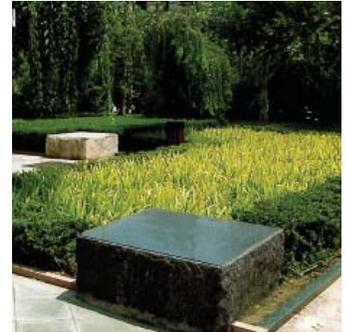
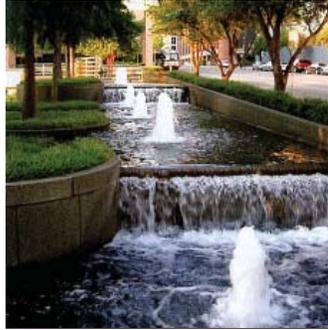


PUBLIC SPACES PLAN



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ACKNOWLEDGEMENTS

Special thanks to the Association of New Jersey Environmental Commissions, which helped fund this plan. Also, special recognition goes to members of the Woolwich Township ANJEC Subcommittee and Woolwich Township Plan Petitioning Committee who guided the development of the Plan.

PREAMBLE

*“Restore human legs as a means of travel. Pedestrians rely on food
for fuel and need no special parking facilities.”*

Lewis Mumford

*“Being in a great public space is absolutely invigorating, even spiritual. To see people comfortable,
natural, and engaged is to see them at their best.”*

Fred Kent, Kathy Madden, Project for Public Spaces

To our credit, today’s communities recognize the importance of public space and plan ahead accordingly. The quandary is that we’ve become so enraptured with quantifying space needs (acres per person, acres for habitat needs, recreational facility needs per acre) that too often, quality has been relegated to the back seat. But in doing so, have we taken the “public” out of public space planning? Have we come to rely on science to the exclusion of art in planning our communities?

Every community needs inspiring, invigorating, vital public space. Public space is not just about acres of preserved open space or about providing recreational fields. These are critically important needs, to be sure. But don’t forget that some of America’s greatest public spaces are tiny little refuges –outdoor rooms – or narrow, linear landscaped corridors - in the midst of vast population centers.

Successful public spaces are destinations in which people gather and interact. They are sunny spines and linear parks that bind together neighborhoods and important destinations. They are fabulous streets and boulevards that do the same. They are places to sit and play a game of chess or read a book over lunch. They are places to take young toddlers or to ride one’s bike or roller blade. They are lush, serene gardens.

Public spaces are shared spaces – used as resting places, activity centers, recreational facilities, walking and biking routes, plant and animal habitats, stormwater management areas, and connective tissue that provides context for the community fabric. Some are green and natural. Some are gray and paved.

Successful public spaces exhibit five very important qualities: They feel safe. They are designed to human scale. They are embracing. They are vibrant. They are multi-purpose places.

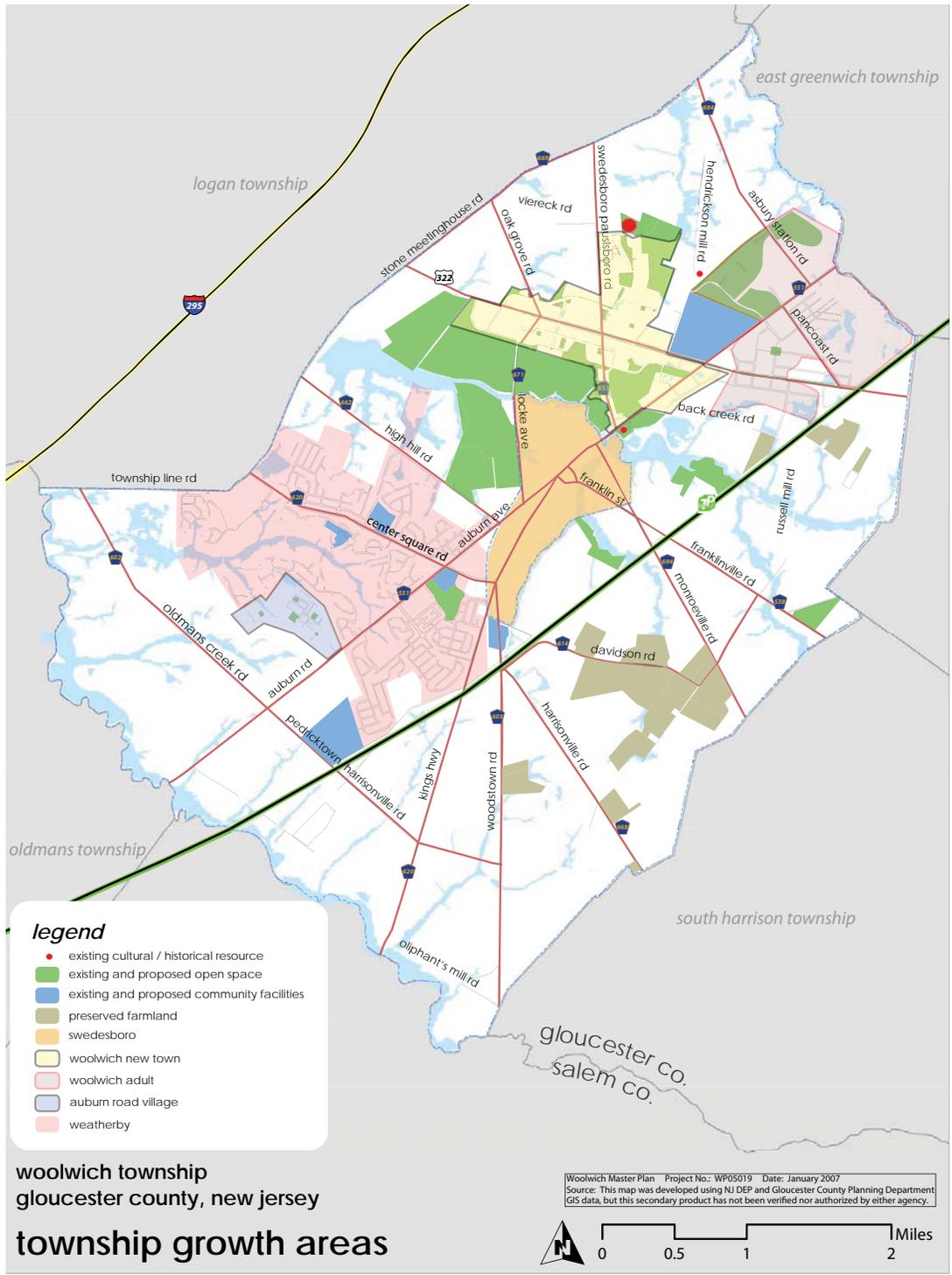
Designed in this way, public spaces support the notion of sustainable communities. They may evolve over time, but they will endure in perpetuity.

Public Spaces Plan provides the foundation for building successful, sustainable public spaces and linkages in Woolwich Township.

INTRODUCTION

OVERVIEW

Woolwich Township is to become a community of roughly 30,000 people when fully built out. By that time, it will host a brand new town. Woolwich New Town will contain up to 3,217 houses of varying types and prices and up to 3.6 million square feet of commercial space built on approximately one square mile. This is the Township's larger of two Transfer of Development Rights Receiving Zones. New Town is located next to a planned development known as Woolwich Adult that will contain 1,029 age restricted homes, 2.7 million square feet of commercial space and a golf course, all on 750 acres. Approximately 45 percent of the Township's future growth will reside in these two areas, collectively called the Woolwich Regional Center.



Construction of the Regional Center is not expected to begin until 2012, when necessary infrastructure—namely sewer and water – is in place. In the meantime, planning for Woolwich New Town is well underway. A central piece of the planning process is ensuring that public spaces and linkages are woven into the fabric of this 21st century new town. Equally important is the need to connect Woolwich New Town to other growth areas, activity centers, nodes, and rural hinterlands.

Outside of its growth areas - including the Regional Center, a 4,500 unit planned development called Weatherby, and a second Receiving Zone adjacent to Weatherby - much of Woolwich Township's rural context will remain as is. Through use of a growth management technique called the Transfer of Development Rights (TDR), roughly 4,000 acres of rural farmland and open space that are not already developed or approved for development will be permanently preserved. TDR will enable development potential in rural areas to be transferred into two planned growth areas called TDR Receiving Zones.

Future residents will enjoy an outstanding system of public spaces and linkages. These places will emerge over the next 20 to 30 years, during which time Woolwich Township is expected to fully build out. But they will continue to evolve long after, displaying the signature of each succeeding generations of stewards.

WHY ARE PUBLIC SPACES IMPORTANT?

The answer seems so obvious, yet we tend to take the benefits for granted. This is seen in the way development too often occurs in today's communities.

Open space is often physically or visually inaccessible, providing little public benefit. Connecting corridors are dark and uninviting or lacking in safe and attractive walking and bicycling paths. Public plazas or gathering areas are increasingly replaced by semi-private spaces accessible only to residents of individual developments.

Spontaneous social interaction is missing when public spaces are lacking. Inadequate attention to design leaves places isolated, abandoned, unwelcoming and underutilized.

Public spaces and linkages are beneficial to personal health, ecological health, visual enjoyment, and community spirit. They inspire social interaction, healthy activity, outdoor experiences, and refuge from hectic day-to-day activities.

To maximize these benefits, attention to design, location, and connectivity are essential. A comprehensive approach recognizes not only the value of the destinations but also of the connective tissue which are the corridors that bind these destinations together.

THE PLANNING PROCESS

When Woolwich Township launched its Transfer of

Development Rights planning process, it became clear that a comprehensive plan for public spaces and linkages was essential. At the macro scale, this plan would build on the Woolwich Township *Open Space and Recreation Plan* (2004), by focusing exclusively on public places and linkages that connect nodes and destinations throughout the Township to the planned New Town. At the micro scale, it would design a series of public spaces within the planned New Town for the benefit of Township residents and visitors alike.

Development of this plan began with the formation of a local subcommittee. The subcommittee met five times to discuss the community's issues and public space needs. During one of its meetings, subcommittee members toured a number of public spaces in Philadelphia, Pennsylvania and Washington Town Center, Robbinsville, New Jersey to begin to define the appropriate design and function of public spaces in Woolwich Township's New Town.

A conceptual framework was developed in response to subcommittee input as well as feedback from the Woolwich Township Plan Petitioning Committee, an officially appointed group that oversaw the preparation of the TDR Plan and State Plan Endorsement petition. The framework was also influenced by the *Open Space and Recreation Plan* (2004) and the draft *Circulation Plan for Woolwich Township and Planned New Town*, a sub-element of the Woolwich Township TDR Master Plan Element.

A draft document was prepared and vetted through the Plan Petitioning Committee, packaged as part of the entire TDR Master Plan Element so that the Committee could see how it fit into the larger context of this comprehensive Master Plan Element.

PLAN ORGANIZATION

Public Spaces Plan is written as a two-tiered plan. It begins with the mapped framework for linking existing and planned open spaces, parks, activity centers and landmarks throughout the Township and beyond. This is followed by a set of detailed design concepts and maintenance notes for planned public spaces in Woolwich New Town.

PART I: GREEN LINKS AND GRAY LINKS

A PLAN FOR A NEW COMMUNITY: GOALS AND INTENT

GOALS

- Support a healthy, active living style of walking, bicycling and outdoor activity
- Promote safe and efficient means of travel that are alternatives to the automobile
- Enhance network connectivity and linkages to civic, natural and historic nodes and to activity centers
- Build public appreciation for green and gray infrastructure as community assets to be enjoyed and utilized

HEALTHY, ACTIVE LIVING STYLE

The increase in public health problems among Americans – including obesity and diabetes – costs billions of dollars each year. These health problems have been attributed in part to a lack of adequate exercise.

Walking and bicycle paths contribute to healthy living by allowing people to combine exercise with recreational enjoyment and alternative modes of travel. To effectively accomplish this, sidewalks, bicycle paths and multi-purpose paths should be highly interconnected and convenient. To this end, they should offer direct routes to activity centers and places of interest. Also, they must be accessible from places that are pedestrian generators, such as neighborhoods, schools and shopping centers.

SAFE, EFFICIENT MEANS OF TRAVEL

Everyone knows that Americans are wedded to their cars. Certainly, long distance trips, particularly in the absence of public transportation, demands that we rely on our cars. But shorter trips to the store or to visit friends or to travel to a neighborhood park should be achievable by means other than the car.

A significant number of work trips could be taken on foot or bicycle that is now traveled by car. A full 20% of all workers living in Woolwich Township work either in the Township or in Swedesboro according to 2000 Census data. With the expected increase in housing and employment along the US 322 Corridor over the next 20 to 25 years, the opportunity to use alternative modes of transportation for commuting trips will become even more viable.

Enticing people to walk or bike to these destinations demands that the routes be safe, efficient, and aesthetically pleasing. Meandering trails are wonderful recreational resources but they do not encourage non-vehicular trips for the purpose of traveling to a destination. Direct routes that feel isolated and lonely will discourage use by those who feel unsafe or threatened in this environment, regardless of how scenic they may be.

Safe and efficient routes are visible and direct. They are sufficiently wide to accommodate users and they avoid steep grades wherever possible. Roadway crossings are safe for pedestrians and bicyclists and traffic calming

elements are used where appropriate. Lighting and landscape treatment are important elements in ensuring a safe, comfortable environment as well.

NETWORK CONNECTIVITY

Connectivity is valuable both within the Township and beyond. Neighborhoods, civic institutions, parks, greenways, natural areas, historic sites are all enticing destinations. Even the more remote, rural resources should be reachable on foot or bicycle. A sufficient number of these destinations should be identified along any given route to avoid long, uninterrupted stretches and monotonous journeys.

In a town environment, an interconnected street grid provides the perfect setting to encourage foot and bicycle travel. Here, streets tend to be laid out in a grid. This introduces a great deal of redundancy, providing many different routes, destinations that are in closer proximity to each other, shorter trips, and more direct access to get from place to place.

Many communities understand the opportunities that existing and planned paths and trails afford recreational users, commuters and other users in neighboring communities. Offering ways to connect to each others' assets beyond motor vehicle routes promotes social and economic cohesion between municipalities. For example, increased pedestrian and bicycle traffic has been found to enhance new demand for businesses along these routes. It also encourages more social interaction at destinations because of the increased number of people at these locations who are on foot or bicycle. To these ends, a network functions best when paths are laid out to connect residents with pedestrian generators based on distance rather than on political boundaries.

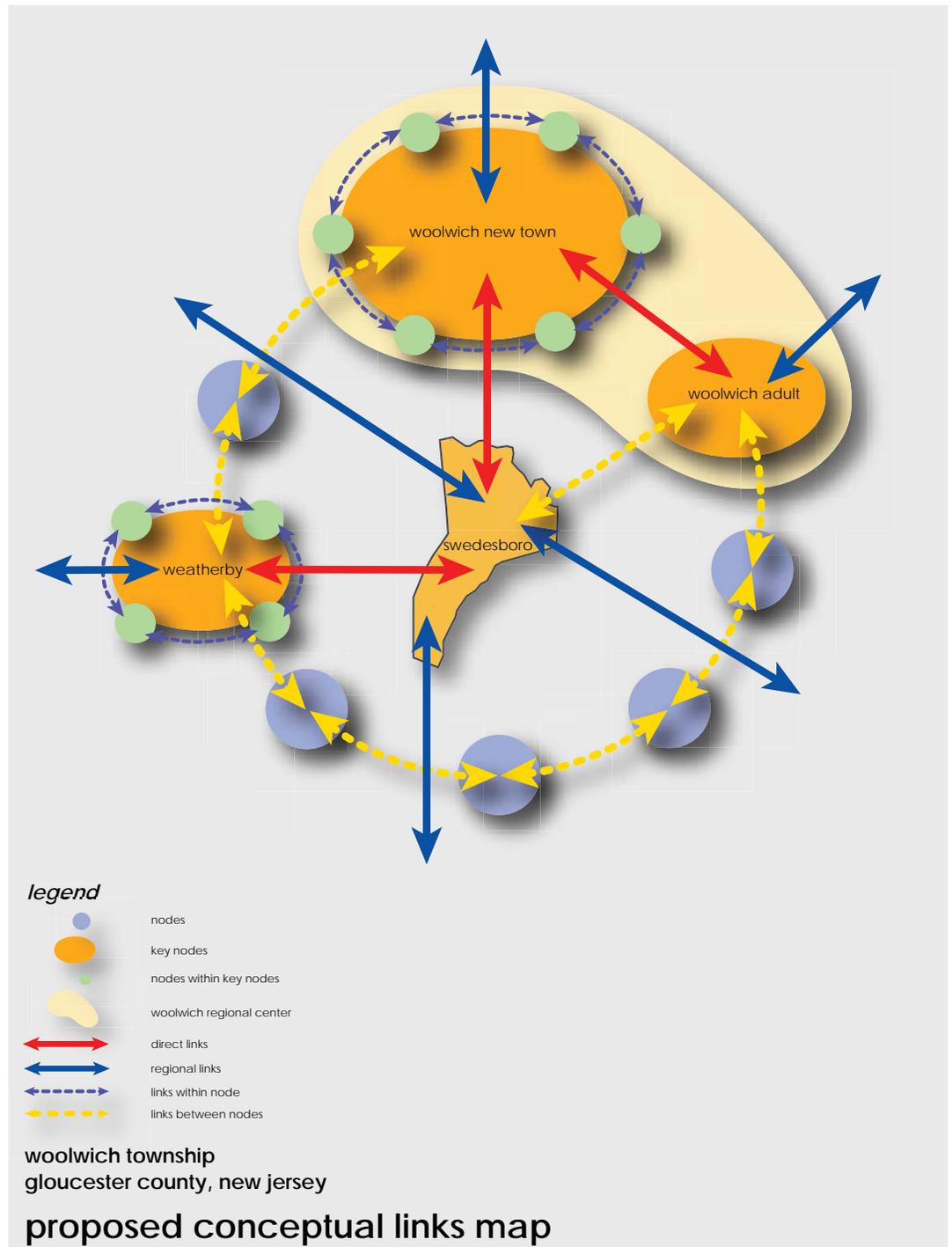
PUBLIC APPRECIATION OF GREEN AND GREY INFRASTRUCTURE

Few people would take exception to "greening" their community and capitalizing on assets such as stream corridors, natural areas and scenic vistas. But our grey infrastructure – namely roads – presents a tremendous asset as well. Gray infrastructure is just as important as is green in enhancing connectivity. Often, this can be

achieved at little cost or impact, by simply re-striping the existing resource to accommodate safe bicycle routes or enhancing the lighting, landscaping and public amenities along existing sidewalks. More extensive improvements can be supported in part through grants and in part through land development regulations. Making our gray infrastructure attractive, safe and enticing to pedestrians and bicyclists should increase appreciation for this critically important resource as a multi-modal public space.

THE CONCEPTUAL FRAMEWORK

The framework for a public spaces plan begins by defining the linear structure – the bones that will knit community resources and activity centers together. Simultaneously, prominent “nodes” must be identified – existing and future places that the linear system will connect. The linear system described below consists of green links and gray links. The nodes include towns, neighborhoods, historic landmarks, parks, greenways and public spaces.



Green links as described in this plan are not to be confused with greenways. Greenways are linear swaths of open space that may or may not contain walking, bicycling or multi-purpose paths. Sometimes, they are unimproved linear stretches that function as wildlife movement corridors or buffers along streams.

Green links are roadways framed by both multi-purpose paths and bicycle lanes. The double allee of street tree plantings “green” the roadway corridor and screen the multi-purpose paths.

The three key nodes identified in this plan are the Borough of Swedesboro, Woolwich Regional Center and Weatherby. As tightly knit communities with residential neighborhoods, businesses and public spaces, they generate a great deal of pedestrian activity. Connectivity within such places is essential but connections between these communities and to the surrounding environs is equally important.

THE FOLLOWING ADDITIONAL NODES AND ACTIVITY CENTERS ARE FOUND IN THE ENVIRONS:

- Existing schools including the Governor Charles Stratton School, and Kingsway Middle School and High School
- Site of future elementary schools
- Existing and proposed sites for the Woolwich Township municipal building
- Planned community at the Auburn Road Village, which will include 502 mixed housing types, 50,000 square feet of commercial space, and public open space
- Public space within the Woolwich Adult planned retail center along US 322
- Locke Avenue Park, a 79.2 acre park providing active and passive recreational facilities
- Governor Stratton House, where the sixteenth governor of New Jersey – Charles Creighton Stratton, was born, raised and spent his final years
- One of two former Nike Missile Sites, the location of a future public park
- Mount Zion African Methodist Episcopal Church, the oldest AME congregation in New Jersey

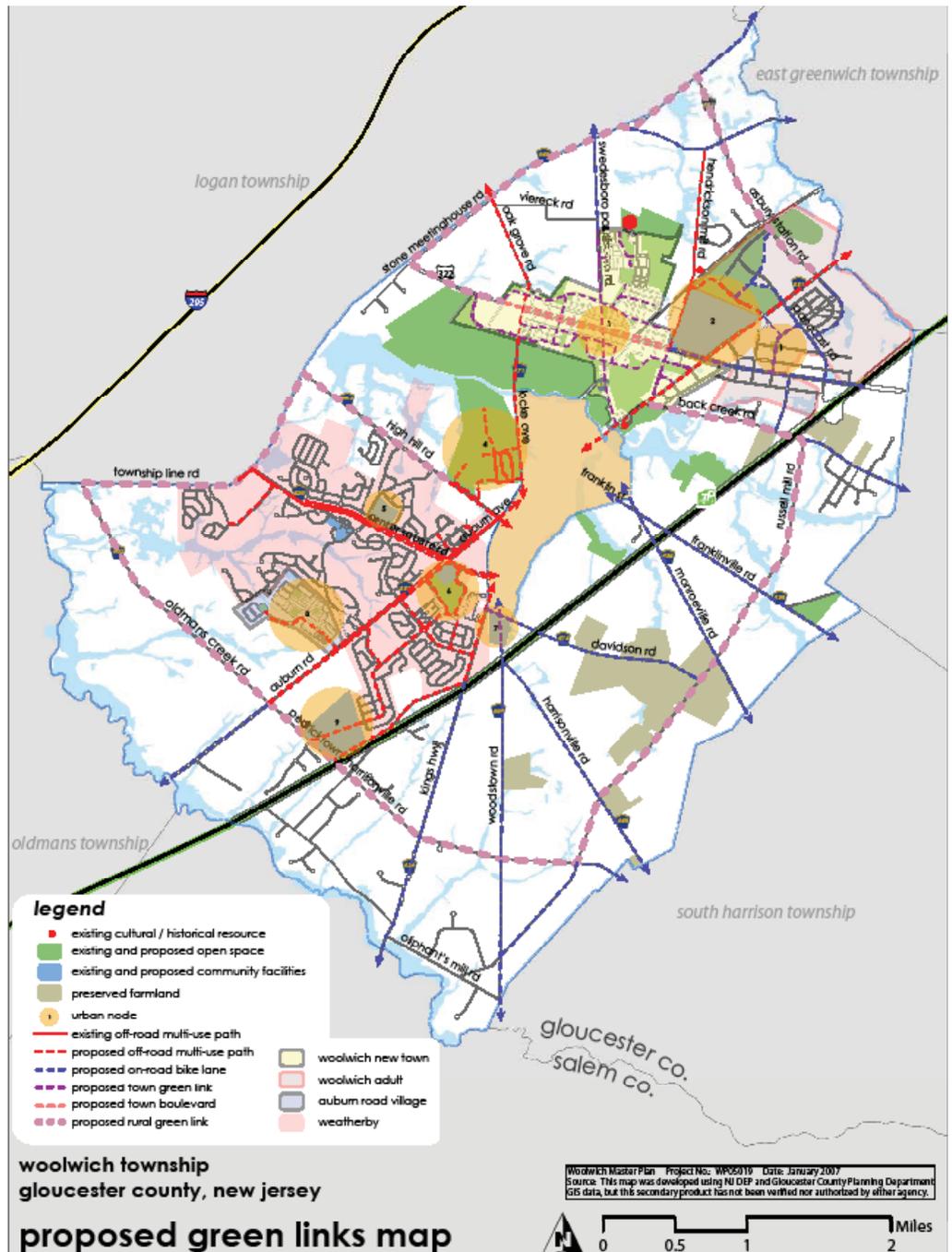
Thus the conceptual plan appears as a string of pearls – the roadway connectors or string – that link a variety of important destinations or pearls within Woolwich Township. But the plan also shows the potential to extend these links beyond municipal boundaries. Not only are connections to Swedesboro important; so, too, are connections to surrounding Townships through which these roads travel. This regional vision recognizes that nodes of activity should be accessible to people based not on political boundaries, but rather on distance traveled. Furthermore, it supports the notion that regional pedestrian and bicycle linkages afford greater recreational opportunities for all to enjoy.

Design Intent: Description of the Green and Gray Links

The green and gray links fall into three classifications. Green links are further subdivided into an additional sub-classification, rural or town.

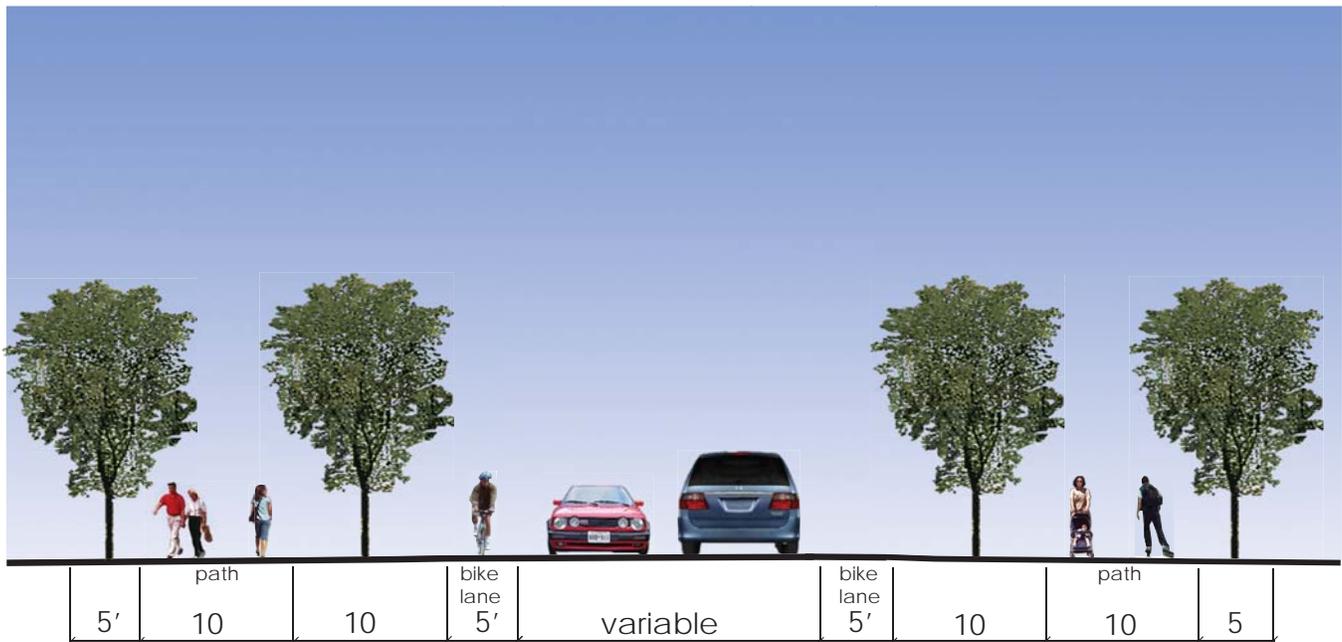
Green Links

The system of green links creates a loop around the Township on a combination of local and county roads and a small section of US 322. As such, this plan encourages a partnership that involves the Township, the County, and the State in order to accomplish its goal to be a comprehensive system. The loop passes through predominantly rural areas, although it also traverses existing and planned developments, including Weatherby via High Hill Road and Woolwich Adult via Kings Highway (CR 551). Other significant nodes it passes includes the middle and high schools (node 2), the site of two future elementary schools (nodes 9), and Locke Avenue Park (node 4). Green links are distinguished by the presence of both on-road bicycle lanes and off-road multi-purpose paths. The design intent is to accommodate road bikes including commuters, as well as recreational cyclists and pedestrians who will use the multi-purpose path.



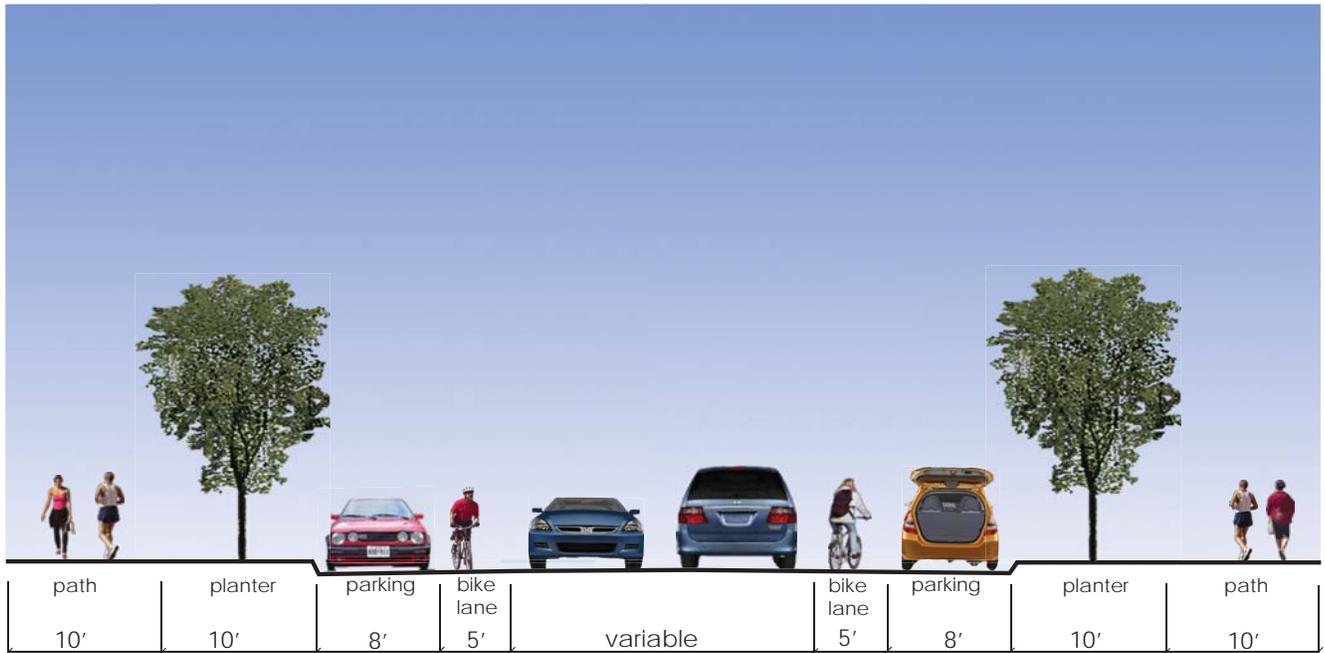
RURAL GREEN LINK

The rural green link is located outside of Woolwich New Town. The design of the roadway safely accommodates vehicular traffic as well as pedestrians and bicyclists. The streets are generally designed with no curbs but provide a generous shoulder. Bicycle lanes have a minimum width of five feet and are clearly striped. Recreational users enjoy a ten foot wide multi-purpose path with a continuous double allee of trees planted in a ten foot wide planting strip to delineate the path, add visual interest, and physically separate it from vehicular traffic. Since there is no on-street parking along these roadways native, drought tolerant ornamental grasses are used in the planting strip. The trees provide shade in the summer and sun in the winter. They bring a sense of pedestrian scale to the user.



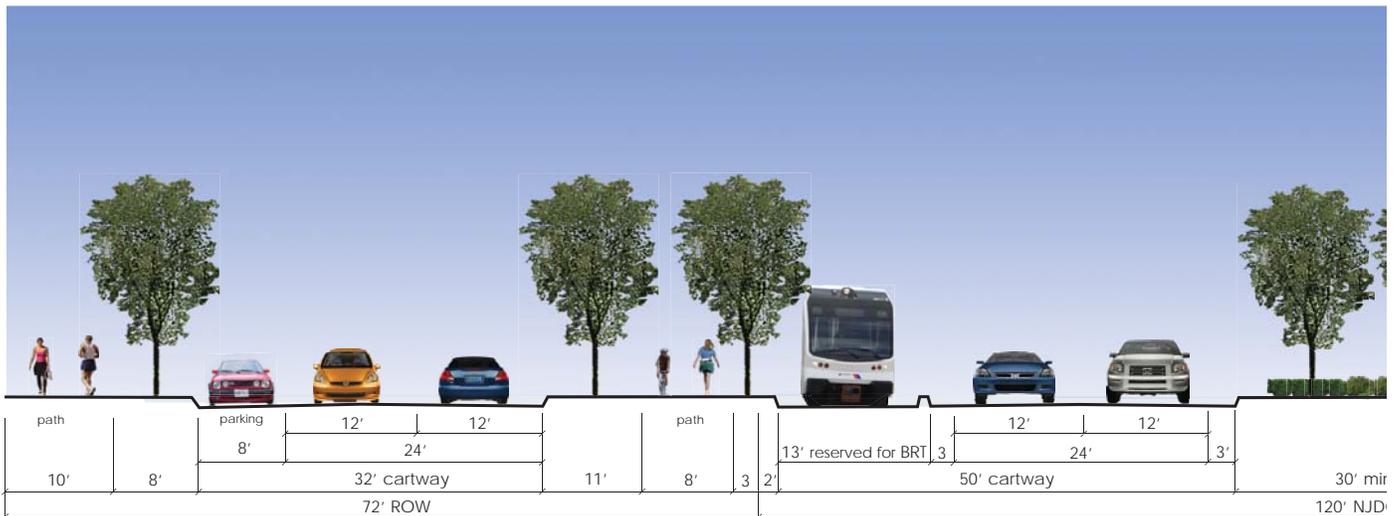
TOWN GREEN LINK

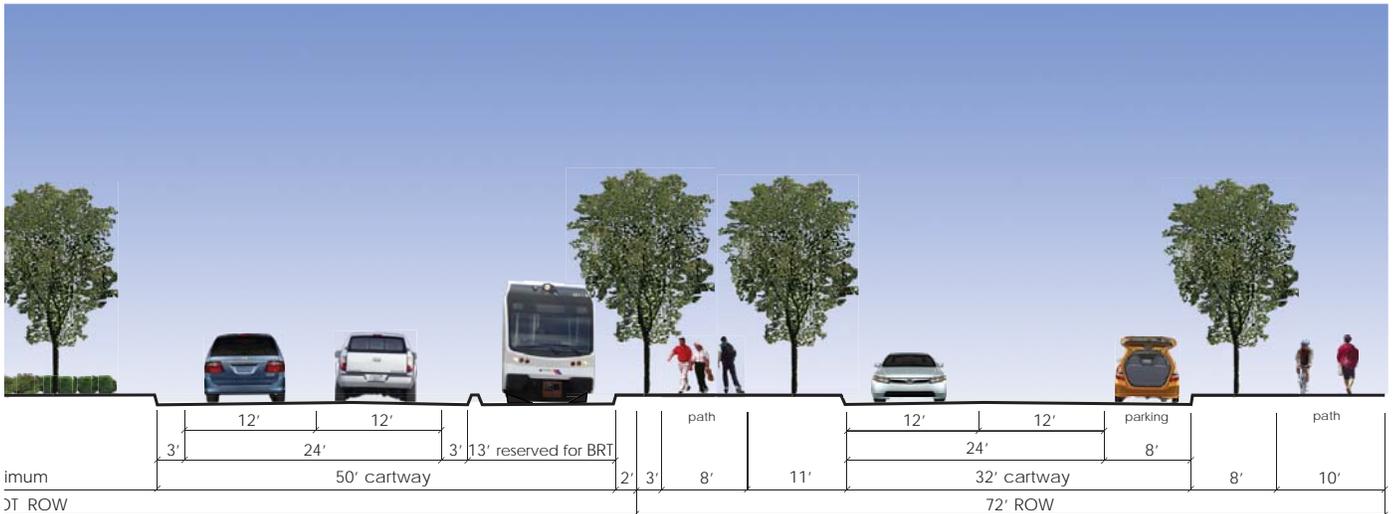
The urban green link is located inside Woolwich New Town. Here, on-street parking is provided in more heavily traveled commercial areas within Town Center. The roadways are curbed and in addition to striping the on-road bicycle lanes, rumble strips are placed between the travel lane and bicycle lane to further delineate the bicycle lane. A ten foot wide multi-purpose path is provided and separated from the roadway by a ten foot planting strip. A continuous row of trees spaced between thirty-five to fifty feet on center on both sides of the roadway create an allee and reinforce pedestrian and vehicle separation. Bio-swale plantings are interspersed within the planting strip and within bump-outs to facilitate stormwater management. Intermittent concrete sidewalks throughout the planting strip accommodate on-street parking users.



TOWN BOULEVARD

Route 322 through Woolwich New Town enables people to safely walk or bike the length of it and cross the highway at four locations via multi-purpose paths. Intersections are required to have curb extensions (bulb-outs) to provide people on bike or foot with a shorter crossing distance and to encourage vehicles to decelerate. Textured crosswalks, a minimum of ten feet wide are required on all corners to alert motorists to the presence of pedestrians. The multi-use paths are eight feet wide and are provided on both sides of Route 322. They are flanked by an alley of trees to provide visual interest and physical separation from vehicular traffic. The trees are grouped in threes at thirty feet on center. The groupings are staggered and will provide continuous canopy cover over the multi-use path. An alley and ornamental grass plantings are also provided in the thirty foot wide center median which serves as safe refuge for pedestrians crossing the highway. This triple alley of trees along Rt 322 gives it a unique identity and distinguishes it as a main thoroughfare encouraging traffic to slow its pace. These eight foot wide multi-use paths provide a connection with Woolwich New Town's main commercial corridor (node 3). It extends eastward through Woolwich Adult's retail shopping centers and connects to green links and on-road bike lanes through Woolwich Adult's Regional Lifestyle Center (node 1) and residential neighborhoods. The multi-use path also provides an opportunity to access public transportation. A future Bus Rapid Transit (BRT) route is envisioned along Route 322 through the Woolwich Township Regional Center which consists of Woolwich New Town and Woolwich Adult. Two smaller streets running parallel intermittently along Route 322 through Woolwich New Town comprise the urban boulevard. Ten foot wide multi-use paths and parallel parking are provided along one side of the parallel roads. A continuous row of trees at forty feet on center delineates the path and physically separates it from vehicular traffic.





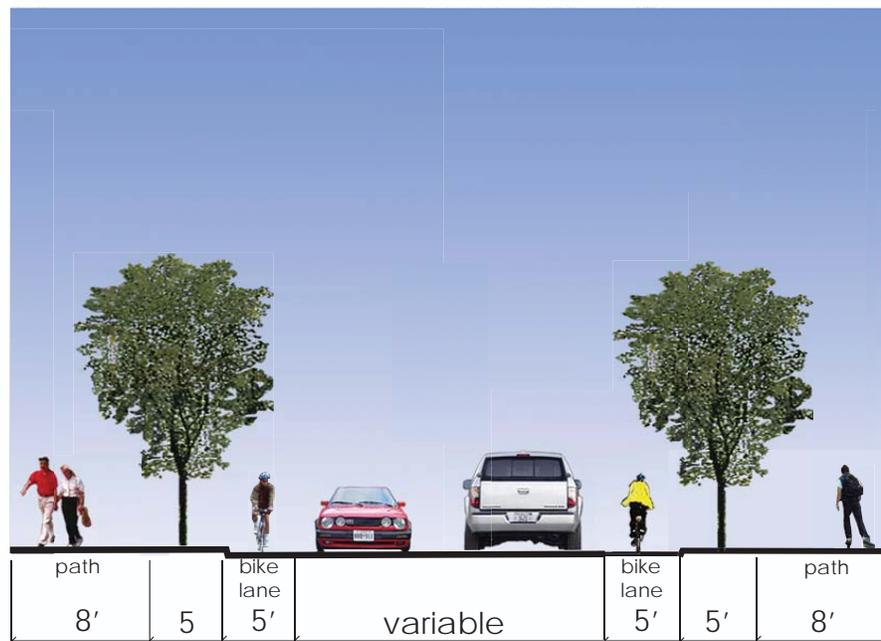
Water color rendering courtesy of Florida DOT



Illustrative of Town (Rt 322) Boulevard in Woolwich New Town

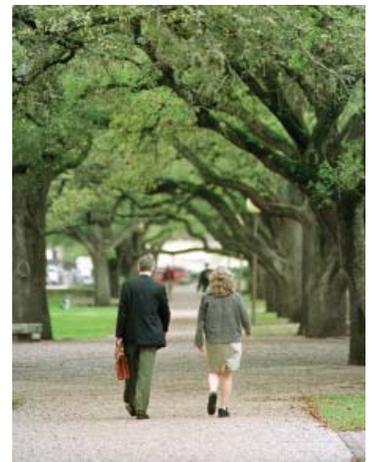
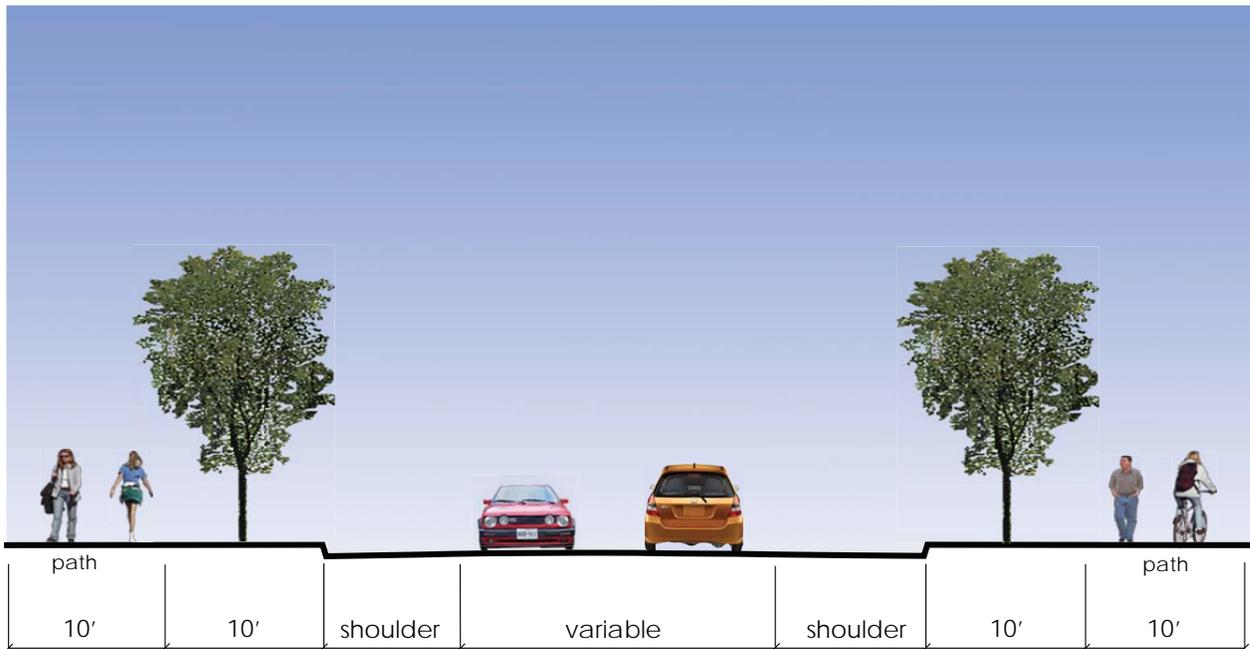
ON-ROAD BIKE LANE

Five foot wide bike lanes are clearly striped. Driveways and intersections are clearly marked by pavers to warn bicyclists of potential automobile and school bus conflicts. A curb and five foot planting strip separates the bicycle lane from the sidewalk in urban and suburban areas. The plantings consist of a single row of trees planted no more than fifty feet on center. The trees delineate the path and add visual interest by forming a single allee along the roadway thus reducing the perceived street width. Since there is no on-street parking along these roadways native, drought tolerant ornamental grasses are used in the planting strip. The trees provide shade in the summer and sun in the winter. They bring a sense of pedestrian scale to the user. There are no sidewalks on rural road.



OFF-ROAD MULTI-PURPOSE PATH

Suburban collector roads within Weatherby and the future Auburn Road Village (node 8) accommodate off-road multi-purpose paths. These paths link the existing municipal complex (node 7) and the proposed municipal building (node 6), existing and future school sites (nodes 5 and 9), Locke Avenue Park (node 4) and residential neighborhoods. Young mothers strolling children, recreational bicyclists, children on roller blades or walking to school can all enjoy the path system. Auburn Road, Kings Highway and High Hill Road, all with proposed off-road multi-purpose paths traverse linear parks, smaller public spaces and pocket parks, and continue through residential neighborhoods which connect them to Swedesboro-Paulsboro Road and New Town's mixed use main street and provide direct connections into Swedesboro. These multi-purpose paths are physically separated from the roadway on both sides by a single row of trees spaced not greater than fifty feet on center. This single alley reduces the automobile scale of a wide street to human scale as well as providing shade for those multi-path users.



PART II: WOOLWICH NEW TOWN PUBLIC SPACES

A PLAN FOR A NEW COMMUNITY'S PUBLIC SPACES: GOALS AND INTENT

GOALS

- Create a highly accessible and diverse system of public spaces in New Town within proximity of residential neighborhoods



Illustrative of Neighborhood pocket park in Woolwich New Town

- View the design of public spaces as a unique opportunity to spawn social interaction and heighten community spirit



- Utilize green space for low-impact and natural approaches to stormwater management



- Protect wildlife habitat and natural features, particularly in wetlands and forested areas in and adjacent to New Town





Neighborhood pocket park



Farmer's market in plaza space



Public art as a focal point



Neighborhood square at Washington Township, Mercer County NJ



Handscape doubles as sitting area



Commercial plazas encourage cafes

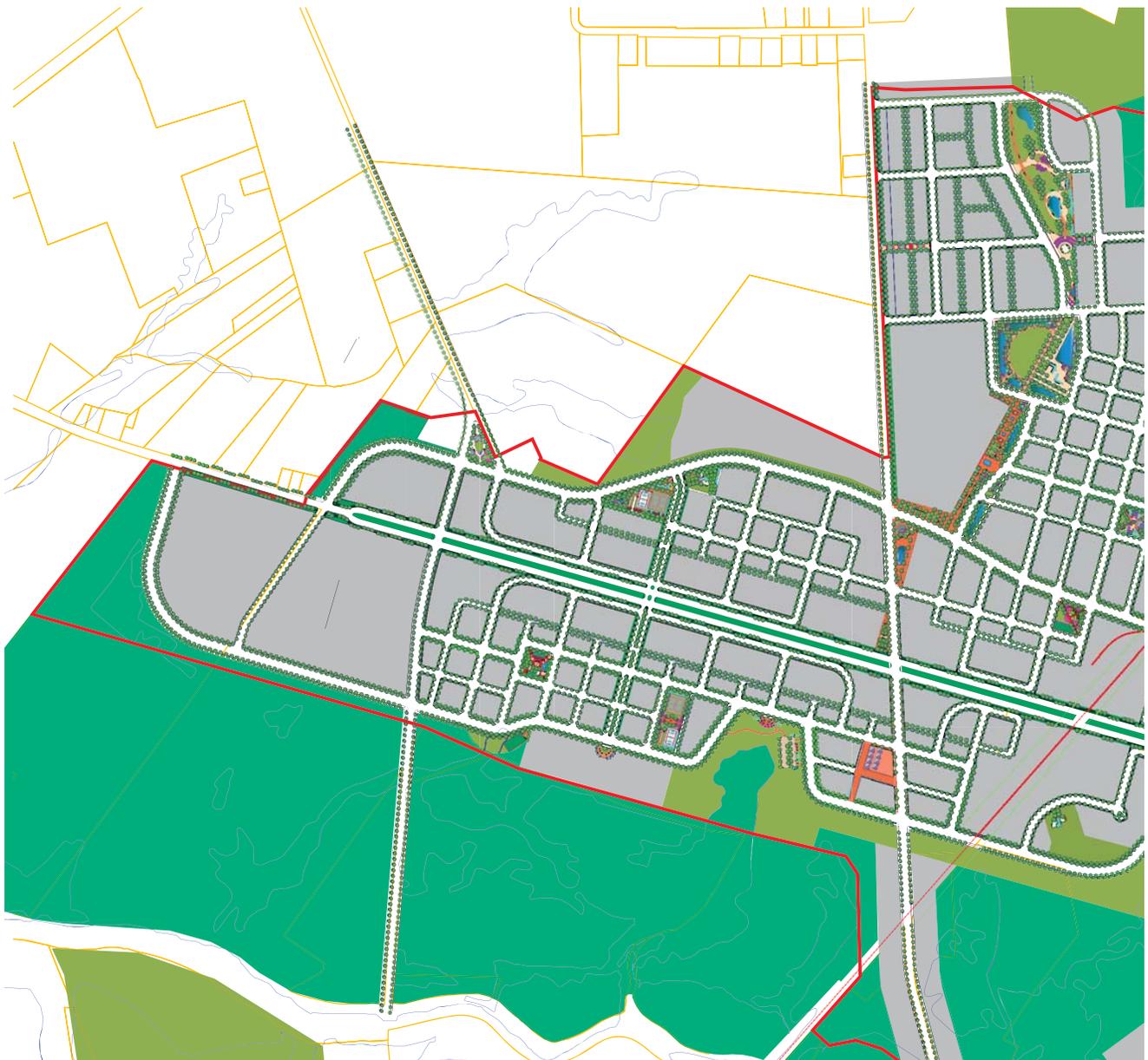
“I end then in praise of small spaces. The multiplier effect is tremendous. It is not just the number of people using them, but the larger number who pass by and enjoy them vicariously, or even the larger number who feel better about the city center for knowledge of them. For a city, such places are priceless, whatever the cost. They are built of a set of basics and they are right in front of our noses. If we look.”

- William Whyte

DIVERSE AND ACCESSIBLE PUBLIC SPACES

Diversity is important in terms of use, activities and landscape treatments. Public spaces should offer recreational activities – both active and passive. They should provide places for socializing and gathering. They should offer open views, shaded gardens, walkways, all for vicarious pleasure. They should feature natural areas, formal gardens and other opportunities for educational benefit to New Town residents. And they should offer a peaceful retreat from daily urban living.

To maximize use and enjoyment of public spaces, they must be accessible throughout New Town. Each neighborhood should have plenty of parks and gathering spots. Linear parks and pedestrian friendly streets should link parks within and between neighborhoods. A good rule of thumb for the spacing of neighborhood parks is a one-thousand foot to one-thousand and five-hundred foot distance between each public space.



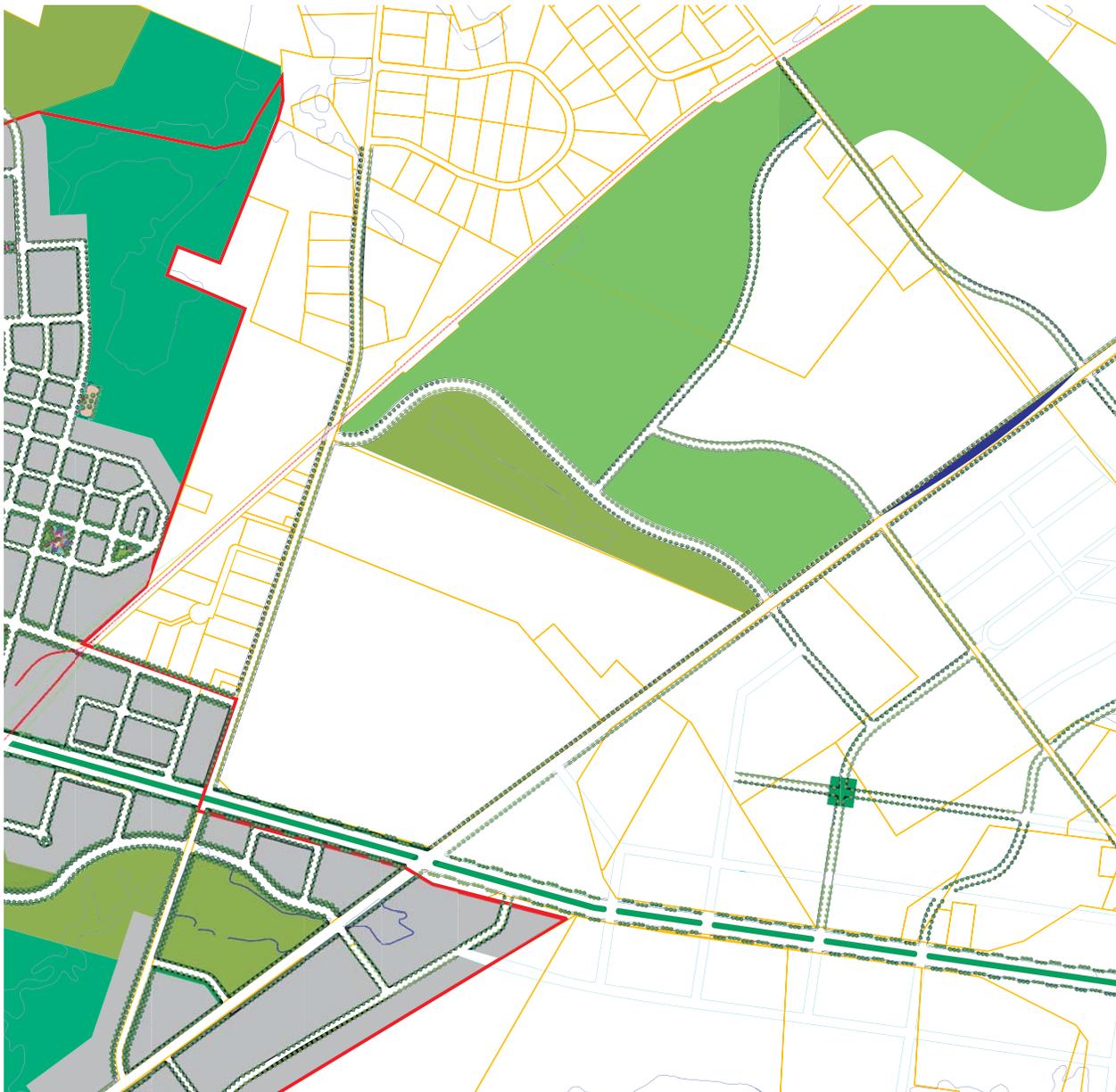
By choosing to live in a town setting, New Town residents accept the reduction in private outdoor space that comes with a highly compact environment. In exchange for this, all residents should have ready access to a wide variety of enjoyable public spaces as New Town provides 20 parks on 89 acres of open space.

SOCIAL INTERACTION

The design of public spaces is instrumental in generating community interaction and spirit. Benches, picnic tables, tot lots draw people in and help people engage with each other. Band stands and farmers markets are public spaces that likewise draw crowds and promote social interaction. Adequate lighting, accessibility and visibility create a sense of security and safety, drawing people into public spaces. In a society where people spend so much alone time – whether in the car commuting to work or on cell phones – the ability to socialize is a healthy distraction. Well-designed public spaces are instrumental in promoting a sense of community.

STORMWATER MANAGEMENT

When we think of public spaces, we rarely if ever consider the stormwater management benefits that they can provide. Stormwater management has long been viewed simply as a necessary means of flood control and, to some extent,



water quality protection. Water would be piped to a basin in which it was detained, treated and eventually discharged to a stream.

Today, stormwater management is viewed much differently. The ability to replenish water into the ground, treat it to remove pollutants and reduce flood potential are more important than ever. Thanks to recently adopted regulations, New Jersey demands a far more holistic approach to achieving these objectives. This holistic approach moves away from traditional engineering solutions in favor of innovation and naturalistic solutions. For example, bio-swales can be used to remove pollutants and help recharge groundwater. (show images w/ following explanations: bio-swales along the road or in the median are concave gardens planted with native perennials and trees that help facilitate water absorption which also improved the streetscape). Innovative structural solutions like pervious pavers are attractive hardscaping that can be used on roads, walkways and plazas to help direct rainwater back into the ground, reducing runoff into streams and surface waters.

Sustainable techniques like bio-swales, rain gardens, pervious pavement can be incorporated into public spaces and streetscapes, beautifying these places while serving essential health and safety functions.

WILDLIFE HABITAT PROTECTION

Woolwich Township supports a rich array of natural habitats, from wetlands to upland forests and grasslands. Portions of New Town and areas immediately below are critical breeding and foraging areas for the bald eagle. While the bald eagle is making a comeback in New Jersey, it is still considered a threatened species by the State of New Jersey and is listed as endangered by the federal government.

Woolwich New Town can co-exist with bald eagle habitat so long as critical areas are left undisturbed. In part, this can be achieved through designation of protected green spaces in and around New Town. Proximity of New Town to such habitat will bring urban residents closer to nature, create a sense of ownership, and hopefully engender a great sense of respect and appreciation for this valuable and vulnerable resource.

CONCEPTUAL FRAMEWORK

The creation of sustainable communities requires the balance of natural and built environments. To stand the test of time communities need to have harmony between social, economic, and environmental factors. Public spaces play a role in the success of all three factors. In town landscapes such as Woolwich New Town, social interactions among residents and between visitors is vital to the formation of community identity and camaraderie. Successful communities have caring, pro-active citizens which rally together in times of crisis. Public spaces are the vehicle for such socialization.

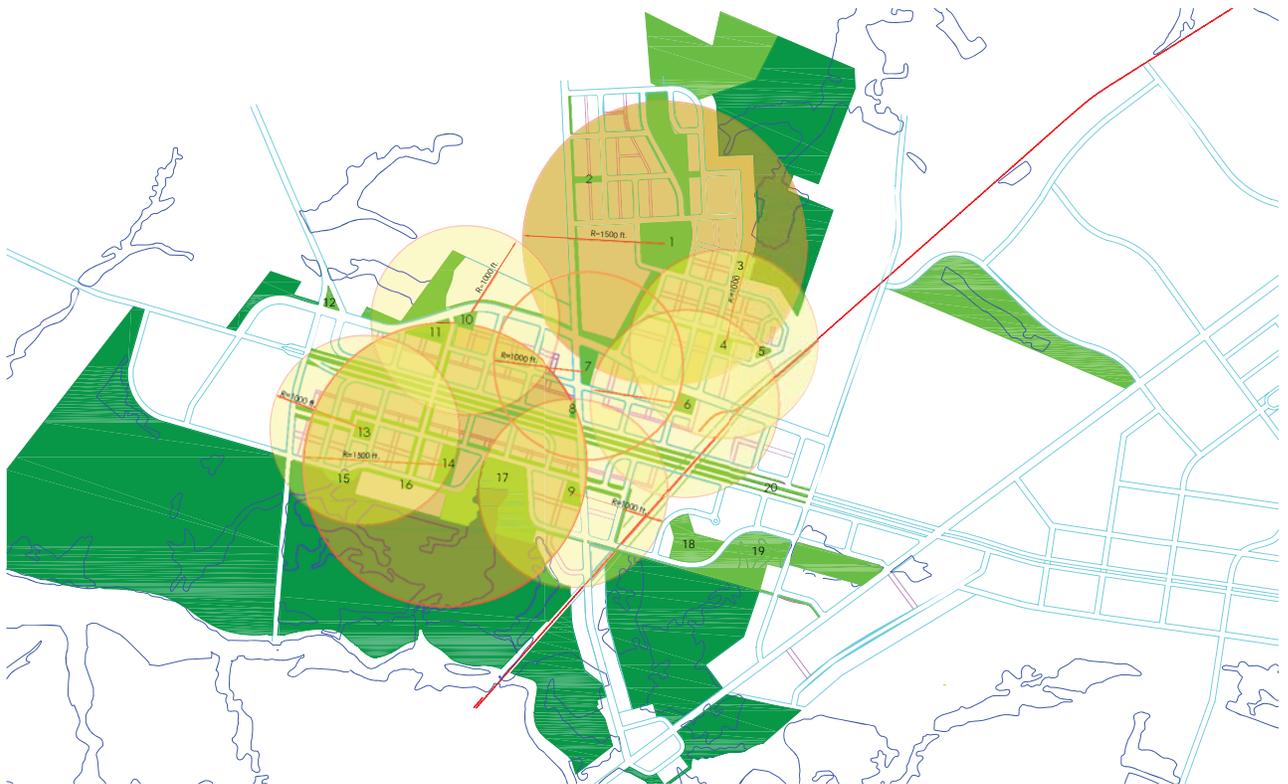
Public spaces directly affect the economic stability of a mixed use town. What good is a commercial main street if people are not drawn to the space? How successful will businesses be if people do not have incentive to do more than jump out of their car, pick up what they came for and jump back in their car and leave? Successful commercial neighborhoods provide an experience which makes one want to walk, explore and stroll while discovering the shops and businesses the town has to offer. Public spaces in this realm are the streets affording pedestrian opportunities, not just vehicular ones. Street amenities and gathering spaces such as plazas along these streets add to their success.

Public spaces in New Town were created with environmental factors in mind. Physical constraints such as wetlands and eagle foraging habitat remain virtually untouched and provide a network of greenway corridors throughout New Town. These environments enhance the quality of life for residents and also provide critical habitat and wildlife transportation corridors. Sustainable communities require the balance of natural and built environments. Incorporation of native and naturalized landscapes define and connect the built environment while enhancing the community's aesthetic beauty. These naturalistic green edges form usable public spaces. Environmental factors are a concern in the built environment too. Woolwich New Town delineates some streets as green links providing not only pedestrian connectivity but opportunities for natural drainage systems serving as places for water to infiltrate into the ground.

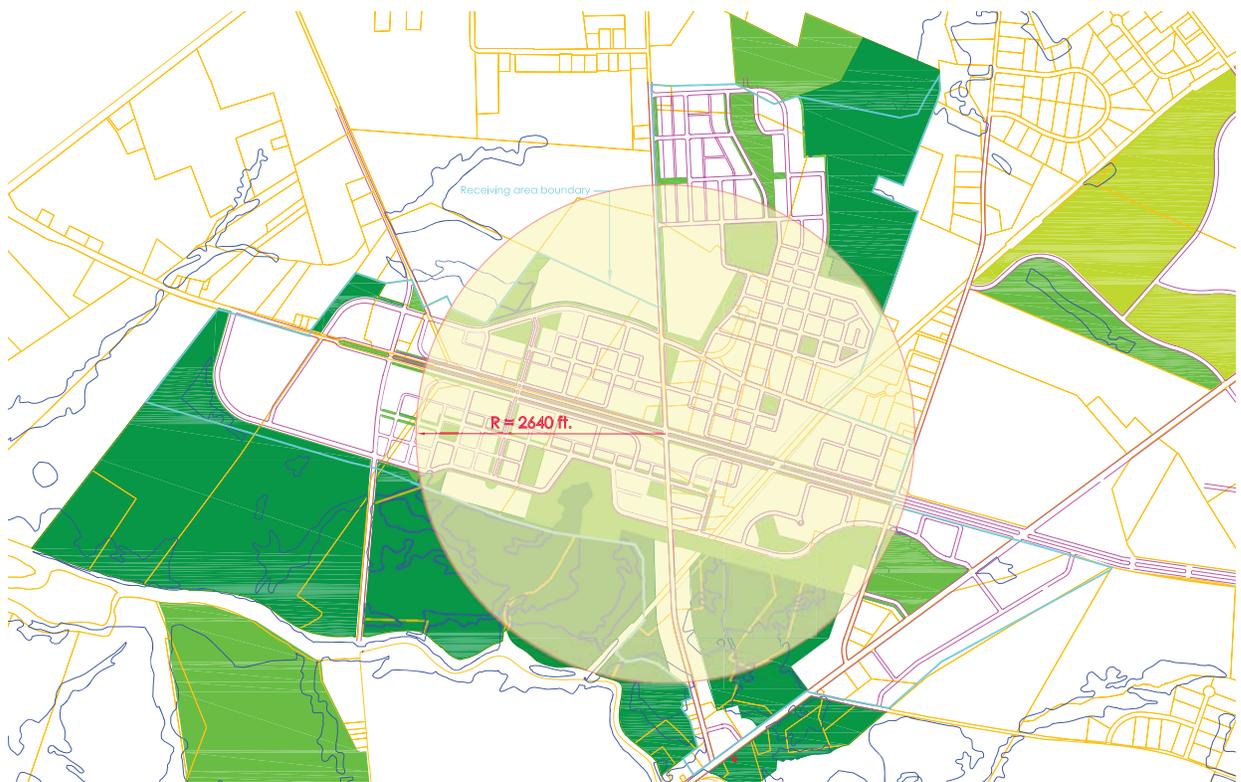
It has long been understood that as communities increase in density residents need public space for their health. They provide a place for recreation, to socialize, an opportunity to feel the wind on one's face or to commune with nature. Americans are more overweight than they have ever been in history. Obesity is killing us. Public spaces encourage walking and bicycling and less reliance on automobiles for short trips. Studies have shown that people are willing to walk or bicycle within a one-thousand foot radius to reach a park or other public space. New Town affords this opportunity within every neighborhood. Equally important, public spaces are good for our mental health. Studies have shown that close ties to others can ward off depression and even shorten recuperation time after surgery. Public space fulfills this role by providing residents a place to gather and socialize.

As communities such as New Town are built at higher densities resulting in less private space, the need for public space, both green and urban, increases. Woolwich New Town has kept this principle in mind and offers approximately 85 acres of public space, both active and passive. Public spaces include street right-of-ways and offer sidewalks and/or multi-purpose paths for pedestrians and cyclists. These public spaces also afford the opportunity for 'greening' of the streets which are an important design element in high density communities. As Woolwich New Town is constructed, it is important for

the development of public spaces to occur at the same time, within neighborhoods ensuring people have access to these places from the time they reside there.



RADIAL DISTANCES BETWEEN PARKS



RADIAL DISTANCES FROM COMMERCIAL CORE

The following terms describe the public spaces in Woolwich New Town:

Allee: two rows of evenly spaced trees, used to frame features or provide a sense of space.

Adult park: public space which affords a host of recreational resources for adults including basketball, tennis and bocce courts.

Greenway: provides multi-use corridor and pedestrian routes. Greenways can also provide wildlife movement and stormwater management areas.

Neighborhood pocket park: located within each neighborhood and used as a community gathering area. They are pedestrian and family friendly and within a short walking distance from just about anywhere in the neighborhood. They can present a green opportunity.

Plaza: space with a village feel/look used as a gathering area. Plazas provide a center for community landmarks such as amphitheaters, water features, farmer's market and outdoor cafes.

DESIGN INTENT: DESCRIPTION OF WOOLWICH NEW TOWN PUBLIC SPACES

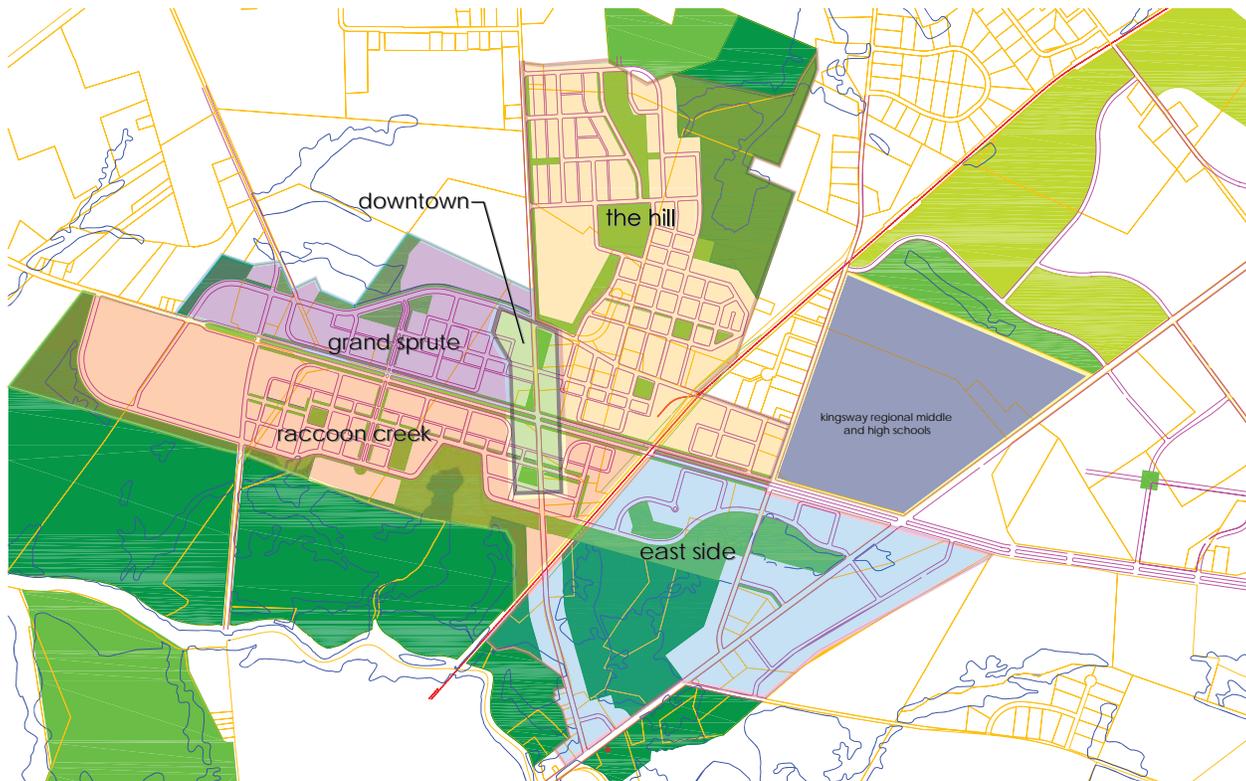
NEIGHBORHOODS

We have divided Woolwich New Town into a series of neighborhoods, each with its own unique sensibility created by the uses, streetscape design and architecture organized around the public spaces within it. This is

designed to provide vibrancy and avoid monotony in New Town, to help residents identify with their individual neighborhood yet feel part of the village as a whole. Neighborhoods include The Hill, Downtown, Grand Sprute, Raccoon Creek, and East Side. (Names are only suggestions for purposes of description in this document).

The Hill is more naturalistic in character as the majority of its northern and eastern edges are remaining green. The woodlands and wetlands forming its eastern border separate this neighborhood from homes further east, creating a quiet, largely residential enclave. It is the least dense of all neighborhoods, hosting 100 grand single family estates in the northernmost section and containing the largest park in New Town. The Hill's neighborhood pocket parks and large Linear Park are formal, providing a nice contrast to the mainly naturalized edges which form a greenway. Its central connection to New Town will be realized by a grand promenade, passing by formal gardens, water features which double as stormwater management, open lawn for informal recreation and plazas within a linear park system. This neighborhood encourages walkability through the small scaled residential streets, and double alleed connector streets. The naturalized edges serve as greenway providing recreational trails and further pedestrian connectivity.

Downtown encompasses the main commercial corridor in Woolwich New Town and is the most urban of all New Town's neighborhoods. The public spaces in this neighborhood have a civic feel. They provide a center for shared community gatherings, including New Town residents and Downtown visitors. These spaces encourage pedestrian activity and fostering of the



NEIGHBORHOOD DESIGNATIONS

community and provide streetscape features which enhance community livability. Such features as kiosk, benches, lighting, and sidewalk cafes spatially define the pedestrian realm and increase the chances for people to socialize. This neighborhood boasts a livable street providing opportunities for special occasions such as festivals, farmer's markets, and outdoor performances. The public spaces are bordered by mixed-use buildings providing retail and personal services on the first floor and residential living on the second through sixth floors.

Grand Sprute is naturalistic in character as wetlands and undisturbed open space border the northern and western edges. A system of trails provides passive recreation through this greenway edge. This neighborhood is named for the Grand Sprute Creek to the northwest which will remain undisturbed as Woolwich New Town is created. The public spaces throughout this neighborhood consist of neighborhood pocket parks with informal plantings and recreational opportunities for both children and adults. A traditional boulevard with a double allee runs south from within Grand Sprute neighborhood to Rt 322 and extends into Raccoon Creek. It serves as a major pedestrian linkage connecting the neighborhoods both north and south of Rt 322.

Raccoon Creek has a mix of active and passive public spaces, both formal and informal in design. This neighborhood is named after the Raccoon Creek which runs south of it. The neighborhood is seemingly naturalistic around its edges as it borders the largest amount of undisturbed, sensitive land surrounding Woolwich New Town. Three park spaces are located in the usable greenway edge of this space, outside of the wetlands boundaries and eagle foraging habitat. These parks are joined by a system of multi-use paths both along the

street and within the greenway edge via recreational trails. One of these park spaces is a terminus for the formal, grand boulevard that begins in Grand Sprute. Land uses in the Raccoon Creek neighborhood vary from big box stores in the west, to residential areas, to mixed-use retail, office and residential uses in the east. The spirit of the neighborhood is its seemingly effortless flow from one land use to another and its public spaces follows suit. A plaza is located in the west side of the neighborhood and softer, green spaces with residential amenities such as tot-lots and basketball courts to the east.

East Side is almost equally divided between public green spaces and built areas. There is a great diversity between the potential land uses in this neighborhood ranging from residential, institutional, mixed-use retail, office and residential and single use office space. Found within the central core of this neighborhood is a usable greenway corridor and sensitive, undisturbed wetlands. The greenway is composed of a system of multi-use paths both along the street and within the greenway edge via recreational trails providing a pedestrian connection to the Downtown commercial corridor. A neighborhood pocket park provides recreation for the children.

PARKS – THE PLAN

Park spaces in Woolwich New Town provide a host of opportunities such as recreational courts, informal sports fields, children's play areas, dog parks, outdoor performances, festivals, cafes and specialty landscapes such as meadows and naturalistic planting, community and native gardens and bio retention basins. The following park spaces found within Woolwich New Town will be discussed by neighborhoods.



PARK LOCATIONS

THE HILL

This neighborhood is in the northern most portion of Woolwich New Town. It is located north of Rt 322 and to the east of Swedesboro-Paulsboro Road. It is comprised of residential and commercial land uses. The following are parks found within the neighborhood:

#1 LINEAR PARK

This is the largest park within Woolwich New Town at approximately 14.3 acres. It is surrounded by on-street parking, making it accessible by foot or automobile. It serves several functions as follows:

- Connection between the downtown commercial mixed-use main street and residential neighborhood
- Provides a green link for pedestrians within New Town from the northern most edge to Rt 322 and the main commercial center
- Provides environmental function as a linear stormwater system which presents opportunities for stormwater movement and infiltration
- Provides civic space and public greens for both active and passive recreation
- Serves as a gateway to the Township Park to the north

All three blocks of this space include benches, trash receptacles, bicycle racks and lighting.

NORTHERN BLOCK: This space serves as a community green in a completely residential neighborhood. It affords an opportunity for active and passive recreation and serves as a gateway to the larger Township Park to the north.

Features include:

- 1 tot-lot (age group: 2-5 years old)
- 2 water features serving as stormwater management
- 1 water feature/fountain with seat wall
- Water fountain/doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Formal and informal plantings
- Tree grove
- Buffer planting along residential edge
- Staggered tree allee along western street edge
- Paving materials include pavers, fieldstone and stone dust and rubberized safety surface for tot-lot

CENTRAL BLOCK: This space serves as a connector between residential and commercial uses. It is a passive space. Features include:

- Great Lawn
- 4 water features/meadows serving as stormwater management
- 1 water feature/fountain with seat wall
- Water fountain/doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Tree bosque with seating
- Staggered tree allee along all four street edges
- Paving materials include pavers, fieldstone and stone dust

SOUTHERN BLOCK: This space serves as a town plaza with office buildings fronting on the edges. This space is a connector between residential and commercial uses. The fountain area depicted serves as a formal pedestrian entrance to what is programed as offices on the Nike Missile site. It is the termination point for the green link extending to the residential neighborhood to the east. It is a passive space. Features include:

- 3 water features/fountain with seat wall
- 2 water features/meadows serving as stormwater management
- Foundation plantings along buildings
- Tree bosque along southern street edge
- Staggered tree allee along eastern street edge
- Paving materials include pavers and fieldstone



1 Linear Park

#2 CORRIDOR PARK

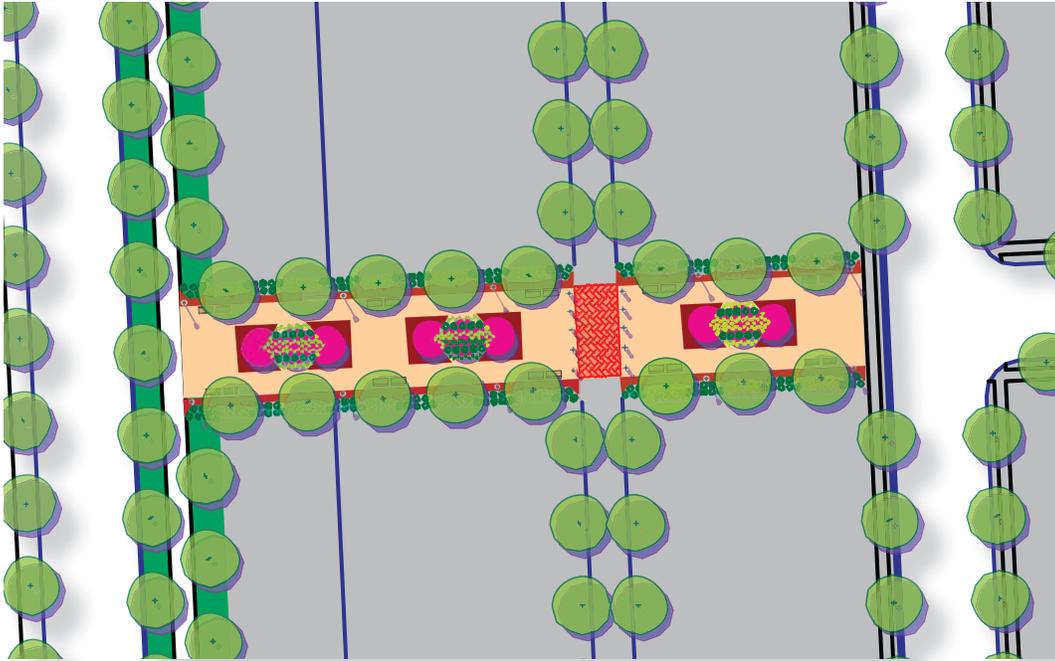
This space is approximately .4 acres and is located in a predominately single family housing area of the neighborhood. It is a linear space for pedestrians and bicyclists and is a termination point for a local road which runs west from Linear Park. An alley roadway runs through the space. Features include:

- Benches
- Bicycle racks
- Stone dust paving treatment
- Alley demarcated by pavers
- Lighted Bollards lining both sides of alley
- Formal planting beds in curbed planter
- Buffer planting along residential edge

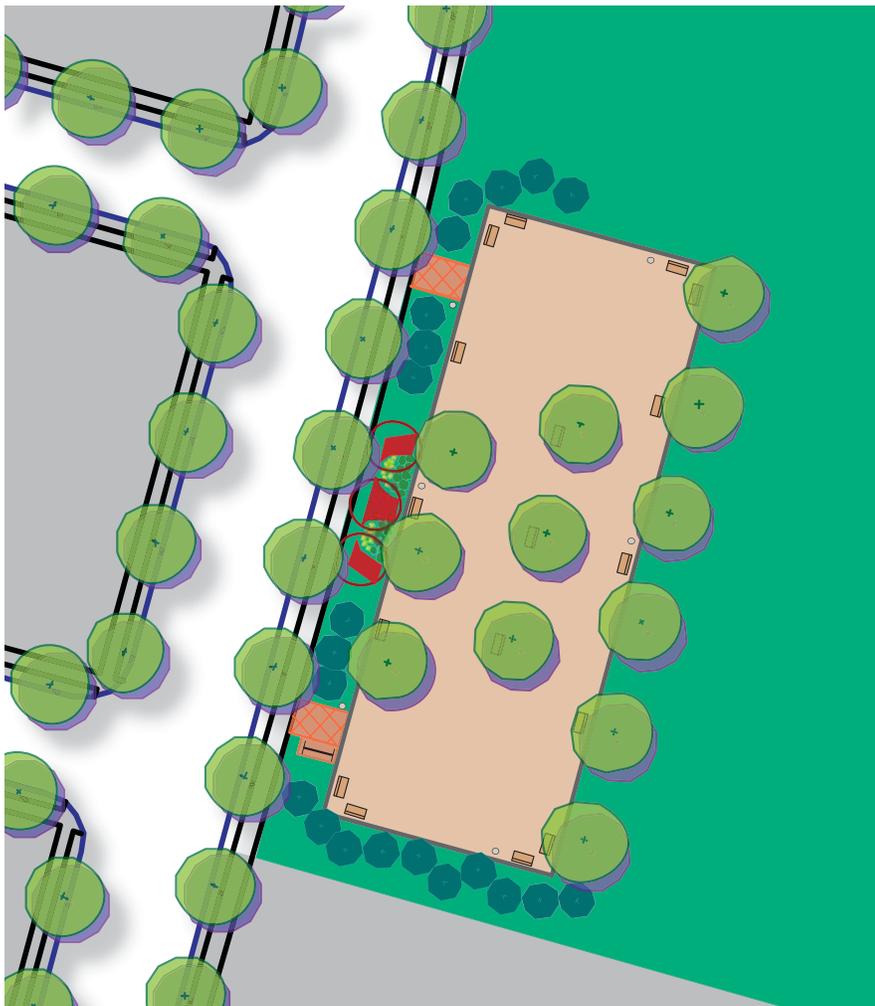
#3 DOG PARK NORTH

This space is roughly .4 acres and is located along the western edge of the greenway in the residential area of the neighborhood. This park functions as a space for resident's dogs to get some exercise and as an opportunity for neighbors to meet. Features include:

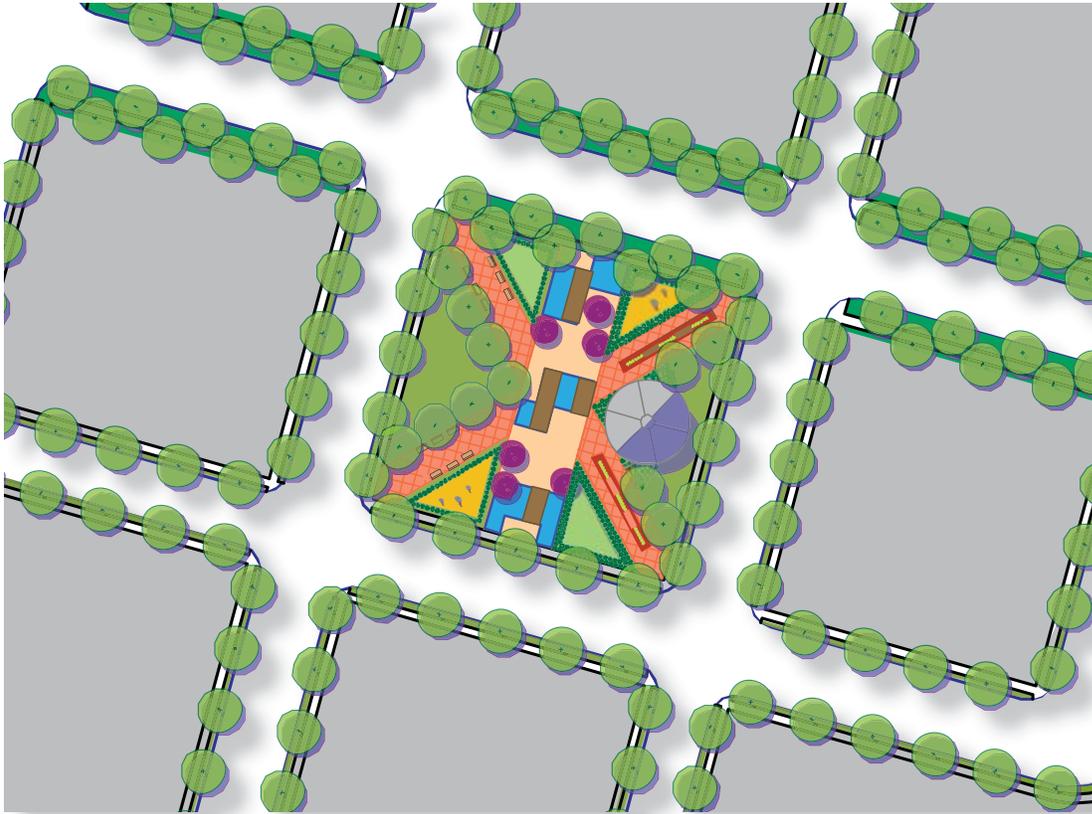
- Fenced in run approximately 200 x 70'
- Gravel / crushed stone paving material
- Benches
- Trash receptacles
- Water fountain / doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Bicycle rack
- Buffer perimeter plantings
- Shade trees inside run



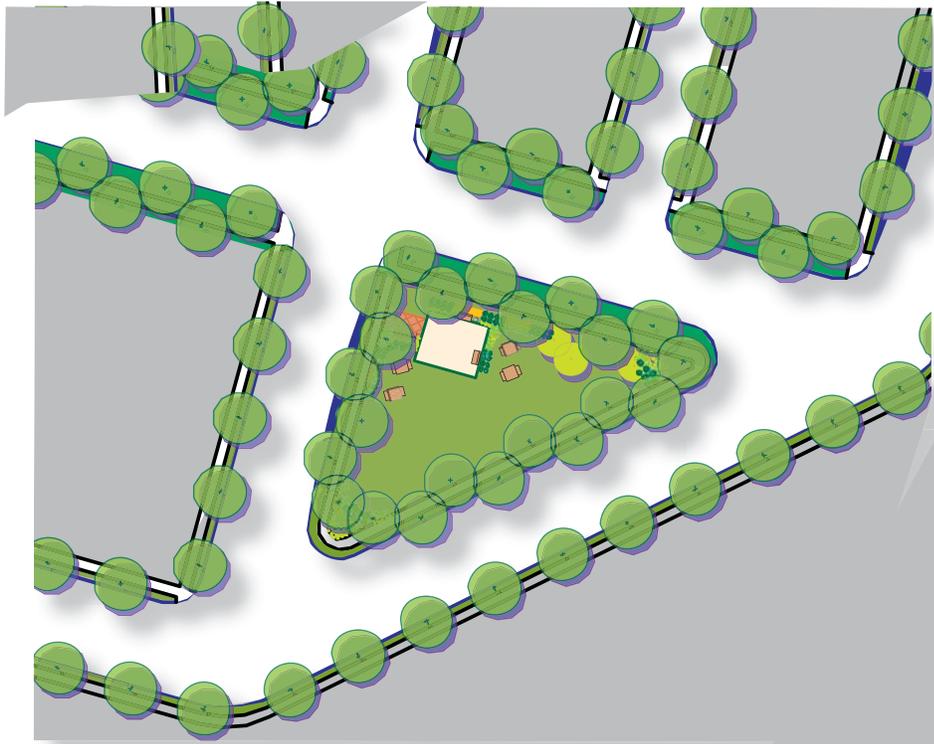
2 Corridor Park



3 Dog Park North



4 Footbridge Park



5 Alphabet Park

#4 FOOTBRIDGE PARK

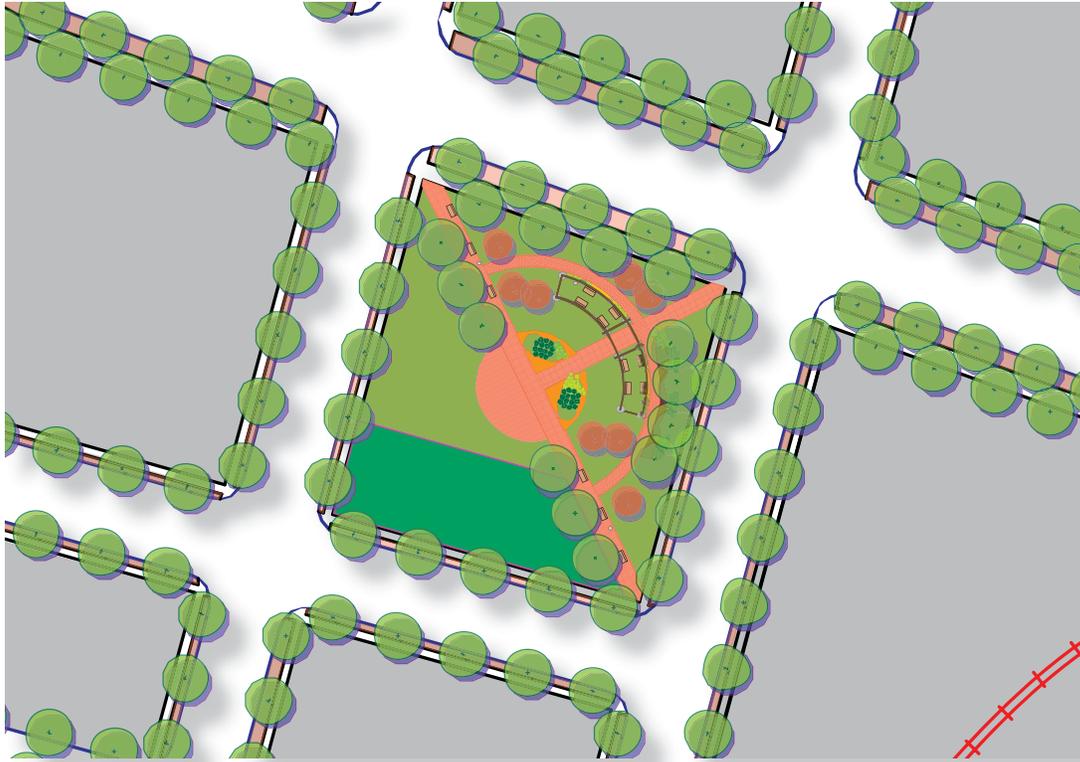
This neighborhood pocket park is roughly .72 acres and is located in the residential section of the neighborhood. It is located along a green link which runs east to west from Linear Park to the greenway edge, providing access by foot or bicycle. It is a passive space. Features include:

- 1 Gazebo / pavilion
- Statuary
- 1 Water feature
- Foot bridges
- Benches
- Trash receptacles
- Geometric walkways and formal plantings
- Paving materials include limestone and stone dust
- Tree alley along northern street edge
- Single row of trees along eastern, western and southern street edge at thirty-five feet on center

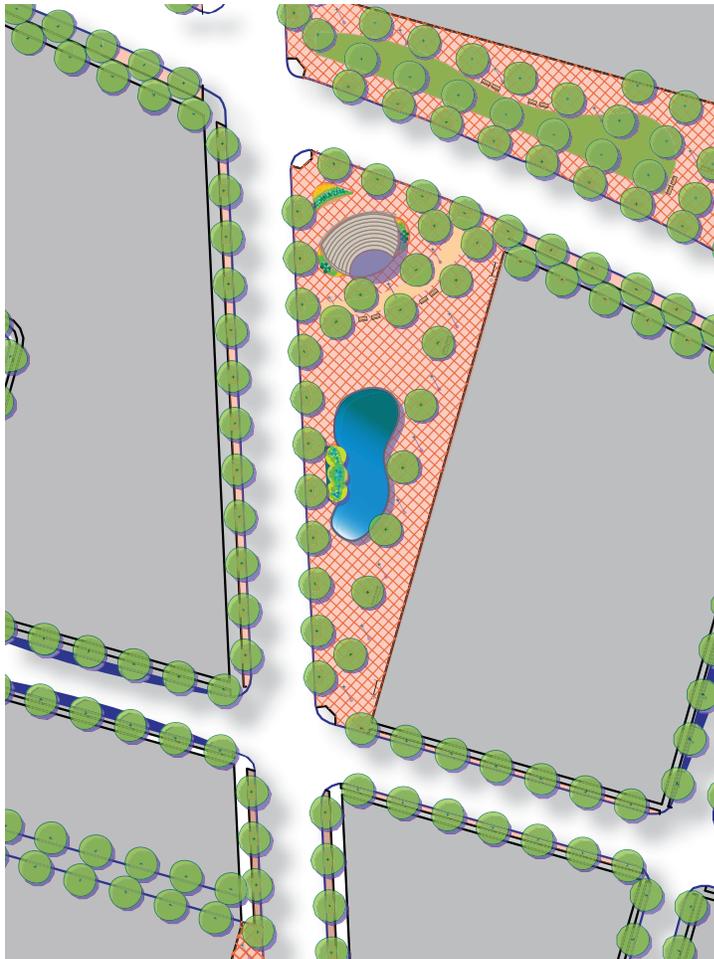
#5 ALPHABET PARK

This neighborhood pocket park is roughly .23 acres and is located in the residential area of the neighborhood. It is located along a green link which runs east to west from Linear Park to the greenway edge, providing access by foot or bicycle. It is an active space for children. Features include:

- 1 Tot-lot (age group: 2-5 years old)
- Lawn play area
- Picnic tables
- Benches
- Bicycle rack
- Trash receptacles
- Water fountain / doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Plantings located to physically separate play area from roadway
- Paving materials include pavers and rubberized safety surface for tot-lot
- Staggered tree alley along all street edges



6 Arbor Park



7 Main Street Plaza North

#6 ARBOR PARK

This neighborhood pocket park is roughly .7 acres and is located in a residential and office area of the neighborhood. It is a passive space. Features include:

- 1 Arbor seating area
- Benches
- Platform for ad hoc performances
- Trash receptacles
- Open lawn area
- Possible community garden plots
- Paving materials include limestone and pavers
- Concrete or wooden platform
- Staggered tree allee along northern street edge
- Single row of trees along eastern, western and southern street edge at thirty-five feet on center

DOWNTOWN

This neighborhood is located along Swedesboro-Paulsboro Road to the north and south of Rt 322. It is in the main commercial district of Woolwich New Town comprised of mixed-use residential and retail buildings.

#7 MAIN STREET PLAZA NORTH

This space is approximately .82 acres and is an active space. It is adjacent to the south-western edge of Linear Park and continues the string of green links to Rt 322. It is a town plaza which serves as a gathering space for the community. Mixed-use buildings define the eastern edge of the space. Features include:

- Raised amphitheater with canopy over seating
- Lighted glass awning extending from back of amphitheater over information board
- 1 water feature / fountain with seat wall
- Sidewalk cafes delineated by movable planters and street furniture
- Lighting
- Benches
- Trash receptacles
- Bicycle racks
- 2 formal planting beds
- Paving material to include limestone and pavers
- Single row of trees along both street edges at fifty feet on center

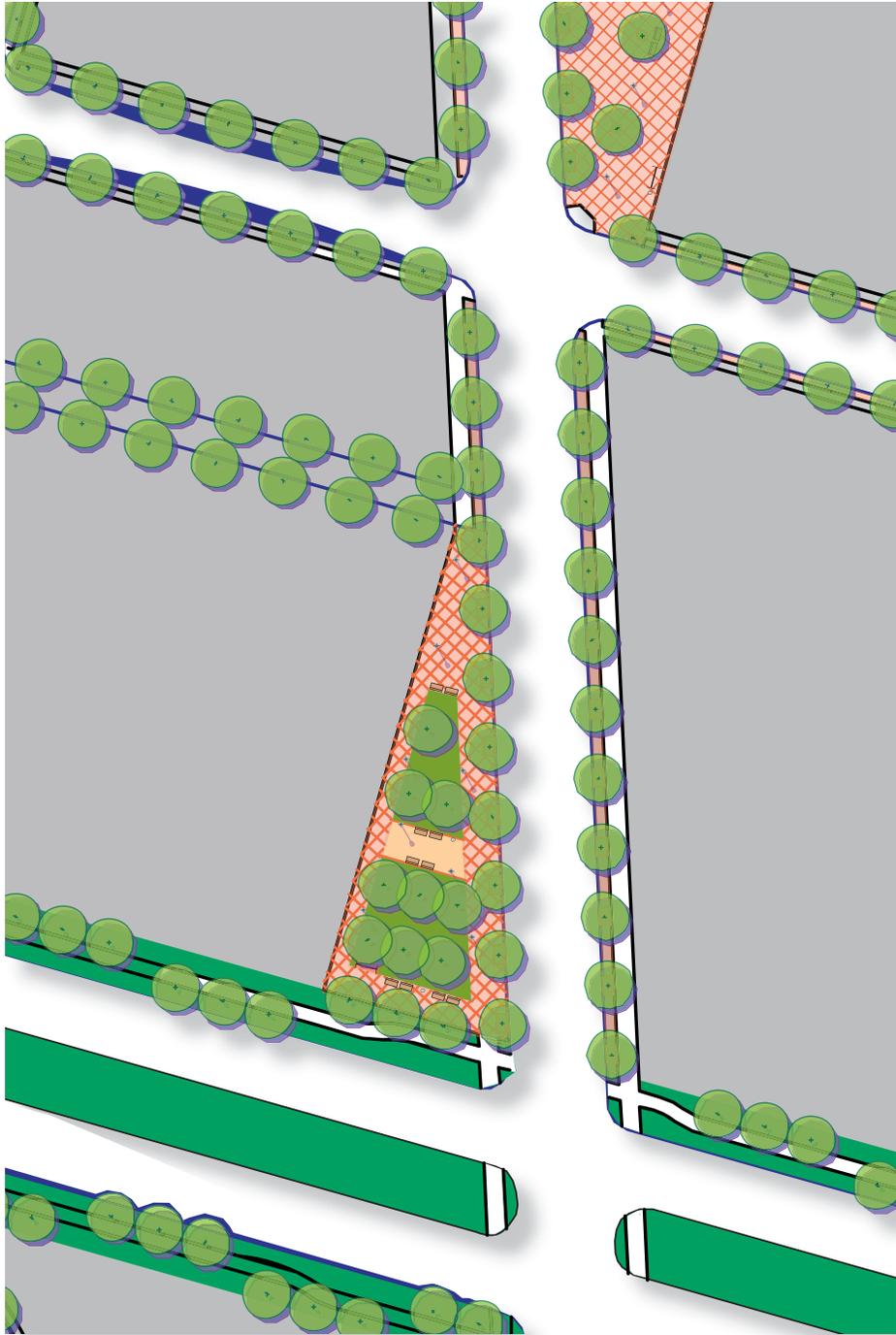
#8 MAIN STREET PLAZA SOUTH

This space is approximately .15 acres and is a passive space. It is a town plaza which serves as a gathering space for the community. It is located just south of Main Street Plaza North and is the final green link connecting the northern neighborhood of New Town to Rt 322. Mixed-use buildings define the western edge of the space. Features include:

- Lighting
- Benches
- Trash receptacles
- Bicycle racks
- Lawn panels
- Paving materials to include pavers and stone dust
- Single row of trees along eastern street edge at 50 feet on center
- Single row of trees along southern edge at twenty-five feet on center



Illustrative rendering of Main Street Plaza South in Woolwich New Town



8 Main Street Plaza South

#9 TOWN PLAZA

This space is approximately .64 acres and is an active, vibrant, identifiable civic space where special events such as festivals and farmer's market can occur. It is a 'livable street' which provides an open urban space with no visible delineation between it and the roadway where people choose to walk and cycle rather than drive to socialize and enjoy community life. Features include:

- Lighted bollards and trees in decorative grates delineate roadway and separate pedestrian traffic
- Permeable on-street paving
- Benches
- Bicycle racks
- Single row of trees along northern and eastern street edge at fifty feet on center

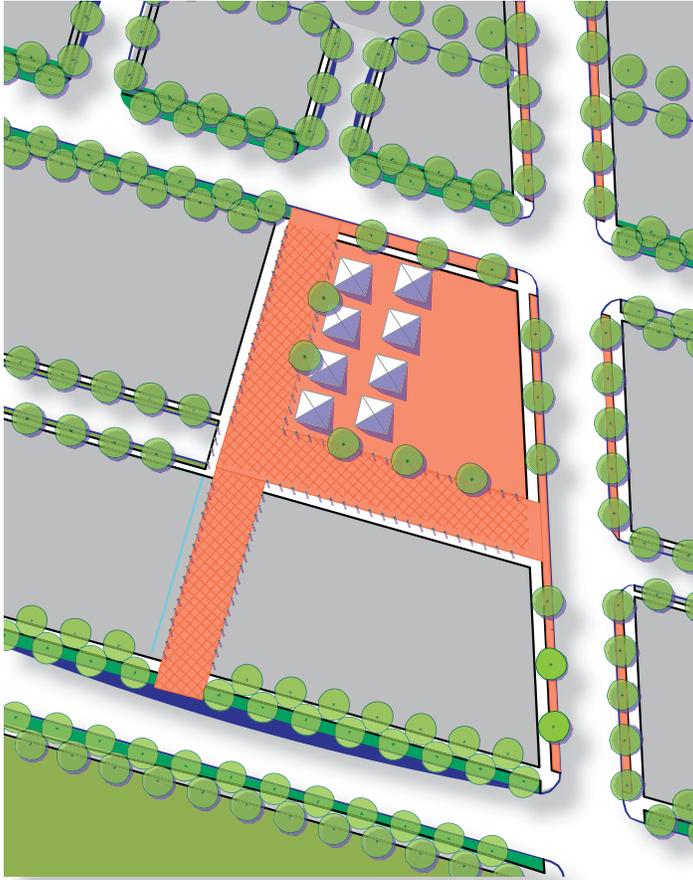
GRAND SPRUTE

This neighborhood is located between Locke Avenue and Swedesboro-Paulsboro Road to the north of Rt 322. This neighborhood is made up of residential and non-residential uses.

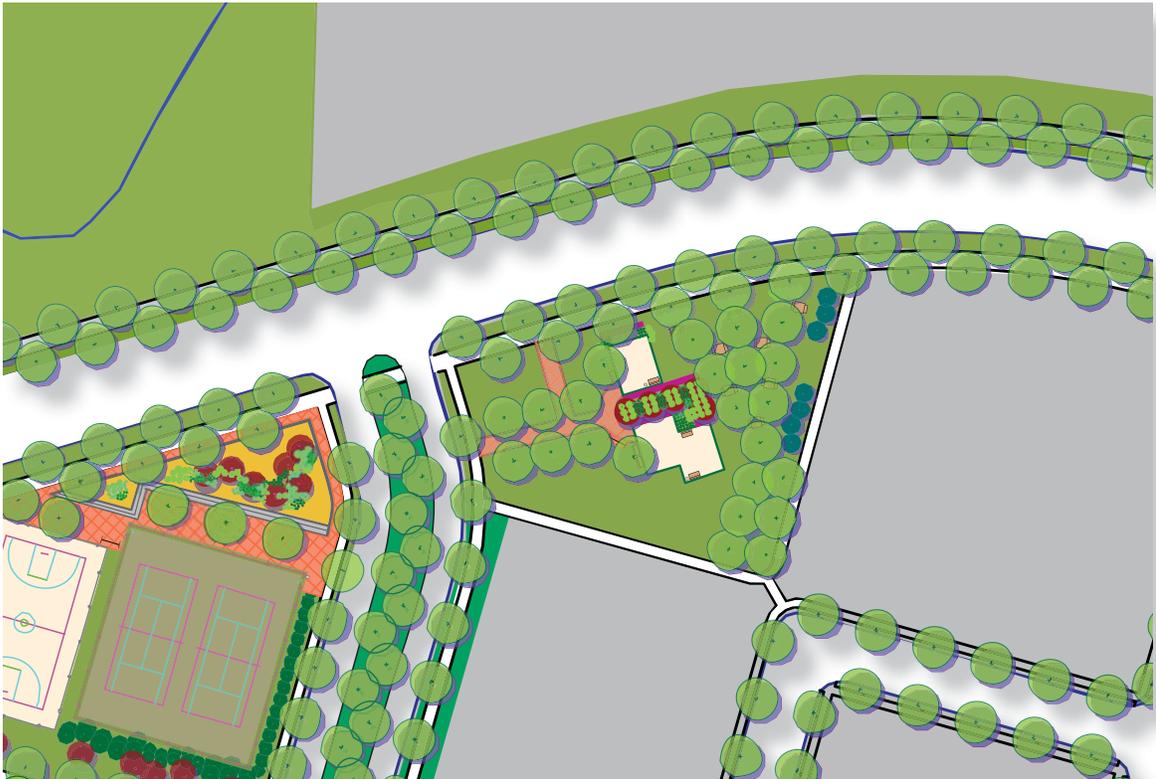
#10 CHILDREN'S PARK WEST

This neighborhood pocket park is roughly .85 acres and is an active recreation space for children, ages 2-12 years old. It is located along two major green links north of Rt 322, one which runs east to west and the other which runs north to south, providing connection through all of New Town by foot or bicycle. There is also direct access via sidewalks from the surrounding residential area. Features include:

- 1 Tot-lot (age group: 2-5 years old)
- 1 Play ground (age group: 5-12 years old)
- Open lawn for informal play
- Picnic grove with tables
- Benches
- Bicycle racks
- Water fountain / doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Plantings located to physically separate play area from roadway
- Paving materials include pavers and rubberized safety surface for tot-lot and play ground
- Buffer planting along eastern residential edge
- Staggered tree allee along northern street edge
- Boulevard with four rows of trees along the western street edge



9 Town Plaza



10 Children's Park West

#11 ADULT PARK NORTH

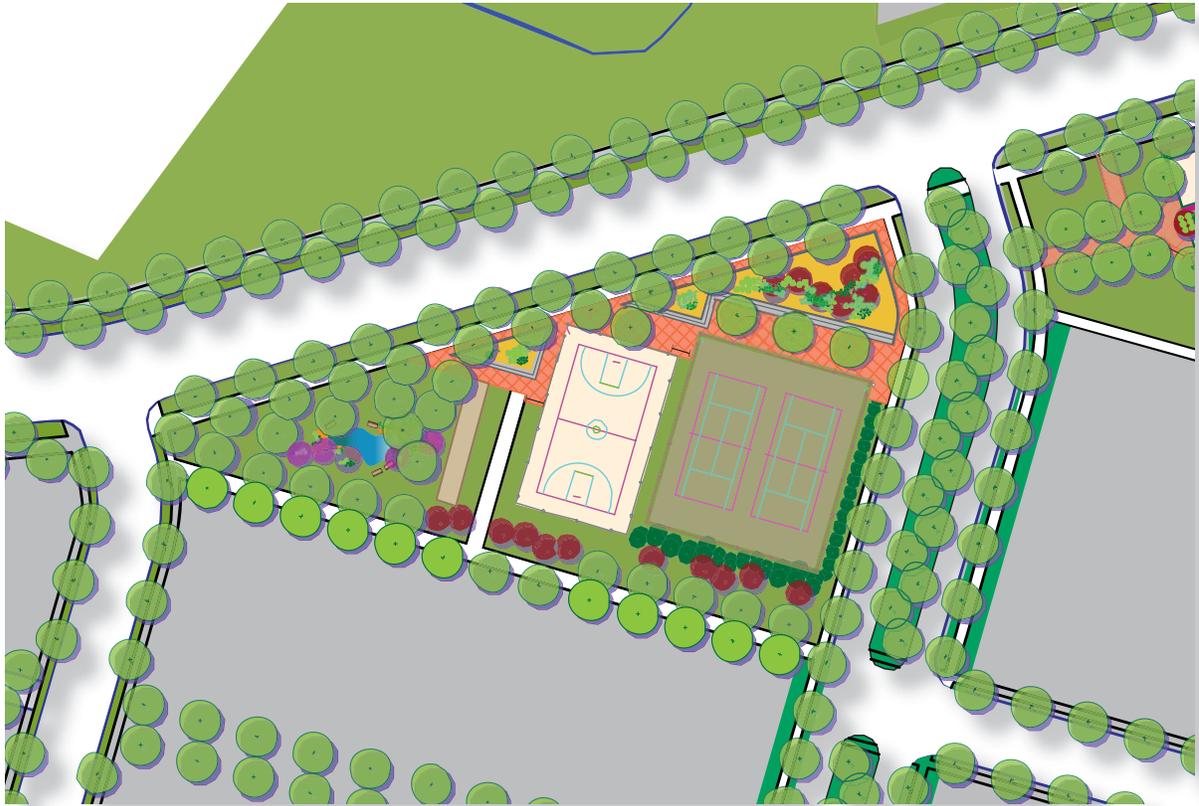
This active recreation space is approximately 1.6 acres. It is located along two major green links north of Rt 322, one which runs east to west and the other which runs north to south, providing connection through all of New Town by foot or bicycle. There is also direct access from the surrounding residential area via a twenty foot wide pedestrian corridor which includes a ten foot wide sidewalk and alley with trees spaced thirty feet on center. Features include:

- Double tennis court
- 1 basketball court
- 1 bocce court
- Raised planter with seat wall on the street side
- Double riser seating in the plaza facing courts
- Trash receptacles
- Drinking fountain/doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Lawn with water feature/meadows serving as stormwater management
- Informal plantings
- Paving materials to include pavers and color treated concrete
- Boulevard with four rows of trees along the eastern street edge
- Staggered tree alley along northern street edge

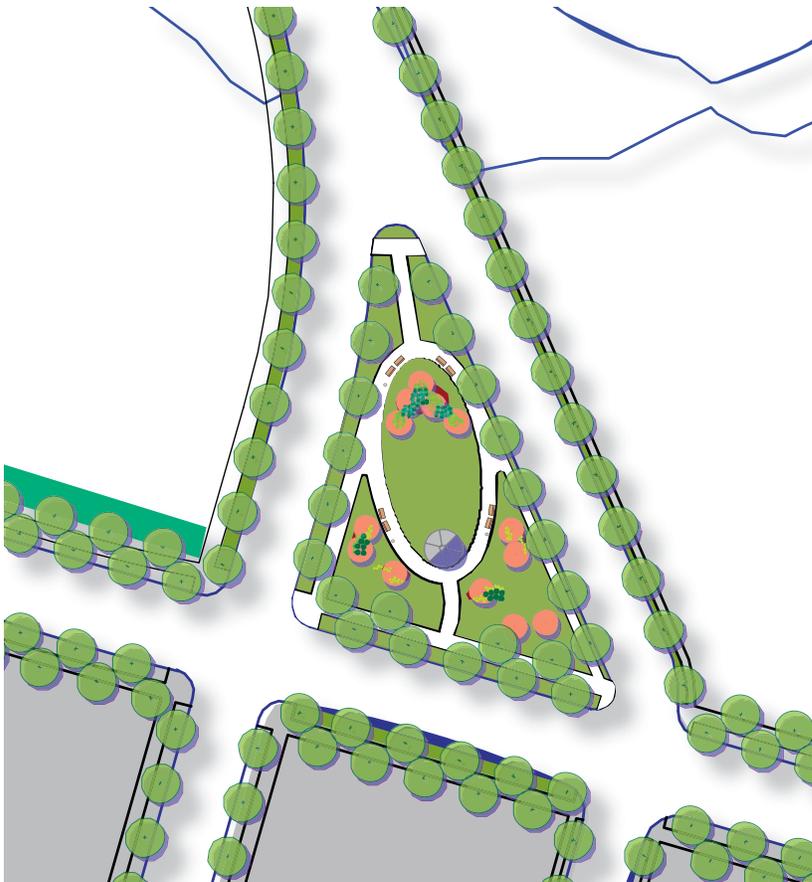
#12 TRIANGLE PARK

This neighborhood pocket park is approximately .4 acres and is a passive space. It is located among a variety of land uses including residential, retail, and office. Features include;

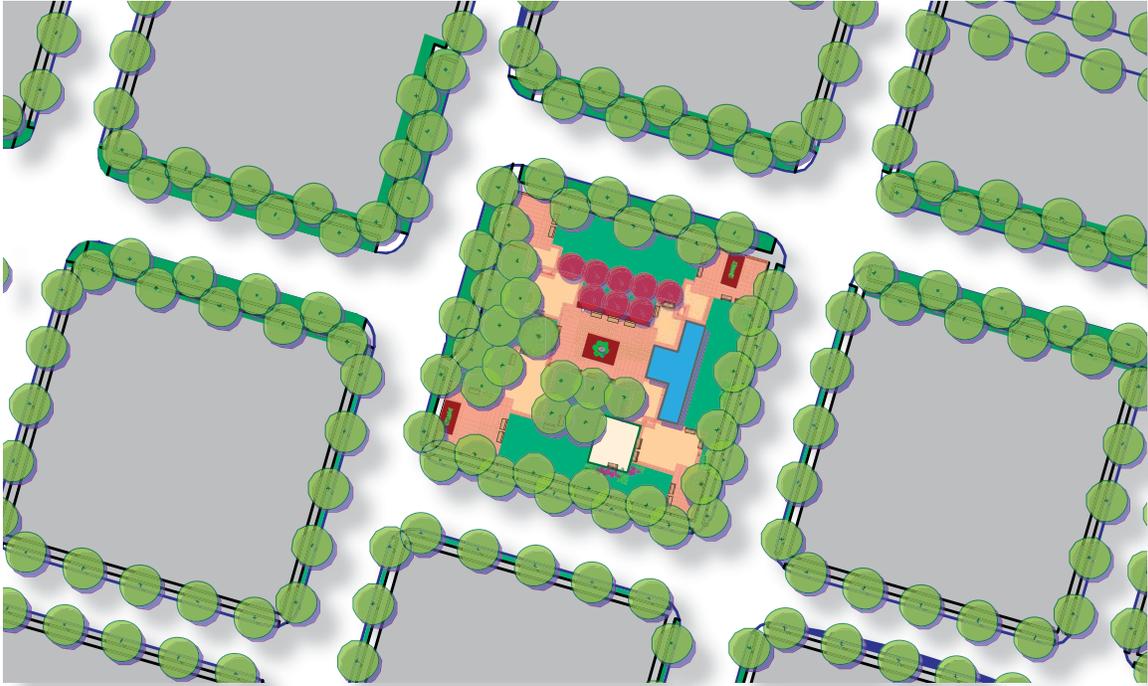
- Gazebo / pavilion
- Benches
- Trash receptacles
- Lawn
- Informal planting
- Paving materials include pavers and color treated concrete
- Staggered tree alley along southern street edge
- Single row of trees along the eastern and western street edge at forty feet on center



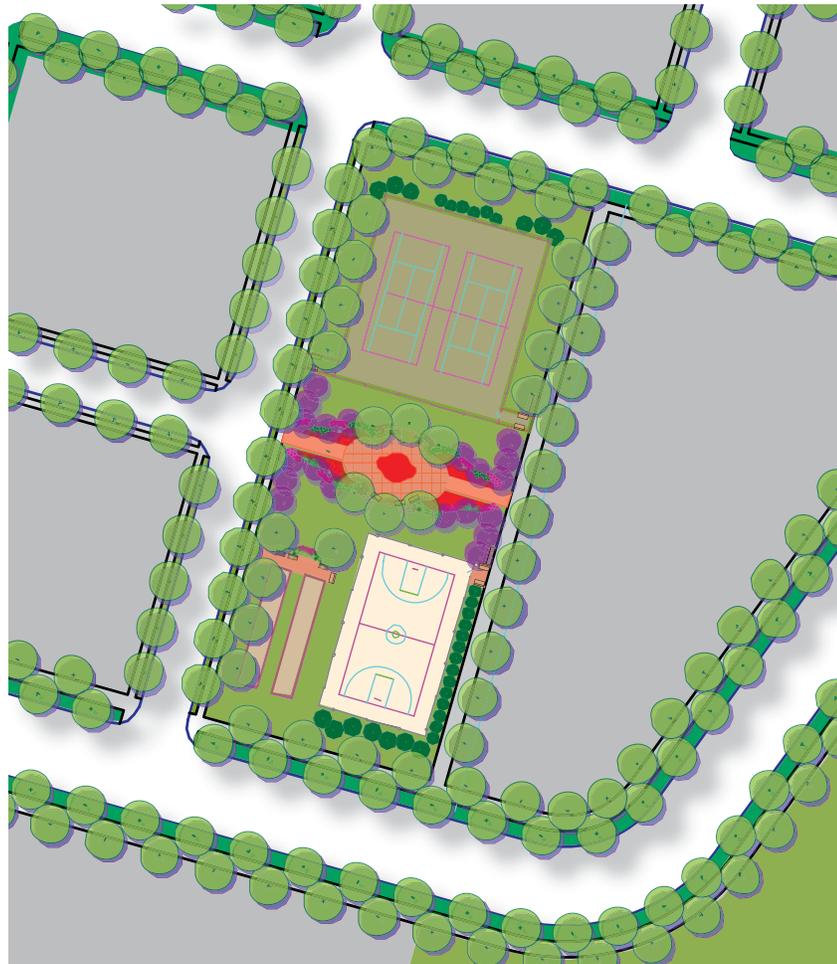
11 Adult Park North



12 Triangle Park



13 Neighborhood Square



14 Adult Park South

RACCOON CREEK DISTRICT

This neighborhood is located between Locke Avenue and Swedesboro-Paulsboro Road to the south of Rt 322. It is comprised of residential and commercial land uses.

#13 NEIGHBORHOOD SQUARE

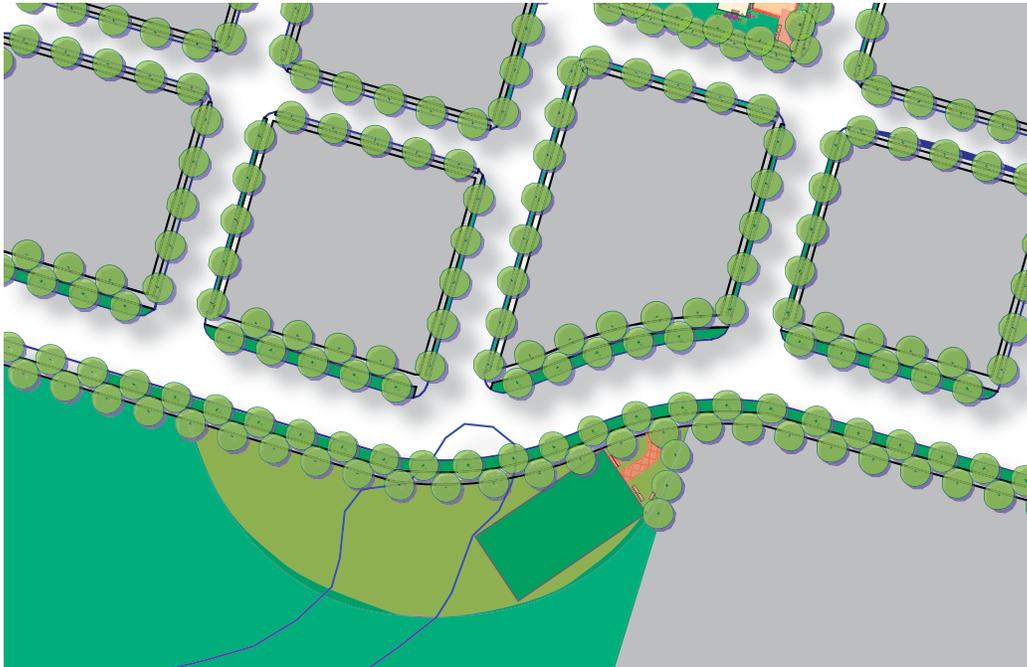
This neighborhood pocket park is roughly .6 acres and is both an active and passive space. It is located in a predominately residential area along a major green link which runs east to west south of Rt 322 providing connection through the heart of New Town by foot or bicycle. Features include:

- 1 tot-lot (age group: 2-5 years old)
- 1 water feature/fountain with seat wall
- Benches
- Trash receptacle
- Bicycle racks
- Series of smaller individual plaza spaces
- Lawn area
- Tree grove
- Informal plantings
- Staggered tree allee along all street edges

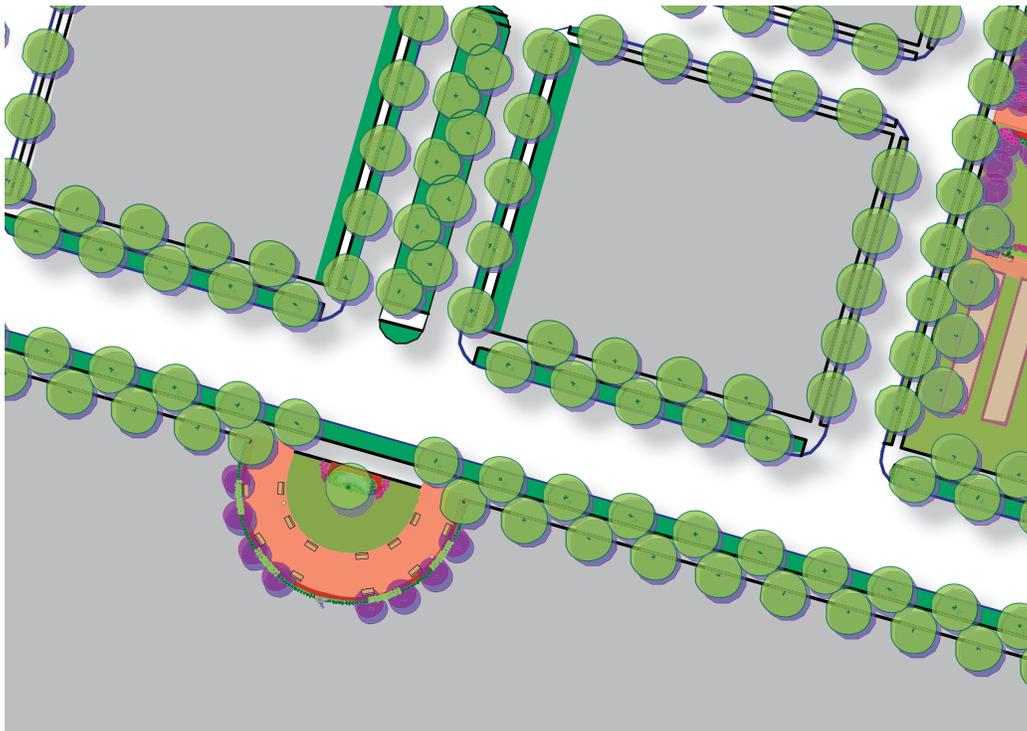
#14 ADULT PARK SOUTH

This active recreation space is approximately 1.3 acres and located in a residential area of the neighborhood. Its northern edge borders a major green link which runs east to west south of Rt 322 providing connection through the heart of New Town by foot or bicycle. Its southern edge is adjacent to the greenway edge which also provides pedestrian and cyclist opportunities. Features include:

- Double tennis court
- 1 basketball court
- 2 bocce courts
- Gathering space / waiting area
- Benches
- Drinking fountain / doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Informal plantings
- Paving materials to include pavers and color treated concrete
- Staggered tree allee along all street edges



15 Community Garden



16 Boulevard Park

#15 COMMUNITY GARDEN

This space is approximately .26 acres and is located in the greenway edge (see #19) of the residential section of the neighborhood. It affords residents the opportunity to maintain a small garden plot. This active space is adjacent to the existing wetlands. Features include:

- Perimeter fencing approximately 70 x 200'
- Water spigot / water source
- Benches
- Trash receptacles
- Bicycle rack
- Staggered tree allee along the only street edge

#16 BOULEVARD PARK

This passive space is roughly .24 acres and serves as a focal point for a tree-lined boulevard. The boulevard serves as a green link connecting the two neighborhoods north and south of Rt 322. It is located in the greenway edge (see #19) and is surrounded by residential uses. Features include:

- Specimen tree centered in park and near street edge
- Statuary
- Open lawn panel
- Benches
- Trash receptacles
- Formal planting around perimeter
- Street edge open except for specimen tree

- #17 DOG PARK SOUTH

This space is approximately 3.27 acres and is an active and passive space. It is located along the northern edge of the greenway (see #19) in the residential area of the neighborhood. This park functions as a space for resident's dogs to get some exercise and as an opportunity for neighbors to meet. The dog park is connected by a walkway to a picturesque sitting area. Features include:

- Fenced in run approximately 200 x 70'
- Gravel / crushed stone paving material
- Benches
- Trash receptacles
- Water fountain / doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Bicycle rack
- Buffer perimeter plantings
- Shade trees inside run
- Formal plantings
- Lawn panel
- Paving materials include fieldstone and pavers
- Staggered tree allee along all street edges

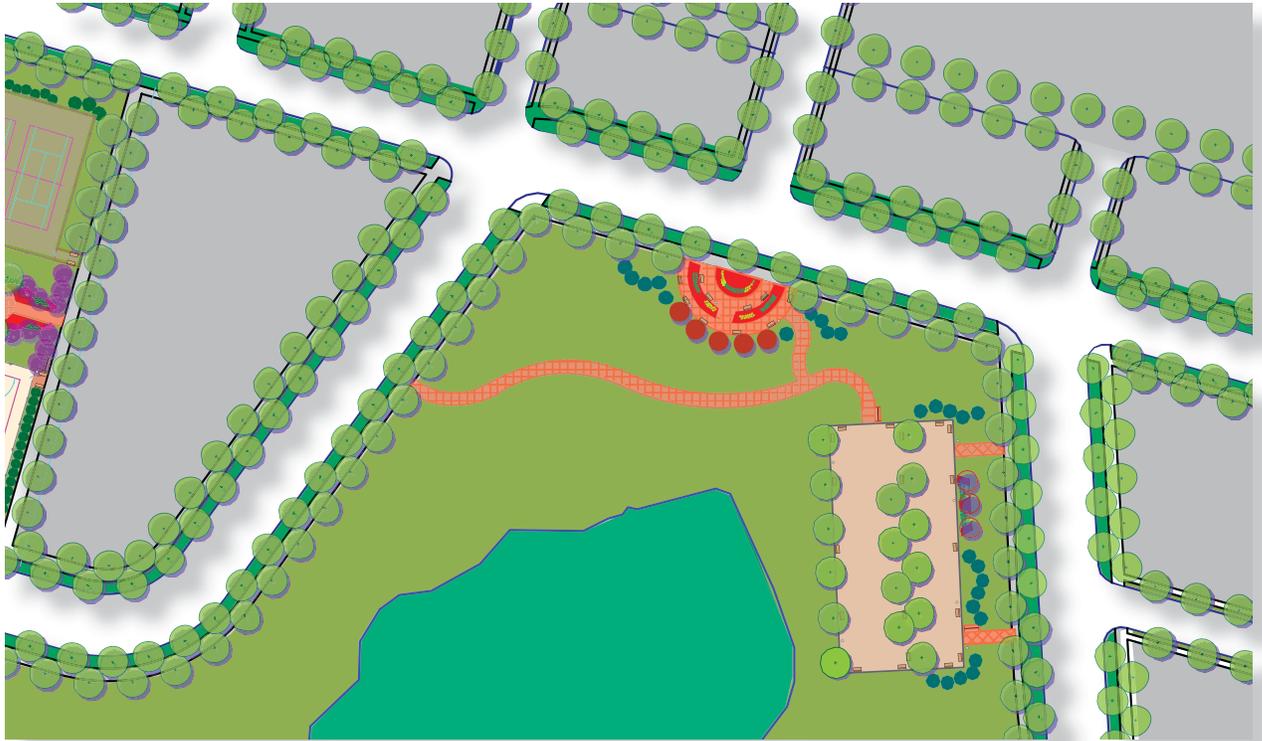
EASTSIDE

This neighborhood is located south of Rt 322 and encompasses the area east of Swedesboro-Paulsboro Road in Woolwich New Town. It is comprised of residential and commercial land uses.

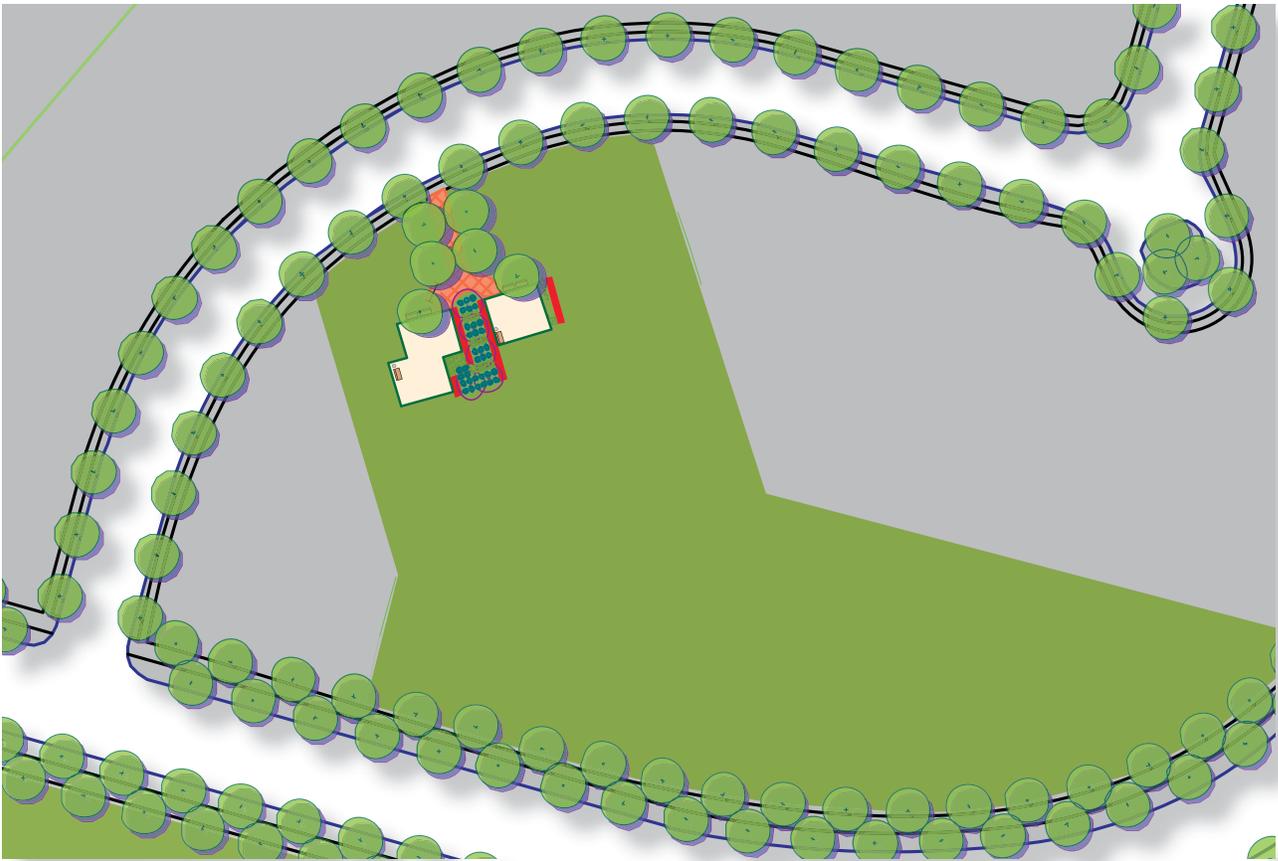
- #18 CHILDREN'S PARK EAST

This neighborhood pocket park is roughly 2.5 acres and is an active recreation space for children, ages 2-12 years old. It is located north of the greenway which runs east to west through the southern portion of New Town in a predominately residential area. Features include:

- 1 Tot-lot (age group: 2-5 years old)
- 1 Play ground (age group: 5-12 years old)
- Open lawn for informal play
- Benches
- Bicycle racks
- Water fountain / doggie fountain
- Dog waste bag dispenser with biodegradable bags
- Plantings located to physically separate play area from roadway
- Paving materials include pavers and rubberized safety surface for tot-lot and play ground
- Single row of trees along the northern street edge at forty feet on center



17 Dog Park South



18 Children and Park East

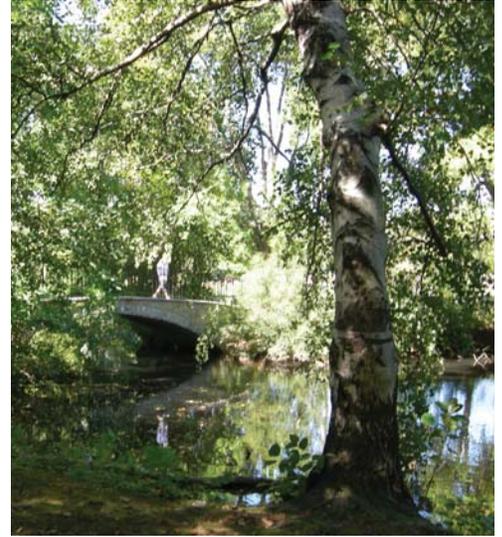
#19 GREENWAY

The greenway is approximately 33.9 acres and runs east to west through both the Raccoon Creek and Eastside neighborhoods. Greenways serve as a space for wildlife movement and stormwater quality and management opportunities. Approximately nine stormwater management basins are located throughout the space. This usable green space also provides passive recreation and is bordered by preserved open space. The preserved land is protected due to wetlands and eagle foraging habitat.

Another greenway is located in The Hill neighborhood along the eastern edge and is approximately 1.64 acres. The greenway meanders north to south from behind residential dwelling to along the street edge and terminates at the Township Park. It provides a passive trail for connectivity from the neighborhood to the Township Park. Approximately three stormwater management basins are located throughout the space.

#20 TOWN (RT 322) BOULEVARD

This boulevard is a main green link running east to west through Woolwich New Town. It provides a necessary buffer and separation between the regional thru lanes on Rt 322 and the mixed-use land uses and roadway's edge. It enables people to safely walk or bike the length of it and cross the highway at four locations via multi-purpose paths. These multi-use paths are eight feet wide and are provided on both sides of Route 322. They are flanked by an allee of trees to provide visual interest and physical separation from vehicular traffic. The trees are grouped in threes at thirty feet on center. The groupings are staggered and will provide continuous canopy cover over the multi-use path. An allee and ornamental grass plantings are also provided in the center median. Two smaller streets running parallel intermittently along Route 322 through Woolwich New Town comprise the Town Boulevard. Ten foot wide multi-use paths and parallel parking are provided along one side of the parallel roads. A continuous row of trees at forty feet on center delineates the path and physically separates it from vehicular traffic. These ten foot wide multi-use paths provide a connection to the various neighborhoods within Woolwich New Town.



19 Photographic examples of greenway public spaces in Woolwich New Town



20 Illustrative Rendering of Town (Rt 322) Boulevard in Woolwich New Town

PUBLIC SPACE PLANT VOCABULARY

Xeriscaping is an environmentally sensitive approach to the design of residential, open space and park land using various methods to conserve resources, especially water. Often native, drought-resistant plants are used and encouraged to limit the fertilizing and watering normally needed to establish a newly planted landscape. Every aspect of Woolwich New Town had been designed with an environmentally friendly, green approach which is illustrated through the choice of architectural materials and building design, alternative transportation means, stormwater management solutions and selection of plant material.

The use of native species within New Town is encouraged. Woolwich is a community proud of its heritage and what better place to show off New Jersey's finest plant selection. Native species that are drought-tolerant, disease resistant and can withstand urban conditions are encouraged throughout the center. Invasive plants are strongly discouraged as New Town shares some of its borders with pristine, undisturbed wetlands. Invasive species are plants that thrive and outperform native plant species as they spread, eventually killing the native species. They are dangerous because there are no natural predators or diseases to keep them in balance in the landscape which results in a permanent altering of the natural environment's landscape. This can affect entire ecosystems. As New Town is constructed, this aspect of plant selection will be strongly monitored.

Micro-climates are another important aspect to consider in the construction of New Town. The micro-climate is the variations in localized climate around a building. This is a consideration when selecting some plant material. Buildings often provide shelter for plants from north-west winds which can be harmful to some plant material thus allowing some otherwise sensitive plants to be utilized. Southern oriented micro-climates can have slightly elevated soil temperatures while northern oriented ones have slightly lower soil temperatures. Both micro-climates can mean a difference between the plant material found in them and even the plant emergent and blooming times. Micro-climates are another consideration to be taken into account when designing New Town.

PLANTS FOR PARK SPACES

SHADE TREES

BOTANICAL NAME

Aesculus hippocastanum
Cladrastis kentukea
Fagus sylvatica 'Pendula'
Gymnocladus dioicus
Liquidambar styraciflua
Liriodendron tulipifera
Quercus alba
Quercus coccinea
Ginkgo biloba

COMMON NAME

Horsechestnut
Yellowwood
Kentucky coffee tree
Sweet gum
Tulip tree
White oak
Scarlet oak
Weeping European beech
Ginkgo

BOTANICAL NAME

Fraxinus Americana
Fraxinus pennsylvanica
Ginkgo biloba
Phellodendron amurense
Quercus alba
Quercus coccinea
Quercus rubra
Quercus palustris
Sophora japonica
Zelkova serrata

COMMON NAME

White Ash
Green Ash
Ginkgo
Amur Cork Tree
White Oak
Scarlet Oak
Red Oak
Pin Oak
Japanese Pagodatree
Japanese Zelkova

ORNAMENTAL TREES

BOTANICAL NAMES

Cercis canadensis
Cornus spp
Halesia carolina
Lagerstroemia
Magnolia spp
Malus spp
Prunus x okame
Stewartia koreana
Syringa reticulata

COMMON NAME

Eastern redbud
Flowering dogwood
Carolina silverbell
Crape myrtle
Magnolia
Crabapple
Okame flowering cherry
Korean stewartia
Japanese tree lilac

ORNAMENTAL TREES

BOTANICAL NAME

Acer campestre
Acer ginnala
Albizia julibrissin
Amelanchier Canadensis
Betula populifolia
Hamamelis virginiana
Koelreuteria paniculata
Malus
Malus hupehensis
Malus sieboldi zumi
Malus x 'Katherine'
Malus Floribunda
Malus x 'David'
Syringa reticulata
Viburnum prunifolium

COMMON NAME

Hedge Maple
Amur Maple
Mimosa or Silk tree
Shadblow Serviceberry
Gray Birch
Common Witchhazel
Golden raintree
Crabapples
Tea Crabapple
Zumi Crabapple
Katherine Crabapple
Japanese Carbapple
David Crabapple
Japanese Tree Lilac
Blackhaw Viburnum

DROUGHT - TOLERANT PLANTS

SHADE TREES

BOTANICAL NAME

Acer rubrum
Celtis occidentalis

COMMON NAME

Red Maple
Common Hackberry

EVERGREEN TREES

BOTANICAL NAME

Abies concolor
Cedrus atlantica
Ilex opaca
Juniperus virginiana
Juniperus chinensis
Picea abies
Picea pungens
Picea pungens glauca
Picea pungens glauca nana
Picea pungens glauca pendula
Pseudotsuga menziesii
Pinus strobus
Pinus thunbergiana
Pinus sylvestris

COMMON NAME

White Fir
Atlas Cedar
American Holly
Eastern Red Cedar
Chinese Juniper
Norway Spruce
Colorado Spruce
Blue Colorado Spruce
Dwarf Blue Spruce
Weeping Blue Spruce
Douglas Fir
White Pine
Japanese Black Pine
Scotch Pine

EVERGREEN SHRUBS

BOTANICAL NAME

Berberis Juliana
Ilex crenata
Myrica pennsylvanica
Pinus mugo mugo
Taxus cuspidata /Taxus media
Taxus cuspidata capitata
Taxus cuspidata densiformis
Taxus cuspidata nana
Yucca filamentosa

COMMON NAME

Wintergreen Barberry
Japanese Holly Spp
Bayberry
Mugo Pine
Japanese Yew Spp
Upright (Cap) Yew
Dense Yew
Dwarf Yew
Adams Needle

DECIDUOUS SHRUBS

BOTANICAL NAME

Abelia x grandiflora
Spirea x bumalda
Vitex agnus-castus
Prunus maritime

COMMON NAME

Glossy Abelia
Anthony Waterer Spirea
Chaste Tree
Beach Plum

WET - TOLERANT PLANTS

SHADE TREES

BOTANICAL NAME

Acer rubrum
Fraxinus pennsylvanica
Liquidambar styraciflua
Metasequoia glyptostroboides
Nyssa sylvatica
Quercus bicolor
Quercus Palustris
Salix alba 'niobe'
Taxodium distichum

COMMON NAME

Red Oak
Green Ash
Sweetgum
Dawn Redwood
Black gum
Swamp White Oak
Pin Oak
Golden Weeping Willow
Bald Cypress

ORNAMENTAL TREES

BOTANICAL NAME

Amelanchier Canadensis
Betula nigra
Carpinus carolinia
Cladastris lutea
Chionanthus virginicus
Magnolia virginiana
Oxydendrum arboreum
Ostrya virginiana
hophornbeam

COMMON NAME

Shadblow serviceberry
River birch
American hornbeam
Yellowwood
White Fringetree
Sweetbay magnolia
Sourwood
American

SHRUBS

BOTANICAL NAME

Aronia arbutifolia 'Brilliantissima'
Clethra alnifolia
Cornus alba 'sibirica'
Cornus racemosa
Cornus sericea
Ilex verticillata 'Harvest Red'
Ilex glabra
Lindera benzoin
Viburnum Dentatum
Viburnum opulus

COMMON NAME

Red chokeberry
Summersweet clethra
Red Twig Dogwood
Gray dogwood
Redosier dogwood
Harvest red winterberry
Inkberry holly
Spicebush
Arrowwood viburnum
European cranberry bush

HERBACEOUS

BOTANICAL NAME

Acorus calamus
Andropogon virginicus
Asclepias incarnata
Aster novi-belgii
Carex crinita
Eleocharis obtuse
Eupatorium perfoliatum
Hibiscus moscheutos
Iris pseudacorus
Iris versicolor
Juncus effusus
Kosteletzkya virginica
Lobelia cardinalis
Lobelia siphilitica
Nuphar lutea
Nymphaea odorata
Peltandra virginica
Polygonum amphibum
Pontederia cordata
Potamogeton nodosus
Sagittaria latifolia
Salix discolor
Saururus cernuus
Scirpus cyperinus
Scirpus pungens
Scirpus robustus
Silphium perfoliatum
Sparganium americanum
Sparganium eurycarpum
Typha latifolia

COMMON NAME

Sweet Flag
Broomsedge
Swamp Milkweed
New York Aster
Tussock Sedge
Blunt Spike Rush
Boneset
Marsh Hibiscus
Yellow Flag
Blue Flag Iris
Soft Rush
Seashore Mallow
Cardinal Flower
Blue Lobelia
Spatterdock
Fragrant Water Lily
Arrow Arum
Water Smartweed
Pickerelweed
Pond Plant
Duck Potato
Pussywillow
Lizard's Tail
River Bulrush
Common Three Square
Saltmarsh Bulrush
Cup Plant
Eastern Bur-reed
Giant Bur-reed
Broad-leaved cattail



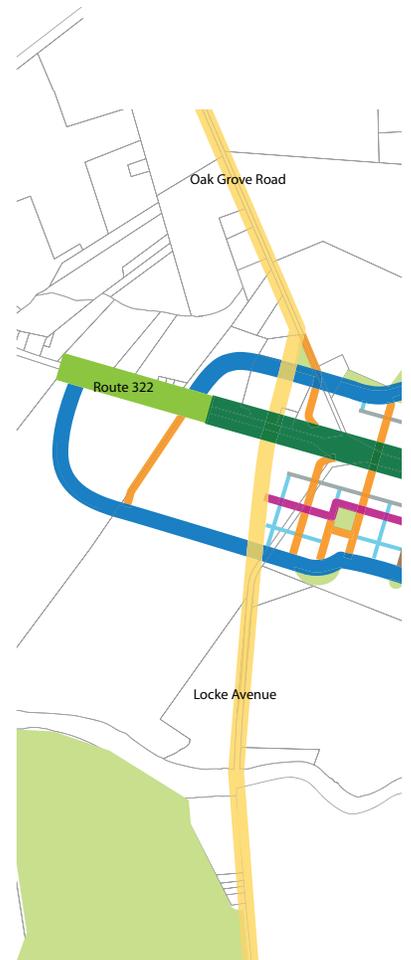
Street Trees

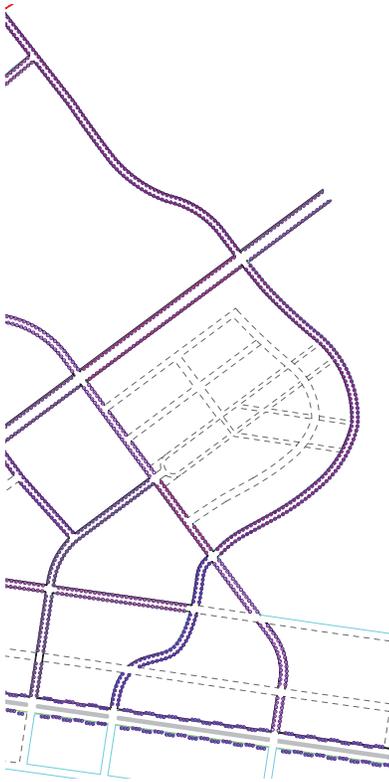
● European Hornbeam	<i>Carpinus betulus</i>
● Fastigate English Oak	<i>Quercus robur 'fastigiata'</i>
● Ginkgo	<i>Ginkgo biloba</i>
● Green Ash 'Newport'	<i>Fraxinus pennsylvanica</i>
● Green Ash 'Summit'	<i>Fraxinus pennsylvanica</i>
● Little Leaf Linden	<i>Tilia cordata</i>
● London Plane	<i>Platanus x acerifolia 'Bloodgood'</i>
● Armstrong Red Maple	<i>Acer rubrum 'Armstrong'</i>
● Sargeant Cherry	<i>Prunus Sargentii 'Columnar'</i>
● Sawtooth Oak	<i>Quercus acutissima</i>
● Shademaster Honeylocust	<i>Gleditsia Tricanthos var. inernis</i>
● Silver Linden	<i>Tilia tomentosa</i>
● Skyline Honeylocust	<i>Gleditsia Tricanthos 'Skycole'</i>
● Sugar Maple	<i>Acer saccharum</i>
● Willow Oak	<i>Quercus phellos</i>

Street Classifications

Route 322 Boulevard A	■
Route 322 Boulevard B	■
Kings Highway	■
Commercial Main Street	■
Collector No Parking	■
Collector Parking	■
Residential	■
Special Street 1	■
Special Street 2	■
Special Street 3	■
Local Street	■
Small Street*	■
Alley	■

*small streets conceptually



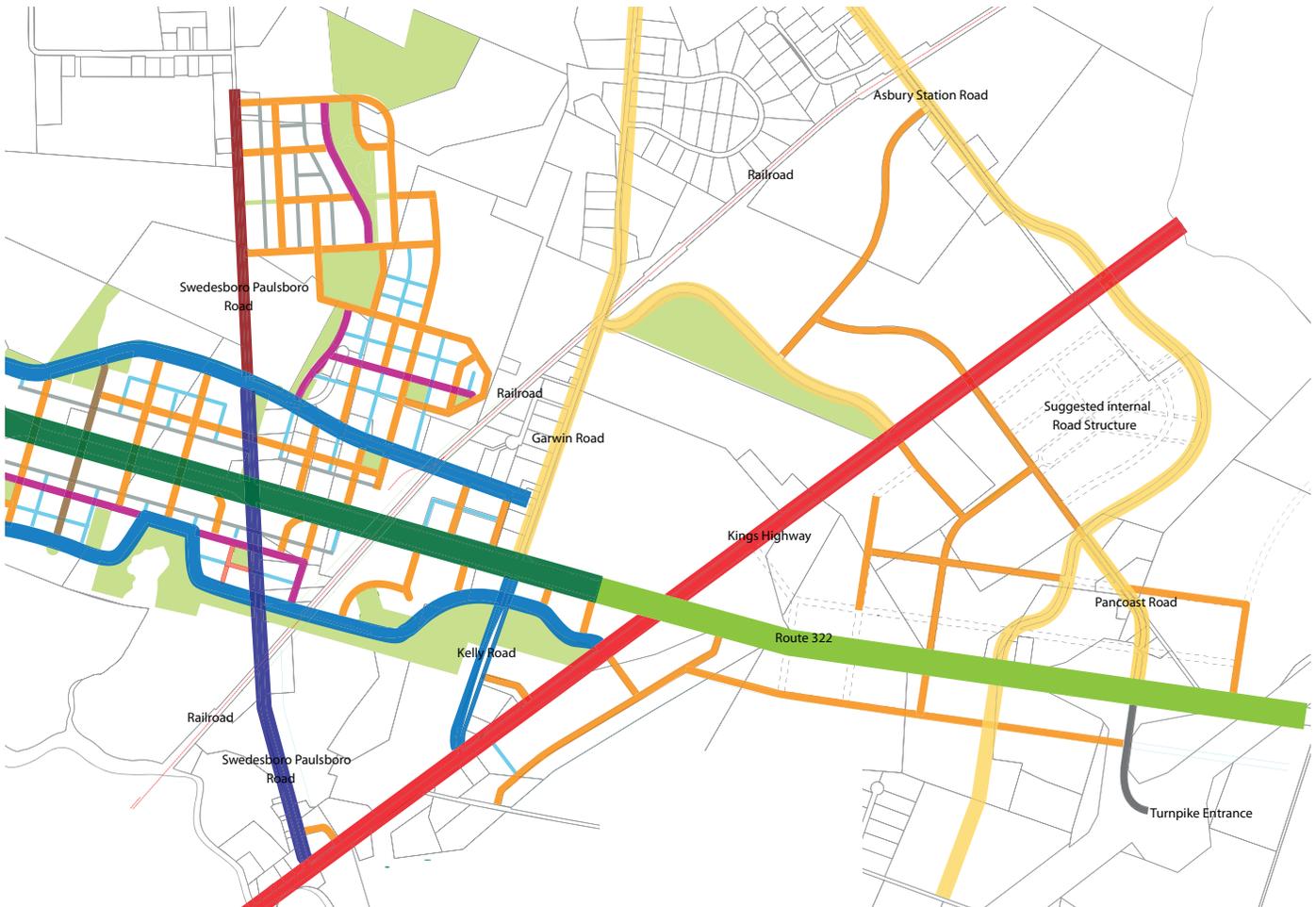


STREET TREES

The street tree suggestions are based on the hierarchy of the streets and their ROW widths. The street trees offer a uniqueness to the individual streets. Trees which can handle a wet environment are suggested along the streets which offer a natural drainage system within the

planting strips. STREET DESCRIPTIONS

Streets constitute the single largest area within a community devoted to public space. Streets are pedestrian and automobile oriented and must be designed for both to feel comfortable in the space. They are part of the gray and green links within New Town. There is a hierarchy of streets within Woolwich New Town. Each type has its own identity which provides the user, whether on foot or by automobile, a unique experience. The streets communicate movement from busier sections of New Town to less busy, intimate areas of Town. A discussion of each road type follows.

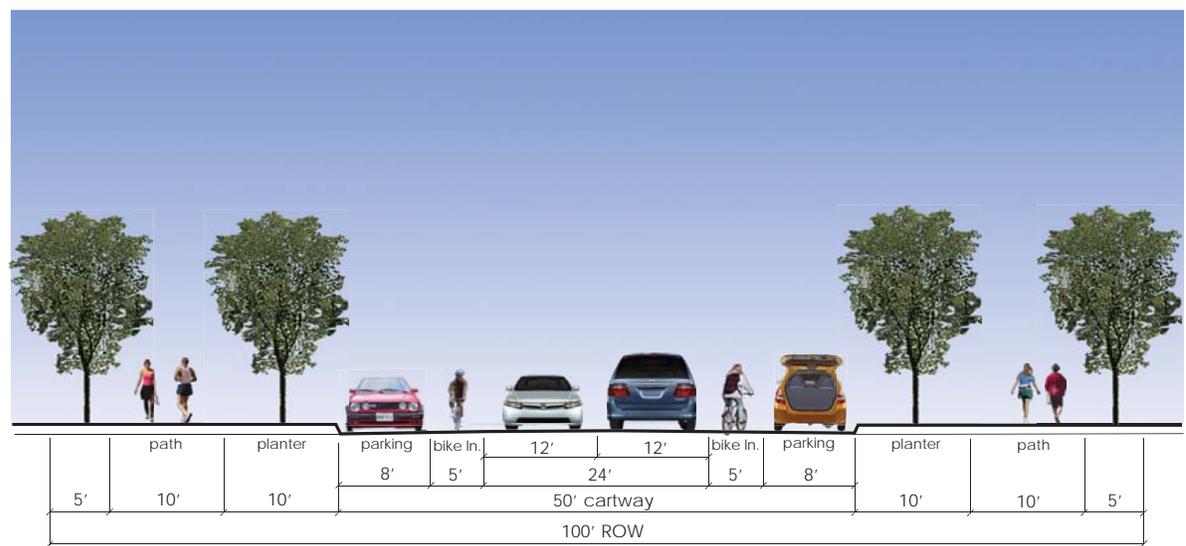
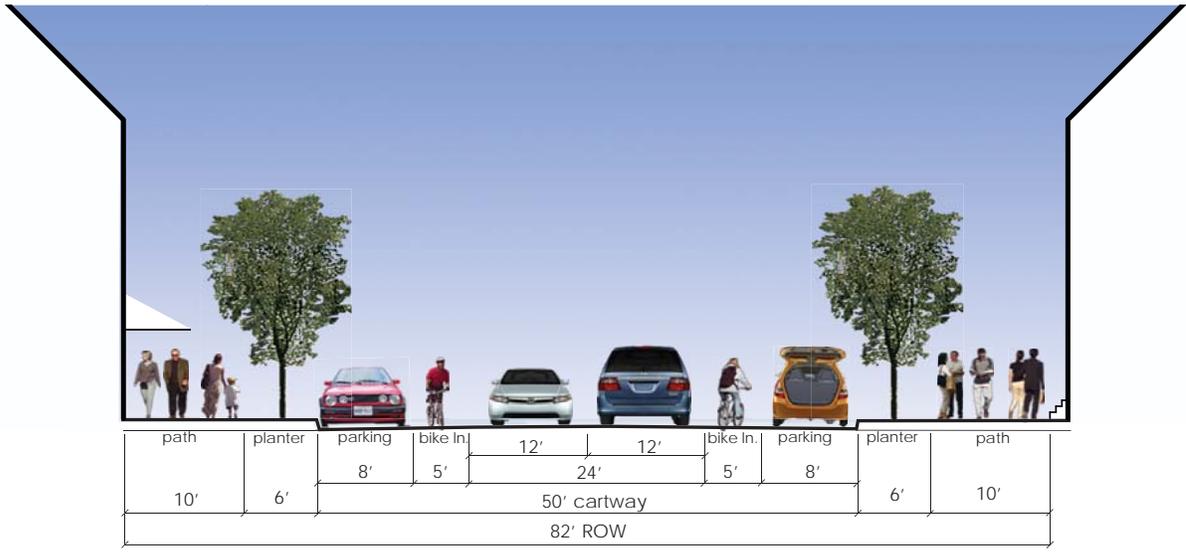


MAINSTREET (SWEDESBORO-PAULSBORO ROAD)

Main Street provides ample travel lanes, on-street parking, clearly delineated on-road bicycle lanes and ten foot sidewalks. Pedestrians are physically separated from the roadway by six foot planting strips containing Honeylocust trees at evenly spaced intervals no greater than fifty feet on center. These trees are located in natural drainage systems in which the planting strip can hold standing water for no longer than one day. Honeylocusts are suited for these occasional wet periods. See Stormwater Management Plan element for detailed natural drainage cross-sections and explanation. These trees have a large open, airy canopy which provides dappled shade. They work well in the commercial core of New Town as their canopy brings a sense of pedestrian scale to the six-story buildings fronting along this street. They co-exist effortlessly with architectural details such as shop-fronts, awnings, street and building lighting and building signage. Main Street also provides the opportunity for larger landscaped edges in the form of bump-outs located in the on-street parking areas and bumped-out intersections. These areas are enhanced with ornamental grasses, perennials and low shrubs. Main Street provides ample space for streetscape amenities such as kiosks, benches, café furniture and bus shelter.

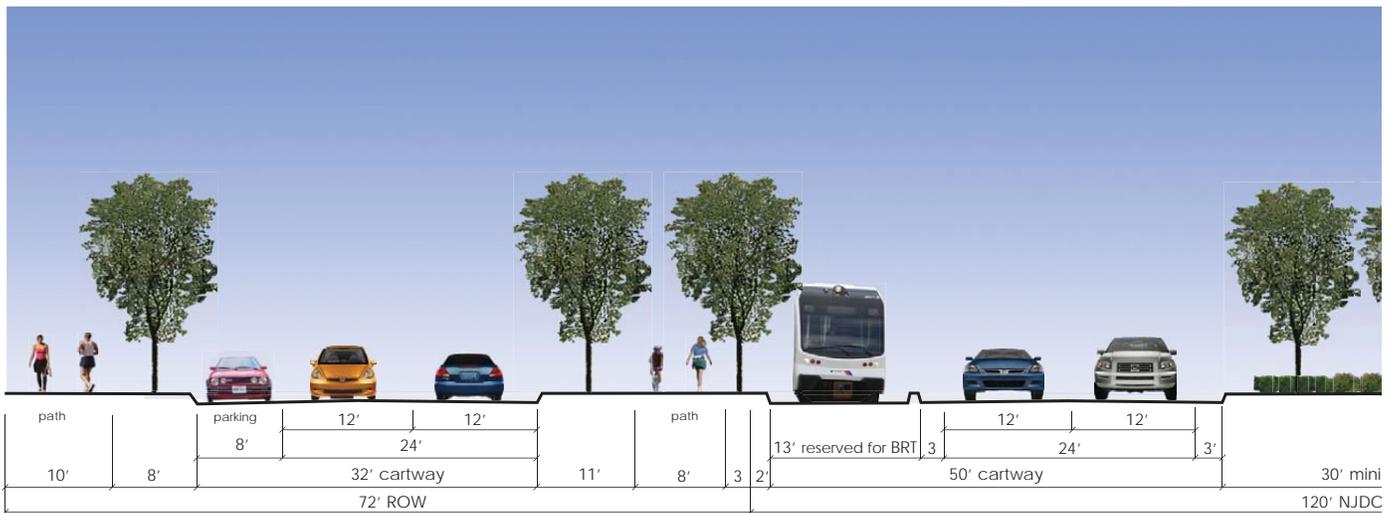
COLLECTOR ON-STREET PARKING

These roadways provide movement to the north and south of Rt 322. They run parallel to Rt 322 and provide the opportunity for motorists to move throughout New Town without traveling on the center Urban Boulevard. These streets provide ample travel lanes, on-street parking, on-road bicycle lanes and a ten foot wide multi-use path. These roads carry users through commercial and residential neighborhoods and lead to several parks throughout town. The double alley of trees brings a sense of welcome to both the pedestrian and auto user. These streets gently curve and hug a majority of the greenway edge which defines New Town's boundary. As a major circulation route, the generous ten foot wide planting strip provides a sense of safety for the pedestrian. The opportunity for larger landscaped edges occur in bump-outs located in the on-street parking areas and bumped-out intersections and provide a mix of ornamental grasses, perennials and low shrubs. Grand trees such as the Silver Linden, Willow Oak, and Gingko grace both sides of the multi-use path at evenly spaced intervals not to exceed fifty feet. As the trees mature the canopies will grow into one another and will create a magnificent green corridor providing shade in the summer and sun in the winter. One block of the Collector On-Street Parking road located in the Raccoon Creek neighborhood becomes a focal point and gateway to the greenway as formal English Oaks line the street. This green corridor provides an opportunity for a natural drainage system. This alternative may require the trees between the curb and multi-use path to be grouped. See Stormwater Management Plan element for detailed alternative street cross-sections and explanation.

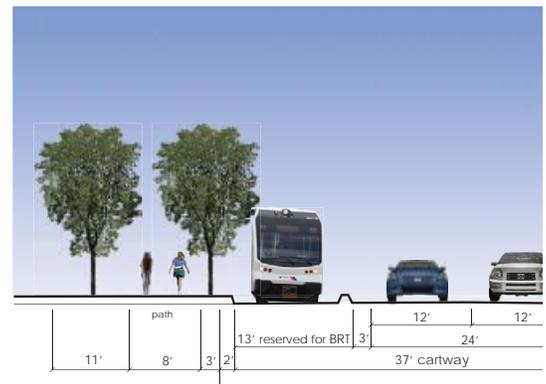


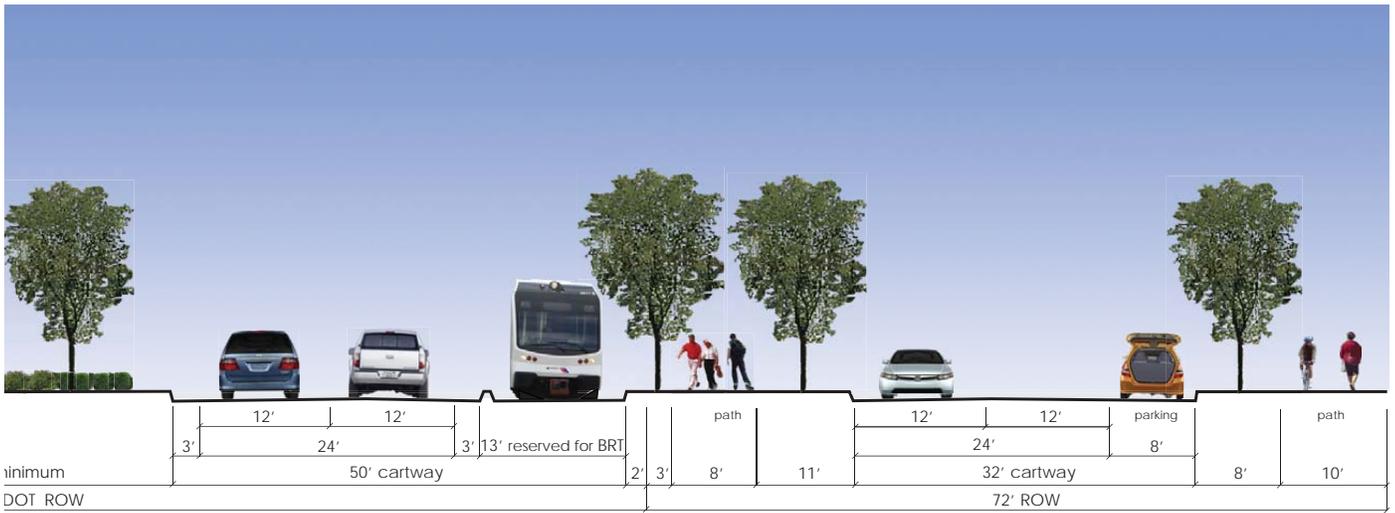
TOWN (RT 322)BOULEVARD

This boulevard is a main green link running east to west through Woolwich New Town. It provides a necessary buffer and separation between the regional thru lanes on Rt 322 and the mixed-use land uses and roadway's edge. It enables people to safely walk or bike the length of it and cross the highway at four locations via multi-purpose paths. These multi-use paths are eight feet wide and are provided on both sides of Route 322. They provide a connection to the various neighborhoods within Woolwich New Town. The paths are flanked by an alley of London Planetrees to provide visual interest and physical separation from vehicular traffic. The trees are grouped in threes at thirty feet on center. The groupings are staggered and will provide continuous canopy cover over the multi-use path. An alley and ornamental grass plantings are also provided in the center median. Two smaller streets running parallel intermittently along Route 322 (Rt 322 'A' cross-section) through Woolwich New Town comprise the center boulevard. Ten foot wide multi-use paths and parallel parking are provided along one side of the parallel roads. A continuous row of London Plane trees at forty feet on center delineates the path and physically separates it from vehicular traffic. This triple alley of stately London Plane trees distinguishes this boulevard as a main thoroughfare. Rt 322 'B' cross-section illustrates the sections of the boulevard that do not have the smaller streets running parallel to it.

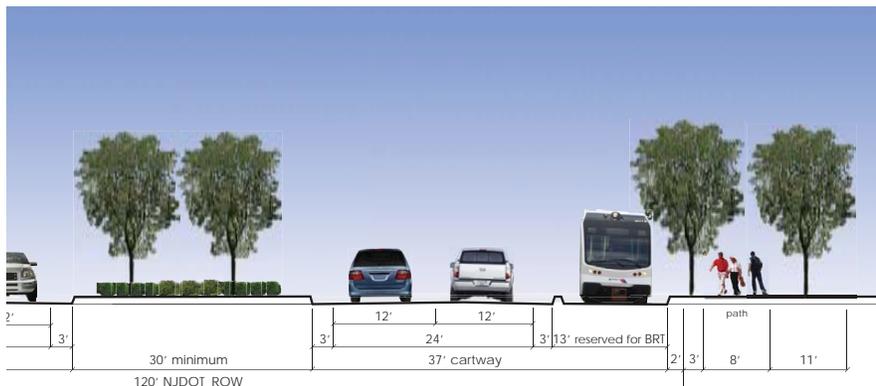


Town (Rt 322)

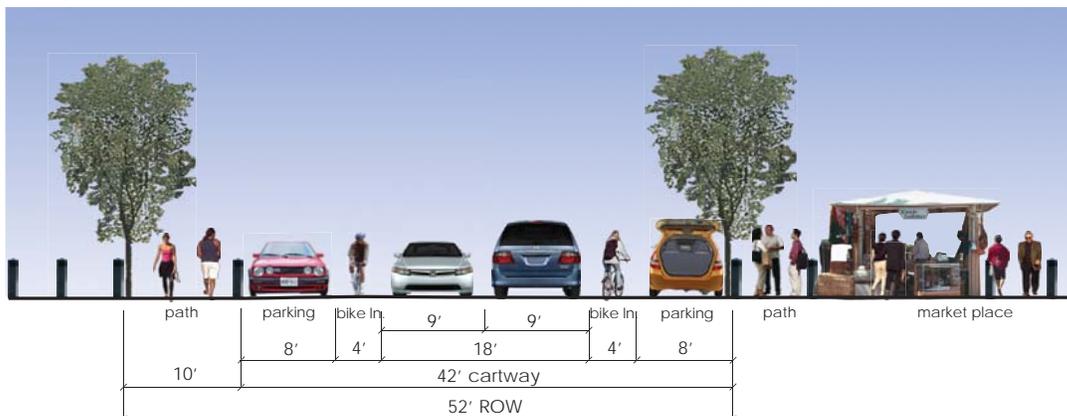
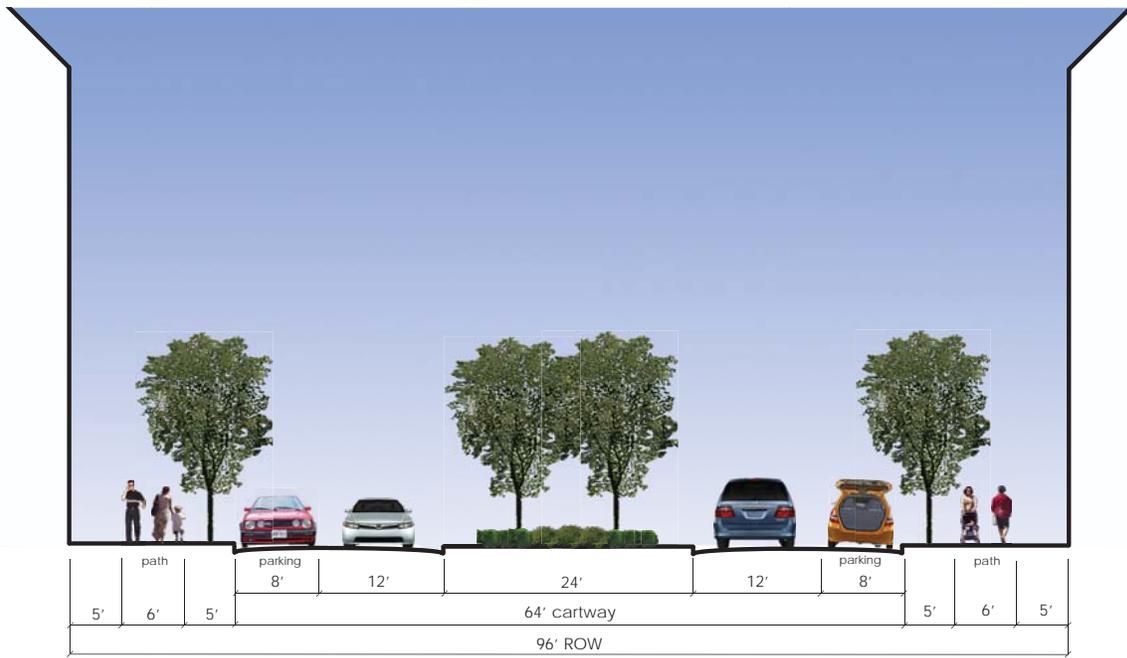
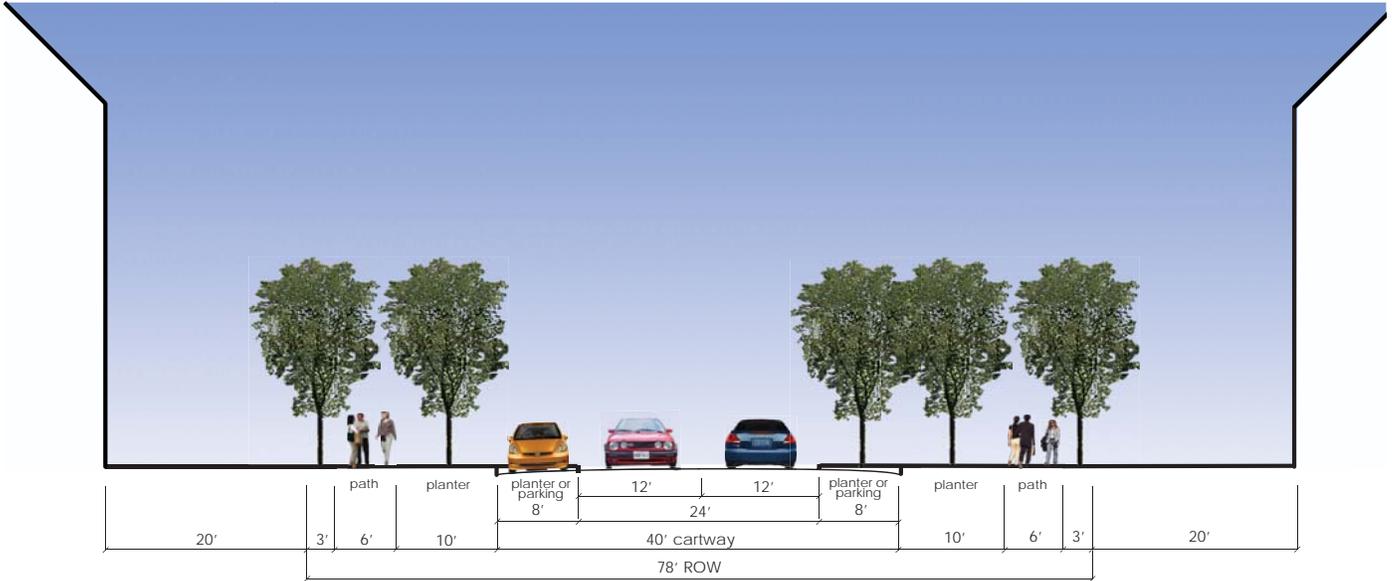




2) boulevard 'A'



Town (Rt 322) boulevard



SPECIAL STREET 1

This street travels through the heart of residential neighborhoods and is lined with a double allee of evenly spaced London Plane trees. The smaller cartway, narrower six foot sidewalks, greater building set-back and green edge signify a quieter place which requires a slower pace to take in the scenery. Through The Hill neighborhood the street terminates at the central block of Linear Park. The stately London Plane tree leads one to this major feature and gathering place in New Town. In the Raccoon Creek neighborhood Special Street 1 signifies a movement from commercial areas to mainly residential areas. Along both streets the London Plane softens the architectural scale of the multi-storied buildings. The opportunity for larger landscaped edges occur in bump-outs located in the on-street parking areas and bumped-out intersections and provide a mix of ornamental grasses, perennials and low shrubs. These streets provide a natural drainage system opportunity in the generous planting strip. This alternative may require the trees between the curb and sidewalk to be grouped along the multi-use path. See Stormwater Management Plan element for detailed alternative street cross-sections and explanation.

SPECIAL STREET 2

This Special Street is a grand boulevard that connects the northern and southern portions of New Town. It terminates at both ends at the greenway edge, where a naturalistic, pastoral feel remains. Shapely, dense Littleleaf Lindens in a double allee, spaced at no greater than forty feet, frame the view down the boulevard and bring a sense of formality to the space. The terminus at the southern end is a large, formal European Weeping Beech. These two formal trees play on the contrast that exists between the natural environment and the built environment. They beautifully illustrate how the two environments can be used to flow into one pleasing experience. The spacious median also provides a mix of ornamental grasses, perennials and low shrubs. The opportunity for larger landscaped edges occur in bump-outs located in the on-street parking areas and bumped-out intersections and also provide a mix of ornamental grasses, perennials and low shrubs. The median provides a natural drainage system opportunity. See Stormwater Management Plan element for detailed natural drainage system cross-sections and explanation.

SPECIAL STREET 3

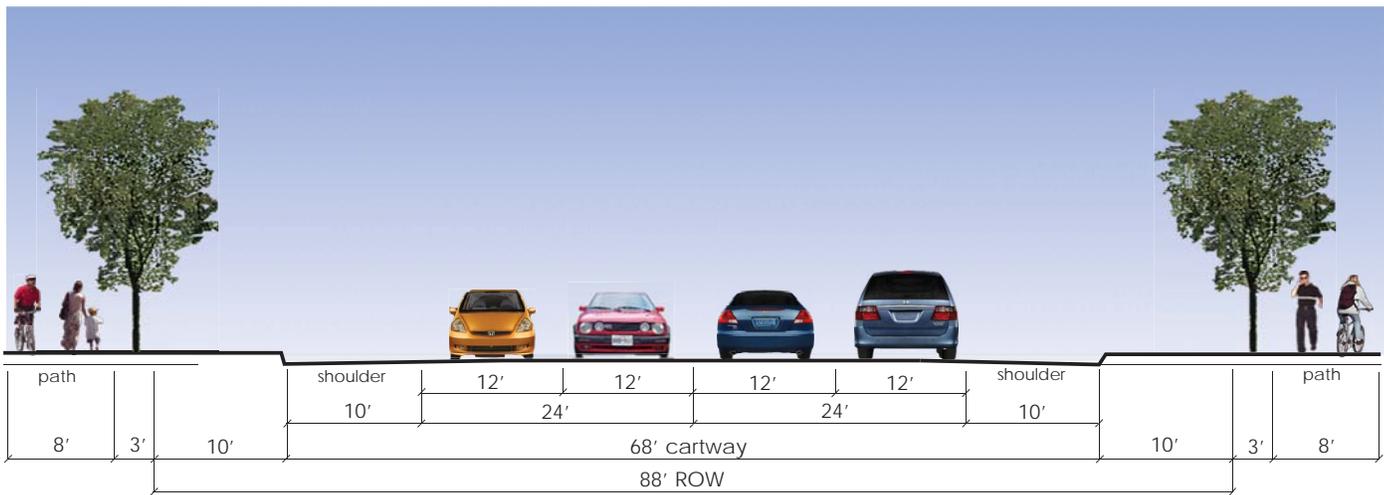
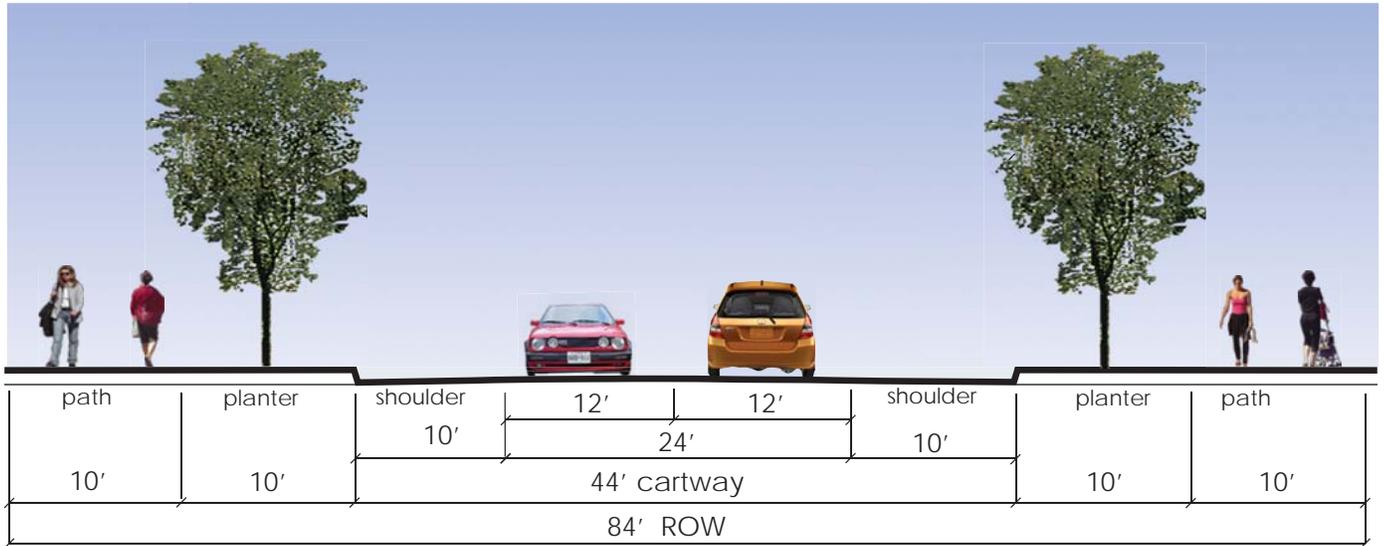
This livable street is designed with the urban user and environment in mind. Pervious pavers that flow into the pedestrian realm of the adjoining space serve as both roadway and plaza. These pavers provide an opportunity for stormwater to infiltrate, not just run off the pavement. This street is European in spirit, in the sense that it is not closed off to automobiles but highly encourages pedestrian activity over the automobile. Shade trees in decorative grates and lighted bollards divide the roadway from the public, pedestrian space. Urban tolerant trees such as the London Planetree and Honeylocust frame this special street.

COLLECTOR NO PARKING

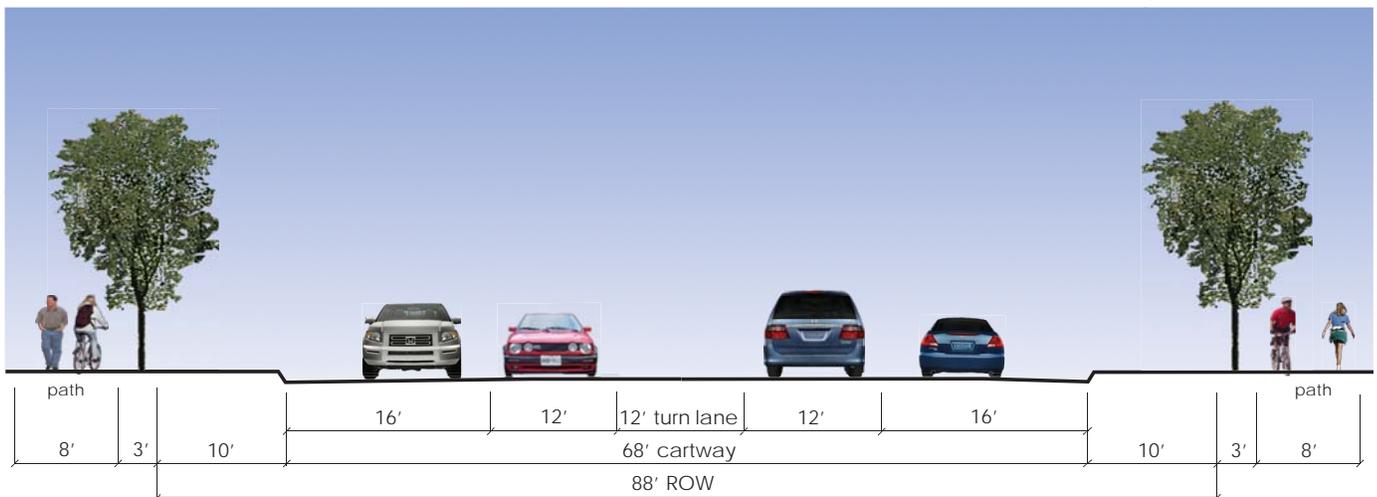
These roadways are county roads within Woolwich Township and therefore come under Gloucester County jurisdiction. Generous shoulders are provided but no on-street parking or on-road bicycle lanes are provided. A ten foot wide planting strip separates the roadway from the ten foot wide multi-purpose path. The Collector No Parking road in The Hill neighborhood is adjacent to Woolwich's high school and middle school and also provides a connection to a cultural / historical resource, the Mount Zion African Methodist Episcopal Church which dates back to the Civil War Period. The multi-purpose path provides a vital pedestrian connection to these destinations. The multi-purpose path is separated from the roadway by a generous ten foot wide planting strip which is lined with evenly spaced Honeylocust within New Town. The trees are spaced between thirty-five and fifty feet and are accompanied by drought tolerant groundcover and grasses. On the outskirts of New Town these streets are lined with stately Oaks, both Willow and Sawtooth. Like the Honeylocust, these trees provide dapple shade as the narrow leaf structure provides a semi-dense canopy. These oaks are also chosen for their large mature height, broad canopy, and longevity. A section of this road type also provides a natural drainage system opportunity in the generous planting strip. This alternative may require the trees between the curb and multi-use path to be grouped. See Stormwater Management Plan element for detailed natural drainage system cross-sections and explanation.

KINGS HIGHWAY (CR 551)

This roadway is a county road and therefore falls under Gloucester County jurisdiction. It is a four lane roadway which provides a major route to surrounding Townships. Woolwich's high school and middle school front on this roadway. This road also provides a connection to a cultural/historical resource, the Governor Stratton House. This busy roadway provides a generous shoulder with no on-street parking or on-road bicycle lane. A left turn lane is provided at intersections, thus reducing the width of the shoulder. A ten foot wide planting strip within the county ROW is planted with drought tolerant, native grasses. Outside of the ROW is a three foot wide planting strip and an eight foot wide multi-use path. The combination of shoulder and planting strips create a sense of safety for the pedestrian/cyclist user since one is roughly twenty-three feet from traffic. Within New Town, Willow Oaks are evenly spaced in the planting strip at no more than fifty feet on center. This tree's mature canopy reduces the perceived street width and will create a human scale for the pedestrian/cyclist user. On the out-skirts of New Town, the roadway alternates with Sawtooth Oaks and Sugar Maples which also create a human scale. A second alternative exists within New Town as a natural drainage system can occur in the generous planting strip. This alternative may require the trees between the curb and multi-use path to be grouped. See Stormwater Management Plan element for detailed alternative street cross-sections and explanation.



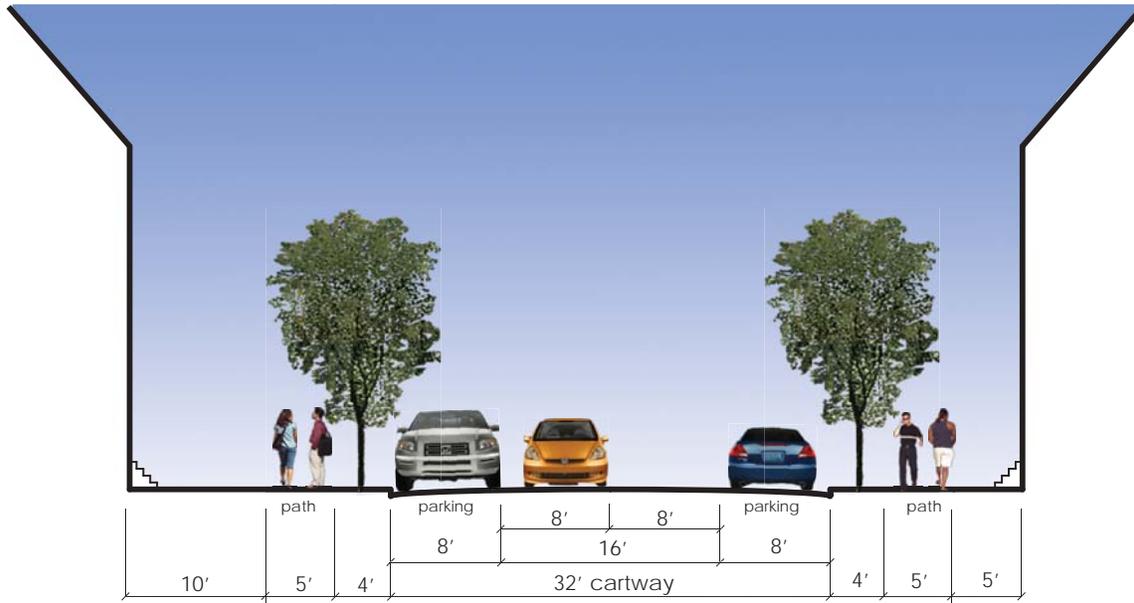
kings highway



kings highway - intersection

SMALL STREETS

This street has a smaller ROW than the other residential streets. It provides the same four foot wide planting strip and five foot wide sidewalk as the Local Streets. On-street parking is provided but not on-road bicycle lanes. This amounts to a smaller space available for tree canopies. To accommodate this smaller space trees with a smaller and sometimes compact habit are utilized such as Littleleaf Lindens, European Hornbeams, and Summit Green Ash. As these trees mature they can be 'limbed up' a term which means the lowest branches can be removed resulting in a pedestrian friendly environment. The smaller tree canopy ensures the trees will not infringe upon the adjacent buildings.



ALLEYS

These roadways are located behind residential and non-residential buildings. They are utilized as a service road and as access to residential driveways and garages. Having the smallest ROW at twenty-two feet, two design alternatives emerge. The first is to stagger the trees on alternating sides of the alley spaced at no more than fifty feet on center. The second alternative is to group several trees at both access points of the alley, mainly at intersections and provide none further along the road behind the buildings. This will green the edges of these streets where pedestrians will most come in contact. To accommodate this streetscape narrow, upright trees such as Columnar Sargent Cherry, Columnar Red Maple, Summit Green Ash and Shademaster Honeylocust line these streets.



CONNECTIVE SPACES - PASSAGES

Passages provide connectivity between spaces. They serve to complete the comprehensive pedestrian linkage plan, integrating connectivity to streets and parks at the block level of the system. Typically they are twenty feet wide or less. They are defined as an opening or entrance into, or through a space. They can afford other opportunities as well, such as an impromptu run in with a neighbor. Passageways are as varied in design and amenities as the public spaces they connect. They are linear corridors, which besides special paving treatment, can provide seating and plantings in beds and/or planters. As little as five feet of landscaping on either edge or a ten foot wide walk can produce an enjoyable environment for pedestrians and adequate buffer to adjacent uses. Passages can be delineated by adjacent buildings, fences and gates, hedges or simply an archway leading to a walkway. Requirements for passages are outlined in the Zoning Regulations and Design Standards element and this Public Spaces Plan. Woolwich New Town contains several types of passages listed below:

- mid-block connections
- connections between housing
- connections between commercial and office uses and parking
- connections between park spaces and surrounding neighborhoods
- connections between public streets and rear yard parking courts in commercial mixed use district

PARK AND STREET AMENITIES

The public spaces throughout New Town will have various design palettes which will create a uniqueness throughout the neighborhoods. Some features will be repeated to produce an overall cohesiveness to New Town. Every public space encountered in New Town will be filled with amenities such as public art, lighting, bollards, bike racks, trash receptacles, drinking fountains, sidewalk cafe furniture and benches. Amenities are functional to the pedestrian user but are also well chosen to provide residents and visitors alike with a sense of place that remains with them long after they have encountered the public space in New Town.

PUBLIC ART

Public art takes many shapes and forms. It can be purely for aesthetic purposes such as a focal point in a park, as a community reference point (i.e. "meet me at the eagle") or it can serve a utilitarian purpose such as a railing, tree grate or culvert grate (see photo to the right). Public art can be sculpture, hanging artwork, public murals and even plant material. Public art in both large and small public spaces is encouraged in Woolwich New Town.



Examples of types of passageways in Woolwich New Town



Examples of encouraged Public Art in Woolwich New Town

BENCHES AND CAFE FURNITURE

Several bench types are found throughout Woolwich New Town. They are a required and necessary component to promote a positive pedestrian environment. A sleek, metallic modern bench is recommended for the Downtown neighborhood. Passive spaces throughout New Town can have a more traditional bench consisting of wood and/or metal materials. Sidewalk cafe furniture is encouraged to be modern and movable. All street furniture should be evaluated for durability, comfort and aesthetics and should be considered key components for green infrastructure.

LIGHTS

Pedestrian scaled light fixtures are required throughout the Town; including public streets, plaza spaces and along the multi-use paths. Lighting encourages night-time activity and provides safety for movement through these spaces on foot or by bicycle. An active nightlife is encouraged in New Town both for the resident's enjoyment and for the economic vitality of the community. While there are both modern and traditional fixtures proposed, all relate to the rules of scale associated with the walkable community. It is recommended that a mixture of fixtures be permitted but that on a per neighborhood basis a consistent fixture theme be followed. It is also recommended that the Planning Board and Governing Body should consider the energy efficiency when choosing the fixtures as a green community is encouraged.

BOLLARDS

Bollards along roadway edges provide a sense of security for a pedestrian. They can also be used to delineate separate spaces within a plaza or a sidewalk cafe. Lighted bollards provide physical separation between the pedestrian realm and roadway as well as provide illumination.

TRASH RECEPTACLES

Trash receptacles are an amenity that must be provided in every public space. People have been found to be more inclined to litter when conveniently located trash receptacles are not available. Just because they serve a very important function, it does not mean that they must look bland and boring. A stylish, modern trash receptacle is suggested.



TREE GRATES

The importance of street trees has been emphasized as an integral component of the streetscape, from the smallest to the largest streets in Woolwich New Town. With trees come tree grates. In village centers where paving runs from curb to building fronts, trees need to uptake water and nutrients. Tree grates provide an essential function while also serving as an opportunity for design.

BIKE RACKS

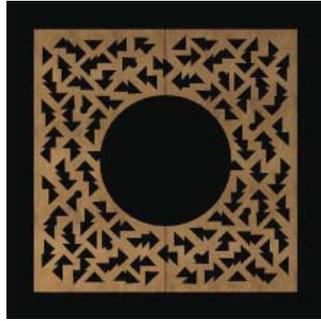
Bike racks can be found throughout the public spaces in Woolwich New Town. Alternative means of transportation such as bike riding are encouraged throughout the Town. As such, people must have a place to park their bike once reaching a destination. Bike racks should be permanently attached to paving within public spaces and set on concrete pads along the recreational greenways.

SIDEWALK AND PAVING MATERIALS

Woolwich New Town will have miles of sidewalks and multi-use paths. Concrete is an ideal paving material. Cost effective and durable, it can withstand years of continuous foot traffic. While a linear scored pattern is commonly used on sidewalks, a change of scoring can add visual interest and alter the aesthetics of a space. It can be used to signify a change in the space, such as a commercial downtown or park entrances. Diamond patterns and intricate patterns made to mimic a stone/paver pattern are scoring alternatives for heavy pedestrian areas in New Town.

A change of paving materials can signify a special area in town. An exposed aggregated sidewalk or a concrete walk mixed with brick or paver bands can be enough to alert the pedestrian that they are entering a special public space. The change in materials along the edges of plazas and parks can be used to lead the pedestrian into the space.

Bituminous paving is used for multi-use paths. Mixing it with another material along the edge, such as a soldier course of brick or exposed aggregate concrete can improve the look while still providing the durability for recreational users. The change of paving material in crosswalks is an important indicator for drivers to slow down. They define pedestrian spaces, even in the roadway.



Bituminous and paver multi-use path



Concrete scored in a pavement pattern



Concrete and paver sidewalk



Pavers with concrete bands



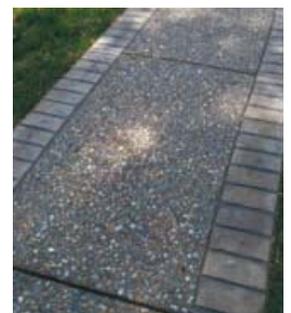
Bituminous path with exposed aggregate concrete edge



Brick cross walk



Diamond scored concrete



Exposed aggregate sidewalk

PART III: COST ESTIMATES

COST ESTIMATES

Individual park spaces will be determined. The cost for all landscape and hardscape material will be calculated once the conceptual designs outlined in this document are finalized. The plaza spaces will be paid for by the developer.

FRAMEWORK FOR COST SHARING

Woolwich Township currently has an ordinance requiring the equivalent of \$3500 per unit for recreation in new developments. Based on this contribution amount, Woolwich New Town will generate roughly \$9 to \$11 million dollars for the development and maintenance of its public spaces in the residential areas of the plan. The plaza spaces located on Swedesboro-Paulsboro Road in the Downtown neighborhood are in a commercial area. Therefore it is recommended that all plazas throughout this mixed-use Main Street will be built and maintained by the developer or commercial owner.

The recreation fee per unit can be used in three ways. The money can be applied for parks built on-site. If a park is located off-site, the money collected will be applied to the construction of it. The third option is for the money to be used for the perpetual maintenance of the public spaces. This money can be placed in a Special Improvement District fund.

The public spaces in the residential areas of the plan serve a multitude of important functions that distinguish them from typical suburban neighborhood parks. For example, due to densities proposed, most dwelling units will not have a back yard. Therefore, the public spaces will become the “public back yards” for neighborhoods and thus reduce the need to make sure that on an acres per acre basis the New Town parks must be the highest quality resource. Additionally, the parks serve an important function in that they are a critical component of the Stormwater Management Plan. For both these reasons, as cost estimates are finalized, in preparation to be codified by ordinance, the pro-rata fee per unit will be higher than \$3500/d.u.

Parks and public open spaces provide added value to communities. When making a decision to buy, it has been found that a substantial number of consumers will pay more for a unit on a well maintained open space or park compared to the same unit not on an open space or park. It is recommended that a Special Improvement District should be established to maintain the public spaces within New Town. On-going maintenance therefore, for plant and hardscape material is not only required but essential to ensure an attractive, safe community. It functions like a condo association as it is dedicated money for the maintenance of a specific district, however amenities remain public. A Special Improvement District should be established prior to the construction of the first phase and funds added as future phases of New Town are built to provide all residents, including the very first ones, the full benefits of their community.