

**BOROUGH OF PENNDEL
COUNTY OF BUCKS
COMMONWEALTH OF PENNSYLVANIA**

ORDINANCE #2008-2

AN ORDINANCE OF THE BOROUGH OF PENNDEL, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA AMENDING THE ZONING ORDINANCE OF THE BOROUGH OF PENNDEL BY (1) ADDING THE DEFINITIONS FOR SMART GROWTH, LEED, SUSTAINABLE DEVELOPMENT, AND GREEN DESIGN TO THE ZONING ORDINANCE LIST OF DEFINITIONS AND (2) CREATING THE PENNDEL BOROUGH TRANSIT ORIENTED DEVELOPMENT (TOD) OVERLAY DISTRICT AS AN OVERLAY ZONING DISTRICT WITHIN THE BOROUGH AND PROVIDING REGULATIONS FOR SAID DISTRICT AND (3) CHANGING THE FLOOR AREA RATIO AND MAXIMUM IMPERVIOUS SURFACE RATIO IN THE RC AND SC ZONING DISTRICTS AND (4) ADDING PROCEDURES FOR THE GRANTING OF A CONDITIONAL USE.

WHEREAS, the Council of the Borough of Penndel, County of Bucks, and Commonwealth of Pennsylvania is empowered to enact, amend and repeal zoning ordinances pursuant to the Act of December 21, 1988, P.L. 1329, No. 170, Sections 45 and 53 P.S. Section 10601 et seq.; and

WHEREAS, the Council of the Borough of Penndel, County of Bucks, Commonwealth of Pennsylvania, in order to encourage development and redevelopment of properties located near or in the vicinity of the SEPTA Langhorne Commuter Rail Station, desires to amend the zoning ordinance of the Borough of Penndel to create a Transit Oriented Development (TOD) Overlay District; and

WHEREAS, the Council of the Borough of Penndel has determined that it is necessary and appropriate to amend the Table of Dimensional Requirements of the

Penndel Borough Zoning Ordinance by amending the floor area ratio and maximum impervious surface ratio in the RC and SC zoning districts; and,

WHEREAS, the Council of the Borough of Penndel, has determined that it is necessary and appropriate to add the definitions of Smart Growth, Sustainable Development, LEED, and Green Design, and the Main Street Program, to the list of definitions in the Zoning Code; and,

NOW THEREFORE, the Council of the Borough of Penndel, Bucks County, Pennsylvania, does hereby ordain and enact the following:

Section I. The Penndel Borough Zoning Ordinance is hereby amended by the addition of the following terms and definitions to Article II, Section 124-4:

Smart Growth - an initiative that seeks to prevent urban sprawl by encouraging revitalization of older communities and neighborhoods to take advantage of in-place infrastructure, mass transit, with new and mixed residential, commercial and retail land uses.

Sustainable Development - sustainable development design preserves natural resources, utilizes rainwater collection, provides more open spaces, reduces energy demand and water shortages, and is environmentally-friendly.

LEED® - The most recent edition of the Leadership in Energy and Environmental Design Green Building Rating System™, as developed and updated by the U.S. Green Building Council.

Green Design - the integration of landscaping and natural environment with development projects in a manner that preserves natural resources, reduces energy demand and water shortages, and is environmentally friendly.

Main Street Program - A preservation-based revitalization program administered nationally by the National Trust for Historic Preservation and in the Commonwealth of Pennsylvania by the Pennsylvania Downtown Center. The Main Street Four-Point Approach™ is a comprehensive strategy that is tailored to meet local needs and opportunities. It encompasses work in four distinct areas — Design, Economic Restructuring, Promotion, and Organization — that are combined to address all of the commercial district's needs.

Section II. The Penn del Borough Zoning Ordinance is hereby amended by the addition of Article XIII that shall be titled the "Penn del Borough Transit Oriented Development (TOD) Overlay District" as follows:

Article XIII

Penn del Borough Transit Oriented Development (TOD) Overlay District

Section 124-75. Title. This Article shall be known as the "Penn del Borough Transit Oriented Development (TOD) Overlay District".

Section 124-76. Declaration of Legislative Intent: To guide redevelopment of commercial areas in accordance with the findings, recommendations, goals, objectives, design guidelines and themes, policies, and purposes of the following documents which form the basis for this TOD Overlay District Ordinance: *February 2004 Assessment of Land Use and Transportation Solutions for the Route 413/513/1 Corridor, 2005 Penn del Business District Revitalization Plan, 2005 Penn del Borough Comprehensive Plan, 2006 Design Standards and Guidelines, 2007 Penn del Renaissance Plan for the Business District, and the 2007 TCDI (Transportation and Community Development Initiative Program) Project's Safety and Aesthetic Enhancements*, Therefore, it is hereby declared to be the intent of this Article, the Penn del Borough Transit Oriented Development Overlay District (TOD), located in a portion of Penn del Borough and as defined in Section 124-77, to:

- A. Encourage and promote creative and flexible development, redevelopment and revitalization in the vicinity of the Southeastern Pennsylvania Transportation Authority's (SEPTA) Langhorne Station, where rail and bus mass transit connect.

- B. To serve the needs of residents, the business community, visitors and commuters by providing for a variety of retail, commercial, office and personal services in either an individual or mixed use configuration, including higher density residential uses, to support a more transit-oriented development pattern along the Route 413, Route 513 and Business Route 1 corridors.
- C. Provide multi-modal transportation linkages for bus, rail, cars, walking, and biking in a safe, pleasing, and efficient environment along these roadway corridors and intersections within the TOD area.
- D. Foster economic viability, pedestrian activity and a sense of community identity and place along the Routes 413/513/1 corridors, while being consistent with the spirit and intent of Smart Growth.
- E. Create a *Sense of Place* within the TOD area, the Borough and the region-at-large.
- F. Recognize the importance of public transit as a viable alternative to the automobile by permitting appropriate densities and a mix of land uses within walking distance of transit stops, while, at the same time, providing sufficient off-street parking within and adjacent to the TOD.
- G. Allow development that decreases auto dependency and mitigates the effects of congestion and pollution, so as to promote and protect the health, safety and general welfare of the citizens of the Borough and surrounding/adjacent communities, while enhancing the economic stability of the Borough by promoting the attractiveness, convenience and stability of this region and specifically the TOD area of the Borough.

- H. Encourage mixed-use real estate development oriented to the rail station and transit stops, thus encouraging transit ridership.
- I. Promote well-integrated residential, commercial, office and civic development in close proximity to local and regional transit facilities.
- J. Support new development that includes diverse pedestrian-compatible, higher density, transit-friendly designs and expands economic development opportunities. Minimize distances between destinations and require linked sidewalks and pedestrian-oriented access with provisions for bicycles and bicycle parking.
- K. Encourage and provide development enhancement bonuses for:
 - a. the creation of land uses in keeping with the character, scale and architecture of the neighborhood, while using development design guidelines to promote compatibility of uses and stimulate pedestrian activity, structured and shared parking, and open spaces, in concert and harmony with the TCDI project and other projects as applicable at the time of developer application, plan reviews and approvals; and
 - b. Green Design, LEED®, and Sustainable Development measures for buildings, streets and drainage, and energy-efficient design.
- L. Maintain a scale, balance and variety of commercial, institutional, and residential uses.
- M. Promote the livability and identify of the TOD area by providing for dwellings, shops and workplaces in close proximity to each other.
- N. Enhance the visual character and physical comfort of the district by minimizing pedestrian and vehicular conflicts and encouraging the renovation and erection

of buildings and storefronts that provide direct connections to the street and sidewalks.

- O. Discourage the dependence on automobile use, thereby reducing traffic congestion and promoting alternative modes of traffic.
- P. Encourage the development of shared parking and attractive, convenient off-street parking facilities to reduce on-street congestion and facilitate vehicular and pedestrian circulation.
- Q. Encourage the establishment of unique building groups, abundant landscaping multi-use common spaces, accessibility, varied-density housing, niche vending: farmers' markets, artisan galleries, and cultural attractions - all within the purposes and guidelines as advanced by the Main Street Program Approach to urban redevelopment and revitalization, as and where applicable.
- R. Avoid the situation where one or two permitted land uses dominate any part of the TOD area by encouraging and seeking certain land uses, but not solely limited to the following land uses, subject to the review and considerations established in this Article:
 - 1. Personal service establishments, day care, postal services, convenience stores, eateries, floral shops, coffee shops, telecommuting centers, mixed with parking and residential development units on 2nd and 3rd floor levels, or above, and consistent with other requirements and allowances of this Article.
 - 2. Offices of professionals such as accountants, physicians and dentists, pharmacies, and financial institutions.

3. It is envisioned that these uses would be part of structures and not freestanding or stand-alone uses, unless otherwise allowed.
- S. In order to inter-relate the mass transit and other uses in the TOD Overlay District, orient buildings toward the stop or station, transit customer parking areas and pedestrian ways and away from vehicular driveways, loading areas and employee parking areas. Cluster buildings to encourage convenient pedestrian access and to minimize walking distances, while allowing for adequate air, landscaping, and light.
 - T. Encourage use of the type and form of architecture described in the Borough Design Guidelines, stressing consistency with: the design guidelines and themes of the 2007 TCDI project for streetscapes, as well as provisions of the 2007 Pennel Renaissance Plan for the Business District, in the design of the buildings, structures, and site amenities in the TOD area.

Section 124-77. Defining TOD District Boundaries. To implement the Declaration of Legislative Intent defined in Section 124-76, the boundaries of the Transit Oriented District (TOD), an overlay of existing zoning districts in the Borough of Pennel, shall be delineated as shown on the Plan attached hereto and identified as Exhibit A.

Section 124-78. Development Plan Modifications and Flexibility. It is the intent of the TOD Overlay District Ordinance to provide for flexibility in the review and execution of proposed subdivision and/or land development plans in order to accomplish the overall intent of the TOD Overlay District Ordinance in the most expeditious manner possible by the use of incentives, and where permissible, waivers of the Subdivision and Land

Development Ordinance (SALDO) standards, with proper cause, to obtain the best possible design in keeping with the purpose of this Ordinance as herein stated.

Applicants for land development approval shall identify in a report or other narration format the extent to which the plan complies with the stated intent and purposes of this article and the goals, objectives, recommendations and design guidelines of this TOD District's base documents cited below:

1. *February 2004 Assessment of Land Use and Transportation Solutions for the Route 413/513/1 Corridor,*
2. *2005 Penn del Business District Revitalization Plan,*
3. *2005 Penn del Borough Comprehensive Plan,*
4. *2006 Design Standards and Guidelines,*
5. *2007 Penn del Renaissance Plan for the Business District*
6. *2007 TCDI Project's Safety and Aesthetic Enhancements*

Section 124-79. Permitted Uses. The following uses shall be permitted by right, in the TOD Overlay District :

- A. Use 12. dwellings in combination such as:
 1. Residential uses located above non-residential uses.
 2. Dwelling units for artisans, professionals and service providers which include work areas. The work area may not exceed 50% of the floor area of the dwelling unit.
- B. Use 17. Day care facilities.
- C. Use 21. Nursing home, including housing for the elderly, retirement community, or assisted living arrangement in a multi-unit facility.

- D. Use 24. Professional Services.
- E. Use 25. Business Services, financial institutions.
- F. Use 26. Governmental business services including post office.
- G. Use 27. Health Services
- H. Use 29. Professional or trade school.
- I. Use 30. Retail Shop
- J. Use 32. Personal Service
- K. Use 33. Repair Service.
- L. Use 34. Eating Place when part of a mixed use development.
- M. Hotels as permitted by Use 38.
- N. Use 46. Rail station, railway service.
- O. Mixed-use development including the uses permitted in this District. Mixed-use development shall contain no less than 3 permitted uses on the site or within structure(s) on-site.

Section 124-80. Conditional Uses. The following uses are permitted, when authorized by the Council of the Borough of Penndel as a conditional use following review and recommendation by the Penndel Borough Planning Commission:

- A. Use 39. Parking Garage in a building 2 or more stories in height where one or more stories are used for vehicle parking and the following conditions are satisfied:
 - 1. Architectural facades shall be used to disguise the use. The primary front facade of a parking structure/garage visible from a public or private street or pedestrian way shall be pedestrian oriented and scaled. Building design shall

be complementary to nearby active commercial facades, in terms of building material and architectural pattern.

2. The structure shall not provide direct vehicular access on the following major state roadways: Business Route 1 (Lincoln Highway), Durham Road, and Bellevue Avenue. Vehicular access must be to roads of lesser classification or must be located at least 50 feet from a major roadway on a driveway exterior to the structure.
3. The applicant shall demonstrate that points of pedestrian access are convenient to anticipated and desirable pedestrian patterns in and around the proposed structure.
4. Pedestrian safety and security shall be addressed to the satisfaction of Borough Council. Safety and security features may include walkway bridges, direct connections to other buildings, glass outside walls on stairwells, glass-backed elevators, video surveillance and similar security features.
5. The structure shall be provided with energy efficient lighting, shielded to prevent undesirable lighting of adjacent structures or property.

B. Reserved

Section 124-81. Development Requirements and Regulations. In the TOD Overlay District, the following development regulations shall apply, regardless of the regulations of the underlying zoning district(s):

- A. Minimum Tract Size - the following minimum tract sizes shall apply regardless of the underlying zoning district:

1. The minimum tract size for a single use in the TOD shall be 20,000 square feet.
2. The minimum tract size for a mixed-use development shall be one (1) acre.

B. Minimum Frontage. The minimum frontage in the TOD shall be one hundred (100) feet, measured along the street line.

C. Minimum Building Setbacks. Building setbacks shall be five (5) feet from the street line, and fifteen (15) feet from any adjoining property line. However, where the applicant submits proof, in a form acceptable to the Borough Solicitor, of an agreement between adjoining land owners to establish a zero-lot line development plan with shared parking and access ways along a side or rear property line, the adjoining property line setback may be reduced to zero.

D. Maximum Building Setbacks. A minimum of seventy-five (75) percent of the façade of any building along a public street must be constructed no more than 20 feet from the street line.

E. Transition Buffer Area. Where a TOD Overlay District commercial, office, and/or retail use, or mixed-use project, abuts a residential use in a residential zoning district located outside the boundaries of the mapped TOD overlay District, the building shall be set back a minimum of fifty (50) feet from the zoning district boundary. A fifteen (15) foot Landscaped Buffer shall be provided within the 50-foot setback, in accordance with the requirements of 124-30.H. Vehicle parking or access drives may be located in the Transitional Buffer, provided there is not more than one vehicular entrance and one vehicular exit through the Landscaped Buffer to any street.

- F. Minimum Parking Setback. No parking will be allowed between the building and the street line, except where permitted as part of a transitional buffer per section 124-82.E. No parking area shall be located closer than ten (10) feet to any side or rear property line. Shared parking and access ways are encouraged and permitted if the applicant submits proof, in a form acceptable to the Borough Solicitor, of a shared access and parking agreement with an adjacent landowner and in such case, the parking setback may be reduced from ten (10) feet to zero.
- G. Parking Spaces. Required parking for new and redeveloped structures and/or sites shall be calculated by using existing regulations of the Borough Code unless modified under section 124-83.
- H. Off-Site Parking and Shared Parking. Off-site parking and Shared Parking are permitted in the TOD District. Off-site parking must be within 500 feet of the mixed-use development as measured along a pedestrian route continually accessible to the public, measured from lot line to lot line. Documentation of an agreement with the parking facility owner, in a form acceptable to the Borough Solicitor, must be submitted prior to plan approval.
- I. On-Street Parking. Legal on-street parking along the lot's street frontage may be counted toward the development's minimum parking requirements. On-street parking spaces shall be at least 8' x 22' in dimension. Each such on-street public parking space may only be counted once.
- J. Maximum Impervious Coverage. The total impervious surface area of a tract shall not exceed Sixty five percent (65%).
- K. Maximum Height. The maximum height for any use in the TOD shall not exceed forty-five (45) feet or four (4) stories, whichever is lower.

- L. Maximum Floor Area. A maximum of fifteen thousand square feet (15,000 square feet) may be devoted to any single occupancy.
- M. Maximum Density. The maximum allowable density shall be 15 dwelling units per acre.
- N. Highway Access. Applicant shall demonstrate that the number of curb cuts and access ways are the minimum necessary for the proposed development.
- O. Pedestrian Ways. Whenever and wherever possible, every effort shall be made to provide direct connections to the SEPTA Langhorne commuter rail station and bus stops from the proposed development and to coordinate access ways and pedestrian paths with existing and planned pedestrian/bicycle facilities serving a broader area and minimizing pedestrian/biking and vehicular traffic conflicts. The primary pedestrian access point to buildings shall face the street line rather than onto rear or side parking lots or alleys. Secondary access points may be located along other facades.
- P. Landscaping. Parking lots shall be landscaped with trees and shrubs to reduce the visual impact of glare and headlights, to delineate all driving lanes and to distinguish rows of parking, and function as streetscapes components and buffers as may be required herein and consistent with the regulations and requirements established by the Pennel Borough Subdivision and Land Development Ordinance and the design themes of the 2007 TCDI streetscapes plan.
- Q. Building Coverage. Site building coverage shall not exceed 65%, unless modified under section 124-83 herein.
- R. Floor Area Ratio. Site floor area ratio shall not exceed 150%, unless modified under section 124-83 herein.

Section 124-82. Development Enhancements. Proposed developments that provide rail or transit-oriented facilities or amenities may be entitled to a development enhancement bonus. Enhancement facilities or amenities include, but are not limited to, the following;

- A. Transit customer parking areas,
- B. Bus pull-offs,
- C. Pedestrian or bus stop shelters,
- D. Dedication of land for roadway realignments and/or intersection reconfigurations deemed consistent with revitalization and redevelopment plans for the entire district,
- E. Installation of sidewalks, bikeways, landscaping, curbing, pavement and stormwater management abutting the site and within the streets/highways rights-of-way to serve the needs of those using these features so as to facilitate safe and efficient vehicular and pedestrian circulation, access and means,
- F. Dedication of land, construction of or capital contribution for a municipal parking lot,
- G. Improvements to on-street parking, such as concrete curb configured to protect the on-street spaces,
- H. Shared parking where land uses on adjacent lots within the TOD District create parking areas with common access ways and pedestrian ways,
- I. Dedication of or provision of lands to be landscaped for public purposes or development,
- J. Inclusion and use of "Green Design" and/or "Sustainable Development" criteria such as vegetated green roofs and terraces for buildings,
- K. Preservation and protection of historic structures and sites which may be re-used or adapted pursuant to the Federal and State regulations for structures and places of historic significance,
- L. Acceptable allowances for future land uses and configurations as presented in the Pennel Renaissance Plan for the Business District as accepted by Borough Council,

- M. Provisions and agreement to work with Borough Officials to assist in the maintenance of streetscapes improvement amenities that adjoin or abut the site, either off-site or within public rights-of-way,
- N. Bicycle Parking. Provide bicycle facilities up to a maximum of ten (10) spaces, as follows:
 - 1. For residential uses, there shall be one (1) bicycle space or locker for each three (3) dwelling units or portion thereof
 - 2. For commercial/retail/office uses, there shall be one (1) bicycle space or locker for every twenty automobile parking spaces or fraction thereof.Bicycle space dimensions and criteria shall be as detailed in Appendix "A" or similar standards deemed acceptable by the Borough Engineer.

124-83. Development Bonus Standards. The individual or multiple bonuses are awarded by Borough Council to a development proposal in the TOD, depending on the extent, quantity and quality of the transit-oriented improvements provided. The proposed transit oriented amenities shall be identified by the land development applicant and subsequently specified in writing at the time of approval of the development.

The following development bonuses may be awarded by Borough Council and used for a specific project in the TOD Overlay District, where Development Enhancements, set forth in Section 124-82 above, are included in the proposed development, as follows:

- A. Floor Area Ratio – may be increased incrementally from 150% up to 200%.
- B. Where a project uses "Green Design" and Sustainable Development criteria and provides for roof-top and/or terrace landscaping, up to 50% of the total area of green roof or terrace landscaping may be subtracted from the impervious surface when computing the impervious surface ratio.
- C. Site building coverage may be increased incrementally from 65% up to 75%.

- D. Maximum density may be increased incrementally from 15 to 30 dwelling units per acre.
- E. Calculation of site parking requirements using the following process:
1. First, compute the maximum number of parking spaces required for each individual Use within the Mixed-Use structure using the Single Use Peak Hour Demand values in TABLE 1.
 2. Next, calculate the number of spaces needed for each Use for each peak hour by multiplying the maximum by the percentage of Peak Demand for Key Times values.
 3. Next, add the computed values for each Use during each Peak Demand Time to determine the number of spaces required for the Mixed-Use structure for each peak hour.
 4. The required number of parking spaces for the development is the highest total hour figure for the Mixed-Use development.

Table 1: Required Parking

Land Use	Single Use Peak Hour Demand (spaces)	Percentage of Peak Demand for Key Times									
		Weekdays					Saturday				
		10am	1pm	5pm	8pm	10pm	10am	1pm	5pm	8pm	10pm
Retail	1/400 sq.ft.	50	75	75	65	25	50	100	90	65	35
Office	1/400 sq.ft.	100	90	50	5	5	15	15	5	0	0
Restaurant	8/1000 sq.ft.	20	70	70	100	95	5	45	60	100	95
Fitness Center	5/1000 sq.ft.	10	80	100	30	10	60	80	60	30	10
Indoor Recreational Facility	5/1000 sq. ft.	70	75	100	100	40	100	100	100	100	90
Hotel	1/room	45	30	60	90	100	40	30	60	90	100
Residential	1.5/ units*	85	80	85	95	100	70	65	75	95	100

1. Source of Peak Demand Percentages is the Urban Land Institute's Shared Parking Standards.

Section III. The Penn del Borough Zoning Ordinance is hereby amended by changing the

Table of Dimensional Requirements as follows:

- A. Floor Area Ratio in the RC and SC Zoning District shall be changed from 50% to 100%
- B. Maximum Impervious Surface Ratio in the I Zoning District shall be changed from 75% to 65%.
- C. Building coverage in RC and SC Zoning Districts shall be reduced from 65% to 50%

Section IV. Section 124-30.H. of the Penn del Borough Zoning Ordinance is hereby amended by adding "TOD Transit-Oriented Development" to the list of districts in which buffer yards are required.

Section V. The Penndel Borough Zoning Ordinance is hereby amended by the addition of Section 124-67.1 as follows:

Section 124-67.1 Granting of Conditional Uses.

- A. Where the Council, in this chapter, has stated conditional uses to be granted or denied by Council pursuant to express standards and criteria, the Council shall hold hearings on and decide requests for such conditional uses in accordance with such standards and criteria. In granting a conditional use, Council may attach such reasonable conditions and safeguards, in addition to those expressed in this chapter, as it may deem necessary to implement the purposes of this chapter and the Pennsylvania Municipalities Planning Code.
- B. General requirements and standards applicable to all conditional uses. Council shall grant a conditional use only if it finds adequate evidence that any proposed use submitted for a conditional use will meet all of the following general requirements as well as any specific requirements and standards listed for the proposed use. The council shall among other things require that any proposed use and location be:
1. In accordance with the Penndel Borough Comprehensive Plan and consistent with the spirit, intent and Purposes of this chapter.
 2. In the best interests of the Borough, the convenience of the community, and the public welfare.
 3. Suitable for the property in question and designed, constructed, operated and maintained so as to be in harmony with and appropriate in appearance with the existing or intended character of the general vicinity.
 4. In conformance with all applicable requirements of this chapter.

C. Applications for a conditional use.

1. Applications for conditional uses shall include a zoning permit application with all information required herein and a statement with any supporting evidence regarding the merits of the proposed use at the proposed location and how the proposal complies with the general and specific requirements of this chapter.
2. Subsequent to the granting of a conditional use, applicant must obtain a zoning permit within 30 days. If application is not made within this time period, such conditional use shall be considered null and void. The Council may impose whatever conditions regarding layout, circulation, and performance it deems necessary to insure that any proposed development will secure substantially the objectives of this chapter.

Section VI. Whenever the requirements of this Ordinance are in conflict with other requirements of the Codified Ordinances of the Borough of Penndel, the most restrictive, or those imposing the higher standards shall govern.

Section VII. The provisions of this Ordinance are severable. If any section, clause, sentence, part or provision thereof shall be held illegal, invalid or unconstitutional by any court of competent jurisdiction, such decision of the court shall not affect or impair any of the remaining sections, clauses, sentences, parts or provisions of this Ordinance. It is hereby declared to be the intent of the Council of the Borough of Penndel that this Ordinance would have been enacted if such illegal, invalid or unconstitutional section, clause, sentence, part or provision had not been included herein.

February 27, 2008

Section VIII. This Ordinance shall become effective on the date adopted by the Council of the Borough of Penndel.

ADOPTED by the Council of the Borough of Penndel on this _____ day of _____, 2008.

Council of the Borough of Penndel

By: _____
W. Ward McMasters, President

Attest: _____
Marie Serota, Secretary/Treasurer

Approved by Mayor Michael Sodano on this _____ day of _____, 2008.

Michael Sodano, Mayor

APPENDIX A

Excerpted from:

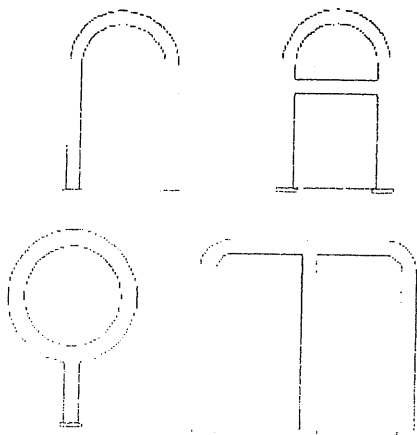


BICYCLE PARKING AND STORAGE

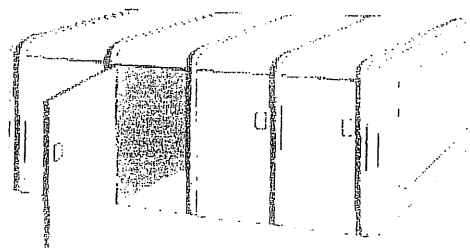
Bicycle parking can be provided using three types of devices (see figure 17-2):

1. **Bicycle racks.** These are open-air devices to which a bicycle is locked and work well for short-term parking.
2. **Bicycle lockers.** These are stand-alone enclosures designed to hold one bicycle per unit and are a good choice at sites that require long-term parking for a variety of potential users.
3. **Bicycle lock-ups.** These are site-built secure enclosures that hold one or more bicycles and are often used for long-term parking for a limited number of regular and trustworthy users.

Figure 17-2. Illustrations and photo. Examples of common bicycle parking devices.



Bicycle Racks



Bicycle Locker



Bicycle Lock-up
(Note cage enclosure)

General recommendations:

- **Visibility:** Cyclists should easily spot short-term parking when they arrive from the street. A highly visible location discourages theft and vandalism. Avoid locations "off on the side," "around the corner" or in un-supervised parking structures or garages.
- **Access:** The parking area should be convenient to building entrances and street access, but away from normal pedestrian and auto traffic. Avoid locations that require bicycles to travel over stairs.
- **Security:** Surveillance is essential to reduce theft and vandalism. For security, locate parking within view of passersby, retail activity, or office windows. Better yet: officially assign building security, a parking lot attendant or other personnel to watch for suspicious behavior.
- **Lighting:** Bicycle parking areas should be well lit for theft protection, personal security and accident prevention.
- **Weather protection:** Whenever possible, protect bicycle parking area from weather. An existing overhang or covered walkway is recommended. Alternatively, construct a canopy or roof—either freestanding or attached to an existing building.

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- **Avoid conflict with pedestrians:** Locate racks so that parked bicycles don't block the pedestrian path. Select a bike rack with no protruding bars that could trip or injure cyclists or pedestrians. Very low bar-type racks can be a hazard to pedestrians and are not recommended.
- **Avoid conflict with automobiles:** Separate bicycle parking, auto parking, and road areas with space and a physical barrier. This prevents motor vehicles from damaging parked bicycles and keeps some thieves at a distance. Most professional bike thieves use vans or similar vehicles to hide their activities and make a getaway with their loot concealed. The closer bicycle parking is to automobile parking, alleys, roads, etc., the better the opportunity for a bike thief.

Dimensional recommendations:

- Racks should be located within 15.2 m (50 ft) of building entrances (where bicyclists would naturally transition into pedestrian mode).
- Racks should be installed in a public area within easy viewing distance from the main pedestrian walkway, usually on a wide sidewalk with 1.5 m (5 ft) or more of clear sidewalk space remaining (a minimum of 61 cm (24 in) of clear space from the parallel wall and 76 cm (30 in) from the perpendicular wall).
- Racks are placed to avoid conflicts with pedestrians. They are usually installed near the curb and at a reasonable distance from building entrances and crosswalks.
- Racks can be installed at bus stops or loading zones only if they do not interfere with boarding or loading patterns and there are no alternative sites.

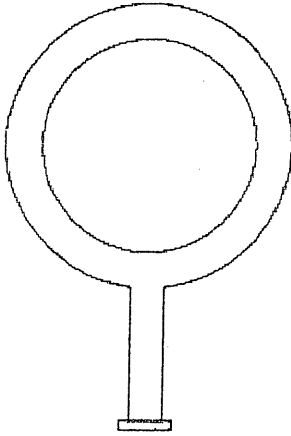
Requirements for racks:

The Association of Pedestrian and Bicycle Professionals (APBP) publication, *Bicycle Parking Guidelines*, suggest that bicycle racks should⁽¹⁾

- Support the bicycle upright by its frame in two places.
- Prevent the wheel of the bicycle from tipping over.
- Enable the frame and one or both wheels to be secured.
- Support bicycles without a diamond-shaped frame with a horizontal top tube (e.g., a women's or other frame).
- Allow front-in parking: a U-lock should be able to lock the front wheel and the down tube of an upright bicycle.
- Allow back-in parking: a U-lock should be able to lock the rear wheel and the seat tube of the bicycle.
- Resist being cut or detached using common hand tools.

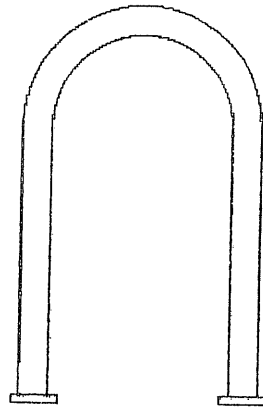
APPENDIX A

Figure 17-3. Illustrations. Recommended types of bicycle racks.



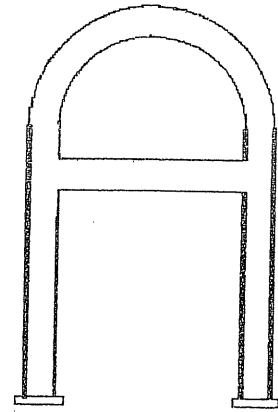
Post & Loop

One rack element supports two bikes



Inverted "U"

One rack element supports two bikes

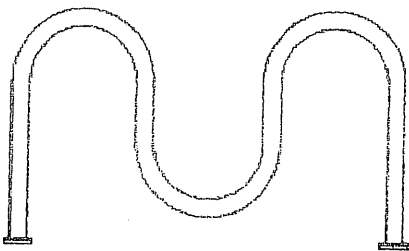


"A"

One rack element supports two bikes

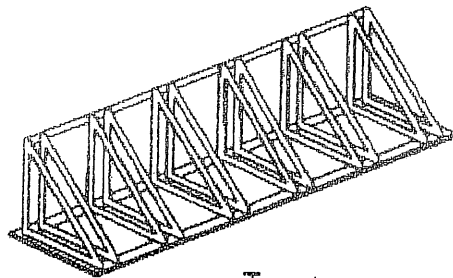
Source: *Bicycle Parking Guidelines*⁽¹⁾

Figure 17-4. Illustrations. Bicycle rack types that are not APBP-recommended.



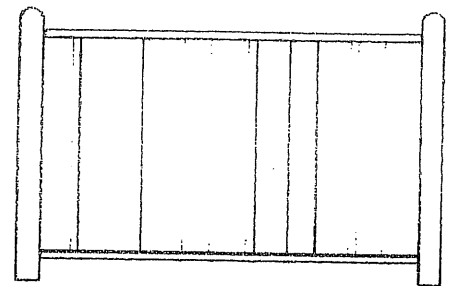
Wave

One rack element is a vertical segment of the rack



Toast

One rack element holds one wheel of a bike



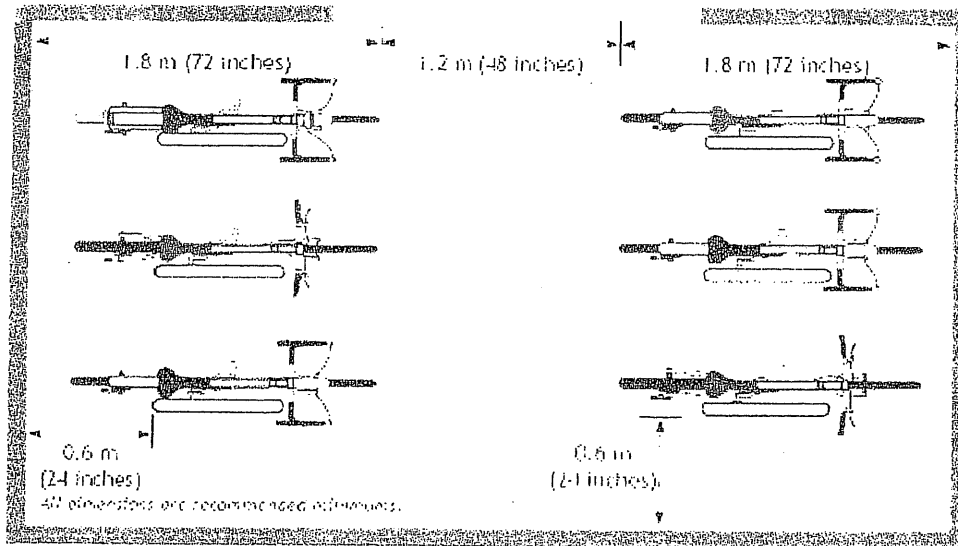
Comb

One rack element is a vertical segment of the rack

Source: *Bicycle Parking Guidelines*⁽¹⁾

APPENDIX A

Figure 17-5. Illustration. APBP-recommended design dimensions for bicycle rack areas.



Source: *Bicycle Parking Guidelines*⁽¹⁾

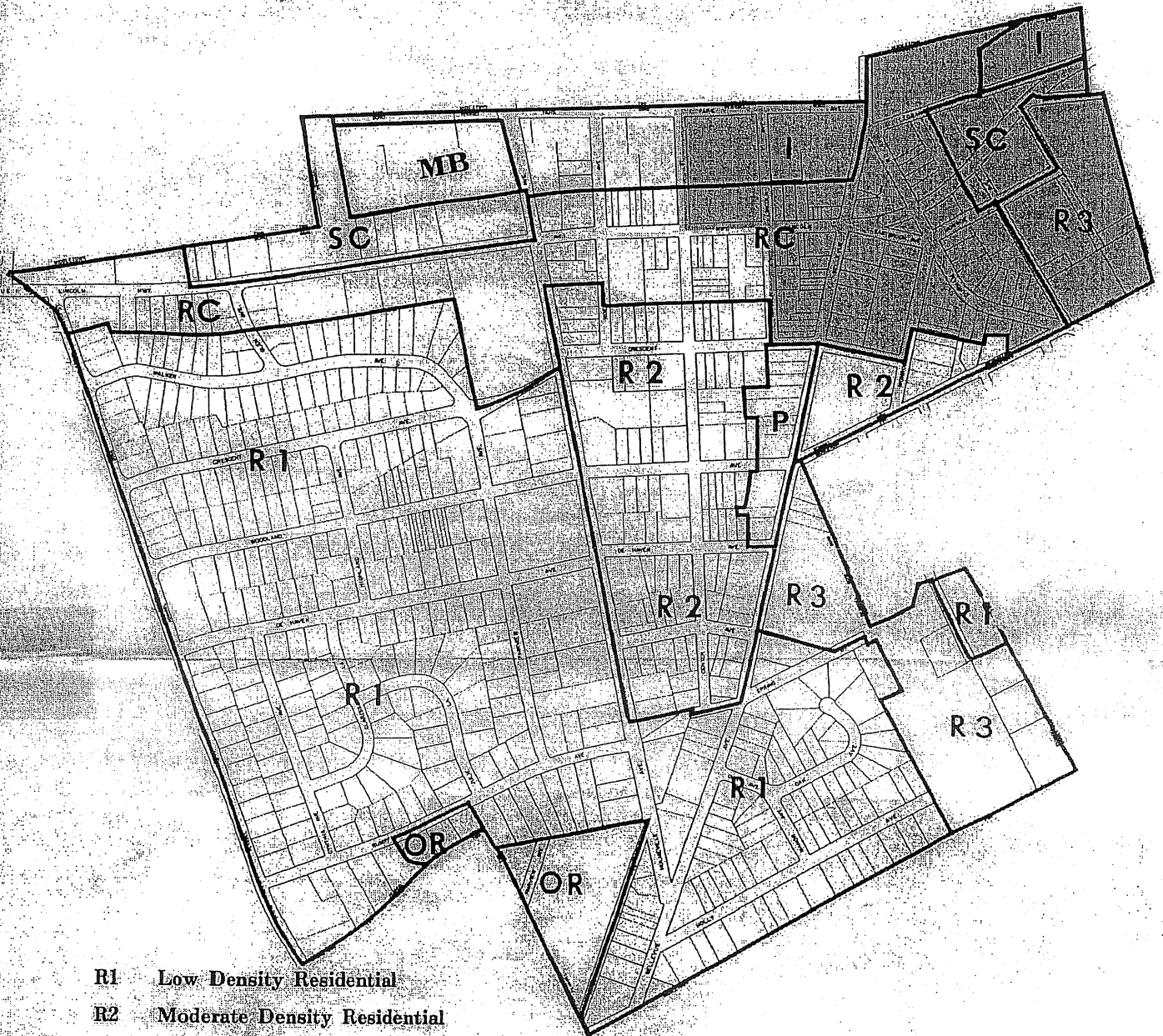
References and Additional Resources

1. *Bicycle Parking Guidelines*, Association of Pedestrian and Bicycle Professionals, Spring 2002, available online at <http://www.apbp.org/pdfs/bikepark.pdf> or <http://www.bicyclinginfo.org/pdf/bikepark.pdf>, accessed March 23, 2004.

ZONING MAP 1978

Exhibit A

REVISED 2007 TO INCLUDE TOD OVERLAY



- R1 Low Density Residential
- R2 Moderate Density Residential
- R3 Multi-Family Residential
- P Professional
- RC Commercial - Retail
- SC Commercial - Service
- I Industrial
- OR Open Recreation
- MB Metropolitan Business

 TRANSIT ORIENTED DEVELOPMENT OVERLAY DISTRICT



PENNDDEL BOROUGH

BUCKS COUNTY, PENNSYLVANIA

0 200 400 800 1600
SCALE IN FEET