
JENKINS PARK MASTER SITE DEVELOPMENT PLAN

CHARLESTOWN TOWNSHIP, CHESTER COUNTY, PA



October 25, 2022 DRAFT

JENKINS PARK

MASTER SITE DEVELOPMENT PLAN

Board of Supervisors

Frank A. Piliero, Chairman
Charles A. Philips, Vice Chairman
Susan T. Bednar
Kevin R. Kuhn
Hugh D. Willig

Township Manager

Christopher W. Heleniak

Parks and Recreation Board

Dan Mount, Chairman
Ashlee Beyer
Frank Beyer
Cordelia Kane
William Longua
Stephanie F. Robinson
Chris Lawrence, Advisor

Prepared by:



Theurkauf Design & Planning, LLC
1350 Elbow Lane, Chester Springs, PA 19425

TABLE OF CONTENTS

Introduction	1
Purpose	1
Local and Regional Context.....	1
Policy Context	7
Site Characteristics.....	7
Park Concept.....	10
Program Elements.....	11
Environmental Improvements	11
Passive Recreation	13
Support Facilities.....	14

INTRODUCTION

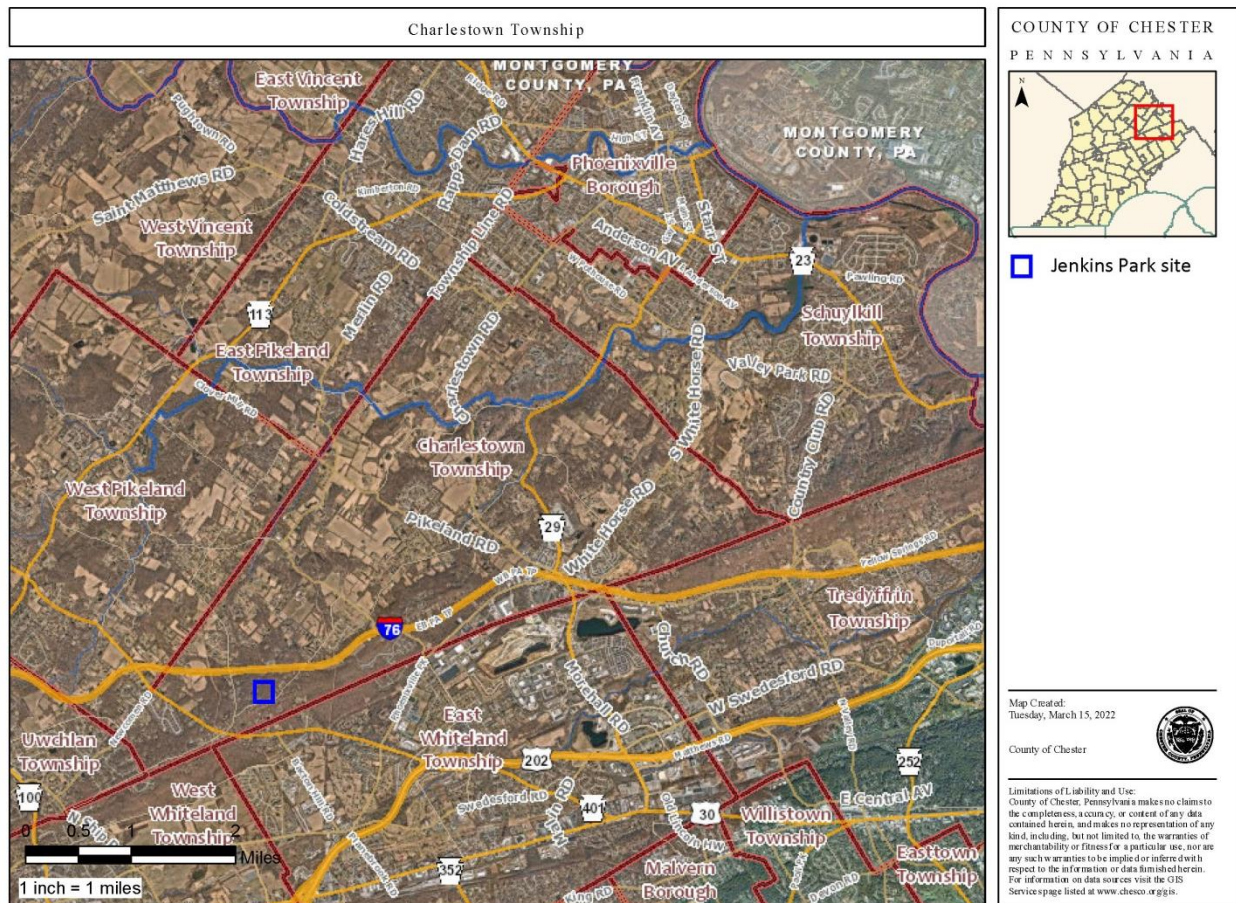
PURPOSE

In accordance with the approved concept plan dated 9-13-21, this document is Charlestown Township's plan to develop the former Jenkins property (parcel numbers 35-7-29, 35-7-30, and 35-7-36) as a neighborhood park to:

- Advance Township recreation and open space goals
- Address local recreation needs
- Conserve the site's environmental resources
- Provide for connections to local and regional recreation and open space assets

LOCAL AND REGIONAL CONTEXT

Charlestown Township is a 12.5 square mile municipality in northern Chester County, situated between the Borough of Phoenixville to the north and the Great Valley to the south. With the exception of the more highly developed Devault area near the intersection of Morehall Road and Phoenixville Pike, Charlestown is a primarily rural community, characterized by rolling farm fields interspersed with



MAP OF CHARLESTOWN TOWNSHIP. THE AREA OF JENKINS PARK IS OUTLINED IN THE BLUE BOX.

residential properties and forested hills. Charlestown Village, an 18th-century crossroads settlement along the Pickering Creek, is the Township's historic heart. The Pennsylvania Turnpike crosses through the southern part of the Township.

Charlestown coordinates with other members of the six-municipality Phoenixville Regional Planning Committee to establish regional goals and implement policies for future land use, resource protection, public services, infrastructure, and recreation.

TOWNSHIP DEMOGRAPHICS

The U.S. Census reports that the Township's 2020 population was 6,001 persons. The 2021 *Phoenixville Regional Comprehensive Plan* cites Census Bureau data indicating that the majority of Township households consist of families of relatively high affluence and educational attainment. Approximately 40% of households have children under 18 years old.

Charlestown Township Household Characteristics	
Median Age (years)	39.3
Total Households	1,806
Family Households	83.9%
Nonfamily Households	16.1%
With Children under 18 years	40.7%
No Children under 18 years	59.3%

TABLE 1 - TOWNSHIP HOUSEHOLD CHARACTERISTICS, 2015 (SOURCE: U.S. CENSUS BUREAU)

Charlestown Township Economic Characteristics	
Median Household Income	\$147,690
Median Per Capita Income	\$70,076
Households without Vehicles	0
Employment Status	
Employed	67.0%
Unemployed	3.1%
Not in Labor Force	29.8%

TABLE 2 - TOWNSHIP ECONOMIC CHARACTERISTICS, 2018 (SOURCE: U.S. CENSUS BUREAU)

The U.S. Census Bureau's American Community Survey (ACS) estimates that children aged 19 or younger comprised 32.5% of the population in 2015:

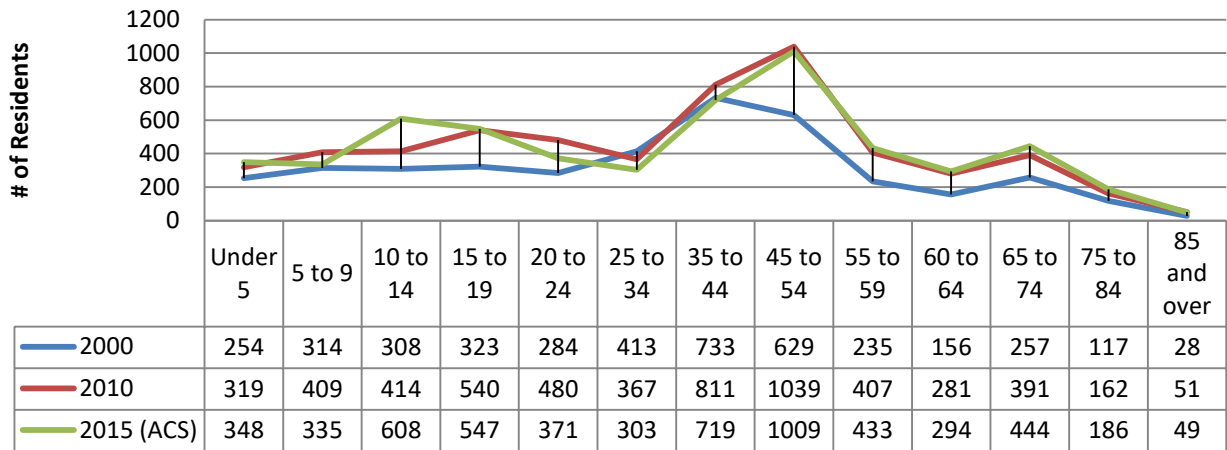


FIGURE 1 - CHARLESTOWN TOWNSHIP AGE STRATIFICATION, 2000 – 2015 (SOURCE: U.S. CENSUS BUREAU). FROM PHOENIXVILLE REGIONAL COMPREHENSIVE PLAN 2021.

The Township is roughly evenly split between males and females. A majority of the population is white, with residents of Asian descent making up the second-largest racial group. Charlestown’s residents are highly educated, with nearly three-quarters of the population aged 25 or older having earned at least a Bachelor’s degree in 2018. Additional demographic data is available in the *Phoenixville Regional Comprehensive Plan*.

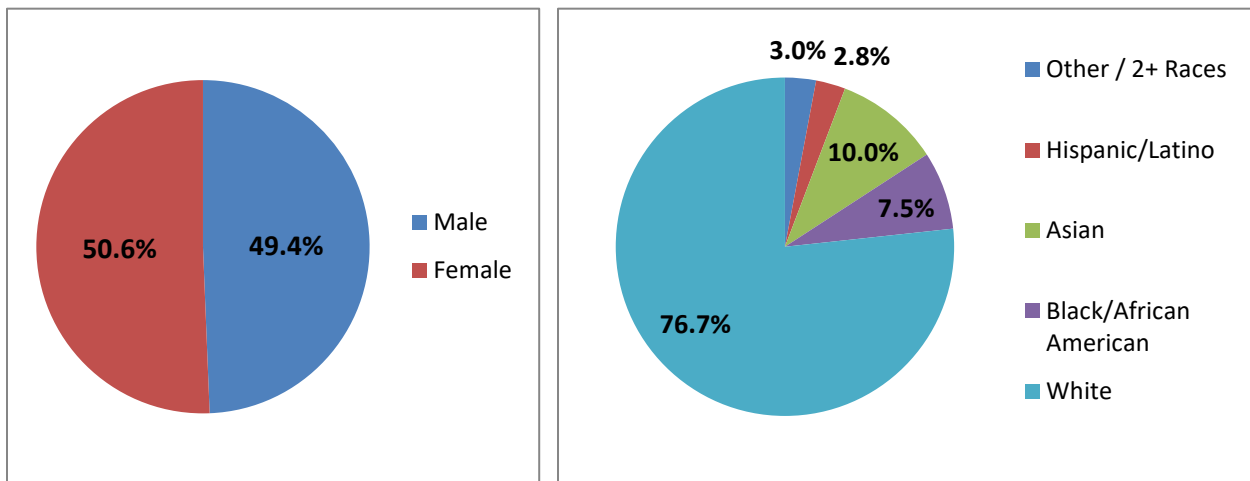


FIGURE 2, RIGHT - TOWNSHIP RACIAL COMPOSITION, 2018 (SOURCE: U.S. CENSUS BUREAU)

FIGURE 3, LEFT - SEX OF TOWNSHIP RESIDENTS OVER 16 YEARS IN AGE, 2018 (SOURCE: U.S. CENSUS BUREAU)

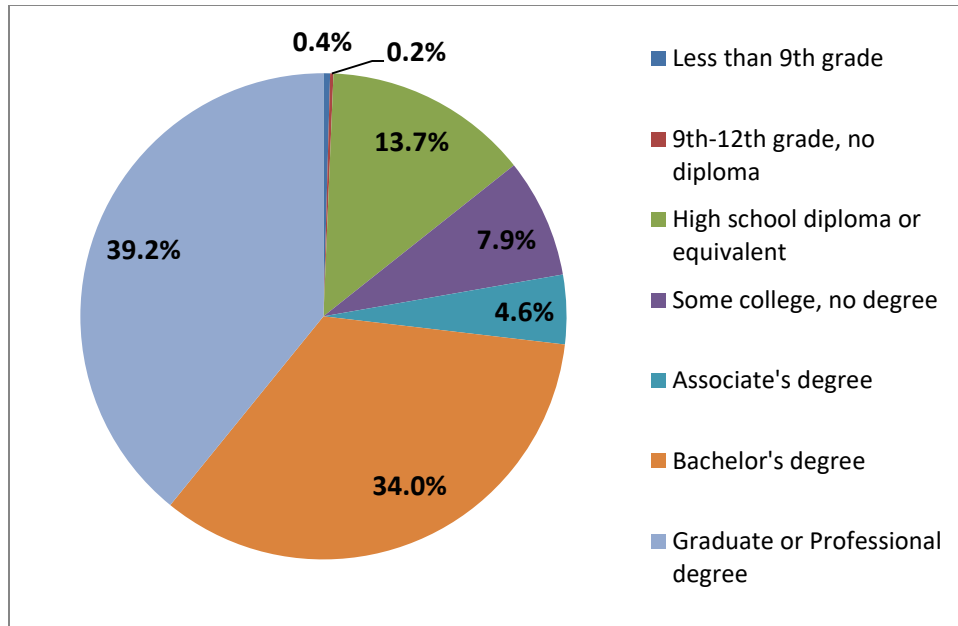


FIGURE 4 - TOWNSHIP EDUCATIONAL ATTAINMENT, 2018 (SOURCE: U.S. CENSUS BUREAU)

PARKS, RECREATION, AND OPEN SPACE

Charlestown Township has two municipal parks, a large swath of public open space along the Pickering Creek, and numerous smaller open space and historic parcels scattered throughout the Township. In addition, Charlestown has worked with landowners and conservation organizations over the last 20 years to secure conservation easements on private agricultural lands and natural areas, totaling nearly 2,500 acres as of 2020. Private open space also includes 457 acres of community association owned lands in residential developments. Prominent recreation assets in Charlestown are mapped on page 6 and include the following:

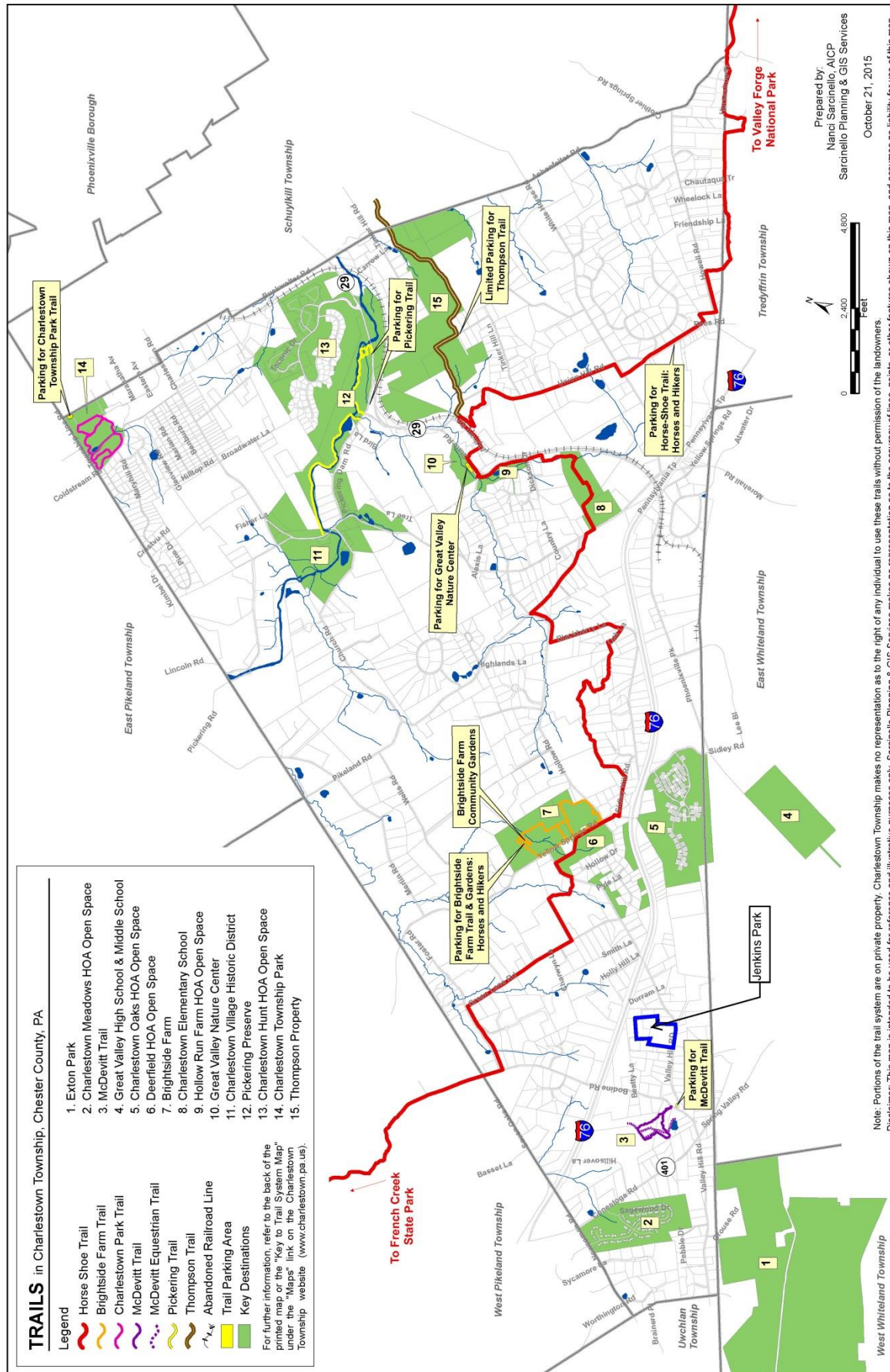
- **Charlestown Park** is a 52-acre community park with seven sports fields, a basketball court, volleyball court, natural areas, picnic and playground facilities, a paved 1.2-mile walking trail, parking, and two buildings utilized by youth sports organizations.
- **Pickering Preserve** is a 100-acre swath of Township open space that extends along the Pickering Creek from Charlestown Road to lands on the east side of State Road (PA Route 29). The site includes trails with informal trailhead parking, creek access, and the ruins of a historic ice dam.
- **Brightside Farm Park** is a 75.6-acre former dairy farm that includes community vegetable gardens, a historic farm complex, parking lot, meadows, pastures, and a 1-mile paved walking trail. The Horse-Shoe Trail crosses through part of the site.
- A 0.11-acre property at the corner of Valley Hill and Bodine Roads contains the preserved remains of the **Longwood School**, a historic, one-room schoolhouse for African-American children that was built in 1857. The site includes an interpretive marker and parking for visitors and hikers of the adjacent McDevitt Trail.
- The 140-mile **Horse-Shoe Trail (HST)** crosses the southern half of the Township in a roughly east-west direction and links Valley Forge National Historic Park with the Appalachian Trail. The

HST primarily follows Township roads, with brief sections traversing protected open space. It is maintained by the Horse-Shoe Trail Conservancy.

- The **McDevitt Trail** is a 0.75-mile-long, Township loop trail that explores forested terrain west of Bodine Road. Trailhead parking is at the historic Longwood School ruins.
- The **Thompson Trail** is a 2-mile-long Township trail that extends from Schuylkill Township to the Horse-Shoe Trail at Union Hill Road.
- The **Devault Line Trail** is proposed to extend 6.6 miles along a discontinued railroad corridor between the Schuylkill River Trail in Phoenixville and Devault in Charlestown Township. From there, connections through East Whiteland and Tredyffrin Townships will eventually link to the Chester Valley Trail. When completed, the Devault Line Trail will be part of the Circuit, a network of multi-use trails that travel nearly 1,000 miles of the Greater Philadelphia area.

Charlestown is also in close proximity to a number of existing and proposed regional open space facilities. These include the following assets within approximately 1 mile of the Jenkins Park property:

- **Exton County Park**, which is a 727-acre park that is part owned by Chester County and part by West Whiteland Township. It includes meadows, forests, sports fields, playground facilities, trails, a pond, and wetlands, and includes trailhead parking for the adjacent Chester Valley Trail. Exton County Park abuts the southern boundary of Charlestown Township.
- **The Chester Valley Trail (CVT)**, a 14-mile-long, County-owned trail that follows the former Philadelphia and Chester Valley Railroad corridor between Bridgeport and Downingtown. It is part of the Circuit. The CVT is 1.2 miles from Charlestown Township.
- **The Uwchlan Trail** is a Circuit trail that is proposed to extend 9 miles from Chester Valley Trail in Exton Park to the Struble Trail in Marsh Creek State Park. Approximately 6 miles of the trail has been constructed to date. The nearest segment of the Uwchlan Trail to Charlestown Township is along Ship Road in Exton Park, 0.7 miles from the Township boundary.



POLICY CONTEXT

Local and regional planning initiatives were analyzed to help define priorities for park planning.

The **2021 Phoenixville Regional Comprehensive Plan**, which also serves as Charlestown's Municipal Comprehensive Plan, calls for regional coordination of recreational facilities and programs to create a comprehensive network of open spaces. The following planning issues are relevant to this Master Site Development Plan:

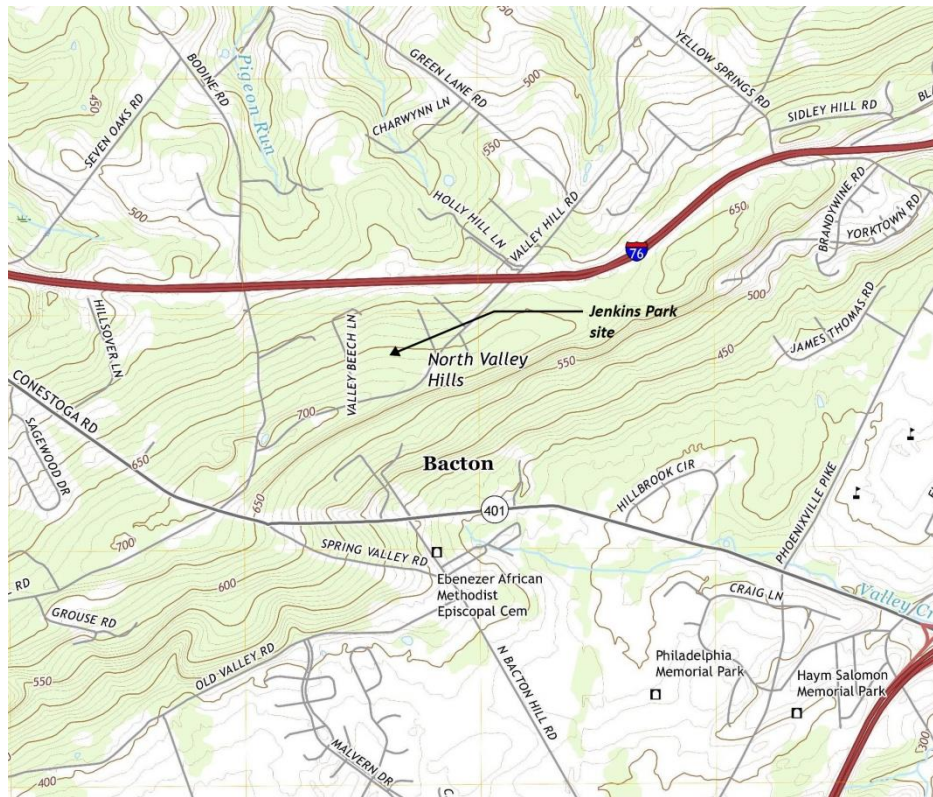
- Integrate open spaces with regional and local trails.
- Accommodate a broad diversity of interests, ages, and abilities with ADA-accessible trails and playground equipment, and programs and facilities that address the needs of the Region's aging population.
- Connect to recreational resources beyond the Phoenixville Region's boundaries.
- Implement trails in coordination with public and private eased open space.
- Implement programs to promote diverse and abundant native landscapes, and prevent, eradicate, and control invasive species.

Charlestown Township has a **2012 Parks, Recreation, Open Space & Trails Plan** that envisions the Jenkins property developed as a neighborhood park with trails, a picnic pavilion and picnic tables, playground, nature study area, and parking for 10 vehicles.

SITE CHARACTERISTICS

The Jenkins tract consists of three parcels totaling 16.4 acres in the southwest corner of Charlestown Township. It is located along the North Valley Hill, which forms the north boundary of Chester County's Great Valley. Site topography gently slopes from downward south to north, with a small area (0.3 acres) near the northern tract boundary consisting of precautionary slopes (15%-25%).

The tract is located along the north side of Valley Hill Road, a state-owned road. The northernmost parcel (# 35-7-29) extends east to Shamrock Hill Lane, a private road. The tract is surrounded by single-family residences. The Pennsylvania Turnpike is approximately 300 feet north of the property. Parcel #35-7-36 was previously developed with a single-family residential house (the Jenkins residence), but the house was demolished after the Township purchased the property in 2004. Dry stack stone walls that bordered the driveway and front Valley Hill Road remain on site. The site of the former residence, approximately 1 acre in area, is now lawn or early successional brush, with a number of mature shade trees and the remains of perennial garden beds. A former logging road runs through the tract on a roughly north-south orientation toward Valley Beech Lane.



EXCERPT OF A USGS MAP SHOWING THE AREA OF JENKINS PARK WITHIN THE NORTH VALLEY HILLS. FORESTED AREAS ARE SHOWN IN GREEN.

NATURAL RESOURCES

Mature, upland hardwood forest covers the majority of the tract and extends beyond the site, through the southern end of the Township and covering much of North Valley Hills. This forest area is rich in biodiversity and contains three Natural Heritage Areas – areas containing vulnerable species, exemplary natural communities, or exceptional native biological diversity – noted in the *Chester County Natural Heritage Inventory*: the Bacton Mine Ridge (0.25 miles southeast of the site), Spring Valley Road Woods (0.5 miles southwest of the site), and North Valley Hills (0.84 miles southwest of the site).

The forest in the western part of the property is of a particularly high quality. There, Chestnut Oak, Red Oak, American Beech, and Red Maple dominate the canopy. Seedlings of these trees are plentiful in the understory, along with native Viburnum, Witch Hazel, and Huckleberry shrubs. Wildflowers in the herbaceous layer include Bellwort, Spotted Wintergreen, and Indian Pipe. Elsewhere on site, Tulip Poplar makes up a larger percentage of the forest canopy. Black Gum, various Hickory species, and Black Birch are also present on site.

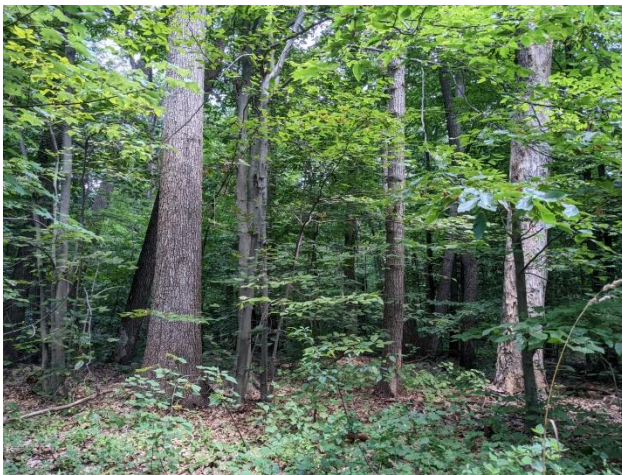
Portions of the site contain interior forest habitat, meaning they exist at least 300 feet from the nearest forest edge. Interior forest is characterized by stable light, wind, heat, and humidity conditions that support specially adapted flora and fauna. A number of migratory bird species have evolved to thrive in interior forests, and have become vulnerable as development fragments their habitat. In addition to wildlife habitat, the property's forest vegetation prevents soil erosion on areas of steep (greater than

15%) slope. The park program is configured to minimize forest disturbance and preserve as much interior habitat as possible.

The site's soils consist of Edgemont Channery Loam, which is a moderately deep, well-drained, upland soil that underlays much of the North Valley Hills. These soils are acidic to strongly acidic (pH 5.0-6.0) and contain thin, flat stone fragments (channers) and gravel. The underlying bedrock is composed of weathered quartzite and quartz schist. The site's soils are further divided into the following units:

- Edgemont channery loam, 3 to 8 percent slopes (EdB)
 - Location: Along Valley Hill Road, approximately 4 acres
 - Depth to bedrock: 42 to 84 inches
 - Drainage class: Well drained
 - Hydrologic Soil Group: A (high infiltration rate, low runoff potential)
 - Depth to water table: More than 80 inches
 - Land capability classification: 2e (moderately susceptible to erosion)
 - Hydric soil: No
- Edgemont channery loam, 8 to 15 percent slopes (EdC)
 - Location: Northern extent of site, approximately 12 acres
 - Depth to bedrock: 42 to 84 inches
 - Drainage class: Well drained
 - Hydrologic Soil Group: A (high infiltration rate, low runoff potential)
 - Depth to water table: More than 80 inches
 - Land capability classification: 3e (highly susceptible to erosion)
 - Hydric soil: No

In order to prevent soil erosion, the plan will maximize forest preservation and design park elements with the minimum necessary slope disturbance.



LEFT: MATURE, NATIVE FOREST COVERS MUCH OF THE PARK PROPERTY. IMPLEMENTATION OF THIS PLAN WILL PROTECT CRITICAL FOREST HABITAT AND MANAGE THREATS SUCH AS INVASIVE PLANTS (RIGHT).

Negative impacts to the site's forest include colonization by invasive plant species and browsing by unnaturally high deer populations. Landscaping associated with the property's former residence included nonnative plants such as Japanese Pachysandra and Privet that have spread into forested areas. Other invasive species including English Ivy, Japanese Stiltgrass, Burning Bush, Garlic Mustard, and Japanese Barberry have colonized the site from adjacent natural areas. These species destabilize and alter the forest ecosystem by pushing out native species on which the ecological web depends. At the same time, large deer populations impact forest regeneration by devouring all but a few native plant species. This plan proposes strategies to protect and improve the park's ecology.

PROXIMITY TO OTHER OPEN SPACE

The property is within walking distance of the following open space assets:

- McDevitt Trail and the Longwood School (0.4 miles). The trail crosses a pipeline ROW that could connect hikers to the Charlestown Meadows open space and beyond to Exton Park, Uwchlan Trail, and Chester Valley Trail.
- Brightside Farm Park and the Horse-Shoe Trail (1.2 miles).
- A 10.5 acre property directly across Valley Hill Road that is undergoing open space preservation by the Open Land Conservancy of Chester County.
- The 14.8 acre Baldwin/Long property (<300 feet), which is currently under Township consideration for open space easement.
- A 122.9-acre site in Charlestown and East Whiteland Townships that is proposed to be preserved open space and is contiguous to wooded open space with trails at Charlestown Oaks (0.3 miles).

Offsite trail connections from the park to these facilities would provide for greater use and accessibility of local and regional open space. The Township should consider coordinating with adjacent landowners to establish trail access.

PARK CONCEPT

PROJECT BACKGROUND

In 2003, Catherine Jenkins, a long-time Township resident and founding member of the Civic Association passed away at the age of 96. The Township acquired the three-parcel Jenkins tract in 2004, and in 2013 approved a subdivision of the property that would create four single-family residential lots and an 8-acre park.

Following the economic downturn of the Great Recession, the property remains undeveloped and the Township is now seeking to develop the 16-acre tract as a passive recreational park. At the direction of Charlestown's Parks & Recreation Board, a concept plan was developed that incorporated program elements that were previously identified as desirable in the Township's **2012 Parks, Recreation, Open Space & Trails Plan**. The concept was presented for public comment during the September 16, 2021 Parks & Recreation Board meeting and during the November 2, 2021 Board of Supervisors meeting.

Following public discussion, in November 2021 the Township approved a park concept with the following program to be developed in phases:

Phase I

- Trails
- Nature playground
- Conversion of lawn areas to native meadow
- 1 bay of parking (maximum 11 spaces)

Phase II (*Program elements for future consideration*)

- Picnic pavilion
- Restrooms
- Outdoor classroom
- Disc golf course
- Additional bay of parking

This Master Site Development Plan is for design of program elements for Phase I.

PROGRAM ELEMENTS

ENVIRONMENTAL IMPROVEMENTS

The majority of the park will be preserved as native habitat for wildlife habitat and natural beauty. The following improvements are proposed to enhance the site's biodiversity and mitigate the impacts of proposed paved surfaces.

FOREST PRESERVATION AND RESTORATION

The park program will maximize preservation of the site's mature forest, as well as implement restoration strategies that will improve site ecology.

INVASIVE PLANT REMOVAL

Invasive species management is critical to protecting the site's biodiversity. Existing landscape plantings of invasive plant species shall be removed as part of park development. New plantings shall be managed to prevent colonization by undesirable weeds. Invasive plants should be eradicated from the park's forest. The following invasive plants should be prioritized for eradication:

- **Japanese Pachysandra** should be eradicated by hand pulling or spraying with glyphosate herbicide and native groundcover established in its place.
- Invasive shrubs including **Japanese Barberry** and **Burning Bush** should be uprooted.
- **Garlic Mustard** should be uprooted in the spring. Larger colonies can be cut low to the ground or sprayed with glyphosate herbicide.

The site is an ideal candidate for the volunteer Weed Warrior program organized by the Township's Environmental Advisory Commission and Parks & Recreation Board.

NATIVE MEADOW

Approximately ½ acre of the property currently in lawn will be seeded with native meadow vegetation. The proposed meadow will create wildlife habitat for pollinators, birds, and other wildlife; and will infiltrate stormwater runoff from impervious and mowed lawn surfaces. Additionally, the meadow will require less maintenance upon establishment than lawn would, thus saving the Township labor time and cost, while providing enhanced seasonal aesthetic interest. Upon establishment of the meadow vegetation, maintenance will consist of once-annual mowing to suppress woody vegetation, with spot eradication of invasive weeds as needed.

SUBSURFACE STORMWATER BASIN

A stormwater basin located under the meadow area will treat stormwater runoff from the proposed parking lot. The treated runoff will infiltrate into the soil to recharge groundwater, and any excess water will be directed out of the basin at controlled rates of flow. Basin maintenance shall follow the Township Engineer's recommendations.



LEFT: NATIVE MEADOW AT CHARLESTOWN WOOLEN MILL; RIGHT: POLLINATOR GARDEN (WEB SOURCE IMAGE)

POLLINATOR GARDEN

Colorful plantings adjacent to the proposed meadow will provide beauty for visitors as well as food and shelter for butterflies, bees, and birds. This pollinator garden will consist of native plants as well as non-invasive introduced species with proven pollinator benefits. Interpretive signs are proposed to educate visitors about the benefits of pollinator gardens.

Low-maintenance plant species will be selected, and the garden will be designed with sweeps of perennials and grasses that eventually form a weed-suppressing groundcover. Groups of flowering shrubs like Bottlebrush Buckeye and Fothergilla will form thickets that add year-round structural interest as well as shelter for wildlife. These shrubs will not require pruning. However, the pollinator garden will require weeding, watering, and mulching until plants become established.

PARKING LOT SCREEN AND PARK ENTRANCE LANDSCAPING

A landscaped shrub buffer is proposed to screen the proposed parking lot from Valley Hill Road and neighboring residences.

Shade and street trees are proposed to enhance the park entrance, with species selected for tolerance of site conditions and environmental benefit. Native species including White Oak, Flowering Dogwood, and Serviceberry will be emphasized.

EVERGREEN TREE SCREEN

A screen of evergreen trees is proposed along a portion of the east property line to improve privacy for a neighboring residence.

PASSIVE RECREATION

PAVED TRAILS

The plan proposes a 0.65-mile long multi-use trail loop that will enable visitors to explore the park. The trail loop will be 8 feet wide to accommodate pedestrians and cyclists, with a maximum 5% slope for ADA accessibility. A 5-foot-wide, ADA-accessible trail is proposed from the parking lot to the nature playground. Trails will be paved asphalt in consideration of cost of installation, universal accessibility, and ease of maintenance. Trail layout will be staked in the field to minimize tree clearing and impact to other significant site features. Paved seating areas with benches are proposed along the trails for rest and wildlife observation.

The park is well-situated for future trails connecting open spaces in Charlestown and East Whiteland Townships. The Township should consider coordinating with adjacent landowners to establish trails from the park to destinations including McDevitt Trail, Horse-Shoe Trail, and Brightside Farm Park.

PLAYGROUND

A nature playground is proposed near the parking lot. The majority of playground equipment will utilize natural materials, and will be located within the forest to facilitate creative play opportunities and foster deep connections between children and the environment. Playground equipment could be built from trees felled on site during park development and repurposed as climbing bars, stepping logs, and balance beams. The construction supervisor shall determine whether existing materials on site can be recycled as playground elements. Tunnels made of conventional materials and conventional swings are also proposed.



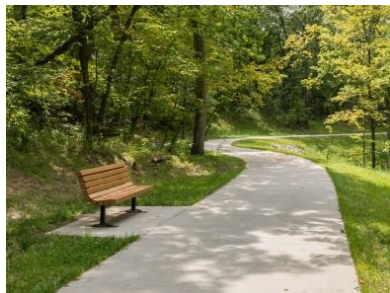
OLLIE OWL NATURE PLAYGROUND AT CHESLEN PRESERVE (SOURCE: NATURAL LANDS)

LAWN

Small lawn areas are proposed near the park entrance for unorganized passive recreation and picnic space.



**EXISTING DRY LAID STONE WALL
ALONG VALLEY HILL ROAD**



**EXAMPLE OF A TRAIL WITH PAVED
BUMP-OUT FOR BENCH (SOURCE:
CITY OF COLUMBIA, MO)**



**PARKING LOT AT BRIGHTSIDE FARM
PARK WITH BOLLARD AT TRAIL
ENTRANCE AND SIGNAGE.**

SUPPORT FACILITIES

PARKING AND VEHICULAR CIRCULATION

The plan proposes 10 paved asphalt parking spaces, including 2 van-accessible handicap spaces. Circulation is one-way with separate points of entry and exit onto Valley Hill Road. The paved multi-use trail will connect to the parking lot for universal accessibility. A second bay of parking can be added if additional capacity is required.

SITE FURNISHINGS

Proposed site furnishings consist of the following:

STONE WALLS

The site features existing dry laid stone walls that add visual character and reinforce the property's Valley Hill Road frontage. They shall be preserved to the extent practicable. Part of the wall along Valley Hill Road will be reconstructed to accommodate the park entrance drive and to form a continuous wall between the proposed parking lot and Valley Hill Road. Walls that framed the Jenkins residence driveway will be stabilized and repurposed to serve as a gateway to the multi-use trail section that leads to the meadow and pollinator garden area. New stone wall construction will match the existing dry laid technique.

BENCHES AND TRASH RECEPTACLES

Benches and trash receptacles are proposed at key areas throughout the park. Benches will be six feet long and installed on paved pads off of pedestrian traffic ways. Paved pads will include a 5-foot-square open area adjacent to benches for wheelchair access. Three benches will be located along the multi-use trail, and three benches will be located within the nature playground. A trash receptacle will be located at the parking lot.

SIGNAGE

One interpretive sign is proposed to educate visitors about the pollinator garden. A park entrance sign is proposed at the parking area and will include park hours and regulations. Directional signs are proposed at the parking lot entrance and exit driveways off of Valley Hill Road.

BOLLARDS

Bollards are proposed at the parking lot to prevent vehicles from driving onto the multi-use trail. Bollards with chains are proposed across the park driveways to prevent after-hours property. Bollards will be collapsible for emergency vehicle access.