resource restrictions and the resource protection land. In the event that two or more resources overlap, only the resource with the highest open space ratio shall be used in the calculations.

Resource	Open Space Ratio	Acres of Land in Resources	Resource Protection Land (Acres X Open Space Ratio)
Flood Plains	1.00		
Flood Plain Soils	1.00		
Steep Slopes:			
8 - 15%	.60		
15 - 25%	.70		
25% or more	.85		
Woodlands	.80		
Lakes and Ponds	1.00		
Lake Shore Areas	.70		
Pond Shore Areas	.80		
Watercourses	1.00		
Wetlands	1.00		
Wetland Margins	.80		

Land with Resource Restrictions \_\_\_\_\_ acres.

Resource Protection Land \_\_\_\_\_ acres.

- c. Recreation Land - Calculate land for recreation.

While some of the open space may be resource protection land, it is required that at least a portion of the public or common open space be usable for active recreation.

Base Site Area		_____	acres
Subtract Land with Resource Restrictions	-	_____	acres
Remainder	=	_____	acres
Multiply by 1/3 Minimum Open Space Ratio	x	_____	acres
Recreation Land	=	_____	acres

d. Combine Resource Protection Land and Recreation Land

Resource Protection Land		_____	acres
Add Recreation Land	+	_____	acres
Resource Protection and Recreation Land	=	_____	acres

e. Standard Minimum Open Space - Calculate the standard minimum open space.

Base Site Area		_____	acres
Multiply by Open Space Ratio	x	_____	(Section 502)
Standard Minimum Open Space	=	_____	acres

f. Required Open Space - Determine the required open space.

The required open space is the resource protection and recreation land or the standard minimum open space, whichever is greater.

\_\_\_\_\_ acres

g. Unusable Land - Calculate the unusable land.

If the Resource Protection and Recreation Land is less than the Standard Minimum Open Space, there is no unusable land. If the Resource Protection and Recreation Land is greater than the Standard Minimum Open Space, the unusable land is the difference.

Resource Protection and Recreation Land		_____	acres
Subtract Standard Minimum Open Space	-	_____	acres
Unusable Land	=	_____	acres

(Enter zero if calculation is less than zero)

h. Net Buildable Site Area - Calculate the net buildable site area.

Base Site Area		_____	acres
Subtract Unusable Land	-	_____	acres
Net Buildable Site Area	=	_____	acres

i. Number of Dwelling Units - Calculate the maximum number of dwelling units.  
For nonresidential uses, skip to subsection j.

Net Buildable Site Area		_____	acres
Multiply by Maximum Density	x	_____	(Section 502)
Number of Dwelling Units	=	_____	dwelling units

(do not round up)

j. Impervious Surfaces - Calculate the maximum area of impervious surfaces.

Net Buildable Site Area		_____	acres
Multiply by Maximum Impervious Surface Ratio	x	_____	(Section 502)
Impervious Surfaces	=	_____	acres

- k. Buildable Portion of the Site - Calculate the buildable portion of the site.

Base Site Area	_____	acres
Subtract Required Open Space	- _____	acres
Buildable Portion of the Site	= _____	acres

- l. Site Capacity Summary

Net Buildable Site Area (h)	_____	acres
Maximum Number of Dwelling Units (i)	_____	dwelling units
Maximum Impervious Surfaces (j)	_____	acres
Required Open Space (f)	_____	acres

Section 502 Table of Performance Standards

The following table establishes the performance standards for the various zoning districts. All of the applicable standards for a zoning district shall be met. If after doing the calculations in the preceding section, one or more of the calculated standards or the standards in any other section of this ordinance is greater than on this table, the strictest standard shall govern.

- a. Minimum Open Space Ratio--For uses where this is applicable, the figure in the column shall be the minimum amount of open space provided. However, if in doing the calculations in Section 501, the open space ratio in subsection d is greater than the standard in this column, then the greater shall become the minimum required.
- b. Maximum Density (DU/Acre)--The number in this column shall be the maximum allowable density for residential uses. This number may be increased only under the provisions of Section 506.
- c. Maximum Impervious Surface Ratio--This number shall be the maximum amount of impervious surface for a use or development.
- d. Minimum Site Area--This is the minimum acreage required in order to qualify for a particular permitted use. For example, in order to qualify for a single-family cluster in the RP district, the site must be a minimum of ten (10) acres.
- e. Minimum Lot Area--This column refers to the minimum area of land on which a use can be located. For all proposed residential uses required to have a minimum lot area greater than one (1) acre, there shall be a contiguous and usable area within the overall lot of at least one (1) acre for the principal building, accessory buildings, driveways, parking areas and on-site sewer and water systems (where these on-site services will be used). This area shall not contain flood plains, flood plain soils, lakes, ponds, watercourses or wetlands. For all proposed residential uses required to have a minimum lot area of one (1) acre or less, there shall be a contiguous and usable area within the overall lot of at least the minimum lot area required by Section 404 or 502, which does not contain any of these noted natural features. For all proposed non-residential uses, the proposed lot area shall contain a contiguous and usable area of at least the minimum lot area required in Section 502 which does not contain any of these noted natural features. All uses, activities and buildings on lots with natural features shall comply with the requirements of Section 504 Environmental Performance Standards.

# TABLE OF PERFORMANCE STANDARDS

District	Use	Minimum Open Space Ratio	Maximum Density DU/Acre	Maximum Impervious Surface Ratio	Minimum Site Area	Minimum Lot Area
RP	B1-Single Family Detached	—	.44	.10	2 acres	2 acres
	B5-Single Family Cluster	.75	.21	.05	10 acres	1 acre**
	Other Permitted Uses*	—	—	.05	5 acres	5 acres
RA	B1-Single Family Detached	—	.44	.10	2 acres	2 acres
	B5-Single Family Cluster	.50	.50	.10	4 acres	30,000 sq. ft.**
	Other Permitted Uses*	—	—	.10	2 acres	2 acres
RD	B1-Single Family Detached	—	.87	.11	1 acre	1 acre
	B5-Single Family Cluster	.50	.90	.10	4 acres	20,000 sq. ft.**
	Other Permitted Uses*	—	—	.15	2 acres	2 acres
FC	All Permitted Uses*	—	—	.15	3 acres	1 acre
SRC	B1-Single Family Detached	—	.44	.10	2 acres	2 acres
	B5-Single Family Cluster	.50	.90	.10	4 acres	20,000 sq. ft.**
	B6-Performance Standard Subdivision	.80	1.1	.15	10 acres	—
	Other Permitted Uses*	—	—	.10	3 acres	3 acres
VC-1	B1-Single Family Detached	—	1.9	.19	20,000 sq. ft.	20,000 sq. ft.
	B4-Village Twin	—	2.3	.25	30,000 sq. ft.	15,000 sq. ft.
	Other Permitted Uses*	—	—	.50	30,000 sq. ft.	30,000 sq. ft.
SRL	B1-Single Family Detached	—	1.9	.19	20,000 sq. ft.	20,000 sq. ft.
	B5-Single Family Cluster	.25	2.2	.20	4 acres	12,500 sq. ft.**
	B6-Performance Standard Subdivision	.55	2.75	.25	5 acres	—
	Other Permitted Uses*	—	—	.20	1 acre	1 acre
SRM	B1-Single Family Detached	—	1.9	.20	15,000 sq. ft.	15,000 sq. ft.
	B5-Single Family Cluster	.15	2.2	.25	4 acres	10,000 sq. ft.**
	B6-Performance Standard Subdivision	.45	3.8	.30	5 acres	—
	Other Permitted Uses*	—	—	.25	1 acre	1 acre
SRH	B1-Single Family Detached	—	1.9	.20	12,000 sq. ft.	12,000 sq. ft.
	B5-Single Family Cluster	.15	2.2	.25	10 acres	10,000 sq. ft.**
	B6-Performance Standard Subdivision	.35	4.5	.33	5 acres	—
	Other Permitted Uses*	—	—	.30	30,000 sq. ft.	30,000 sq. ft.
VC-2	B1-Single Family Detached	—	2.3	.20	15,000 sq. ft.	15,000 sq. ft.
	B4-Village Twin	—	3.2	.30	20,000 sq. ft.	10,000 sq. ft.
	Other Permitted Uses*	—	—	.50	30,000 sq. ft.	30,000 sq. ft.
URL	B1-Single Family Detached	—	3.2	.27	9,000 sq. ft.	9,000 sq. ft.
	B6-Performance Standard Subdivision	.30	6.0	.39	20,000 sq. ft.	—
	Other Permitted Uses*	—	—	.35	20,000 sq. ft.	20,000 sq. ft.
PC	All Permitted Uses*	—	—	.85	1 acre	1 acre
CC	All Permitted Uses*	—	—	.95	2,500 sq. ft.	2,500 sq. ft.
SC	All Permitted Uses*	—	—	.50	1 acre	1 acre
PI	All Permitted Uses*	—	—	.60	1 acre	1 acre
EXT	All Permitted Uses*	—	—	—	2 acres	2 acres

\* Unless a greater standard is specified in Section 404 Use Regulations.

\*\* For Use B5 Single Family Cluster, the minimum lot area shall be the minimum average lot area.  
The minimum lot area for Single Family Cluster is specified in Section 404.B5.

### Section 503 Area and Dimensional Requirements

The following table establishes the performance standards for the various zoning districts except where greater or lesser standards are established in Section 404. In order for the standards in Section 404 to apply, all requirements in that section must be met.

DISTRICT	Minimum Lot Width (Ft.)(Ft.)	Minimum Yards*			Maximum Floor Area Ratio	Maximum Building Height
		Front (Ft.)	Side (Ft.)	Rear (Ft.)		
RP	200	75	30	75	--	35
RA	200	75	30	75	--	35
RD	200	75	40	75	--	35
FC	150	50	30	50	.20	35
SRC	200	75	40	75	--	35
VC-1	100	15	20	25	--	35
SRL	150	50	30	50	--	35
SRM	150	50	30	50	--	35
SRH	100	50	25	50	--	35
VC-2	100	15	20	25	--	35
URL	100	40	20	40	--	35
PC	150	50	30	50	.40	35
CC	30	--	--	20	3.00	65
SC	150	30	30	50	.25	35
PI	150	50	30	50	.40	35
EXT.	200	150	50	50	.10	35

\* The minimum front yard along an arterial highway shall be one hundred (100) feet and the minimum front yard along a collector highway shall be sixty-five (65) feet. In boroughs and in village zoning districts, a minimum front yard requirement shall be established by the Governing Body after consultation with the Planning Commission.

### Section 504 Environmental Performance Standards

All uses and activities established after the effective date of this Ordinance shall comply with the following standards. Site alterations, regrading, filling or clearing of any natural resources prior to the submission of applications for zoning or building permits or the submission of plans for subdivision or land development shall be a violation of this ordinance. In the event that two or more resources overlap, the resource with the greatest protection standard (the least amount of alteration, regrading, clearing or building) shall apply to the area of overlap.

- a. Flood Plain: Such areas shall remain undeveloped, except for minor road crossings where design approval is obtained from the Municipality and the Pennsylvania Department of Environmental Resources and where no other reasonable access is available. See Section 507 Flood Plain Regulations.
- b. Flood Plain Soils: Such areas shall remain undeveloped, except for minor road crossings where design approval is obtained from the Municipality and the

Pennsylvania Department of Environmental Resources and where no other reasonable access is available. Flood plain soils shall not be used where the one hundred year flood plain (with a floodway and flood fringe) has been delineated. See Section 507 Flood Plain Regulations.

- c. Steep Slopes: In areas of steep slopes, the following standards shall apply:
  - (1) 8% to 15%. No more than forty percent (40%) of such areas shall be altered, regraded, cleared or built upon.
  - (2) 15% to 25%. No more than thirty percent (30%) of such areas shall be altered, regraded, cleared or built upon.
  - (3) 25% or steeper. No more than fifteen percent (15%) of such areas shall be altered, regraded, cleared or built upon.
  - (4) Areas of steep slope that are less than three thousand (3,000) square feet shall be exempt from these standards.
- d. Woodlands: No more than twenty (20) percent of such areas shall be altered, regraded, cleared or built upon. The remaining eighty (80) percent shall be maintained as permanent woodland.
- e. Tree Protection Zone: Such areas shall not be altered, regraded, compacted or built upon, nor used for storage or parking of vehicles.
- f. Lakes, Ponds and Watercourses: Such areas shall remain undisturbed, undeveloped and free-flowing. Such areas shall not be altered, regraded, filled, piped, diverted or built upon, except for minor road crossings where design approval is obtained from the Municipality and the Pennsylvania Department of Environmental Resources and where no other reasonable access is available.
- g. Lake Shore Area: The shorelines of lakes, to a distance of three hundred (300) feet from the shorelines, shall contain no more than ten (10) percent impervious surfaces. At least seventy (70) percent shall remain undeveloped in which no alteration, regrading, filling or development shall be permitted.
- h. Pond Shore Area: The shorelines of ponds, to a distance of one hundred (100) feet from the shorelines, shall contain no more than ten (10) percent impervious surfaces. At least eighty (80) percent shall remain undeveloped in which no alteration, regrading, filling or development shall be permitted.
- i. Wetlands: The following standards shall apply to wetlands:
  - (1) Delineation of Wetlands. When the National Wetlands Inventory (NWI) Maps indicate wetlands on a site or when a site contains hydric soils<sup>1</sup> or an area with a predominance of wetlands vegetation,<sup>2</sup> an on-site investigation shall be conducted to determine if wetlands are present on the site. A landowner or an applicant shall use one of the following methods to delineate wetlands:

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<sup>1</sup> See Section 237 for a list of hydric soils.

<sup>2</sup> See Appendix A for a plant list of common wetland species found in Bucks County. These species are reliable indicators of wetlands when found dominating a site (e.g. comprising more than 50% of the vegetation).

- (a) Wetland boundaries shall be delineated through an on-site assessment which shall be conducted by a professional soil scientist or others of demonstrated qualifications. Such a person shall certify that the methods used correctly reflect currently accepted technical concepts, including the presence of wetlands vegetation, hydric soils and/or hydrologic indicators. A study shall be submitted with sufficient detail to allow a thorough review by the municipality. The study must be approved by the Governing Body.
    - (b) A wetlands delineation validated by the U.S. Army Corps of Engineers. In the event that a wetlands delineation validated by the U. S. Army Corps of Engineers is shown to vary from a wetlands boundary derived from subsection (a) above, the Corps delineation shall govern.
  - (2) Wetlands of one (1) acre or greater in size shall remain as permanent open space. Such areas shall not be altered, regraded, filled, piped, diverted or built upon, except for minor road crossings where design approval is obtained from the Municipality, where State and Federal permits have been obtained, and where no other reasonable access is available.
  - (3) Wetlands of less than one (1) acre in size shall not be altered, regraded, filled, piped, diverted or built upon except where State and Federal permits have been obtained.
  - j. Wetland Margin: For wetlands of one (1) acre or greater in size, a wetland margin shall be provided. The wetland margin shall extend one hundred (100) feet from the wetland boundary or to the limit of the hydric soils, whichever is less. At least eighty (80) percent shall remain undeveloped in which no alteration, regrading, filling or development shall be permitted.
- In addition, any Department of Environmental Resources' regulations (under Chapter 105) concerning activities in wetland margins shall be met.
- k. Storm Water: All uses shall limit the rate of stormwater run-off so that the rate of run-off generated is no more than that of the site in its natural condition. Where farm field or disturbed earth is the existing condition, meadow shall be used as the starting base for such calculations instead of the actual conditions. All run-off calculations shall be based on 100 year, 24 hour storms. The method for such calculations shall be that contained in the United States Department of Agriculture, Soils Conservation "Engineering Field Manual, Notice #4" of April 30, 1971, as amended.
  - l. Soil Erosion and Sedimentation: All uses shall protect streams, lakes and ponds from sedimentation damage and control erosion in accordance with the "Clean Streams Law P.L. 187," Chapter 102, except that in addition, all subdivisions and land developments shall submit a soil erosion and sedimentation plan as part of the preliminary subdivision or land development plan even where these are less than twenty-five (25) acres in extent.
  - m. Sewage Disposal: All sewage disposal systems, regardless of type, shall meet the requirements and procedures of the Municipal Sewage Facilities Plan, the Bucks County Department of Health and the Pennsylvania Department of Environmental Resources. The applicant shall demonstrate compliance with the requirements of this section for all applications for zoning or building permits.

- n. **The Permanent Removal of Topsoil:** The permanent removal of topsoil from any parcel of land shall be prohibited, except in Extraction Districts and as follows:
- (1) During actual construction on premises, that portion of the topsoil present which covers an area to be occupied by permanent structures or permanently located materials of an impervious nature or ponds and lakes may be considered excess, and may be removed by the owner.
  - (2) During regrading operations conducted upon premises, whether or not carried on in conjunction with on-site construction, excess topsoil remaining after restoring proper topsoil cover to the areas of the parcel upon which regrading operations were conducted may be removed by the owner.
  - (3) Areas of the site not occupied by permanent structures, impervious surfaces, ponds or lakes shall be provided with a top layer of arable soil to a compacted depth of not less than six (6) inches.
- o. **Permanent Removal of Subsurface Solids:** The permanent removal of subsurface solids, whether soil, clay, or mineral in nature, for other than on-site construction or grading purposes shall be permitted. However, the provisions of Section 504.n., above, shall be met for the restoration of topsoil.

**Section 505 Buffer Yards**

- a. Buffering serves to soften the outline of buildings, to screen glare and noise, and to create a visual and/or physical barrier between conflicting land uses. Buffer yards are required between uses and along existing and proposed streets. The extent of buffering required shall be determined by the type of use proposed and the adjacent uses or streets surrounding the proposed development.

To determine the required buffer yard and planting schedule, a three step procedure should be followed:

- Step 1 -- Site Analysis and Determination of Buffer Yard Class:  
Step 2 -- Selection of the Planting Option for the Buffer Yard Class:  
Step 3 -- Selection of the Plant Materials from the Plant Materials List.

- Step 1 -- Site Analysis and Determination of Buffer Yard Class:

For each property boundary, the applicant shall determine the adjacent land use. Land use information shall be determined by an on-site survey. Table 1 specifies the buffer yard class for each boundary.

The applicant shall match his proposed land use with the corresponding adjacent land use for each property boundary. The letter indicates the buffer yard class.

- Step 2 -- Selection of the Planting Option for the Buffer Yard Class:

After determining the buffer yard class, the applicant shall select a planting option from Table 2. For each buffer class, several planting options are available, one of which the applicant shall select to meet the buffer yard requirement for each boundary.

- Step 3 -- Selection of the Plant Materials from the Plant Materials List.

For each planting option, any of the plant materials outlined in Table 3 may be utilized. Minimum plant size, given either in height or in caliper, is indicated on



this table. The Planning Commission may permit other plant types if they are hardy to the area, are not subject to blight or disease, and are of the same general character and growth habit as those listed in Table 3. All plant material shall meet the standards of the American Association of Nurserymen.

The applicant shall not be required to provide a buffer yard should existing planting, topography, or man-made structures be deemed acceptable for screening purposes by the Planning Commission or the Zoning Officer.

b. General Requirements

(1) Location of Buffer Yard

- (a) The buffer yard shall be measured from the property line or the near street line where a street serves as the property line.
- (b) The buffer yard may overlap the required front, side or rear yards and, in case of conflict, the larger yard requirements shall apply.
- (c) The buffer yard may be part of the lot area assigned to a dwelling unit; however, the portion of the lot area containing the buffer yard must be in addition to the required minimum lot area. A deed restriction shall be placed on the lot in accordance with Section 533 of this Ordinance.
- (d) No more than thirty (30) percent of the required open space area shall be located in the buffer yard.

(2) All buffer yards shall be maintained and kept clean of all debris, rubbish, weeds and tall grass.

(3) No structure, sign, manufacturing or processing activity, commercial activity, parking, or storage or display of materials shall be permitted in the buffer yard.

(4) Existing Buffer: All existing deciduous and coniferous trees larger than two (2) inches in caliper and/or six (6) feet in height may be considered to contribute to the definition of an existing buffer on the property. If the amount of existing plant material that size or greater equals any of the planting requirements, the equivalent reduction of required plant material may be taken. In all cases, existing plant material of the above caliper and height shall be preserved in any buffer yard except where clearance is required to insure adequate sight distance. Any removal shall, where feasible, involve relocation rather than clearing.

(5) Plant materials shall be permanently maintained and any plant material which does not live shall be replaced.

(6) Planting design: It is encouraged that plant materials in buffer yards be planted in natural clusters that will give privacy but do not block views or vistas. The exception shall be commercial or industrial uses bordering residential uses. Here a dense, visual screen is required. Thus, plant material shall be at least four (4) feet high when planted and be of such species as will ultimately produce a screen at least eight (8) feet high.

(7) The plant material shall be so placed that at maturity it will be no closer than three (3) feet from any property or street line.

- (8) A clear sight triangle shall be maintained at all street intersections and at all points where private accessways intersect public streets in accordance with Section 523.
  - (9) The screen planting shall be broken only at points of vehicular or pedestrian access.
  - (10) Prior to the issuance of any zoning permit, complete plans showing the arrangement of all buffer yards and the placement, species and size of all plant materials to be placed in such buffer yard shall be reviewed by the Zoning Officer to ascertain that the plans are in conformance with the terms of this Ordinance.
- c. Special Buffer Yard Requirements: The following requirements shall supersede the buffer yard requirements of Table 1: Determination of Buffer Yard Class.
- (1) Buffer Yard Requirements In and Around Villages
    - (a) A Class "C" buffer yard shall be provided for any use proposed adjacent to a VC-1 Village Center District, a VC-2 Village Center District or a VE Village Expansion (Overlay) District.
    - (b) Within a VC-1 Village Center District or a VC-2 Village Center District, a nonresidential use shall provide a Class "A" buffer yard where such use abuts a residential use.
  - (2) Buffer Yard Requirements along Expressway and Arterial Streets
    - (a) Where a residential use is proposed adjacent to an expressway or arterial street, a Class "C" buffer yard shall be provided.
    - (b) No screen planting shall be required along expressway or arterial streets which form district boundary lines provided that:
      - (i) The proposed use is nonresidential;
      - (ii) No outdoor processing, manufacturing or commercial activity and no outdoor storage or display of material shall be so located as to be visible from the property across the expressway or arterial street; and
      - (iii) The front of the building faces the expressway or arterial street.

Table 1: Determination of  
Buffer Yard Class

EXISTING/ADJACENT LAND USE

	Agricultural (Uses A3, 5, 8 and 9 only)*	Residential (Uses B1, 4 and 5)*	All Other Residential	Institutional and Recreational	Office	Retail and Consumer Services	Utility, Service and Transportation	Industrial	Vacant Land RP, RA, RD, SPC, SRL, SRM, SRH, & URL Districts	Vacant Land FC, PC, CC, SC, PM & EXT. Districts
P R O P O S E D										
Agricultural (Uses A3, 5, 8 and 9 only)*	-	B	B	A	A	A	A	A	A	A
Residential (Uses B1, 4 and 5)*	A	-	A	B	B	B	B	B	-	B
All Other Residential	A	B	A	B	B	B	B	B	B	B
Institutional and Recreational	A	B	B	A	A	A	A	B	B	A
Office	A	B	B	A	-	A	A	A	B	A
Retail and Consumer Service	A	C	C	B	A	A	A	A	C	A
Utility Service and Transportation	A	B	B	B	A	A	A	A	B	A
Industrial	B	C	C	C	B	B	A	A	C	B
L A N D U S E										

\*A3 Intensive Agriculture  
A5 Riding Academy  
A6 Commercial Kennel  
A9 Farm Support Facility  
B1 Single-Family Detached  
B4 Village Twin  
B5 Single-Family Detached Cluster

**Table 2: Planting Options**

The options below indicate the amount of plant material that is required per linear foot of property line. Plantings shall be placed within the minimum width of the buffer area. The Planning Commission may permit staggering or grouping of plant materials provided a satisfactory buffer is achieved.

<b>BUFFER YARD CLASS</b>	<b>WIDTH OF BUFFER YARD</b>	<b>OPTIONS</b> (choice of one within class category)
A	25 feet	(1) 1 canopy tree per 40 feet; plus 1 evergreen tree per 60 feet
		(2) 1 flowering tree per 40 feet; plus 1 evergreen tree per 60 feet
B	50 feet	(1) 1 canopy tree per 40 feet; plus 1 flowering tree per 60 feet; plus 1 evergreen tree per 60 feet
		(2) 1 canopy tree per 40 feet; plus 1 flowering tree per 60 feet; plus 1 hedge on lot line (3 foot centers except as noted in Table 3.D)
		(3) 1 flowering tree per 40 feet; plus 1 evergreen tree per 25 feet
C	100 feet	(1) 1 canopy tree per 40 feet; plus 1 evergreen tree per 20 feet; plus 1 shrub per 4 feet
		(2) 1 flowering tree per 40 feet; plus 1 evergreen tree per 20 feet; plus 1 hedge on lot line (3 foot centers except as noted in Table 3.D)
		(3) 1 flowering tree per 40 feet; plus 1 evergreen tree per 20 feet; plus 1 berm 4 feet high

**Table 3: Plant Materials List**

- A. Canopy Trees (2 inches caliper minimum)
- Acer ginnala - Amur Maple
  - Acer platanoides - Norway Maple
  - Acer rubrum - Red Maple
  - Acer saccharum - Sugar Maple
  - Betula alba - European White Birch
  - Fagus grandifolia - American Beech
  - Fagus sylvatica - European Beech
  - Fraxinus americana - White Ash
  - Fraxinus pennsylvanica lanceolata - Green Ash
  - Ginkgo biloba - Ginkgo (male only)
  - Gleditsia triacanthos inermis - Thornless Honey Locust
  - Liquidambar styraciflua - Sweet Gum
  - Liriodendron tulipifera - Tulip Tree
  - Phellodendron amurense - Amur Cork Tree
  - Platanus acerifolia - London Plane Tree
  - Quercus alba - White Oak
  - Quercus borealis - Red Oak
  - Quercus coccinea - Scarlet Oak
  - Quercus palustris - Pin Oak
  - Quercus phellos - Willow Oak
  - Robina psuedoacacia inermis - Thornless Black Locust
  - Sophora japonica - Japanese Pagodatree
  - Tilia-Linden - all species hardy to the area
  - Zelkova serrata - Japanese Zelkova
- B. Flowering Trees (2 inches caliper minimum)
- Amelanchier canadensis - Shadblow Serviceberry
  - Cornus florida - Flowering Dogwood
  - Cornus kousa - Kousa Dogwood
  - Cornus mas - Cornelian Cherry
  - Crataegus phaenopyrum - Washington Hawthorn
  - Koelreuteria paniculata - Golden Rain Tree
  - Laburnum vossi - Goldenchain
  - Magnolia soulangeana - Saucer Magnolia
  - Magnolia virginiana - Sweetbay Magnolia
  - Malus baccata - Siberian Crab
  - Malus floribunda - Japanese Flowering Crab
  - Malus hopy - Hopy Red-Flowering Crab
  - Oxydendrum arboreum - Sourwood
  - Pyrus calleryana Bradford - Callery Pear
  - Prunus kwanzan - Kwanzan Cherry
  - Prunus yedoensis - Yoshino Cherry
- C. Evergreen Trees (4 feet high minimum)\*
- Ilex opaca - American Holly
  - Picea abies - Norway Spruce
  - Picea omorika - Serbian Spruce
  - Picea pungens - Colorado Spruce
  - Pinus nigra - Austrian Pine
  - Pinus strobus - White Pine
  - Pseudotsuga menziesii - Douglas Fir
  - Tsuga canadensis - Canada Hemlock

\* It is recommended that two or more species of evergreen trees be used in a buffer yard.

D. Hedge (4 feet high minimum)

Crataegus intricata - Thicket Hawthorn  
Forsythia intermedia - Border Forsythia  
Rhamnus fraxula columnaris - Tallhedge Buckthorn  
Syringa chinensis - Chinese Lilac  
Syringa vulgaris - Common Lilac  
Juniperus virginiana - Upright Juniper  
Pinus strobus - White Pine (1 per 5 feet)  
Pyracantha lalandi - Laland Firethorn  
Taxus cuspidata - Upright Yew  
Taxus hicksi - Hicks Yew  
Tsuga canadensis - Canadian Hemlock (1 per 5 feet)  
Thuja occidentalis - American Arborvitae (1 per 5 feet)

E. Shrubs (4 feet high minimum)

Euonymus alatus - Winged Euonymus  
Hamamelis vernalis - Vernal Witch Hazel  
Hamamelis virginiana - Common Witch Hazel  
Ilex verticillata - Winterberry  
Rhamnus frangula - Glossy Buckthorn  
Viburnum dentatum - Arrowwood Viburnum  
Viburnum lantana - Wayfaring Tree Viburnum

Section 506 Performance Standard Bonuses

An increase in the density or impervious surface ratio may be achieved by meeting the specific criteria outlined below. All other standards of this Ordinance must be met in order to get the bonuses. The various bonuses are additive. For example:

Suburban Residential Low District

Base Density	2.75
Density Bonuses	
Open Space	10%
Fire Equipment	<u>5%</u>
	15%

Permitted Density                       $2.75 \times 1.15 = 3.16$  (rounded to nearest hundredth)

- a. Open Space--A density bonus of ten (10) percent shall be permitted when the open space ratio is increased by five percentage points (for example, from .35 to .40), provided that such an increase is not the result of meeting the minimum open space requirements of Section 501 Site Capacity Calculations. This density bonus shall apply to uses B5 Single-Family Detached Cluster, B6 Performance Standard Subdivision, B7 Mobile Home Park and B8 Planned Residential Development (PRD) only.
- b. Low or Moderate Income Housing--A density bonus shall be permitted for the provision of housing subsidized by the federal government for low or moderate income families or the elderly, as defined by various federal housing subsidy programs. For each subsidized dwelling unit, an additional dwelling unit may be built. The maximum density bonus shall be twenty (20) percent. This density bonus shall apply to uses B6 Performance Standard Subdivision and B8 Planned Residential Development (PRD) only.

- c. **Moderate Income Housing**--A density bonus shall be permitted for the provision of moderately priced dwelling units. Moderately priced dwelling units are defined as units affordable to households earning between sixty (60) and eighty (80) percent of the county's median household income, with the average moderately priced dwelling unit affordable to households earning seventy-five (75) percent of the median income. For each moderately priced dwelling unit, an additional dwelling unit may be built. The maximum density bonus shall be twenty-five (25) percent. To ensure the orderly development of moderately priced dwelling units, the equitable distribution of benefits and sustained affordability, the developer shall provide a process for screening and qualifying households and for regulating the sale and re-sale of the moderately priced units, subject to the approval of the Governing Body. The designated moderate income units shall have their moderate market value established by an independent appraisal.
- d. **School Site**--A density bonus of ten (10) percent shall be permitted for the provision of a school site. Fifty (50) percent of the area of the school site may be counted towards meeting the minimum open space requirement for the development. The proposed site shall meet the approval of the Quakertown Community School District, Governing Body, local planning commission, county planning commission and state board of education. It shall be the option of the Quakertown Community School District to accept such dedication. This density bonus shall apply to uses B5 Single-Family Detached Cluster, B6 Performance Standard Subdivision, B7 Mobile Home Park and B8 Planned Residential Development (PRD) only
- e. **Water Systems**: A maximum water system density bonus of five (5) percent shall be permitted for residential developments when a developer dedicates any of the following facilities:
- (1) Dedication of an existing water company, its facilities and service area to the municipality.
  - (2) Construction and dedication of wells and/or standpipes needed to provide water pressure.
  - (3) Construction of a trunk service main, sized to municipal specifications to serve a segment of the development district.
- All designs shall be subject to the approval of the municipal engineer, planning commission, water authority, and Governing Body. This provision specifically does not apply to the dedication of normal service mains which are required of all developments.
- f. **Fire Equipment or Facilities**--A density bonus of five (5) percent shall be permitted for residential developments where the developer provides a cash contribution per dwelling unit to the Governing Body for disbursement for fire equipment or facilities. An impervious surface ratio bonus of five (5) percent or a floor area ratio bonus of ten (10) percent shall be permitted for nonresidential developments where the developer provides a cash contribution per square foot of building area to the Governing Body for disbursement of fire equipment or facilities. The cash contribution shall be in accordance with a fee schedule adopted by resolution of the Governing Body.
- g. **Planned Residential Development (PRD)**--Where the Governing Body grants tentative approval for a PRD, a density bonus shall be permitted as follows:

<u>Density Bonus</u>	<u>Acreage</u>
5%	50-124
10%	125-199
15%	200 or more

## B. FLOOD PLAIN PERFORMANCE STANDARDS

### Section 507 Flood Plain Regulations

No development as defined in Section 221 other than those permitted herein shall hereafter be permitted in an area designated as flood plain as defined in this Ordinance.

#### a. Purpose

The purpose of these provisions is to prevent the loss of property and life, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and to protect the tax base by:

- (1) Regulating uses, activities, and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities and frequencies.
- (2) Restricting or prohibiting certain uses, activities and development from locating within areas subject to flooding.
- (3) Requiring all those uses, activities, and development that do occur in flood prone areas to be protected and/or floodproofed against flooding and flood damage.
- (4) Protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

#### b. Warning and Disclaimer of Liability

- (1) The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur. Flood heights may be increased by man-made or natural causes. This Ordinance does not imply that areas outside the flood plain districts or that land uses permitted within such districts will be free from flooding or flood damages.
- (2) This Ordinance shall not create liability on the part of the municipality or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

#### c. Establishment of Flood Plain

For the purposes of this Ordinance, various flood plain areas are identified which are subject to the provisions of this section. These flood plain areas are:

- (1) Floodway: That portion of the flood plain including the watercourse channel and adjacent land areas which must be reserved to carry the 100-year recurrence-interval flood without cumulatively increasing that flood elevation more than one (1) foot.
- (2) Flood Fringe: That portion of the flood plain which is outside the Floodway.



- (3) Approximate 100 - Year Flood Boundary: That portion of the flood plain as identified in the Flood Insurance Study for which no detailed flood profiles or 100-year-flood elevations have been determined.
- (4) Flood Plain Soils: Areas subject to periodic flooding and listed in the Soil Survey of Bucks and Philadelphia Counties Pennsylvania, U.S. Department of Agriculture; Soil Conservation Service, July, 1975, as being "on the flood plain" or "subject to flooding".

The following soil types are flood plain soils:

Alluvial land	Marsh
Alton gravelly loam, flooded	Pope loam
Bowmansville silt loam	Rowland silt loam
Hatboro silt loam	

d. Boundaries of the Flood Plain

- (1) The following studies shall be used to identify the flood plain. The study which indicates a flood plain of greater delineation shall be used; unless a detailed study which identifies a floodway and flood-fringe has been prepared, in which case, such detailed study shall be used.
  - (a) The Flood Insurance Study prepared by the Federal Insurance Administration and the accompanying Flood Boundary and Floodway Maps.
  - (b) The Soil Survey of Bucks and Philadelphia Counties, Pennsylvania prepared by the U.S. Department of Agriculture, Soil Conservation Service, July, 1975.
  - (c) A study prepared by a registered engineer expert in the preparation of hydrological studies. Such hydrological studies shall be subject to the review and approval of the Governing Body on recommendation of the municipal engineer.
- (2) The delineation of any of the flood plain areas may be revised by the municipality where natural or man-made changes have occurred and/or more detailed studies conducted or undertaken by the U.S. Army Corps of Engineers, a River Basin Commission, a registered engineer or others of demonstrated qualifications document the need for such change. However, prior to any such change to the Flood Insurance Study, approval must be obtained from the Federal Insurance Administration and the Pennsylvania Department of Community Affairs.

e. General Provisions

- (1) The flood plain areas described above shall be overlays to the existing underlying zoning districts and the flood plain provisions shall serve to supplement the underlying zoning provisions. Where there is a conflict between the provisions or requirements of any flood plain requirement and those of the underlying zoning, the more restrictive provisions and/or those pertaining to the flood plain area shall apply. However, in all cases the flood plain requirements shall be met.
- (2) In the event any provision concerning a flood plain regulation is declared inapplicable as a result of any legislative or administrative actions or

judicial discretion, the basic underlying zoning district provisions shall remain applicable.

- (3) Under no circumstances shall any use, activity and/or development adversely affect the capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system.
- (4) No encroachment, alteration or improvement of any kind shall be made to any watercourse channel until all adjacent municipalities which may be affected by such action have been notified by the municipality, and until all required permits or approvals have been first obtained from the Department of Environmental Resources, Bureau of Dams and Waterway Management.

In addition, the Federal Insurance Administration and Pennsylvania Department of Community Affairs, Bureau of Community Planning, shall be notified by the municipality prior to any alteration or relocation of any watercourse.

f. Approximate 100-Year Flood Boundary and Flood Plain Soils Regulations

Any proposed use, development or activity in approximate 100-year flood boundary areas and flood plain soils areas shall be subject to all standards specified in this section for floodway areas unless a hydrological study is prepared thereby identifying the floodway and flood fringe areas. Such study shall be prepared by a registered engineer expert in the preparation of hydrological studies. The hydrological study shall be subject to the review and approval of the Governing Body on recommendation of the municipal engineer.

g. Use Regulations

(1) Uses Permitted by Right

The following uses and activities are permitted in the flood plain provided that they are in compliance with the provisions of the underlying zoning district and are not prohibited by any other ordinance and provided that they do not require structures, fill or storage of materials or equipment.

- (a) Agricultural uses such as general farming, pasture grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
- (b) Public and private recreational uses and activities such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, hiking, bicycling and horseback riding trails, wildlife and nature preserves, game farms, fish hatcheries, tennis courts, and hunting and fishing areas.
- (c) Yard areas for residential and non-residential uses.
- (d) Temporary uses such as circuses, carnivals, and similar activities.

(2) Uses Permitted by Special Exception

The following uses and activities are permitted in the flood plain by special exception provided that they are in compliance with the provisions of the underlying district and are not prohibited by any other

ordinance and provided that all applicable flood plain requirements are met:

- (a) Utilities, public facilities and improvements such as streets, bridges, transmission lines and pipe lines.
- (b) Water related uses and activities.
- (c) Storage of materials and equipment provided they are not buoyant, flammable or explosive, and are not subject to major damage by flooding, and provided such material and equipment is firmly anchored to prevent flotation or movement. Storage of materials and equipment listed in subsection k. hereof shall be prohibited in the flood plain.
- (d) Pervious parking areas

h. Existing Structures in the Flood Plain

A structure or use of a structure or premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions, may be continued subject to the following conditions:

- (1) Existing structures and/or uses may be expanded when permitted as a special exception by the Zoning Hearing Board.
- (2) Existing structures and/or uses located in any floodway shall not be expanded or enlarged unless the effect of the proposed expansion or enlargement on flood heights is fully offset by accompanying improvements.
- (3) Any increase in area shall not exceed an aggregate of twenty-five (25) percent of the area of the structure and/or use, during the life of the structure and/or use.
- (4) The modification, alteration, reconstruction, or improvement of any kind to an existing structure shall be undertaken only in full compliance with the provisions of this Ordinance and any other applicable ordinances.

i. Special Requirements for Mobile Homes

Mobile homes are defined in Section 245 of this Ordinance. For flood plain management purposes, the term mobile home shall also include park trailers, travel trailers, recreational vehicles and other similar vehicles placed on a site for greater than 180 consecutive days.

- (1) No mobile home shall be permitted in the flood plain except as a nonconforming use which predates the enactment of this Ordinance.
- (2) Within any floodway area, replacement of, or expansion of an existing mobile homes shall be prohibited.
- (3) Within any flood fringe area, replacement of or expansion of an existing mobile home shall be:
  - (a) placed on a permanent foundation;

(b) elevated so that the lowest floor of the mobile home is one and one-half (1.5) feet or more above the elevation of the 100 year flood;

(c) anchored to resist flotation, collapse, or lateral movement.

j. Prohibited Activities in the Flood Plain

The commencement of any of the following activities; or the construction, enlargement, or expansion of any structure used, or intended to be used, for any of the following activities shall be prohibited within the flood plain:

- (1) hospitals
- (2) nursing homes
- (3) jails or prisons

k. Development Which May Endanger Human Life

Any new or substantially improved structure which will be used for the production or storage of any of the following dangerous materials or substances or which will be used for any activity requiring the maintenance of a supply (more than ten (10)) gallons or other comparable volume or any amount of radioactive substances) of any of the dangerous materials or substances, including but not limited to the following and other such materials or substances identified for exclusion from flood plain areas by the agencies of the Commonwealth or the Federal Government, on the premises, shall not be permitted in any identified flood plain area.

- (1) Acetone
- (2) Ammonia
- (3) Benzene
- (4) Calcium carbide
- (5) Carbon disulfide
- (6) Celluloid
- (7) Chlorine
- (8) Hydrochloric acid
- (9) Hydrocyanic acid
- (10) Magnesium
- (11) Nitric acid and oxides of nitrogen
- (12) Petroleum products (gasoline, fuel, oil, etc.)
- (13) Phosphorus
- (14) Potassium
- (15) Sodium
- (16) Sulphur and sulphur products
- (17) Pesticides (including insecticides, fungicides and rodenticides)
- (18) Radioactive substances, insofar as such substances are not otherwise regulated

l. Special Exceptions and Variances

When development is allowed in the flood plain, either by special exception or variance, the following standards shall be met.

- (1) No development shall be permitted in the floodway that would result in any increase in the 100-year flood elevation.

- (2) No new construction or development shall be located within the area measured fifty (50) feet landward from the top-of-bank of any water course.

(3) Elevation Requirements

(a) Residential Structures

Within any flood plain area, the lowest floor (including basement) of any building shall be at least one and one-half (1.5) feet above the one-hundred year flood elevation. Fully enclosed spaces below the lowest floor shall be prohibited. A document certified by a registered professional engineer or architect, which certifies that the proposed building is in compliance with the elevation requirements shall be submitted to the Zoning Officer.

(b) Non-Residential Structures

(i) Within any identified flood plain area, the lowest floor (including basement) of any non-residential structure, or any substantial improvement to an existing non-residential structure, shall be at least one and one-half (1 1/2) feet above the one hundred (100) year flood elevation, or be designed and constructed so that the space enclosed by such structure shall remain either completely or essentially dry during any flood up to that height. Fully enclosed spaces below the lowest floor shall be prohibited.

(ii) Any non-residential structure, or part thereof, having a lowest floor which is not elevated to at least one and one-half (1 1/2) feet above the one hundred (100) year flood elevation, shall be floodproofed in a completely or essentially dry manner in accordance with the W1 or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the U.S. Army Corps of Engineers (June 1972), or with some equivalent standard. All plans and specifications for such floodproofing shall be accompanied by a statement certified by a registered professional engineer or architect which states that the proposed design and construction are in conformance with the above referenced standards.

(4) Fill

- (a) The cross-sectional area of the flood plain shall not be reduced by more than three (3) percent. The three (3) percent shall be allocated to one and one-half (1.5) percent on either side of the centerline of the watercourse. Such fill shall not cumulatively increase the 100-year flood elevation more than one (1) foot.
- (b) Fill shall consist of soil or small rock materials only; solid waste landfills shall not be permitted.
- (c) Fill shall be compacted to provide the necessary permeability and resistance to erosion, scouring, or settling.

(d) Fill shall be no steeper than one (1) vertical to two (2) horizontal, unless substantiated data justifying steeper slopes are submitted to, and approved by, the Zoning Officer.

(e) Fill shall be used to the extent to which it does not adversely affect adjacent properties.

(5) Drainage

Storm drainage facilities shall be designed to convey the flow of stormwater runoff in a safe and efficient manner. The system shall insure proper drainage along streets, and provide positive drainage away from buildings. The system shall also be designed to prevent the discharge of excess runoff onto adjacent properties.

(6) Water and Sanitary Sewer Facilities and Systems

(a) All new or replacement water and sanitary sewer facilities and systems shall be located, designed and constructed to minimize or eliminate flood damages and the infiltration of flood waters.

(b) Sanitary sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into flood waters.

(c) No part of any on-site sewage system shall be located within any identified flood plain area. No expansion of any on-site sewage system now located either wholly or partially in the flood plain shall be permitted.

(7) Other Utilities

All other utilities such as gas lines, electrical and telephone systems shall be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.

(8) Streets

The finished elevation of all new streets shall be at least one (1) foot above the one hundred (100) year flood elevation.

(9) Storage

No materials that are buoyant, flammable, explosive or, in times of flooding, could be injurious to human, animal, or plant life shall be stored within any identified flood plain area.

(10) Placement of Buildings and Structures

All buildings and structures shall be designed, located, and constructed so as to offer the minimum obstruction to the flow of water and shall be designed to have a minimum effect upon the flow and height of flood water.

(11) Anchoring

(a) All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse, or lateral movement. The zoning officer shall

require the applicant to submit the written opinion of a registered professional engineer that the proposed structural design meets this criteria.

- (b) All air ducts, large pipes, storage tanks, and other similar objects or components located below the one hundred (100) year flood elevation shall be securely anchored or affixed to prevent flotation.

(12) Floors, Walls and Ceilings

- (a) Wood flooring used at or below the 100-year flood elevation shall be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain without causing structural damage to the building.
- (b) Plywood used at or below the 100-year flood elevation shall be of a "marine" or water-resistant variety.
- (c) Walls and ceilings at or below the 100-year flood elevation shall be designed and constructed of materials that are water-resistant and will withstand inundation.
- (d) Windows, doors, and other components at or below the 100-year flood elevation shall be made of metal or other water-resistant material.

(13) Paints and Adhesives

- (a) Paints or other finishes used at or below the 100-year flood elevation shall be of "marine" or water-resistant quality.
- (b) Adhesives used at or below the 100-year flood elevation shall be of a "marine" or water-resistant variety.
- (c) All wooden components (doors, trim, cabinets, etc.) shall be finished with "marine" or water-resistant paint or other finishing materials.

(14) Electrical Components

- (a) Electrical distribution panels shall be at least three (3) feet above the 100-year flood elevation.
- (b) Separate electrical circuits shall serve lower levels and shall be dropped from above.

(15) Equipment

Water heaters, furnaces, air conditioning and ventilating units, and other electrical, mechanical or utility equipment or apparatus shall not be located below the 100-year flood elevation.

(16) Fuel Supply Systems

All gas and oil supply systems shall be designed to prevent the infiltration of flood waters into the system and discharges from the system into flood

waters. Additional provisions shall be made for the drainage of these systems in the event that flood water infiltration occurs.

m. Variances

If compliance with any of the requirements of this Section would result in an exceptional hardship for a prospective builder, developer, or landowner, the Zoning Hearing Board may, upon request, grant relief from the strict application of the requirements. Requests for variances shall be considered by the Zoning Hearing Board in accordance with the following:

- (1) No variance shall be granted for any construction, development, use or activity within any floodway that would cause any increase in the one hundred (100) year flood elevation.
- (2) No variance shall be granted for any of the requirements pertaining to Development Which May Endanger Human Life (subsection k.) or Prohibited Activities in the Flood Plain (subsection j.).
- (3) If granted, a variance shall involve only the least modification necessary to provide relief.
- (4) In granting any variance, the Zoning Hearing Board shall attach whatever reasonable conditions and safeguards it considers necessary in order to protect the public health, safety, and welfare, and to achieve the objectives of this Ordinance.
- (5) Whenever a variance is granted, the Zoning Hearing Board shall notify the applicant in writing that:
  - (a) the granting of the variance may result in increased premium rates for flood insurance;
  - (b) such variances may increase the risks to life and property.
- (6) In reviewing any request for a variance, the Zoning Hearing Board shall consider, but not be limited to, the following:
  - (a) that there is good and sufficient cause;
  - (b) that failure to grant the variance would result in exceptional hardship to the applicant;
  - (c) that the granting of the variance will neither result in an unacceptable or prohibited increase in flood heights, additional threats to public safety, or extraordinary public expense; nor create nuisances, cause fraud on, or victimize the public, or conflict with any other applicable state statute or regulation, or local ordinance or regulation.
- (7) A complete record of all variance requests and related actions shall be maintained by the municipality. In addition, a report of all variances granted during the year shall be included in the annual report to the Federal Insurance Administration.
- (8) Notwithstanding any of the above, however, all structures shall be designed and constructed so as to have the capability of resisting the 100-year flood.



## C. NUISANCE STANDARDS

### Section 508 Noise

- a. Terminology--All technical terminology not defined below shall be defined in accordance with applicable publications of the American National Standard Institute (Acoustical Terminology, ANSI, [S1.1-1960] (R1976) with its latest approved revisions.
- (1) Ambient Sound: The all encompassing noise associated with a given environment being a composite of sound from many sources near and far, excluding the sound source.
  - (2) Continuous Sound: Any sound which is steady state, fluctuating, or intermittent with a recurrence greater than one time in any one hour interval.
  - (3) Impulsive Sound: Sound of short duration, with an abrupt onset and rapid decay and an occurrence of not more than one time in any one hour interval.
  - (4) Land Use: The actual real use of land and buildings regardless of the zoning or other classification attributed to such land and buildings.
  - (5) Normal Residential Activities: Any sound which is generated as a result of an owner or occupier of a residence exercising his normal and usual right to enjoy, maintain, repair, or improve said residence or the real property upon which the residence is located.
  - (6) Sound Source: The noise source which is being evaluated to determine its conformance with permissible sound levels.
- b. Standards--For the purpose of measuring sound in accordance with the applicable provisions of these regulations, test equipment methods and procedures shall conform to the standards as published by the American National Standard Institute (ANSI, Standard Specification for Sound Level Meters, S1.4-1971 and ANSI S1.13-1983, "Standard Methods for the Measurement of Sound Pressure Levels") with its latest revisions or may be done manually as follows:
- (1) Observe the ambient sound on a sound level meter for five seconds and record the best estimate of central tendency of the indicator needle, and the highest and lowest indications.
  - (2) Repeat the observations as many times as necessary to provide that observations be made at the beginning and at the end of a fifteen (15) minute period and that there shall be at least as many observations as there are decibels between the lowest low indication and highest high indication.
  - (3) Calculate the arithmetical average of the observed central tendency indications. This value is the ambient sound level.
  - (4) Observe a sound level meter for five seconds with the sound source operating and record the best estimate of central tendency of the indicator needle, and the highest and lowest indications.
  - (5) Repeat the observations as many times as necessary to provide that observations be made at the beginning and at the end of a fifteen (15)

minute period and that there shall be at least as many observations as there are decibels between the lowest low indication and highest high indication.

- (6) Calculate the arithmetical average of the observed central tendency indications. This is the sound level of the ambient sound plus the sound source (Total Sound Level).
- (7) If the difference between the ambient sound and the sound source is 10dBA or greater, the measured sound level is an accurate measurement of the sound source. This value should be compared to the permitted sound levels in Table 1.
- (8) Due to the logarithmic nature of sound, if the difference between the ambient sound level and the Total Sound Level is less than 10dBA a correction factor shall to be applied. The correction factors are noted in the table below:

<u>Total Sound Level minus ambient sound level</u>	<u>Correction factor to be subtracted from Total Sound Level</u>
10	0
9	1
8	1
7	1
6	1
5	2
4	2
3	3
2	4
1	7

- (9) The Total Sound Level less the correction factor is compared to the permitted sound levels in Table 1.

- c. Sound Levels by Receiving Land Use--No person shall operate or cause to be operated within the Municipality any source of continuous sound in such a manner as to create a sound level which exceeds the limits set forth for the receiving land use when measured at or beyond the property boundary of the receiving land use, during the times specified in Table 1.

**Table 1. Continuous Sound Levels by Receiving Land Use**

<u>Receiving Land Use Category</u>	<u>TIME</u>	<u>Sound Level Limit</u>
I. Residential, Public Space, Open Space, Agricultural, or Institutional	1.) 7:00 a.m. - 10:00 p.m.	55 dBA
	2.) 10:00 p.m. - 7:00 a.m. plus Sundays & Legal Holidays	50 dBA
II. Office, Commercial or Business	1.) 7:00 a.m. - 10:00 p.m.	65 dBA
	2.) 10:00 p.m. - 7:00 a.m. plus Sundays & Legal Holidays	60 dBA
III. Industrial	At all times	70 dBA

For any source of sound which emits an impulsive sound, the excursions of sound pressure level shall not exceed 20 dBA over the maximum sound level limits set forth in Table I above, provided that in no case shall they exceed 80 dBA, regardless of time of day or night or receiving land use, using the "fast" meter characteristic of a Type II meter, meeting the American National Standard Institute specifications S1.4-1971.

d. Specific Prohibitions

The following acts and the causes thereof are declared to be in violation of this Ordinance.

- (1) Operating, playing, or permitting the operation or playing of any radio, television, phonograph, sound amplifier, musical instrument, or other such device between the hours of 10 p.m. and 10 a.m. in such a manner as to create a noise disturbance across a real property line.
- (2) Owning, possessing, or harboring any animal which frequently or for any continued duration howls, barks, or makes any other sound so as to create a noise disturbance across any real property boundary or to constitute a public nuisance.
- (3) Performing any construction operation or operating or permitting the operation of any tools or equipment used in construction, drilling or demolition work between the hours of 7 p.m. and 7 a.m. or at any time on Sundays if such operation creates a noise disturbance across a real property boundary line. This section does not apply to domestic power tools or to vehicles which are duly licensed, registered, and inspected for operation on public highways.
- (4) Repairing, rebuilding, modifying, testing or operating a motor vehicle, motorcycle, recreational vehicle or powered model vehicle in such a manner as to cause a noise disturbance across a real property boundary.
- (5) Operating or permitting the operation of any mechanically powered saw, drill, sander, grinder, lawn or garden tool, or similar device (used outdoors) between the hours of 9 p.m. and 7 a.m. so as to cause a noise disturbance across a real property boundary.

e. Exceptions--The maximum permissible sound levels by receiving land use established in Section 508.c shall not apply to any of the following noise sources:

- (1) The emission of sound for the purpose of alerting persons to the existence of an emergency.
- (2) Work to provide electricity, water, or other public utilities when public health or safety are involved.
- (3) Normal residential activities.
- (4) Licensed game hunting activities on property where such activities are authorized.
- (5) Agriculture.
- (6) Motor vehicle operations on public streets (covered in Pennsylvania Department of Transportation Regulations, Title 67, Chapter 450 governing established sound levels, effective August 27, 1977).

- (7) Public celebrations, specifically authorized by the Municipality.

Section 509 Smoke, Ash, Dust, Fumes, Vapors and Gases

- a. There shall be no emission of smoke, ash, dust, dirt, fumes, vapors or gases which violate the Pennsylvania Air Pollution Control Laws or other regulations of the Pennsylvania Department of Environmental Resources or the U.S. Environmental Protection Agency.
- b. The emission of smoke, ash, dust, dirt, fumes, vapors or gases which can cause any damage to human health, to animals, to vegetation, or to property, or which can cause any soiling or staining of persons or property at any point beyond the lot line of the use creating the emission, is herewith prohibited.

Section 510 Heat

No use shall produce heat perceptible beyond its lot lines.

Section 511 Odor

- a. No use shall emit odorous gases or other odorous matter in such quantities as to be offensive at any point on or beyond its lot lines.
- b. Subsection a. above shall not apply to odors normally created as part of an agricultural or horticultural use except that no animal waste produced off of the property shall be stockpiled unless processed to eliminate all offensive odors.

Section 512 Glare

No use shall produce a strong, dazzling light or a reflection of a strong, dazzling light beyond its lot lines.

Section 513 Vibrations

No vibration shall be produced which is transmitted through the ground and is discernible without the aid of instruments at or at any point beyond the lot lines, with the exception of vibration produced as a result of temporary construction activity.

Section 514 Storage and Waste Disposal

- a. No storage of flammable or combustible liquids in excess of thirty (30) gallons shall be permitted unless written approval has been obtained from the Director of the Pennsylvania State Police, Fire Marshall Division. This requirement shall not apply to domestic fuel oil heating systems.
- b. No materials or wastes shall be deposited upon a lot in such form or manner that they may be transported off the lot by natural causes or forces, nor shall any substance which can contaminate a stream or watercourse or otherwise render such stream or watercourse undesirable as a source of water supply or recreation, or which will destroy aquatic life, be allowed to enter any stream or watercourse. Disposal of sewage, septage or sludge must meet the requirements of the Pennsylvania Department of Environmental Resources.
- c. All materials or wastes which might cause fumes or dust, or which constitute a fire hazard, or which may be edible or otherwise attractive to rodents or insects, shall be stored outdoors only if enclosed in containers adequate to eliminate such hazards.

**Section 515    Radioactivity and Electrical Disturbance**

- a.    Any use which emits dangerous or harmful radioactivity shall be prohibited. If any use is proposed which incorporates the use of radioactive material, equipment, or supplies, such use shall be in strict conformity with Title 25 of the Pennsylvania Department of Environmental Resources Rules and Regulations.
- b.    No use shall produce an electrical disturbance which adversely affects the operation of any equipment beyond its property line. This requirement shall not apply to electronic and electrical equipment which meet the applicable standards of the Federal Communications Commission (FCC), the Underwriters Laboratories (UL), and the Electronics Industries Association (EIA).

## D. PARKING PERFORMANCE STANDARDS

### Section 516 General Regulations Applicable to Off-Street Parking Facilities

- a. Existing Parking--Structures and uses in existence at the date of adoption of this Ordinance shall not be subject to the requirements of this Section so long as the kind or extent of use is not changed, provided that any parking facility now serving such structures or uses shall not in the future be reduced below such requirements.
- b. Change in Requirements--Whenever there is an alteration of a structure or an expansion of a use which increases the parking requirements according to the standards of Section 404, additional parking shall be provided for the alteration or expansion in accordance with the requirements of that section.

Whenever there is a change of use which increases the parking requirements according to the standards of Section 404, the total amount of parking required for the new use shall be provided in accordance with the requirements of that section.

- c. Conflict with Other Uses--No parking area shall be used for any use that interferes with its availability for the parking need it is required to serve.
- d. Continuing Character of Obligation--All required facilities shall be provided and maintained so long as the use exists which the facilities were designed to serve. Off-street parking facilities shall not be reduced in total extent after their provision, except upon the approval of the Zoning Hearing Board as a special exception and then only after proof that, by reason of diminution in floor area, seating area, or change in other factors controlling the regulation of the number of parking spaces, such reduction is in conformity with the requirements of this Ordinance. Reasonable precautions shall be taken by the owner or sponsor of a particular use to assure the availability of required facilities to the employees or other persons whom the facilities are designed to serve. Such facilities shall be designed and used in such a manner as to at no time constitute a nuisance, a hazard, or an unreasonable impediment to traffic.
- e. Joint Use--Two (2) or more uses may provide for required parking in a common parking lot if the total space provided is not less than the sum of the spaces required for each use individually. However, the number of spaces required in a common parking facility may be reduced below this total by special exception if it can be demonstrated to the Zoning Hearing Board that the hours or days of peak parking needed for the uses are so different that a lower total will provide adequately for all uses served by the facility.
- f. Location of Parking Spaces--Required off-street parking spaces shall be located on the same lot or premises with the principal use served. Where a nonresidential use cannot meet this requirement, the required off-street parking may be located within three hundred (300) feet of the premises to which they are appurtenant; however, pedestrian access from the parking facility to the nonresidential use shall be provided.
- g. Fractional Measurements--If in determining the number of required off-street parking spaces there results a fractional space, any fraction up to and including one-half (0.5) shall be disregarded and any fraction over one-half shall require one space.
- h. Maintenance of Parking Areas--For parking areas of three (3) or more vehicles, the area not landscaped and so maintained, including driveways, shall be graded,

surfaced with asphalt or other suitable material, and drained to the satisfaction of the Municipal Engineer to the extent necessary to prevent dust, erosion, or excessive water flow across streets or adjoining property. All off-street parking spaces shall be marked so as to indicate their location. Failure to keep parking areas in satisfactory condition (i.e., free from holes or clearly delineated) shall be considered a violation of this Ordinance.

#### Section 517 Reduction of Non-Residential Parking Requirements

In order to prevent the establishment of a greater number of parking spaces than is actually required to serve the needs of non-residential uses, the Governing Body, after consulting with the Planning Commission and Municipal Engineer, may permit a conditional reduction of parking space if the following conditions are satisfied:

- a. This conditional reduction of parking shall apply to Use D3 Office Park, Use E22 Multiple Commercial Use, Use G3 Wholesale Business, Wholesale Storage or Warehousing and Use G12 Industrial Park. The Governing Body may permit a conditional reduction of parking for other uses where it deems appropriate.
- b. The design of the parking lot, as indicated on the land development plan, must designate sufficient space to meet the parking requirements of this Ordinance. The plan shall also illustrate the layout for the total number of parking spaces.
- c. The conditional reduction shall provide for the establishment of not less than eight (80) percent of the required number of parking spaces, as specified in this Ordinance. This initial phase of the parking provision shall be clearly indicated on the land development plan.
- d. The land development plan shall indicate that the maximum impervious surface ratio will be met if the total number of required parking spaces is provided.
- e. The balance of the parking area conditionally reserved shall not include areas for required buffer yards, setbacks, or areas which would otherwise be unsuitable for parking spaces due to the physical characteristics of the land or other requirements of this Ordinance. This parking area which is reserved shall be located and have characteristics so as to provide amenable open space should it be determined the additional parking spaces are not required. The developer shall provide a landscaping plan for the reserved area with the land development plan.
- f. The developer shall enter into a written agreement with the Governing Body that after eighteen (18) months following the issuing of the last occupancy permit, the additional parking spaces shall be provided at the developer's or owner's expense should it be determined that the required number of parking spaces are necessary to satisfy the need for the particular land development. This agreement shall apply to any future owners of the property.
- g. At the time of the above stated agreement, the developer or owner shall post a performance bond or other securities to cover the cost of the installation of the remaining parking spaces. Eighteen (18) months after the issuance of the last occupancy permit the Governing Body, with recommendations of the Municipal Engineer and the Planning Commission, shall determine if the additional spaces shall be provided by the developer or if the area shall remain as open space.
- g. Land which has been determined and designated by the Governing Body to remain as open space rather than as required parking shall not be used to provide parking spaces for any addition or expansion but shall remain as open space.

Section 518 Design Standards

- a. Parking lots--All off-street parking lots with a capacity of three (3) or more vehicles shall comply with the standards for automobile parking facilities in the Quakertown Area Subdivision and Land Development Ordinance.
- b. Parking areas in villages--All off-street parking areas for nonresidential uses in the VC-1 and VC-2 Districts shall meet the following requirements:
  - (1) All off-street parking spaces shall be located to the side or rear of principal buildings to screen the view of parked cars from the street and to allow the space in front of buildings to be used for pedestrian paths and landscaping. No off-street parking spaces shall be located in front of principal buildings.
  - (2) Plant material sufficient to screen the parking areas from view in the village shall be required.
- c. Parking garages--The design standards specified below shall be required for all parking garages established after the effective date of this Ordinance.

- (1) The minimum dimensions of stalls and aisles shall be as follows:

- (a) Stall width shall be at least ten (10) feet. Parking stalls next to a wall or pillar shall be one (1) foot wider.
- (b) Stall depth shall be at least twenty (20) feet with said dimensions measured on the angle for all angle parking, and twenty-two (22) feet for parallel parking.
- (c) Minimum width of aisles providing access to stalls for one-way traffic only, varying with the angle of the parking, shall be:

<u>Angle of Parking</u>	<u>Minimum Aisle Width</u>
Parallel	12 feet
30 degrees	12 feet
45 degrees	15 feet
60 degrees	18 feet
90 degrees	20 feet

- (d) Minimum width of aisles providing access to stalls for two-way traffic shall be twenty-four (24) feet.
- (2) Parking areas shall be designed to permit each motor vehicle to proceed to and from the parking space provided for it without requiring the moving of any other motor vehicles.
  - (a) The width of accessways shall be:
    - (i) A minimum of twelve (12) feet for one-way use only;
    - (ii) A minimum of twenty-four (24) feet for two-way use;
    - (iii) A maximum of thirty-five (35) feet at the street line and fifty-four (54) feet at the curb line.
  - (b) Parking is prohibited along the length of an accessway.



- (3) There shall be a minimum transition of twelve (12) feet on all ramps where they meet the parking floor.
- (4) Maximum grades: parking floor - five (5) percent  
ramp - ten (10) percent  
ramp transition - five (5) percent
- (5) On circular ramp systems, the minimum outside radius on all turns shall be thirty-four (34) feet.
- (6) Garage entrance
  - (a) There shall be a minimum stacking area beyond the entrance control point for ten (10) cars. The stacking areas shall not be in a public street, nor shall it interfere with vehicular circulation in the vicinity of the common parking garage.
  - (b) The grade of the ramp shall begin at least twenty-five (25) feet beyond the control point.
- (7) Parking garages shall be subject to all minimum building setback requirements of this Ordinance.

Section 519 Off-Street Loading

- a. Off-street loading facilities shall be provided for any use hereafter established or enlarged which customarily receives or distributes goods or materials by trucks.
- b. The off-street loading facilities provided shall be sufficient to accommodate the maximum number of trucks that will normally be loading, unloading or stored on the premises at any one time.
- c. Off-street loading facilities shall be appropriately dimensioned and located with relation to the types of deliveries and pick-ups anticipated. Loading or unloading which takes place on a platform or dock raised to the height of a truck bed shall be designed to conform to the specifications for a loading berth. Loading or unloading which takes place at ground level shall be designed to conform to the specifications for a loading space.
  - (1) Each loading berth shall be at least fourteen (14) feet in width and fifty-five (55) feet in length and have at least fifteen (15) feet of vertical clearance.
  - (2) Each loading space shall be at least twelve (12) feet in width and thirty-five (35) feet in length.
- d. Off-street loading facilities required by this Ordinance shall, in all cases, be on the same lot or parcel of land as the use they are intended to serve.
- e. Off-street loading facilities shall have adequate and unobstructed access to a street, service drive or alley. Such facilities shall have adequate maneuvering space and shall be so arranged that they may be used without blocking or otherwise interfering with the use of automobile accessways, parking facilities, fire lanes or pedestrian ways or backing out onto a street.
- f. The maximum width of driveway openings measured at the street line shall be thirty-five (35) feet; the minimum width shall be twenty (20) feet.

- g. Off-street loading facilities shall be graded, surfaced with asphalt or other suitable material, and drained to the satisfaction of the Municipal Engineer to the extent necessary to prevent dust, erosion or excessive water flow across streets or adjoining property.
- h. All required facilities shall be provided and maintained so long as the use exists which the facilities were designed to serve. Off-street loading facilities shall not be reduced in total extent after their provision, except upon the approval of the Zoning Hearing Board and then only after proof that such reduction is in conformity with the requirements of this Ordinance. Reasonable precautions shall be taken by the owner or sponsor of a particular use to assure the availability of required facilities to the delivery and pick-up vehicles they are designed to serve. Such facilities shall be designed and used in such a manner as to at no time constitute a nuisance, a hazard, or an unreasonable impediment to traffic.
- i. All off-street loading facilities shall be located to the side or rear of the building.
- j. Lighting of off-street loading facilities shall be provided. All artificial lighting used to illuminate loading facilities shall be so arranged that no direct rays from such lighting fall upon any neighboring property or streets.

## E. DIMENSIONAL REQUIREMENTS

### Section 520 Lot Area or Yard Required

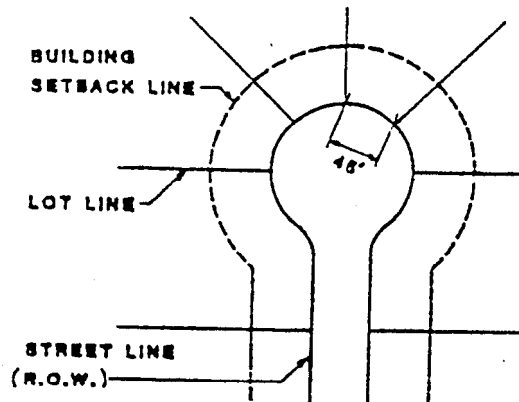
The lot or yard requirements for any new building or use shall not include any part of a lot that is required by any other building or use to comply with the requirements of this Ordinance. No required lot or area shall include any property, the ownership of which has been transferred subsequent to the effective date of this Ordinance, if such property was a part of the area required for compliance with the dimensional requirements applicable to the lot from which such transfer was made.

### Section 521 Minimum Lot Area

Where a minimum lot area is specified, no primary building or use shall be erected or established on any lot of lesser size than as specified in Sections 404 and 502, except as specified in Article VIII Nonconformities.

### Section 522 Minimum Lot Width

- a. Where a minimum lot width is specified, no primary building shall be erected on any part of a lot which has a width less than that specified in Sections 404 and 503, except as specified in Article VIII Nonconformities and as permitted in subsections b and c below.
- b. On lots fronting on the turn-around of a permanent cul-de-sac, the planning commission may permit the minimum lot width to be measured at a greater distance from the street line than the building setback line. The building setback line shall be measured parallel to the street line. However, such lots fronting on the turn-around of a permanent cul-de-sac shall have a minimum straight line distance of forty-five (45) feet between the points of intersection of the lot lines and the street line.



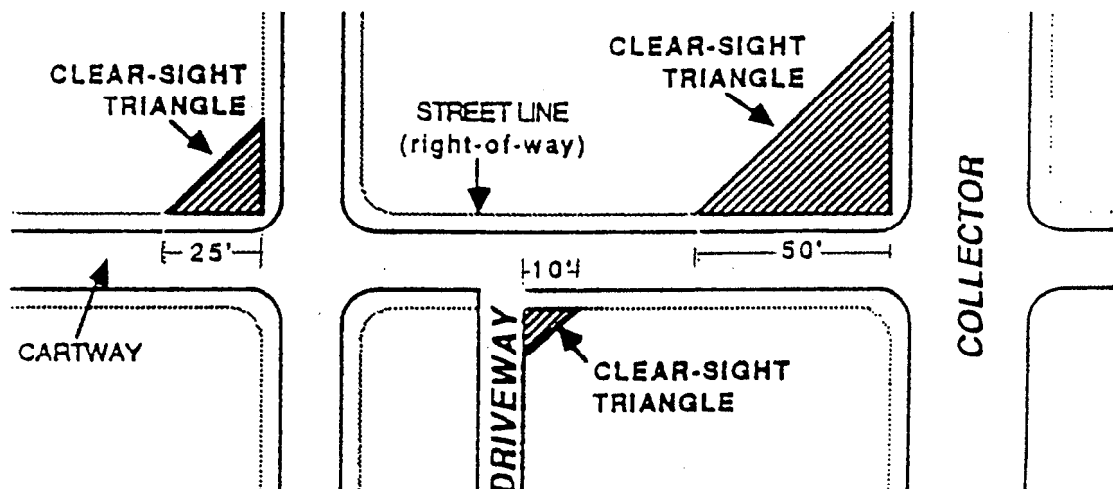
- c. Lane Lot--A parcel of land which does not have the required minimum lot width at the minimum front yard line but has direct access to a public street through a narrow strip of land which is part of the same lot. The lot lines of the narrow portion of the lot (the lane) are parallel or nearly parallel.

Lane Lots may be permitted for tracts of land with limited frontage that would limit the number of lots with the required lot width, but with sufficient area in the rear of the tract for an additional lot or two. Lane lots are not permitted in a subdivision where a street could reasonably be developed to serve the lots with each meeting the minimum lot width requirement.

- (1) A lane lot shall be used for single-family detached dwellings only.
- (2) Each lot shall have a separate lane; however, the use of common driveways shall be permitted.
- (3) If the proposed lane lot is not large enough to further subdivide under the zoning requirements at the time the subdivision is proposed, then the "lane" shall have a minimum width of twenty-five (25) feet at the street line of a public street and shall not narrow to a lesser dimension. However, if the proposed lot is large enough to further subdivide under the zoning requirements at the time the subdivision is proposed, then the minimum lane width shall be fifty (50) feet at the street line and shall not narrow to a lesser dimension.
- (4) The area of the lane shall not be included in the calculation of the minimum lot area.
- (5) The front yard setback for a lane lot shall be a distance equal to the front yard requirement for the district in which the lot is located and shall be measured from the point where the lot first obtains the minimum lot width measurement.
- (6) No more than two (2) lane lots shall be permitted in the subdivision of a tract of land even if lots are subdivided from the tract at different times.
- (7) Only one tier of lane lots shall be permitted on a tract.

Section 523 Traffic Visibility Across Corners

- a. In all districts, no structure, fence, planting or other obstruction shall be maintained between a horizontal plane two (2) feet above curb level and a horizontal plane seven (7) feet above curb level so as to interfere with traffic visibility across the corner within that part of the required front or side yard which is within a horizontal clear-sight triangle bounded by the two street lines (rights-of-way) and a straight line drawn between points on each such line twenty-five (25) feet from the intersection of said lines or extension thereof. When one or both streets which form the intersection are classified as collector or arterial highways, the clear-sight triangle bounded by the two street lines and a straight line drawn between points on such line shall be fifty (50) feet from the intersection of said lines or extension thereof.



- b. At each point where a private accessway intersects a public street or road, a clear-sight triangle of ten (10) feet measured from the point of intersection of the street line and the edge of the accessway shall be maintained within which vegetation and other visual obstructions shall be limited to a height of not more than two (2) feet above the street grade.

**Section 524    Future Rights-of Way**

- a. Future right-of-way widths are established for those roads wherein the existing legal right-of-way is less than that indicated below for the particular class of road. The centerline of each future right-of-way shall be considered the same centerline as the existing right-of-way. The specific classification for each road is shown on the "Map of Highway Classification, Quakertown Area," which accompanies and is hereby made a part of the Ordinance.
- b. Streets and their future rights-of-way shall be as follows:
  - (1) Thoroughfares:
    - (a) Expressway--Future right-of-way shall be as determined by the Pennsylvania Department of Transportation.
    - (b) Arterial Highways--Future rights-of-way shall be a minimum of one hundred twenty (120) feet.
    - (c) Collector Highways--Future rights-of-way shall be eighty (80) feet.
  - (1) Local Streets:
    - (a) Primary Streets--Future rights-of-way shall be sixty (60) feet.
    - (b) Rural Roads and Secondary Streets--Future rights-of-way shall be fifty (50) feet.
    - (c) Marginal Access Street--The PC, FC and SC Districts are intended for development with marginal access streets. Future rights-of-way shall be fifty (50) feet.

**Section 525    Exceptions for Existing Building Alignment**

A proposed building may be constructed nearer to the street than the required minimum front yard depth under the following conditions:

- a. There shall be existing buildings which are nearer to the street than the required front yard depth on the lots on either side of the lot which would contain the proposed building.
- b. The proposed building would front on the same side of the same street in the same block as the existing buildings on lots on either side.
- c. The existing buildings on the lots on either side would be no greater than fifty (50) feet from the proposed building.
- d. The proposed building may be constructed at a front yard depth that is not less than the average of the front yard setbacks of the existing buildings on the lots on either side.

**Section 526    Yard Requirements**

No portion of a building or structure including porches, decks, patios and terraces shall be built within the required minimum front, side or rear yards, except as permitted in Section 404, 527 and 528.

**Section 527    Projections into Yards**

- a. Chimney flues, columns, sills, cornices, gutters and similar features, excluding fire escapes, may project into the required front yard not more than two (2) feet.
- b. Chimney flues, fire escapes, columns, sills, cornices, gutters and similar features may project into required side or rear yards up to one third (1/3) of the width of the projection, but not more than four (4) feet in any case.

**Section 528    Fences and Driveways in Yards**

The provisions of Section 526 shall not apply to fences or hedges less than seven (7) feet above the natural grade. Driveways shall be permitted in front, side and rear yards.

**Section 529    Exceptions to Building Height**

The height of buildings is regulated to prevent loss of life or excessive property damage through the inability of fire equipment to reach upper stories or roofs. Therefore, no building shall exceed the maximum building heights specified in Articles IV and V, except church spires, belfries, silos, water towers, solar energy systems, antennas, television towers, masts, aerials, flagpoles or other structures necessary for providing water, electricity, heat, cooling, radio or similar facilities provided they are not used for human occupancy and are set back one and one-half (1.5) times their height (from ground level to the top of the structure) from any property lines.

## F. OPEN SPACE IN RESIDENTIAL DEVELOPMENTS

### Section 530 General Requirements

- a. Single-family detached clusters, performance standard subdivisions, mobile home parks, and planned residential developments (PRDs) shall meet the open space requirements of this Ordinance. The plan shall contain or be supplemented by such material as required to establish the method by which open space shall be perpetuated, maintained and administered. The approval of the final plan and other materials shall be construed as a contract between the landowner(s) and the municipality, and shall be noted on all applicable deeds.
- b. Open space shall not include land occupied by nonrecreational buildings or structures, roads or road rights-of-way, parking areas for nonrecreational uses or land reserved for future parking areas for nonrecreational uses, stormwater detention or retention basins, or the yards or lots of dwelling units.
- c. A portion of the open space must be set aside as recreation land in accordance with Section 501.c of this Ordinance. Recreation land shall not include natural features with a one hundred (100) percent protection standard nor any portion of those natural features that may not be developed as specified in Section 504 Environmental Performance Standards. Recreation land may contain impervious surfaces. Such impervious surfaces shall be included in the calculation of the impervious surface ratio.

### Section 531 Open Space Designation

All land held for open space shall be so designated on the subdivision and land development plans. Such plans shall contain the following information:

- a. A statement that the open space land shall not be separately sold or further subdivided, except for transfer to the municipality or a conservation organization approved by the municipality. And, a statement that the open space land shall not be further developed, except for recreational facilities.
- b. The use(s) of the open space shall be indicated on the plans. In designating the use(s), one or more of the following classes shall be used:
  - (1) **Lawn:** A grass area with or without trees which may be used by the residents for a variety of purposes and which shall be mowed regularly to insure a neat and orderly appearance.
  - (2) **Natural Area:** An area of natural vegetation undisturbed during construction, or replanted. Such areas may contain pathways. Meadows shall be maintained as such and not left to become weed-infested. Maintenance may be minimal, but shall prevent the proliferation of weeds and undesirable plants such as honeysuckle and poison ivy. Litter, dead trees and brush shall be removed, and streams shall be kept in free flowing condition.
  - (3) **Recreation Area:** An area designated for a specific recreational use in accordance with Section 501.c., including but not limited to tennis courts, basketball courts, swimming pools, playfields and tot lots. Such areas shall be maintained so as to avoid creating a hazard or nuisance, and shall perpetuate the proposed use.
- c. The type of facilities to be provided and the extent of proposed improvements shall be noted on the plans, including a planting plan and schedule.

- d. The plan shall note the method by which the open space shall be owned and maintained in accordance with Section 534.

**Section 532    Design Standards for Open Space**

All open space areas shall meet the following design standards:

- a. Layout of Open Space: The open space shall be laid out in accordance with the best principles of site design, the Quakertown Area Linked Open Space Plan, and any other duly adopted open space plan. It is intended that the open space shall be as close to all residences as possible, with greenways leading to major recreation spaces. Major recreation areas shall be located to serve all residents. The open space is most needed in areas of highest density.
- b. A method of physically delineating private lots from common open space areas shall be provided. Such method may include shrubbery, trees, markers or other method acceptable to the municipality.
- c. Recreation Land: Section 501.c of this Ordinance requires that a portion of the open space be useable for active recreation. The following standards shall apply to the design of the recreation land:
  - (1) Areas set aside for active recreation purposes shall be of adequate size and configuration to accommodate the intended use. The National Recreation and Park Association Standards, standards established by a sports Governing Body, or standards obtained from another credible source shall be utilized to determine the exact spacial and dimensional requirements needed for a specific type of recreation area or facility.
  - (2) The recreation land shall not include narrow or irregular pieces of land which are remnants from lotting or the layout of streets and parking areas.
  - (3) The developer shall be required to improve the recreation land so that it is useable for the intended activity, including necessary facilities and equipment. The proposed improvements, including facilities and equipment, shall be acceptable to the municipality.
  - (4) The slope of recreation land to be used for active play areas shall not exceed two (2) percent. Compliance with this slope requirement may be achieved through regrading, in keeping with applicable natural resource protection standards.
  - (5) At least one side of the recreation land shall abut a street for a minimum distance of fifty (50) feet.
  - (6) Recreation land shall not be traversed by utility easements unless said utilities are placed underground and no part of them or their supportive equipment protrudes above ground level.
- d. Open space shall be freely accessible to all residents of the development.

**Section 533    Open Space Performance Bond**

Designated planting and recreation facilities within the open space areas shall be provided by the developer. A performance bond or other securities may be required to cover costs of installation in accordance with the provisions of the subdivision and land development ordinance.



## Section 534 Ownership of Open Space

Any of the following methods may be used to preserve, own, or maintain open space: condominium, homeowners association, dedication in fee simple, dedication of easements, or transfer to a private conservation organization. The following specific requirements are associated with each of the various methods.

- a. **Condominium:** The open space may be controlled through the use of condominium agreements. Such agreements shall be in conformance with the Pennsylvania Uniform Condominium Act of 1980, as amended. All open space land shall be held as "common element." Such land shall not be eligible for sale to another party except for transfer to another method of ownership permitted under this section, and then only where there is no change in the open space ratio.
- b. **Homeowners Association:** The open space may be held in common ownership by a homeowners association. This method shall be subject to all of the provisions for homeowners associations set forth in Article VII of the Pennsylvania Municipalities Planning Code.
- c. **Fee-simple Dedication:** The municipality may, but shall not be required to, accept any portion or portions of the open space provided the following conditions are met:
  - (1) Such land shall be freely accessible to the public.
  - (2) There shall be no cost to the municipality involved.
  - (3) The municipality agrees to and has access to maintain such lands.
  - (4) The open space shall be in an acceptable condition to the municipality at the time of transfer with regard to size, shape, location and improvement.
- d. **Dedication of Easements:** The municipality or county may accept, but shall not be required to accept, easements to any portion or portions of the open space. In such cases, the land remains in the ownership of the individual, condominium, or homeowners association while the easements are held in public ownership. The county shall accept the easements only in accordance with the provisions of Act 442 and county plans. The municipality may accept such easements as it sees fit. In either case, there shall be no cost to the county or municipality for acquisition or maintenance. The municipality may require this method where it seems this is the most appropriate way of preserving land in open space.
- e. **Transfer to a Private Conservation Organization:** With permission of the municipality, an owner may transfer either the fee simple title, with appropriate deed restrictions running in favor of the municipality, or easements, to a private, nonprofit organization, among whose purposes is to conserve open space land and/or natural resources provided that the following conditions are met:
  - (1) The organization is acceptable to the municipality and is a bona fide conservation organization with perpetual existence.
  - (2) The conveyance contains appropriate provision for proper reverter or re-transfer in the event that the organization becomes unwilling or unable to continue carrying out its functions.
  - (3) A maintenance agreement acceptable to the municipality is entered into by the developer and the organization.

f. Deed Restrictions

- (1) Buffer yards as required by this Ordinance may be held in the ownership of the individual property owners of residential developments. This form of ownership of open space will be subject to the following requirements:
  - (a) This form of ownership will be limited to buffer yards.
  - (b) It may be used only if approved by the municipality.
  - (c) Restrictions meeting municipal specifications must be placed in the deed for each property that has buffer yards within its boundaries. The restrictions shall provide for the continuance of the buffer yard in accordance with the provisions of this ordinance.
  - (d) It will be clearly stated in the individual deeds that the maintenance responsibility lies with the individual property owner.
- (2) For nonresidential uses, buffer yards and areas of natural resource features may be held with the ownership of the entire parcel provided the buffer yards and natural features are deed restricted to ensure their protection and continuance.
- (3) In the case of residential developments where all of the units are rental, the open space land may be in the same ownership as that of the development provided that the land is deed restricted to ensure its protection and continuance and that a maintenance agreement suitable to the municipality is provided.
- (4) For any of the above options, the municipality may accept, but is not required to accept, an easement to the open space land in the development.

Section 535 Costs

Unless otherwise agreed to by the municipality or county, the cost and responsibility of maintaining open space shall be borne by the property owner, condominium association, or homeowners association. If the open space is not properly maintained, the municipality may assume responsibility of maintenance and charge the property owner, condominium association, or homeowners association a fee which covers maintenance costs, administrative costs, and penalties as stipulated in this Ordinance.