

3

OPEN SPACE & RECREATION PLAN RECOMMENDATIONS

Based on the Level of Service determination, benchmarking of similarly sized communities, assessment of the physical and locational characteristics of the various parcels examined, input from the public, project committee and Township and Borough representatives, the following trails and recreational facilities are recommended.

Trail Types – Descriptions

Bikeway Classifications

The following are nationally recognized bikeway classifications as per the American Association of State Highway Transportation Officials (AASHTO). These classifications are specific to bicycle transportation routes and do not include other pedestrian facilities such as sidewalks and off-road hiking trails which are described later in this chapter.

Class 1 Bikeways are pathways completely separated from a roadway. They are also known as ‘off-road trails’, ‘greenways’, ‘shared use paths’, and/or ‘multi-use paths’. The AASHTO recommended width for multi-use paths is 10 feet with 8 feet being the minimum recommended width for a two way trail.

Class 2 Bikeways are designated bicycle lanes within a roadway for exclusive use of the cyclist and contains special pavement markings and signage. Bike lanes are one-way in the direction of motor vehicle traffic. The standard width for a bike lane is five (5) feet.

Class 3 Bikeways are also known as ‘Bike Routes’. These offer no special accommodations for the cyclist within the road right-of-way. Signs such as “Bicycles May Use Full Lane” or “share the road” are used to define the route and the cyclist shares the roadway with vehicular traffic. Class 3 bikeways sometimes include improved shoulders for additional use by bicycles. Typically, for shoulders less than 4 feet wide it is assumed that bicyclists will be in the vehicular travel lane.

Multi-Use Trail (Off-Road)

The trail type that provides for the largest cross section of trail users is a Multi-Use Trail, also known as Class 1 Bikeways (as described above). The following paragraph provides a nationally recognized definition of a Multi-Use Trail and its typical design criteria.

“The American Association of State Highway and Transportation Officials (AASHTO) defines a Multi-Use Trail or Shared Use Path as: a bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users.”

As the definition suggests, this trail type provides for a variety of trail users, depending on the trail surface paving and available right-of-way width. Another general trait of multi-use trails is universal accessibility for those with disabilities. This is due to gentle slopes, adequate widths, and smooth surfaces. Parking areas for multi-use trail segments should provide facility access in accordance with the Federal Americans with Disabilities Act (ADA) guidelines to provide for trail users with disabilities.

Both the Rails-to-Trails Conservancy (RTC) and AASHTO recommend a multi-use trail to be ten feet (10') wide, with the minimum width for a two-way trail at eight feet (8'), and for a one-way trail at five feet (5'). Depending on the user volume, widths of twelve feet (12') or fourteen feet (14') are recommended to avoid potential conflicts. An additional two-foot (2') shoulder is recommended on either side of the trail surface to provide clearance from trees, poles, walls, fences or any other lateral obstruction. Site conditions may warrant additional safety measures such as fencing and increased shoulder widths.

Walking / Hiking Trails

A walking or hiking trail may be defined as a recreational trail that does not meet the design requirements of a multi-use trail such as width, slopes & surfacing. An advantage of walking trails is that they can allow for access and recreational use of the land quickly at a relatively low cost. A disadvantage of walking trails is that they generally limit the number and type of trail users due to their minimal width, steeper slopes, and softer surfaces, and generally do not meet ADA requirements.



Trail Surface Types

Asphalt

Asphalt surfaces provide for the widest variety of trail users including bicyclist, walkers, joggers, wheelchair users, and in-line skaters. Initial installation costs are relatively high compared to other trail surface types, however long term maintenance costs will remain lower when compared to other surfaces if properly installed and maintained. Asphalt trails are preferred in flood prone areas.

Crushed Limestone

Crushed limestone surfaces can accommodate all trail user types with the exception of in-line skaters. Initial

installation costs for this trail surface are relatively low, however long term maintenance costs increase due this surface's higher susceptibility to erosion, especially if not properly installed with swales and cross drains. A crushed limestone surface can also serve as base material for an asphalt surface if trail use increases or funds become available for a surfacing upgrade. Crushed limestone surfaces should be avoided in flood prone areas or steep slopes. If their gradients fall within limits, these surfaces can be ADA accessible.

Compact Earth

Compact earth surfaces are the least expensive to install, however they limit the types and number of trail users. Compact earthen surfaces are primarily used for hiking only or horse trails adjacent to multi-use trails that receive significantly less trail user volume. Hiking trails may be



considered as an alternate means to reach the more environmentally sensitive areas found within the floodplain area to provide routes to a stream for environmental education, bird watching, or fishing access.

Trails and many other recreational facilities are commonly developed within floodplains to take advantage of the relatively flat land. These trails may require additional maintenance to remove debris deposited by a flood event. If a trail is placed where flood waters will have a significant erosion effect, asphalt surfaces are recommended. Trails should generally not be located within a floodway, which is where the most significant flood damage occurs.

All trails proposed in this plan will need to be further examined and engineered prior to construction. The Rails to Trails Conservancy study listed below and referenced herein should be utilized as a resource for trail development and should not be seen as design guidelines.

Sources and references:

Guide For Development of Bicycle Facilities, American Association of State Highway and Transportation Officials (AASHTO), 2012;

Trails for the Twenty-First Century: Planning, Design, and Management Manual for Multi-Use Trails, Rails to Trails Conservancy (RTC), 2001.

Bicyclist Types

The American Association of State Highway and Transportation Officials (AASHTO) classifies bicyclists into one of the following three groups:

Group A – Advanced Bicyclists (experienced / confident)- These riders generally use their bicycles as they would a motor vehicle. They are riding for transportation, convenience, and speed and want direct access to destinations with a minimum of detour or delay. They are typically comfortable riding with vehicular traffic. They prefer a sufficient operating space on the travel way or shoulder to eliminate the need for either themselves or a passing motor vehicle to shift position.

Group B – Basic Bicyclists (casual / less confident) – Less confident adult riders may also be using their bicycles for transportation purposes, e.g., to get to the store or to visit friends, but prefer to avoid roads with fast and busy motor vehicle traffic unless there is ample roadway width to allow easy overtaking by faster motor vehicles. Thus, basic riders are comfortable riding on neighborhood streets and shared use paths and prefer designated facilities such as bike lanes or wide shoulder lanes on busier streets.

Group C – Child Cyclists – Riding on their own or with their parents, child cyclists may not travel as fast as their adult counterparts but still require access to key destinations in their community, such as schools, convenience stores and recreational facilities. Residential streets with low motor vehicle speeds, linked with shared use paths and busier streets with well-defined pavement markings between bicycles and motor vehicles, can accommodate children without encouraging them to ride in the travel lane of major arterials.

It is estimated that only 5% of bicyclists overall would qualify as Group A or Advanced Bicyclists, therefore 95% fall into either Group B or C. (Source: AASHTO - Guide For Development of Bicycle Facilities)

GIS Mapping

Trail base mapping for the project was created using a Geographic Information System (GIS) program. This GIS program is used as a data management and graphic tool to create the trail mapping exhibits; to calculate accurate lengths for trail segments; and, to identify impacted land parcels. Base data used in the formulation of this report was provided by Woolwich Township and Gloucester County, New Jersey.

Proposed Trail Connections

The Township and Borough lack trail infrastructure for both recreation and non-motorized transportation connections to parks, open space, schools, and other important destinations. Pedestrian sidewalks are also lacking throughout much of Woolwich further limiting the ability for pedestrians to walk safely through the community. As development increases, this need will only be exacerbated.

This plan proposes to create the links between residential areas, recreational destinations, and future centers of development. The trail and bicycle links will also establish a non-motorized connected network to parks and open space, and to destinations and trails in adjacent municipalities, and will create additional recreational opportunities. Trail alignments were selected based on several factors such as network connectivity, opportunities for future ecotourism, and committee and public input. This plan proposes a total trail system of approximately 75.5 miles. All trails will need to be further analyzed and engineered prior to construction.



All proposed trail improvements are shown on the Trails Map at the end of this chapter.

On-Road Routes (Bikeways)

These routes are intended to provide safe connections to various destinations and recreational facilities. On-road routes include a combination of class 2 bikeways (designated bicycle lanes) and class 3 bikeways (“share the road”/“bicycles allowed use full lane” bicycle routes).

Class 2 bicycle lanes should be implemented along routes of high anticipated use and also where determined to be feasible based upon a review of existing right of way widths and site conditions. Class 3 share the road routes should include an improved shoulder (3 foot wide minimum) with appropriate signage and striping to clearly indicate a shared road situation. These routes are intended to be used by class B and C cyclists and provide important cross connections within the community and to

adjacent municipalities. The appropriate bicycle class for each specific roadway will need to be confirmed by factors such as right of way width, number of travel lanes, traffic volumes, traffic patterns, speed limits, sight distances, and adjacent site conditions.

Major on-road routes proposed on the Trail Map include:

- Township Line Road
- Auburn Road
- Kings Highway
- Pedricktown Harrison Road
- Monroeville Road
- Franklinville Road
- Russel Mill Road

- Swedesboro Paulsboro Road
- Back Creek Road
- Stone Meetinghouse Road

Certain trail segments have been proposed as a combination on-road bicycle route with pedestrian sidewalks. Major on-road / sidewalk routes proposed on the Trail Plan include:

- High Hill Road
- Locke Avenue
- Swedesboro Paulsboro Road
- Asbury Station Road
- Garwin Road
- Auburn Road
- Kings Highway

It will be especially important for the Township to consider safe pedestrian connections along High Hill Road as this will be a main recreation center.

Off-Road Routes - Multiuse Trails

These connections are proposed to provide safe recreational and transportation opportunities within the Township and Borough. Multiuse routes are separated from vehicular traffic and are intended for pedestrians and bicyclists of all skill levels.

Multiuse pathways proposed on the Trail Plan are primarily located in the area along High Hill Road where a network of trails has been proposed to link Swedesboro and Locke Avenue/High Hill Park to LaPalomiento Park and Palladino Field. It is recommended that this area become the major

recreational hub.

A second proposed multiuse trail links Beckett Golf Club west to Charles Harker School, proposed Auburn Village and Township Line Road. This trail continues south along Oldmans Creek and terminates at the Township owned parcel off of Meadow Lark Drive. This trail should be taken into consideration as the plans for Auburn Village move forward. This trail should connect to the “central green space” proposed as part of the village plan.

Multiuse trails are also proposed within the future regional center area. These trail locations and types should be taken into consideration and examined more closely as the regional center plans move forward. It will be important to connect the regional center to Swedesboro and Locke Avenue/High Hill Park.

Off-Road Routes - Walking / Hiking Trails

Several walking/hiking trails are proposed on the Trail Plan. These routes are not intended for bicyclists. One walking route is in the eastern side of the Township connecting the existing trail at Lake Narraticon Park to Monroeville Road and then south along the perimeters of several preserved farms along Narraticon Run. This trail would link to the existing Beckett Golf Club.

Another walking trail is loop trail proposed from Narraticon Park south along the New Jersey Turnpike through several preserved farms and a third is proposed in the area of Indian Branch connecting Maccarone Farm to Westbrook development and Auburn Village. Several other smaller walking trails are proposed within the existing Weatherby Development and in the northern section of the Township around the former Nike missile site.

Several of the above mentioned walking trails are proposed on preserved farmland. These trails have been identified as great opportunities for agritourism, however, easements or agreements would need to be negotiated with property owners to allow trails on privately owned property. If agreed upon, these trails should be constructed with appropriate fencing or vegetative buffers so trail use does not conflict with the ongoing farm activities. Several other trail connections are proposed on private parcels that are not preserved farms. The Township will also need to obtain easements or consider friendly acquisition of these properties in order to construct the trail in these locations.

The plan identifies multiple locations where pedestrian bridges may be needed to construct trails over streams and wetlands. These locations will need to be further examined during design and engineering to determine the most appropriate location for waterway crossings. Boardwalk trails may also be an alternative to crossing of wetland areas.

Water Trails

Two water trails have also been proposed as part of the plan. One water trail is proposed along Raccoon Creek and one along Oldmans Creek. These trails provide recreational opportunities for kayaking or canoeing. Multiple boat launch areas have been proposed along each water trail to provide multiple resting spots and safe entry and exit from the water.

All proposed trail improvements are shown on the Trails Map at the end of this chapter.

Regional Connections

The Regional Trails Map at the end of this chapter displays proposed trail connections to adjacent municipalities and

other existing, proposed, and planned regional trails. Woolwich Township and the Borough of Swedesboro are bordered by 7 municipalities. The trail plan makes direct connections to all of these municipalities except Greenwich Township which only borders Woolwich in a small area in the northern corner of the Township.

The trail plan links to multiple regional trails including existing and proposed on road and off road routes identified by the Cross County Connection Transportation Management Association and Gloucester County. The planned Delaware Estuary Route lies to the north of Woolwich and Swedesboro in Logan Township. This trail would continue east into Greenwich Township and beyond to National Park. The DVRPC Circuit lies just across the Delaware River in Pennsylvania and to the north in Camden, NJ. The Circuit is a network of existing and planned trails that, when completed, will total approximately 750 miles of bicycle and pedestrian trails in the greater Philadelphia Area.

All proposed regional trail connections are shown on the Regional Trail Map at the end of this chapter.

Recreational Facilities Concept Diagrams and Recommendations

Concept plans were completed for several potential parks that were identified as priority sites. The diagrams recommend possible uses appropriate for each site. Specific uses and arrangements will need to be more closely examined and planned by the municipalities based on need, funding, and detailed site plans developed in the design and engineering phase of facility development.

PROPOSED TRAIL MATRIX						
Trail Letter	Trail or Road Name	Trail type	Approx. Length (mi)	Limits	Priority (High / Medium / Low)	Notes
A	Swedesboro Paulsboro Road	On road & multi use	2	Township Line to Rt 551	Mixed	Coordinate with Regional Center
B	Route 322	Multi Use	3.5	Township limits	Medium	Coordinate with Regional Center
C	High Hill Road	On road with sidewalk	1.7	Township line to Rt. 551	High	Bicycles and pedestrians
D	New Sweden Trail	Off -Road	6.4	Multiple parcels	High	Walking & Multi Use
E	Center Square Road (EXISTING)	Off Road	1.7	Township Line to Municipal Complex	High	Boardwalk trail at west end to be built
F	Indian Run Trail	Off-Road	8.7	Oldmans Creek park parcel # 16 to Beckett Golf Club	Medium	Through many proposed open space parcels and some preserved farmland
G	Pedricktown Harrison Road	On Road	4.8	Township limits	Low	Major southern E/W connector
H	Auburn Road (Rt. 551)	On-Road, & Multi-Purpose	5.8	Township limits	Low	Major N/S connector
I	Kings Highway	On-Road	3.5	South Twp Line to Auburn Rd	Medium	County Planned Bike Route
J	Russell Mill Road	On-Road	4	Pedricktown Harrison Rd. to Rt. 322	Low	On Road - bicycles only
K	Narraticon Run Trail	Off-Road	3.3	Beckett Golf Club to Monroevill Rd.	Low	Walking only - no bikes
L	Hidden Valley Trail	Off-Road	1.5	Lake Narraticon to Ogden Rd.	Medium	Walking only - no bikes - some preserved farmland
M	Monroeville Road Trail	On-Road	1.7	Russell Mill Road to Auburn Rd.	Low	On Road - bicycles only
N	Locke Avenue Trail	Multi-Use	0.8	Raccoon Creek to Prop. Regional Center	High	Coordinate with Regional Center

O	Northern Circuit Trail	On-Road	3.8	Auburn Rd. / Kingsway H.S. / Kelley Rd. / Ashburn Station Rd. /	Low	Coordinate with Regional Center
P	Woolwich Trail	Off-Road	0.3	At Municipal Complex	High	Walking Only
Q	Lake Narraticon Trail (Partially existing)	Off-Road	1.2	Monroeville Rd. to	High	Connect to Swedesboro center
R	Franklinville Road	On-Road	1.6	Auburn Rd to Russell Mill Rd.	Medium	Scenic
S	Raccoon Creek Water Trail	Water Trail	2.5	Township Limits to State open space site #29	High	4 Prop. Landings
T	Oldmans Creek Water Trail	Water Trail	4.3	Twp Limits to Possible park site # 23	Medium	3 Prop. Landings
U	Township Line Road	On-Road	2	High Hill Rd. to Pedricktown Harrison Rd.	High	On Road - bicycles only
V	Memorial Trail	Off-Road	1.6	Garwin Road to Swedesboro Paulsboro Road	Medium	Walking Only
W	Kingsway Trail	Off-Road	1	Kingsway Regional School to Possible park site #30	Low	Walking Only - preserved
X	Stone Meetinghouse Road & Warrington Mill Road	On-Road	3.1	Route 322 to E. Greenwich Township	Low	On Road - bicycles only
Y	Back Creek Road	On-Road	1.7	Kings Highway to Harrison Township	Medium	On Road - bicycles only
Z	Oliphants Mill Road	On-Road	0.8	Kings Highway to South Harrison Township	Low	On Road - bicycles only
		Total Length	73.3			

The concept diagrams for the sites mentioned below are located at the end of this chapter. Detailed master plans should be completed for all sites prior to engineering and development.

In total, the plan proposes 1,781 acres of park and open space land. This includes 640 acres currently owned by the municipalities, 191 acres owned by the State, and 950 acres considered for acquisition. The 1,781 acres is approximately 12.6% of the total area of Woolwich and Swedesboro.

Palladino Field and LaPalomento Family Park (Map 1)

Given its proximity to Locke Ave/High Hill Park and the opportunity to create a large recreational network along High Hill Road. Given the natural beauty and interesting plant species found at the Palladino Field site, it is recommended that this property remain primarily passive unless it is determined that overflow fields are needed in the future. The area could be used as a nature trail area with ongoing farming or meadow lands. Additionally, it may possible to use the site as a means of ecotourism by leasing a portion of the agricultural land for a vineyard with wine tasting.

If additional fields are needed to compliment the fields at Locke Avenue/High Hill Park, the LaPalomento Family Park can accommodate approximately nine athletic fields. The rear portion the site is proposed as a meadow area or area for temporary uses such as concerts or events. A boat launch site and associated parking is also recommended. Trails and vehicular driveways in this area should utilize the existing alignments to minimize new development within wetlands and wetland buffers. The existing woodlands and topography on the eastern edge of Palladino Field and on the western edge of LaPalomento Family Park

could be used to create a high ropes course or zipline course between the two parcels.

NJDEP Wildlife Management Parcel (Map 2)

As mentioned in Chapter 2, the Township has discussed swapping a Township owned parcel to the State in exchange for this parcel. Should this parcel be acquired through a land swap with the State, it is recommended that it remain primarily passive. Two picnic areas are proposed adjacent to the existing pond. It is recommended that the existing pond utilized to allow for swimming or fishing. The remainder of parcel is proposed to be utilized for nature trails around meadow or farmland. It is recommended that the residential parcel with existing house directly to the north of the NJDEP parcel be acquired and utilized as a nature center or Parks and Recreation Department offices with a youth programming area adjacent to the



Photo: Matthew Blake

creek. The second existing residence further to the west should also be considered for acquisition so as not to create any conflicts between private property and the surrounding Township lands. The existing residence could also be utilized for events, a maintenance facility, or other Township functions. A new pedestrian connection and bridge is proposed to the High Hill West fields. Additionally, it may be possible to use the site as a means of ecotourism by leasing a portion of the agricultural land for a vineyard with wine tasting.

Locke Avenue / High Hill Park (Map 2)

The undeveloped parcels at Locke Avenue/High Hill Park are recommended for active recreation facility expansion. The area can accommodate approximately 7 soccer/multiuse fields, 3 baseball fields, 4 tennis courts, a 1.5 acre dog park, a playground/picnic area, and an open unprogrammed use that could be used for various activities as needed. It is also recommended that a boat launch area be constructed at this location to allow access for car top boating. The existing woodlands and topography on the western side of Locke Ave Park may also accommodate a zipline course across existing wetlands to the NJDEP parcel. The quantities and locations for all recommended uses should be further examined and confirmed in the engineering phase.

A swim club/YMCA has been proposed on the 10 acre, former PMC parcel with access off of Locke Avenue. The Township has indicated that discussions have previously occurred with YMCA about a facility in this location. A YMCA or swim club in this location would require a connection to sewer service. One option for the Township is to propose a restroom on this parcel as part of the Locke Avenue Park development in order to acquire sewer service to the site. A BMX bike park or skate park may be temporary uses for this parcel prior to development of a

swim club. An alternative location for a swim club would be Block 5, Lot 7.03.

Weatherby Development Open Space Parcels (Maps 3 and 4)

It is recommended that the existing open spaces associated with the Weatherby Development remain passive and be utilized as open space for nature trails or connector trails to High Hill Road. These trails should connect to the residential community through the existing maintenance access locations as identified on the mapping. Precise alignments will have to be more closely studied in the engineering phases. A survey will be needed to determine the most appropriate routes as topography is quite steep in some areas, and existing stormwater management basins will need to be avoided, and tree removal minimized.

Woolwich Township Municipal Complex (Map 5)

Through discussions with the project committee it was determined that future uses at the Woolwich Municipal Complex should be primarily passive. The concept diagram shows a community garden expansion, playground, dog park, open picnic and play area, and connector trails. It is anticipated that lands around the municipal complex will eventually be developed with commercial and residential uses. The municipal complex will need to serve as a local park space for these future residential communities and the existing Weatherby and Four Seasons developments. Pedestrian trails are proposed to link future development to the municipal complex while an enhanced tree buffer will provide separation between the two uses. Area for parking expansion is also available.

Indian Branch Parcels (Map 6)

The four privately owned parcels around Indian Branch should be considered for future acquisition by the Township in order to preserve the important natural features and wildlife habitats on site. It should be a priority to protect the existing bald eagle nest. It is recommended that much of the area be used primarily for nature trails and bird watching, with the exception of the large, flat clearing along Township Line Road. This area should be used for future athletic fields as needed due to its gentle slopes, minimal vegetation that would need to be cleared, and close proximity to Beckett Park in Logan Township. This area could become a second active recreation hub to serve the future residents at Auburn Village and other existing residents in the southern portion of the Township. A bird watching area could also be incorporated as the parcels contain an important bird habitat.

Auburn Village Trails (Map 7)

A connector trail is proposed from the Indian Branch

parcels to Auburn Village. This trail would utilize an existing crossing over Indian Branch and connecting to the main Boulevard within Auburn Village. This trail should connect the proposed central park, the proposed retail area, and Auburn Road. The exact location and design of the trail within Auburn Village will need to be coordinated in the village land development plans.

Beckett Golf Club (Map 8)

In discussions with the project committee it was revealed that the owners of the Beckett Golf Club may be considering a possible reconfiguration of the golf course from 27 to 18 holes. The Township has shown interest in potentially purchasing a portion of the property for future municipal use. Should this occur it is understood that the golf course would occupy the entire eastern portion of the site and potentially a small piece of the western side of the site.

Should the Township take ownership of the remaining



Photo: Matthew Blake



land it is recommended that uses compatible with the golf course be considered. Two concept diagrams are shown. These diagrams display potential compatible uses such as disc golf, tennis, miniature golf, roller hockey, and a community center.

It is also recommended that the portion of the property that is currently undeveloped be used for more passive uses such as nature trails, swimming, and winter sledding.

This area could also be used for future athletic field expansion if needed however it is recommended that Locke Ave/High Hill, LaPalomente Park, and the parcels around Indian Branch take precedence for this use.

Should the Township take ownership of the entire property, the eastern side of the site could accommodate additional athletic fields as the topography in this area is relatively flat. Another possible use for the site is a public works facility.

Swedesboro Auction Park

The project committee identified two passive uses that have been previously considered at the Swedesboro Auction Park. These uses include a performance stage and community garden. It is recommended that a seating area and display garden, and unprogrammed open field also be considered in order for the site to serve as a small neighborhood park for surrounding residents. Public rest rooms should also be included. This site could serve as an important gateway to Swedesboro.

Former Nike Missile Silo Site

The former Nike Missile Silo site provides a unique opportunity to serve residents with passive recreation in combination with historical interpretation. Recommended uses include seating and viewing areas, walking paths, parking areas, historic and military interpretive signs, and/or a botanical garden. It is recommended that the Township first take steps to clean the site prior to planning of any future uses. Trails should also be considered to link this site to the future regional center and Swedesboro Paulsboro Road.

Former Japanese Internment Camp Site

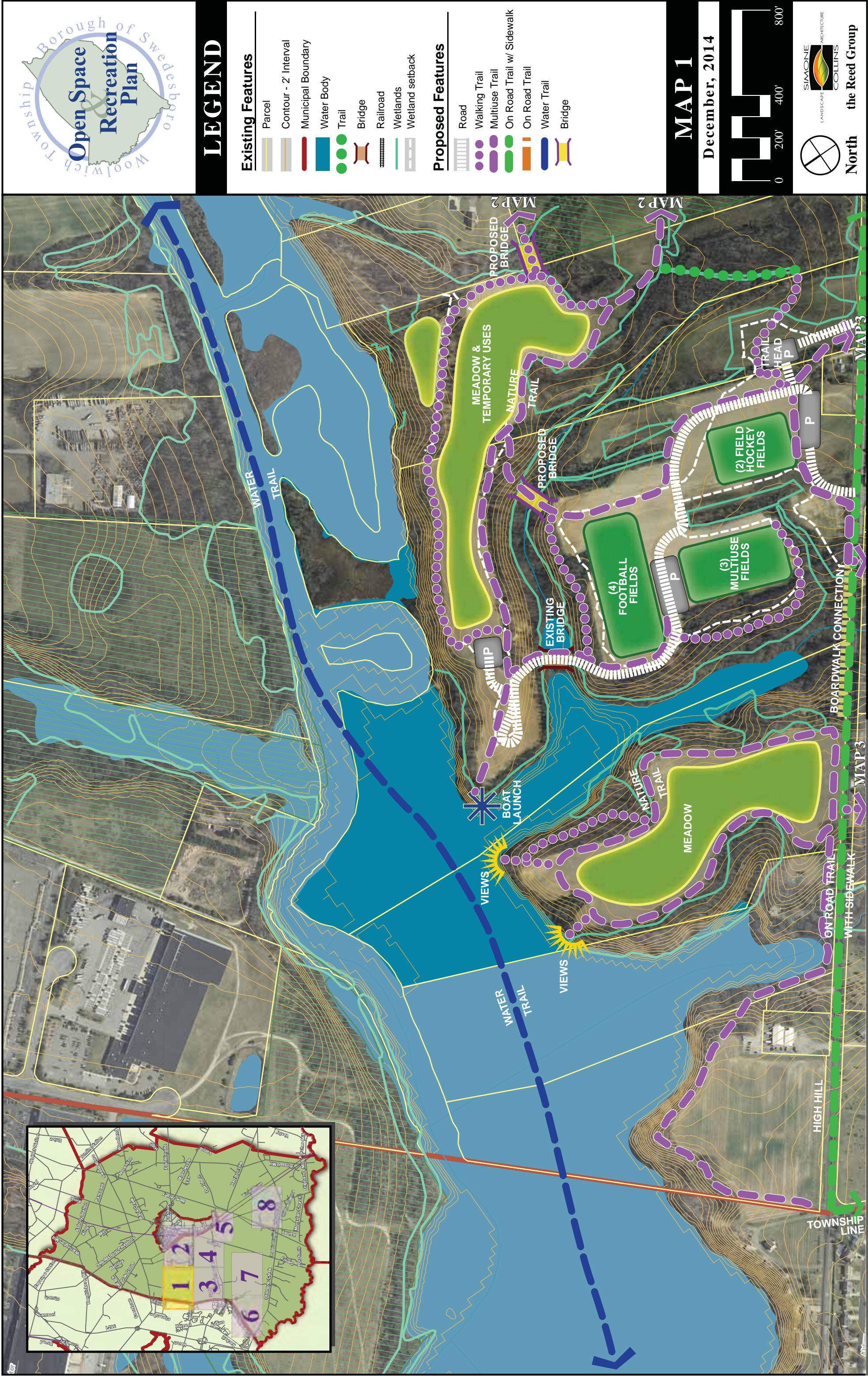
The former Japanese Internment Camp site is currently privately owned. It is recommended that the Township consider this parcel for acquisition should it become available. The site is located directly adjacent to the Locke Avenue bridge and could serve as a “gateway” (along with the Swedesboro Auction Park) to Swedesboro and Locke Avenue/High Hill Park. The site also has valuable access to Raccoon Creek. In discussions with the committee it was mentioned that the location of the site may be ideal for light commercial such as a restaurant, ice cream shop, or boat rental facility along with public use such as a picnic area, creek viewing area, or boat launch.



Photo: Matthew Blake



Photo: Matthew Blake





LEGEND

Existing Features

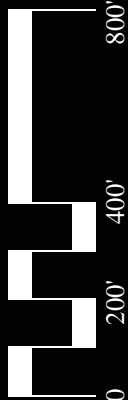
- Parcel
- Contour - 2' Interval
- Municipal Boundary
- Water Body
- Trail
- Bridge
- Railroad
- Wetlands
- Wetland setback

Proposed Features

- Road
- Trail
- On Road Trail w/ Sidewalk
- On Road Trail
- Water Trail
- Bridge

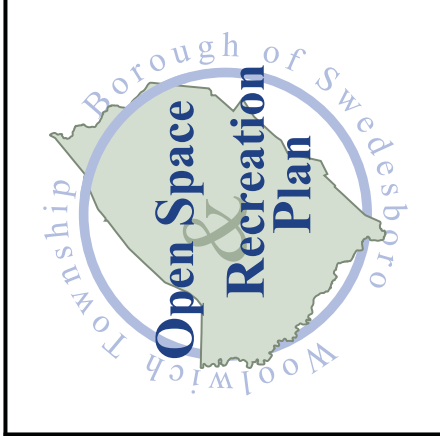
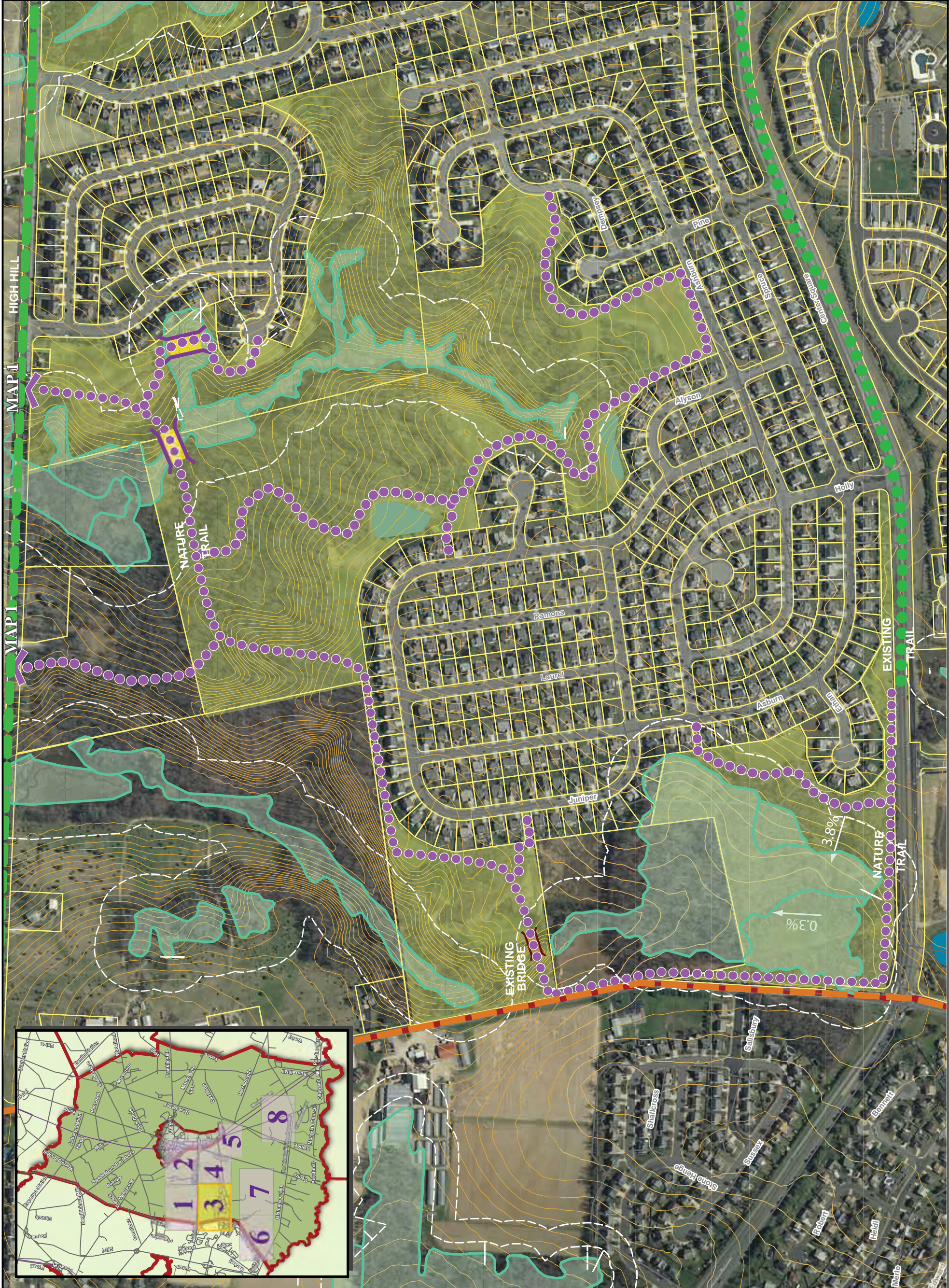
MAP 2

December, 2014



North



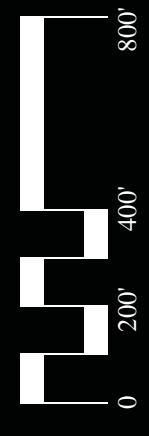


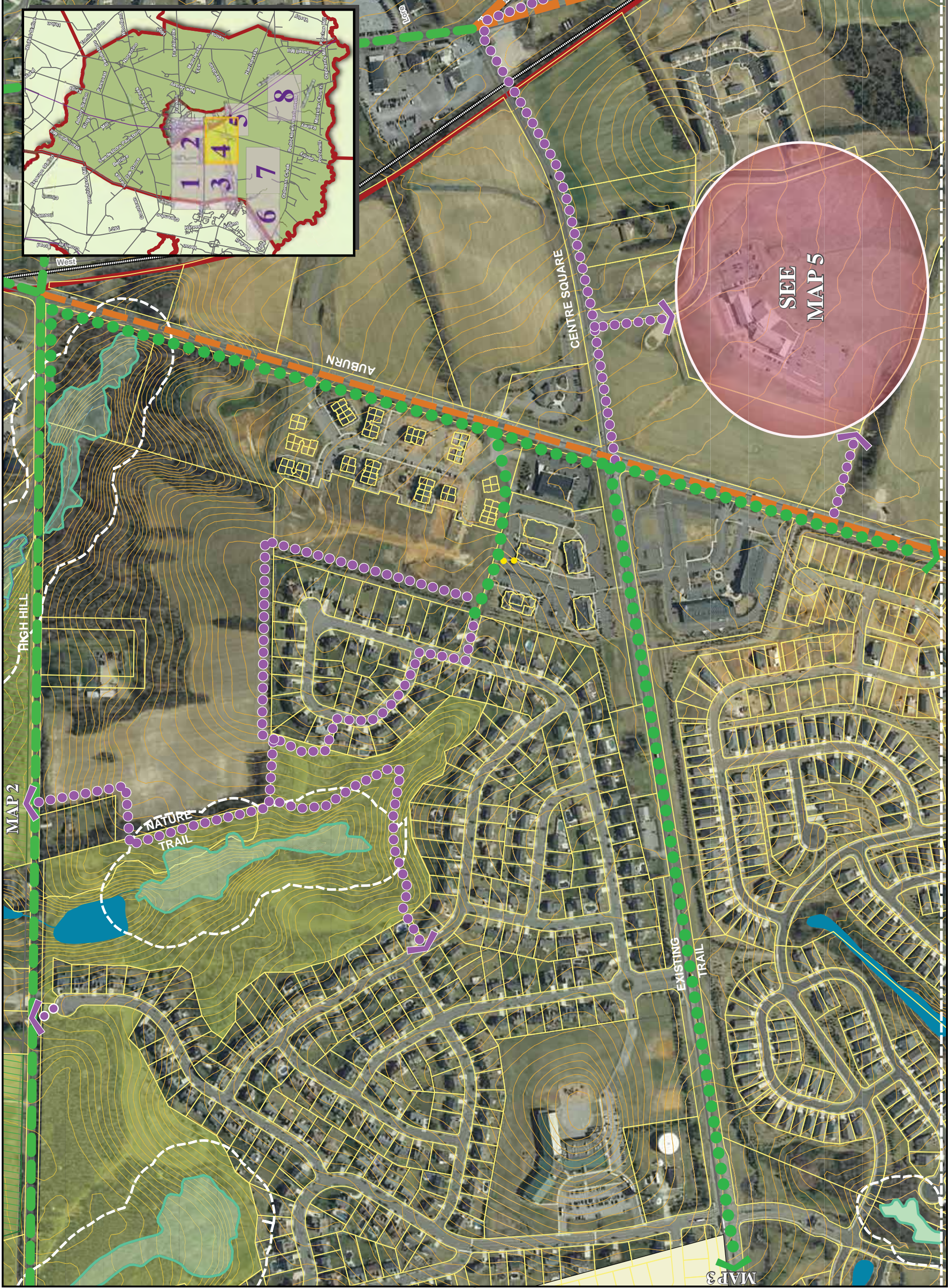
LEGEND

- Existing Features**
 - Parcel
 - Contour - 2' Interval
 - Municipal Boundary
 - Water Body
 - Trail
 - Bridge
 - Railroad
 - Wetlands
 - Wetland setback
- Proposed Features**
 - Road
 - Trail
 - On Road Trail w/ Sidewalk
 - On Road Trail
 - Water Trail
 - Bridge

MAP 3

December, 2014



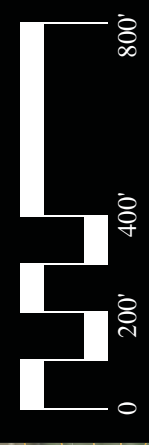


LEGEND

Existing Features	
	Parcel
	Contour - 2' Interval
	Municipal Boundary
	Water Body
	Trail
	Bridge
	Railroad
	Wetlands
	Wetland setback
Proposed Features	
	Road
	Trail
	On Road Trail w/ Sidewalk
	On Road Trail
	Water Trail
	Bridge

MAP 4

December, 2014



the Reed Group



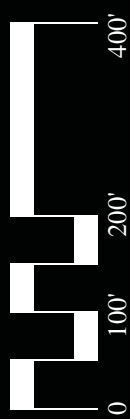
LEGEND

- ### Existing Features
- Parcel
 - Contour - 2' Interval
 - Municipal Boundary
 - Water Body
 - Trail
 - Bridge
 - Railroad

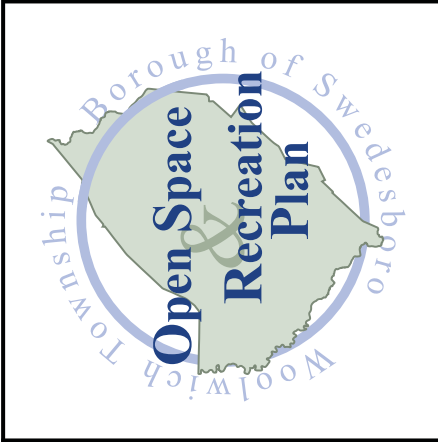
- ### Proposed Features
- Road
 - Trail
 - On Road Trail w/ Sidewalk
 - On Road Trail
 - Water Trail
 - Bridge

MAP 5

December, 2014



the Reed Group

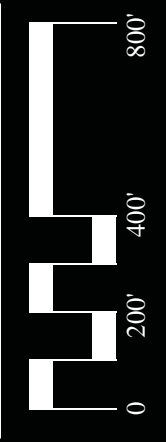


LEGEND

Existing Features	
	Parcel
	Contour - 2' Interval
	Municipal Boundary
	Water Body
	Trail
	Bridge
	Railroad
	Wetlands
	Wetland setback
Proposed Features	
	Road
	Trail
	On Road Trail w/ Sidewalk
	On Road Trail
	Water Trail
	Bridge

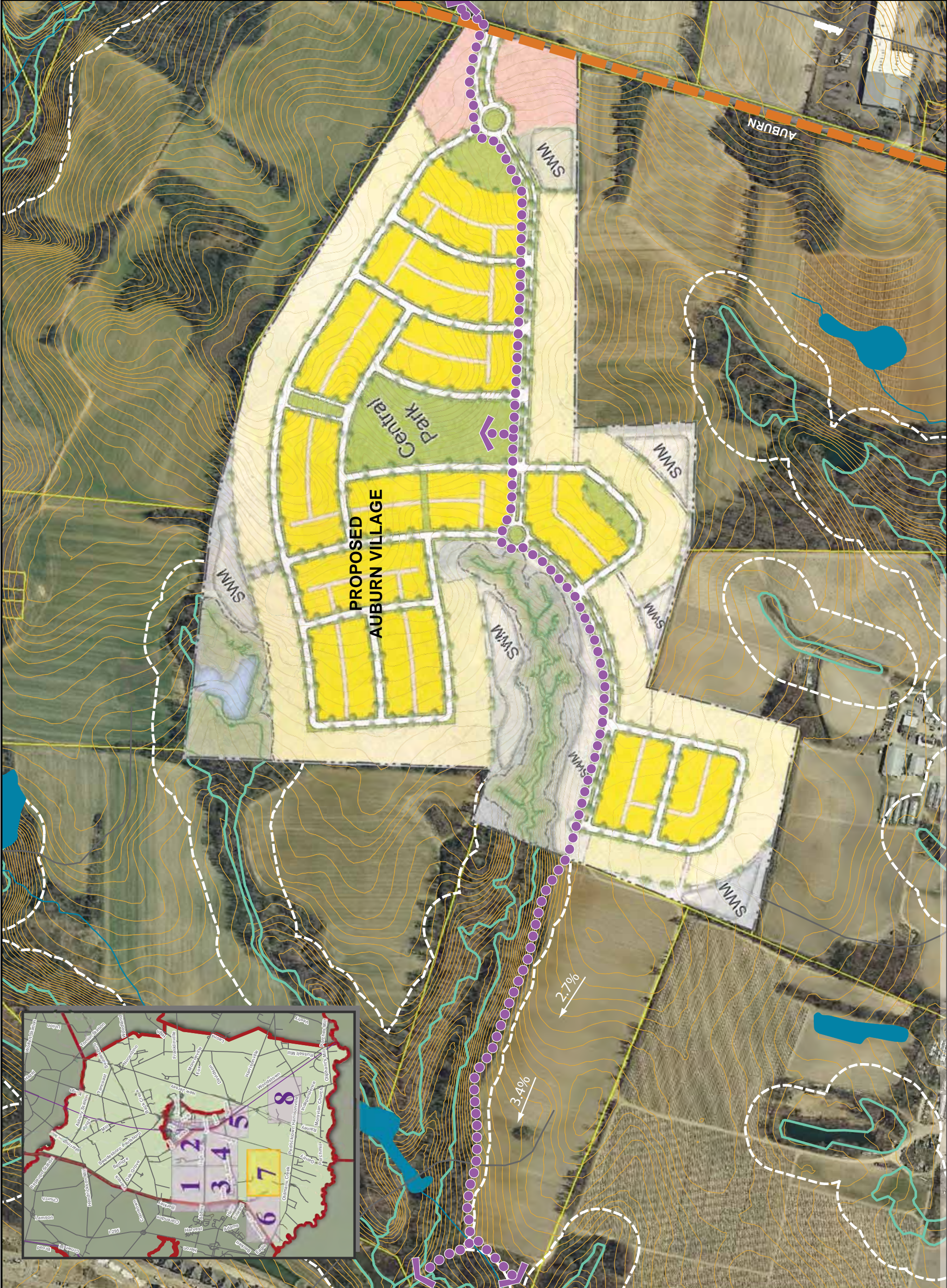
MAP 6

December, 2014



North

the Reed Group



LEGEND

Existing Features

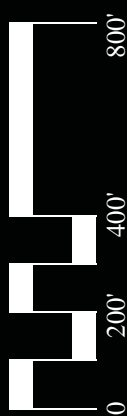
- Parcel
- Contour - 2' Interval
- Municipal Boundary
- Water Body
- Trail
- Bridge
- Railroad
- Wetlands
- Wetland setback

Proposed Features

- Road
- Trail
- On Road Trail w/ Sidewalk
- On Road Trail
- Water Trail
- Bridge

MAP 7

December, 2014



the Reed Group



LEGEND

Existing Features

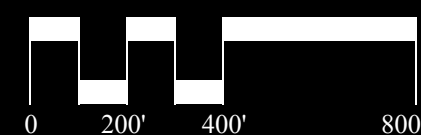
- Parcel
- Contour - 2' Interval
- Municipal Boundary
- Water Body
- Trail
- Bridge
- Railroad
- Wetlands
- Wetland setback

Proposed Features

- Road
- Trail
- On Road Trail w/ Sidewalk
- On Road Trail
- Water Trail
- Bridge

MAP 8A

December, 2014



North



the Reed Group

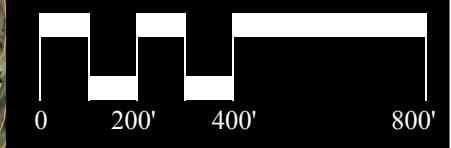


LEGEND

Existing Features	
	Parcel
	Contour - 2' Interval
	Municipal Boundary
	Water Body
	Trail
	Bridge
	Railroad
	Wetlands
	Wetland setback
Proposed Features	
	Road
	Trail
	On Road Trail w/ Sidewalk
	On Road Trail
	Water Trail
	Bridge

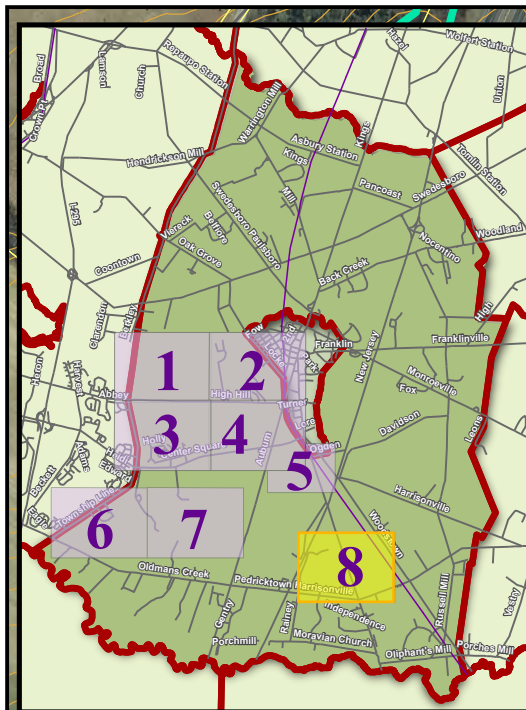
MAP 8B

December, 2014



North

the Reed Group



LEGEND

Existing Features

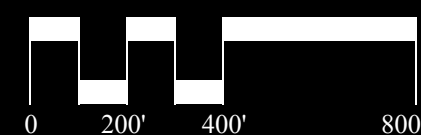
- Parcel
- Contour - 2' Interval
- Municipal Boundary
- Water Body
- Trail
- Bridge
- Railroad
- Wetlands
- Wetland setback

Proposed Features

- Road
- Trail
- On Road Trail w/ Sidewalk
- On Road Trail
- Water Trail
- Bridge

MAP 8C

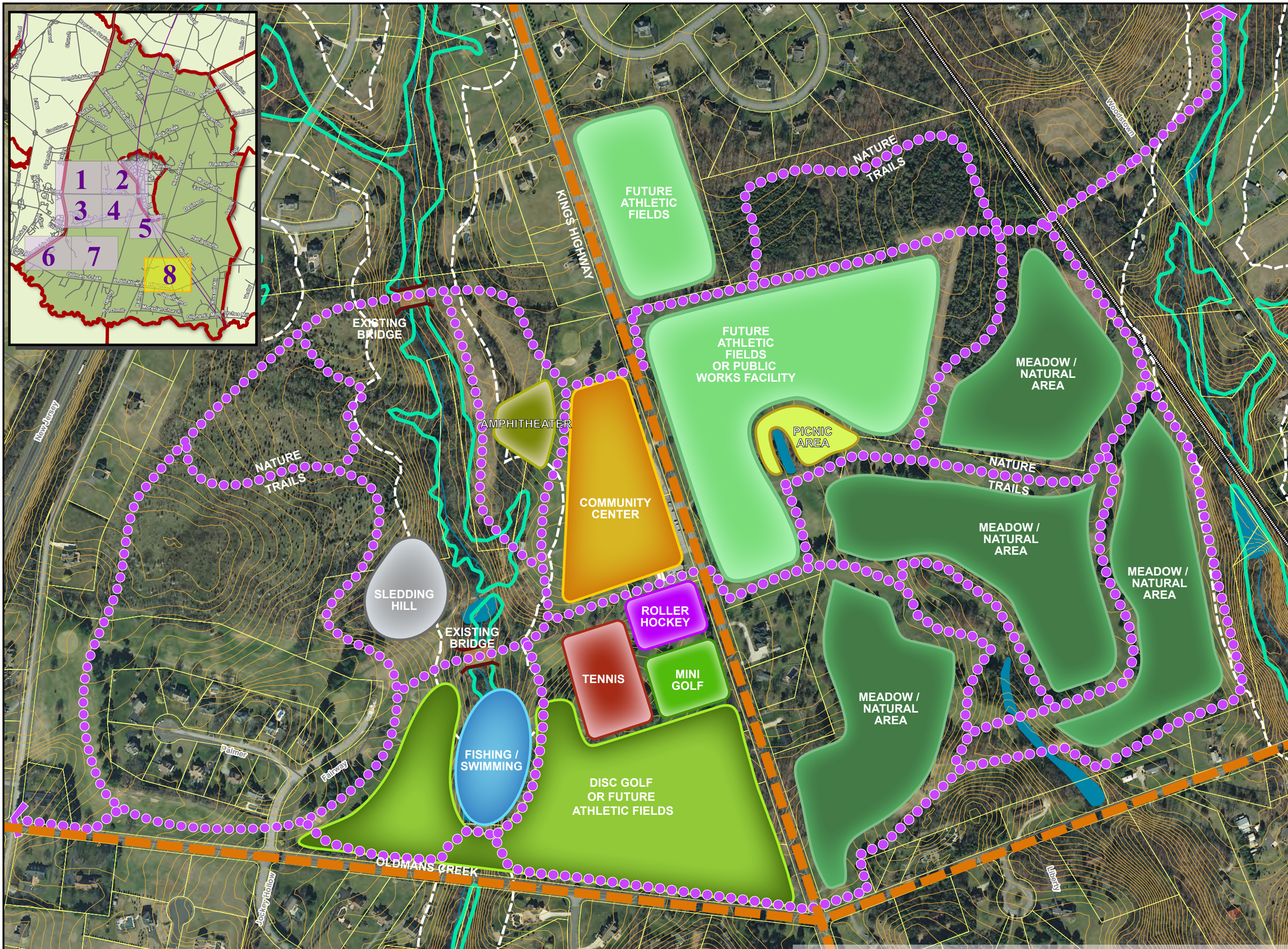
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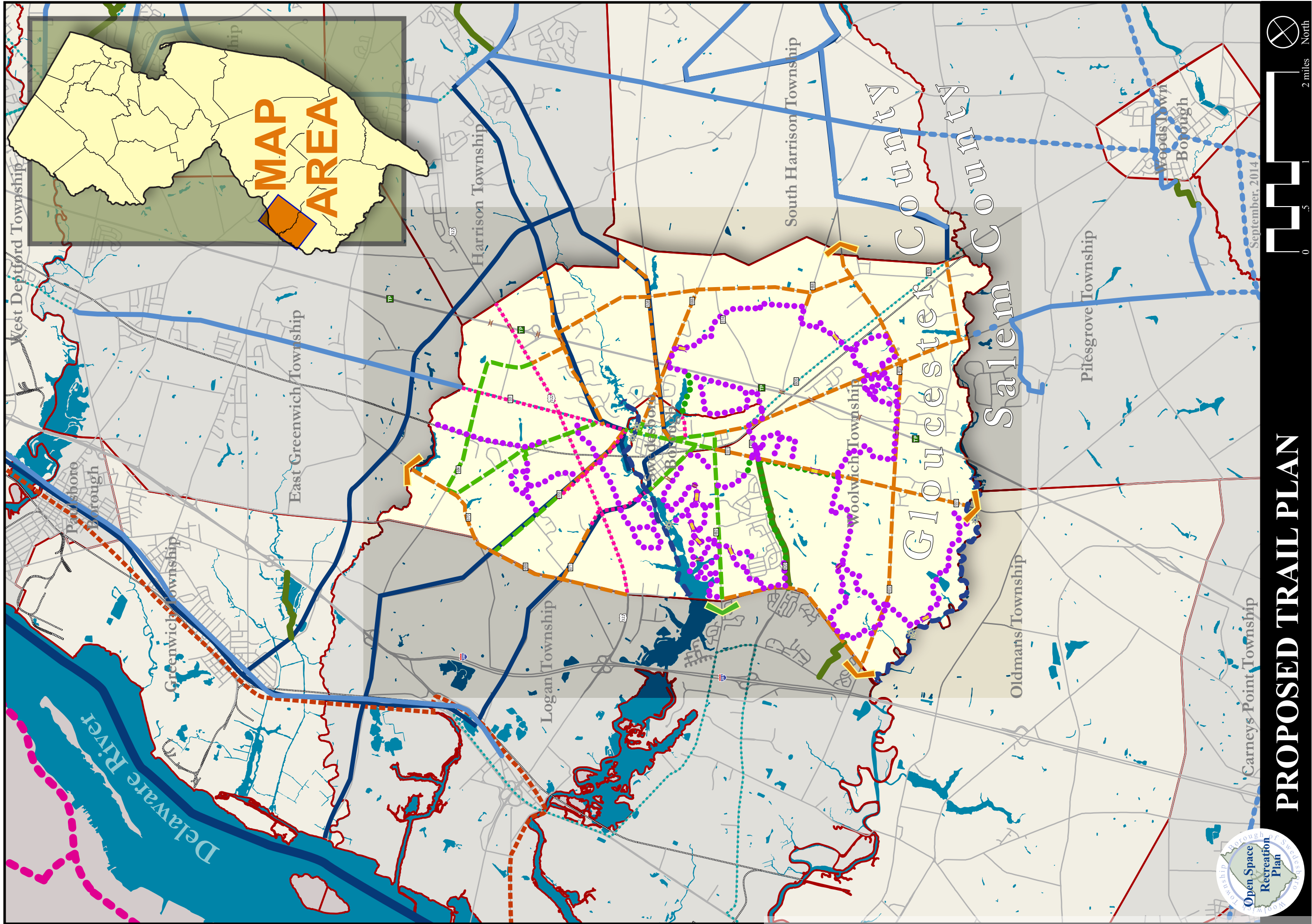


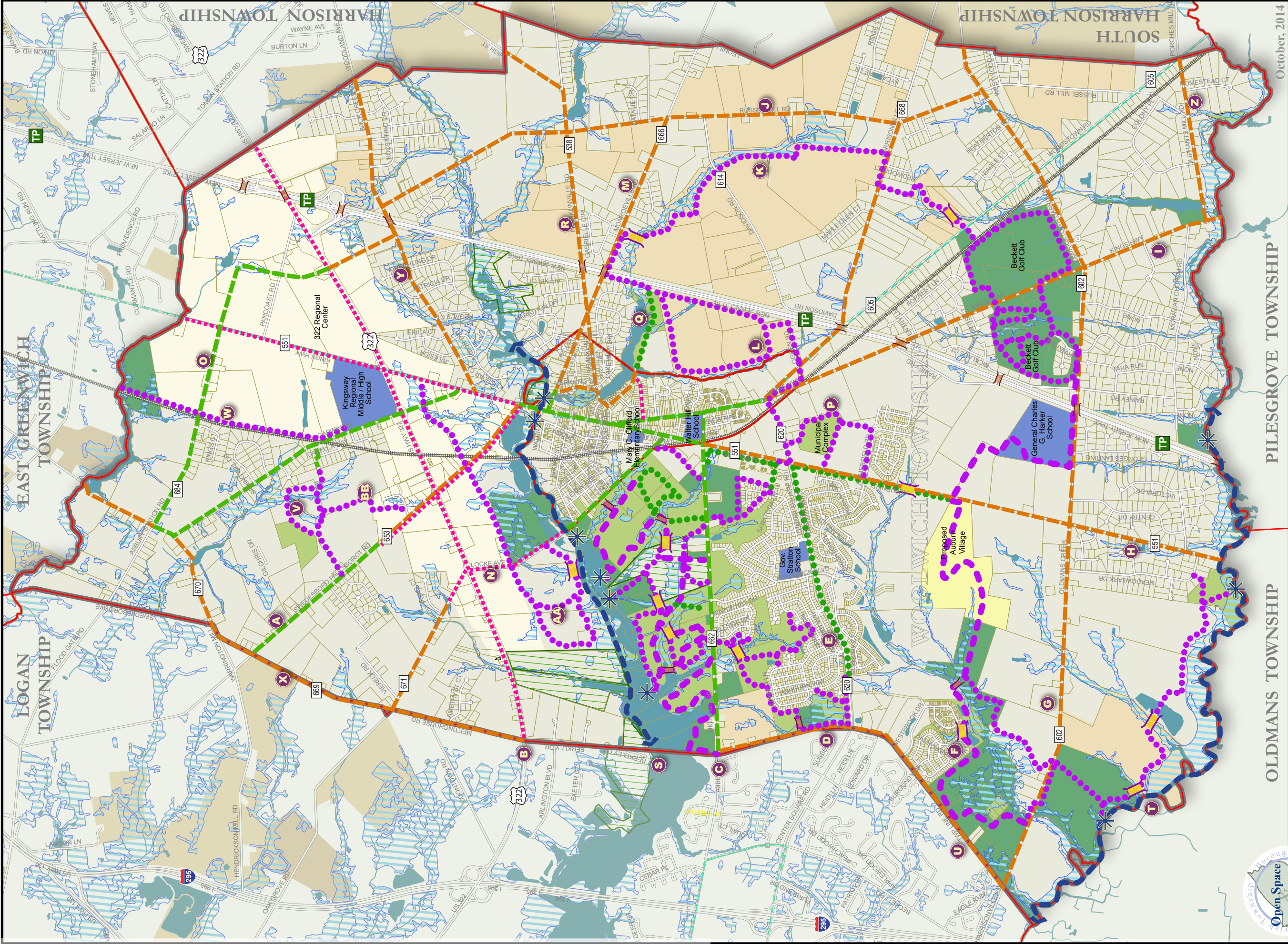
North



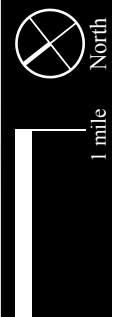
the Reed Group







October, 2014



PROPOSED TRAIL PLAN

- Proposed**

 - Water Trail
 - Multi Use Trail
 - Walking Trail
 - On Road Trail
 - On Road Trail with Sidewalk
 - Multi-Use Trail / Sidewalk
- Legend**

 - Road
 - Proposed Road
 - Parcel
 - Stream
 - Municipal Boundary
 - Project Area
 - Existing Trail
- 322 TDR**

 - Receiving Area
 - State Property
 - Wetland
 - Railroad
- Land Use**

 - Permanently Preserved Farm
 - Municipal Park & Open Space
 - Auburn Village TDR
 - School
 - Water
 - Other Parcels of Interest
- Trail Features**

 - Boat Access
 - Proposed Bridge
 - Existing Bridge
 - Trail Name (see matrix)



DRAFT



4

IMPLEMENTATION

Development and Acquisition Priorities

It is expected that the acquisition and development as proposed in this plan will take 20 to 25 years. Development will need to be implemented in phases based on multiple factors including available funding, willing partnerships, municipal priorities, actual community growth, recreation trends, and property acquisitions. The Township and Borough will need to periodically update this plan based on evolving recreational needs including participation rates of various sports leagues.

Development Priorities – 0-10 years

- Establish primary trail and sidewalk connections from existing residential neighborhoods to existing parks
- Construct new active recreation fields at Locke Avenue/High Hill Park
- Construct new active recreation fields at LaPalomente Family Park as needed

Photo: Matthew Blake

- Redevelop Swedesboro Auction Park to serve local residents
- Develop off road trail network from Locke Avenue to Palladino Field
- Establish a water trail along Raccoon Creek
- Conduct a thorough analysis of potential bicycle routes in the Township. Establish bicycle routes with “share the road” signage and striping and bicycle lanes where existing conditions allow. Main corridors such as High Hill Road, Township Line Road, Auburn Road, and Kings Highway should take priority if possible to improve connections from residential areas to existing parks.
- Develop and distribute a map of existing parks, open space, and trails accessible to residents. Update regularly as needed.
- Establish a water trail along Oldmans Creek

Development Priorities – 10-15 years

- Complete development at Palladino Field, LaPalomente Park and Locke Ave/High Hill Park if needed.
- Consider acquisitions and bridge enhancements to establish gateway to Swedesboro and Woolwich center at Locke Avenue bridge.
- Convert appropriate “share the road bicycle” routes to bicycle lanes through roadway reconstruction or widening where needed.
- Establish other on road bicycle routes throughout the Township where roadway reconstruction or widening is needed, including on road connections needed to link the future TDR regional center and other future development.

- Establish other off road trails as needed to link TDR regional center and other future development.
- Continue expansion of park system through acquisitions along Raccoon Creek, Oldmans Creek and in southern portion of Woolwich Township and redevelopment of Nike missile base.

Development Priorities – 15-25+ years

- Establish recreational trails along preserved farms to market ecotourism in the area
- Establish a second active recreation hub on Township Line Road as needed
- Continue development of off road and on road connections as needed to link future development
- Continue expansion of park and open space system through acquisition and new park development

Acquisition Priorities

As described in the previous chapter, this plan indicates properties that are of current interest to the Township and Borough based on a variety of factors. These properties amount to approximately 950 acres of land. This list of properties is meant to serve as an inventory of properties that the Township would consider acquiring if they become available and is not a final list of properties for to pursue for acquisition. It is expected that over the next two decades some properties may be removed from the list and new properties will be added.

The Township and Borough will need to continuously prioritize properties for possible acquisition based on evolving recreational needs. To the right is a list of the current properties of interest and their recommended priority (High, Medium, Low).

PARCELS OF INTEREST MATRIX									
Site #	Facility Name	Block / Lot	Size (acres)	Ownership Status	Existing/Anticipated Facility Type	Existing/Potential Primary Use	Priority (High, Medium, Low)	Acquisition Cost (Y/N)	Development Cost Low < \$500k Med < \$1M High > \$1M
4	Privately Owned Parcel	B5, L11.02	32.33	Private	Passive	Water access, Env. Protection	High	Y	Low
5	Former Japanese Internment Camp Site	B5, L16	5.79	Private	Passive	Historic, Water access	Med	Y	Med
11	Privately Owned Parcel	B2, L22	56.38	Private	Mixed	Sports, Env. Protection	High	Y	High
12	Privately Owned Parcel	B2, L18	44.22	Private	Mixed	Sports, Env. Protection	High	Y	High
13	Privately Owned Parcel	B2, L17	16.5	Private	Passive	Env. Protection	Low	Y	Low
14	Privately Owned Parcel	B2, L16	29.7	Private	Passive	Env. Protection	Low	Y	Low
15	Maccarone Farm	B1, L3	124	Private	Passive	Water access, Env. Protection	High	Y	Med
17A	Beckett Golf Club (western side)	B31, L1.01, 4, 4.01	131.4	Private	Mixed	Recreation, Community use, Golf	High	Y	High
17B	Beckett Golf Club (eastern side)	B40, L12, 14	91.37	Private	Mixed	Recreation, Community use, Golf	Med	Y	High
18	Oliphant's Mill Pond	B36, L5	31.6	Private	Passive	Swimming, Env. Protection	High	Y	Med
22	Privately Owned Parcel	B1, L1	10	Private	Passive	Water access, Env. Protection	Low	Y	Low
23	Privately Owned Parcel	B25, L1	9.65	Private	Passive	Water access, Env. Protection	High	Y	Low
26	Privately Owned Parcel on Glen Echo Ave.	B32, L11 (Swedesboro)	0.72	Private	Passive	Water access	High	Y	Low
28	Privately Owned Parcel	B5, L6.05	11.79	Private	Passive	Water access, community use	High	Y	Med
30	Tomlin Station NHP	B21, L5 / B22, L3	45	Private	Passive	Pond access, Env. Protection	Low	Y	Low
31	Privately Owned Parcel	B7, L2, 3	58.65	Private	Passive	Water Access, Env. Protection	High	Y	Low
32	Privately Owned Parcel	B5, L7.03	7.38	Private	Active	Sports	Low	Y	Med
33	Privately Owned Parcel	B3, L6	33.39	Private	Passive	Connector trails	Med	Y	Low
34	Privately Owned Parcel	B3.16, L2.01	10.81	Private	Passive	Connector trails	High	Y	Low
35	Privately Owned Parcel	B3.07, L14.01	13.21	Private	Passive	Connector trails	Low	Y	Low
36	Privately Owned Parcel	B40, L9, 10, 11	51.83	Private	Mixed	Recreation, Community Use, Golf, Env. Protection	Med	Y	High
39	Privately Owned Parcel	B2, L24	64.22	Private	Passive	Trails, Env. Protection	Low	Y	Low
40	Privately Owned Parcels	B31, L5, 5.01	2.95	Private	Mixed	Recreation, Community use, Golf	High	Y	High
41	Privately Owned Parcel	B5, L6.06	11.05	Private	Passive	Water Access, Trails, Community use	Med	Y	Low
42	Privately Owned Parcel	B5, L1	27.76	Private	Passive	Trails, Env. Protection	High	Y	Low
43	Privately Owned Parcel	B5, L2	24.46	Private	Passive	Trails, Env. Protection	Low	Y	Low
44	Privately Owned Parcel	B5, L6.08	2.51	Private	Passive	Township use, Community use	Med	Y	Low
45	Privately Owned Parcel	B5, L4.01	1.13	Private	Passive	Trails, Township use, Community use	Med	Y	Low
46	Privately Owned Parcel	B1, L1 (Swedesboro)	0.91	Private	Passive	Gateway park, Community use	Med	Y	Med
TOTAL ACREAGE			950.71						

It should also be noted that section 203-54.G.2.b of the Woolwich Township zoning ordinance states that “Woolwich Township shall maintain the first right of refusal for properties identified as potential future municipal parks in the Woolwich Township Open Space Plan”, giving the Township the first opportunity to negotiate acquisition of properties they may be interested in.

Potential Funding Sources

Over the next two decades, Woolwich Township and the Borough of Swedesboro will need to be proactive in obtaining funds for design and construction of the improvements proposed in this study. The Township and Borough will need to continually seek project partners and review opportunities for funding. There are multiple funding sources that provide grants for park, trail, and open space development and acquisition like those identified in this plan. Several examples of such sources are listed below.

Federally Funded Programs

Federal Highway Administration Recreational Trails Program

Administered through NJDEP Green Acres, this program provides financial assistance to states for developing and maintaining trails and trail facilities. The Recreational Trails Program funds come from the Federal Highway Trust Fund, and represent a portion of the motor fuel excise tax collected from non-highway recreational fuel use. Permissible uses and projects include maintenance and restoration of existing trails; development and rehabilitation of trail side and trail head facilities and trail

linkages for trails (e.g., parking, signage, shelters, sanitary facilities); purchase and lease of trail construction and maintenance equipment; construction of new trails in existing parks or in new right of way; for motorized use only, acquisition of easement and fee simple title to property for trails. Projects are funded on a 80% federal share and 20% matching share basis. The maximum grant amount is 24,000 for non-motorized projects. The application deadline is mid-February each year. For more information visit the program website at http://www.state.nj.us/dep/parksandforests/natural/trail_grants.htm.

Transportation Alternatives (TAP)

This program replaced the previous *Transportation Enhancements* program with the most recent passing of the surface transportation bill, Map-21. The program is administered by the New Jersey Department of Transportation (NJDOT), in partnership with the North Jersey Transportation Planning Authority (NJTPA), the Delaware Valley Regional Planning Commission (DVRPC) and the South Jersey Transportation Planning Organization (SJTPO).

The Transportation Alternatives Program (TAP) was established by Congress in 2012 under the Moving Ahead for Progress in the 21st Century Act (MAP-21), and is funded through a set aside of the Federal Aid Highway Program. TAP provides federal funds for community based “non-traditional” projects designed to strengthen the cultural, aesthetic and environmental aspects of the nation’s intermodal system. TAP projects must relate to surface transportation.

Eligible projects include:

- Provision of facilities for pedestrians and bicycles.

- Scenic or historic highway programs including the provision of tourist and welcome center facilities as well as scenic turnouts, overlooks and viewing areas.
- Landscaping and other scenic beautification.
- Historic preservation.
- Rehabilitation of historic transportation buildings, structures and facilities (including historic railroad facilities and canals).
- Preservation of abandoned railway corridors (including the conversion and use for pedestrian and bicycle trails).
- Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.

The eligible entities to receive TAP funds are:

- Local governments
- Regional transportation authorities
- Transit agencies
- Natural resource or public land agencies
- Tribal governments
- Any other local or regional governmental entity with responsibility for oversight of
- Transportation (other than a metropolitan planning organization or a State agency).

For more information on the Transportation Alternatives Program please visit <http://www.state.nj.us/transporta->



State Funded Programs

New Jersey State Aid Program

This program administered by NJDOT consists of multiple sub-programs that provide funding to local municipalities to improve the state's transportation system.

Two funding opportunities administered through the State Aid Program include applicable to future projects proposed in this plan include:

1. Municipal Aid

This program is announced each spring when the NJDOT invites municipalities to apply. This program funds projects that include road improvements such as resurfacing, rehabilitation, reconstruction, and signalization. This fund could be used for widening of road shoulders for on-road bike routes.

2. Bikeway Grant Program

This program provides funds to counties and municipalities to promote bicycling as an alternative mode of transportation in New Jersey. Examples of eligible projects include:

- New bikeways
- Separation of bikeway from motor vehicle traffic
- Bikeway connecting to existing local or regional bicycle system
- Bikeway improving access to centers of activity
- Continuation of a previously NJDOT funded

While the application deadline for the 2015 round of funding for both of these programs was October 14, 2014, it is anticipated that funds will be available on a yearly basis. These programs should be continuously monitored by the Township and Borough as a potential funding source for projects proposed in this plan. For more information on these plans please visit <http://www.state.nj.us/transportation/business/localaid/>

NJDEP Green Acres Program

The New Jersey Department of Environmental Protection (NJDEP) Green Acres Program was created to meet the state's recreational and conservation needs. Since its inception, Green Acres has protected almost 500,000 acres of open space and developed hundreds of public parks. Green Acres helps to preserve the State's water supply and other natural and historic resources, in addition to helping to grow state parks, forests and natural areas as well as providing for urban and neighborhood parks. Green Acres is the land acquisition arm of NJDEP, and as such, it can acquire land directly from private landowners. This land then becomes part of the network of state parks, forests, natural areas and wildlife management areas.

Green Acres funding can be used for the acquisition of land that will be used for public outdoor recreation or conservation. Eligible lands include natural areas, historic sites, conservation areas, water bodies and open space suitable for active or passive recreation. The land can contain buildings as long as they'll be used to support outdoor recreation, they're historic or they will be demolished to create open space. The acquired land can be used for: "active" recreation, like playgrounds, athletic fields, outdoor basketball and tennis courts, outdoor pools, outdoor skate parks and outdoor rinks; "passive" recreation like walking, hiking, horseback riding, cross-country skiing, snowshoeing, boating, picnicking and

other related activities; or conservation. Funding can also be used towards development, or the improvement of parkland with facilities for outdoor recreational use and/or conservation. Examples include the construction of tot lots, athletic fields, tracks, courts, walkways, trails, boat ramps and boardwalks. Support structures for outdoor recreation, like restrooms and concessions, may also be funded through Green Acres. Some ineligible projects include: structures that won't be used to support outdoor recreation and conservation, any site that is intended to be a public road right-of-way and any facility where public access is not provided. To receive funding, the local government must own the land or have an irrevocable lease or use agreement for at least 25 years

One part of Green Acres is the Green Acres Planning Incentive, which provides funds to municipalities that have passed a local open space tax for the acquisition of land for conservation and recreation purposes and who have a Green Acres approved Open Space and Recreation Plan to guide the usage of the funds. Through the Planning Incentive, municipalities can get a 50% matching grant, up to a set cap based on available funds. They also have more leeway in using the funds for acquisition. Municipality matching funds can come from a bargain sale on the property, federal or state funds, county or local open space funds or private funds.

In 2008, the Township executed a Project Agreement with the state Green Acres Program to participate in its Planning Incentive Program which enables municipalities with an approved dedicated funding source and Open Space and Recreation Plan (OSRP), to secure a 50% cost-share in matching state funds for the acquisition of land for conservation purposes and compatible outdoor recreation uses.. The 2008 project agreement has been renewed several times since initial adoption as funds have been drawn-down and the Township has successfully applied for additional supplemental funding to replenish



its account for reimbursement on new projects per Green Acres Guidelines. The Township and Borough may also apply for a Green Acres loan available at a 2% interest, payable over thirty years through the Department's Environmental Infrastructure Financing Program (EIFP), to supplement or fully fund an acquisition or park development project.

For acquisition projects, eligible funding costs include acquiring the land as well as other transactional costs if they are included in the initial request and there are sufficient funds. These include survey, appraisal, title, and preliminary assessment costs associated with the acquisition, provided these reports are prepared in accordance with Green Acres Guidelines. The costs to demolish a building on a site being acquired are eligible for reimbursement up to an established cap per project. Other incidental costs, individually itemized, associated with the implementation of the acquisition project, including legal, engineering, financial, geological, hydrological, inspection, and other professional services are eligible for reimbursement up to an established cap.

Green Acres also provides a 25% cost share for park development projects within a designated Urban Aid municipality, densely or highly populated municipality. However, both communities currently do not meet the criteria to be eligible to apply for park development funding. Currently, the Township has \$498,472 available in its Planning Incentive account. However, once reimbursements are submitted for a recent acquisition in 2014, along with various transactional costs, the amount will likely be under \$100,000 in remaining funds. In 2014, the Township submitted a supplemental funding request to Green Acres for \$375,000.

Safe Routes To School (SRTS)

Administered through NJDOT, New Jersey's Safe Routes

to School (SRTS) program is a federally funded reimbursement program that makes funds available to school districts, schools, municipalities, county government, and planning partners to address infrastructure projects that provide safer walking and bicycling routes. These funds are intended to benefit elementary and middle school children in kindergarten through the eighth grade.

SRTS funding is only available to municipalities, school districts, individual schools county government, and planning partners. Funding may only be used for infrastructure projects that physically exist within the public right-of-way.

Eligible projects include the planning, design, and construction of infrastructure-related projects that will substantially improve the ability of students to walk and bicycle to school, including:

- sidewalk improvements
- traffic calming and speed reduction improvements
- pedestrian and bicycle crossing improvements
- on-street bicycle facilities
- off-street bicycle and pedestrian facilities
- secure bicycle parking facilities
- traffic diversion improvements in the vicinity of schools

The next round of SRTS funding has not yet been determined and is probably contingent on the long-term reauthorization of the Federal Transportation bill. For more information on the NJ SRTS program, please visit <http://www.state.nj.us/transportation/business/localaid/srts.shtm>

County Funded Programs

Gloucester County Open Space Preservation Program

This program is partially funded through grants administered by the State Agriculture Development Committee and the New Jersey Green Acres Program. Through this program, the County assists municipalities in the purchase of recreational lands. Funds can be used to buy new parks, expand existing parks, or develop greenways. This program should be continuously monitored by the Township and Borough as a potential funding source for projects proposed in this plan. For more information please visit www.gloucestercountynj.gov

Municipal Funding

Woolwich Township

In 2002, Woolwich Township voters passed a public question asking residents to support a non-binding levy for 5¢ per \$100 of assessed value for the purchase and maintenance of land. It did not explicitly state that the funds could be used for park-related, planning or development. A referendum was passed in 2013 which changed the language in the question to allow for up to 5¢ rather than a strict 5¢. The question that was voted on in 2002 stated that 5¢ per \$100 assessed would be the tax revenue.

Based on the Township's most recent revaluation, the assessments across the municipality are up drastically and there was concern about creating an unintentional windfall. In previous years the Township would collect \$300,000 for Municipal Open Space. Calculating the same 5¢ on the new assessed values, Woolwich Township would collect more than \$500,000. For each penny increase in the rate it raises the average homeowner's

taxes by \$28.83. As a result of the recent referendum, Woolwich Township is currently collecting only 3¢ for the Municipal Open Space Tax, but will likely collect the full voter-approved amount of 5¢ in the future given strong public support as evidenced in previous referendum, and in anticipation of multiple acquisition and development projects being considered for this plan.

As mentioned, DVRPC has indicated that the population in Woolwich Township is expected to increase by 126.5% by the year 2040. The anticipated 2040 population is 23,098. Assuming 3.2 people per household per the 2010 census, the estimated number of households is 7,218. Assuming an average home value of \$309,000, 5¢ per \$100 assessed would generate approximately \$1.12 million in revenue. It should be noted that the DVRPC estimates are rough assumptions and based on recent preservation efforts in Woolwich, the 2040 population may not be as large as estimated.

Borough of Swedesboro

The Borough of Swedesboro currently does not have a Municipal Open Space tax similar to that of Woolwich. It is recommended that the Borough consider posing a public question to voters asking them to support a municipal open space tax levy similar to that of Woolwich. The Borough will need to determine the levy rate as felt to be appropriate. As an example, based upon the 2012 median home value within Swedesboro of \$179,000, a tax of 3¢ for every \$100 assessed would generate a revenue of approximately \$53,914. This tax would help to generate revenue for the Borough to utilize for acquisition, ongoing maintenance, and development of parks and open space in Swedesboro or for any future shared facilities with the Township. Alternatively, the Borough could consider setting up a general fund for parks and open space in which a certain dollar amount is allocated to the fund each year.

In addition to providing for ongoing maintenance, such a fund could give the Borough the ability to partner with Woolwich in various grant applications. As part of the grant application, the Borough could declare its intent to contribute a certain amount of funds for a project. Joint applications such as these display intermunicipal cooperation which can sometimes be advantageous in securing grants.

Maintenance

As the Township and Borough continue to expand their park and open space, the cost of maintenance will undoubtedly increase. The Township has the opportunity to utilize revenue from the 5¢ Open Space Tax for maintenance purposes. Swedesboro should consider proposing a similar tax to residents. Currently maintenance costs in Woolwich Township equate to about \$1,908 / acre of maintained park space. The breakdown of this figure is as provided by the Woolwich Township Public Works department is below:

Equipment cost	\$10,180
Equipment maintenance and fuel costs	\$3,400
Park maintenance expenses	\$30,641
Salary and Wages (3,080 man hours)	<u>\$60,723.60</u>
Total	\$104,944.60
Cost per acre of approx. 55 acres	\$1,908.08

The total number of park and open space acreage, including Township owned lands and parcels of interest equates to approximately 1,500 acres. It is not expected that the Township will acquire every parcel of interest listed in this plan, however as a point of reference, 1,500

acres utilizing the same cost per acre would equate to approximately \$2,862,000. Much of this land would likely remain as open space and require minimal maintenance, which would reduce the above cost.

Calculating only parcels that are proposed in this plan to potentially contain some active recreation equates to approximately 510 acres of land. At the same cost per acre, maintenance costs would be approximately \$973,120 per year. Again, portions of these properties may remain passive and some may never be acquired thereby reducing the above cost.

Prior to development of future active recreation facilities, the Township should ensure that adequate maintenance and resources are available for existing parks. The Township should consider options such as converting stormwater facilities and other lawn areas to meadow and natural areas and constructing artificial turf fields to reduce maintenance costs where possible.



Photo: Matthew Blake



5 APPENDIX



Volume 1:

- Committee meeting minutes and sign-in sheets
- Public meeting minutes and sign-in sheets
- Online survey results data
- Telephone survey summary presentation
- Telephone survey results data
- Email letter to local sports organizations
- Woolwich Regional Center layout plan

Volume 2:

- 2004 Open Space & Recreation Plan
- Environmental Resource Inventory
- Stewardship Assessment Plan
- TDR Plan
- TDR Circulation Plan
- TDR Public Spaces Plan
- Nike Missile Base Correspondence

