

Borough of Westwood, New Jersey

Open Space & Recreation Plan



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1.0 EXECUTIVE SUMMARY

The Borough of Westwood is committed to protecting open space and providing a full range of recreational activities to the citizens of the borough. This document seeks to assist the borough in achieving that goal and related goals detailed in the borough's Master Plan documents. In order to achieve those goals, this plan includes an assessment of the borough's existing open space and recreation facilities, and its environmental characteristics. It further analyzes the current and future recreation and open space needs of the borough and provides recommendations based on these assessments.

The Borough of Westwood faces an ever diminishing supply of open space. In fact, the borough has just under 5% of total land area identified as vacant land according to tax records.

In order to achieve the open space and recreation goals, this plan identifies and analyzes the existing open space and recreation facilities of the borough. In addition, the plan evaluates existing environmental features and sensitive areas of the borough.

Furthermore, to understand the current conditions and to plan for their future, a review of existing facilities in comparison to the generally accepted national standards is utilized. According to national standards, based on the total land area of the borough, Westwood should have approximately 110 acres devoted to open space.

As a largely developed community, Westwood is limited in its ability to plan for open space and recreation facilities. Nonetheless, the plan sets forth mechanisms that can be used to address the community's current and future needs.

OVERVIEW OF RECOMMENDATIONS

Conserving natural places allows important biological resources and natural habitats to remain intact and, when well managed, remain ecologically healthy. It is well documented that freshwater wetland areas filter and process polluted water and buffer developed areas from flooding. Forested areas help in purifying the air, assist in climate control and provide habitat for wildlife while providing areas for passive recreation. Economically, open spaces and recreation areas, together with historic and cultural sites, generate value to the borough by promoting a desirable

community, balancing the built and natural environment, and promoting vitality and commerce.

2.0 MUNICIPAL LAND USE LAW REQUIREMENTS

Municipal planning activities in New Jersey are directed by the Municipal Land Use Law (MLUL). The MLUL provides land use boards throughout the state the power to zone if the municipality adopts a housing element and land use element prior to implementing a zoning ordinance. Additionally, Section 40:55D-28 of the MLUL sets forth regulations for the preparation of several optional master plan elements. Among the many elements identified are a recreation plan element showing a comprehensive system of areas and public sites for recreation and a conservation plan element.

The MLUL authorizes municipal planning boards to adopt optional plan elements as a component of the municipal master plan. The master plan is intended to be a comprehensive review of various land use issues facing a community and sets forth the goals and policies for managing growth. These goals and policies affect the preservation and maintenance of open space and recreation resources of the community. Therefore, open space and the role it plays in defining the character of the community should be an integral component of the master planning effort.

The Open Space and Recreation Plan (OSRP) presented herein contains each of the required components detailed in the MLUL. More importantly, it offers the borough and its residents a plan for increasing and enhancing the open space resources of the community.

3.0 GREEN ACRES REQUIREMENTS

The New Jersey Department of Environmental Protection has created the Green Acres Program which assists counties and local municipalities throughout the state in enhancing recreation facilities and acquiring land for preservation and recreation purposes. The Green Acres Program includes a "Planning Incentive" (PI) funding category. The PI category awards 50 percent matching grants to local governments to preserve lands identified in its Open Space and Recreation Plan (OSRP). In order to qualify for this category of funding a municipality must have a local open space tax and a Green Acres approved and adopted Open Space and Recreation Plan (OSRP). If a municipality does not have both of these two items or a Green Acres approved alternative, they can only be considered for awards up to 25 percent of the cost of the land being preserved.

Open space and recreation planning is more efficient and cost effective when supported by a stable source of funding like a tax and an OSRP. For example, a local government can acquire lands identified in its OSRP without making multiple, site-specific applications for Green Acres to acquire those lands. Once a municipality has established its open space plan, the application process for funding is streamlined. In addition, an open space tax provides a local revenue stream to fund open space preservation and recreation projects. Below, information is provided regarding an open space tax program for future consideration.

3.1 Open Space Tax

A local government qualifying for Planning Incentive funding must have established and be collecting an open space tax, pursuant to P.L. 1997, Chapter 24. Under this law, counties and municipalities may assess a tax, approved by voter referendum, for the following purposes, or any combination of these purposes:

- (a) Acquisition of lands for recreation and conservation purposes,
- (b) Development of lands acquired for recreation and conservation purposes,
- (c) Maintenance of lands acquired for recreation and conservation purposes,
- (d) Acquisition of farmland for farmland preservation purposes,
- (e) Preservation of historic properties, including the acquisition of such properties for historic preservation purposes, or
- (f) Payment of debt service on indebtedness issued or incurred by a local government for any of the purposes stated in (a), (b), (d) or (e).

3.2 Open Space and Recreation Plan Guidelines

The Green Acres Program requires the following items in an Open Space and Recreation Plan (OSRP). The organization of the OSRP and level of detail given to each item are at the discretion of the local government. This document utilized this format a a general outline as follows:

- A. Executive Summary: a summary of the plan's origin, purpose, planning processes, findings, major goals it establishes, and actions it proposes.
- B. Goals and Policies: the goals and policies should relate to the municipalities philosophy of open space & recreation.
- C. Inventory: documentation of existing public and private open space and recreation resources and opportunities. The inventory is to include the size, location, ownership, and usage.
- D. Needs Analysis: an analysis of the adequacy of the current open space and recreation system, to satisfy present and future needs.
- E. Resource Assessment: the assessment of lands with open space and recreation potential and interest, and this lands ability and opportunity to meet the public's needs.
- F. Action Plan: a program of actions to guide the orderly and coordinated execution of a plan's goals and policies.
- G. General Open Space System Map: a map of the open space and recreation system showing the location and general configuration of all existing open space and recreation resources and sites identified as having open space and recreation potential.
- H. Additional Parcel Data Requirements: data required to maintain a statewide map of existing and planned open space.
- I. Public Participation: a discussion of the public participation process.
- J. Planning Adoption: adoption by the Planning Board as an element of the local master plan.

4.0 INTRODUCTION TO PLAN

The State of New Jersey, like the nation as a whole, faces a diminishing supply of open space and land available for active and passive recreation use. Population growth and increasing development pressures have accelerated the loss of farmland, forest, and other open spaces to development.

In New Jersey, the combination of sustained population growth (9 percent between 1990 and 2000), building activity (273,646 building permits issued between 1990 and 2000), and land use changes (135,764 acres developed between 1986 and 1995) suggests an ominous future for the State's open space resources. The acceleration of this disconcerting trend challenges forward-thinking municipalities to identify and preserve vital open space resources. Open space preservation fulfills many worthwhile goals such as protecting environmentally critical areas, retaining the natural beauty of the landscape, providing recreation opportunities in close proximity to residential areas, and offering locations for leisure activity. The goal of providing adequate open space for a growing population is a worthy public purpose.

As the metropolitan region continues to grow and development pressures mount, it is imperative that the borough establish a plan to ensure the preservation of this increasingly susceptible amenity.

4.1 Statement of Purpose

The purpose of the Open Space and Recreation Plan (OSRP) is to establish a guiding document by which the borough can provide sufficient open space and recreational facilities to meet the varied and changing needs of the public. This is to be achieved within the context of the land use and housing elements of the master plan. The borough recognizes that open space is essential in creating a balanced, diverse and healthy community, and it contributes to a high quality of life. As stated by the Association of New Jersey Environmental Commissions (ANJEC), there are many reasons to preserve open space, including:

- to preserve a connection with the natural world;
- to provide a tranquil, noise free island amid the chaos of life;
- to ensure health and diversity among populations of various

- animal and plant species;
- to help lessen pollution;
- to provide outdoor tourism and recreational facilities; and,
- to provide for healthy living.

The borough recognizes each of these reasons and the need for open space and recreational facilities in Westwood. The purpose of this document is stated below:

4.2 Benefits of Open Space

Open Space can broadly be defined as land in its undeveloped and natural state, which encompasses conservation areas, waterfronts, undeveloped scenic lands, agriculture and forest land, public parks, vacant land, or even an undeveloped parcel amidst a developed neighborhood.

The MLUL (N.J.S.A. 40:55D-5) defines "Open-space" as:

"Any parcel or area of land or water essentially unimproved and set aside, dedicated, designated, or reserved for public or private use or enjoyment or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space."

Open space benefits a community in diverse ways such as by adding natural beauty, creating recreational opportunities and providing a circulation system for the community's natural processes, among others. In addition, the conservation of open spaces allows important biological resources and natural habitats to remain intact and ecologically healthy. Freshwater wetland areas filter and process polluted water and buffer developed areas from flooding. Forested areas help in purifying the air, assist in climate control and provide wildlife habitat. Economically, open spaces together with historic and cultural sites generate revenues by promoting property values as well as contributing to the desirable fabric of a well-balanced community in which to live and do business.

5.0 CONSISTENCIES WITH OTHER PLANS AND GOALS AND POLICIES

5.1 Consistency with Borough Master Plan

The Borough's most recent master plan was adopted in 1993 with a

re-examination report update in 2005. The master plan and the re-examination report affirms the need for preservation of environmentally sensitive lands in the borough. In addition the 1993 plan noted that “the prospective development of the borough’s remaining vacant land should be critically evaluated due to the fact that virtually all of the remaining vacant land was characterized by environmentally sensitive features”.

The plan identifies several existing open space and recreational facilities in the Borough. The Land Use Plan designates several areas of the community developed as a park land as “public” land use which require some updating to depict land acquisition that have been designated for open space preservation or are in use as active recreation facilities.

The plan further emphasizes the importance of the open space preservation through supporting the overall philosophy of the State Development and Redevelopment Plan. The plans states “it is one of the goals of the community to encourage the preservation and enhancement of these facilities”.

5.2 CONSISTENCY WITH BERGEN COUNTY OPEN SPACE PLAN

The Bergen County Open Space and Recreation Plan (BCOSRP) 2004, as prepared by the Bergen County Department of Planning and Economic Development, is intended to provide a countywide policy direction on open space and recreation issues. One of the main concerns expressed by the BCOSRP is the decline in the amount of open space countywide accompanied by an increasing demand for high quality open spaces to serve various functions. Some of the main goals listed in the BCOSRP which are applicable to the Borough of Westwood are listed below:

- Improve the quantity, quality and availability of parks and open space, including active and passive recreational facilities, parks and environmentally sensitive areas.
- Preserve the environment, including freshwater wetlands areas, streams and wetland corridors.

Further, the plan identified in relation to “people” and “plant and

animal”, several distinct goals:

- Maximize the amount of green permeable open space within developed areas.
- Provide areas for relaxation, contemplation, social and economic interchange.
- Enhance the appearance of neighborhoods through preservation of green spaces.
- Provide space for active and passive recreation
- Conserve and enhance significant natural, cultural, historical and aesthetically significant areas and resources.
- Protect flora and fauna from suburban encroachment and habitat destruction.
- Preserve and protect environmentally sensitive area in a largely undeveloped state. Bergen County’s Open Space, Recreation, Farmland and Historic Preservation Trust Fund financially supports various municipalities through the county in achieving these goals. To help achieve these goals the county offers the following guidance:
 - encourage innovative financial mechanisms to enhance and maximize the limited funds available through the Bergen County Open Space, Recreation, Farmland and Historic Preservation Trust Fund.
 - Supplement Trust Fund monies with other funding sources, such as State Green Acres acquisition, non-profit acquisition and Green Trust’s loan/grant municipal and county programs, federal programs, local municipal trust fund programs and private donations.
 - Explore protecting land via conservation easements, transfer of development rights (TDR) and other means.

5.3 CONSISTENCY WITH STATE DEVELOPMENT AND REDEVELOPMENT PLAN

As with all planning documents in New Jersey, the Open Space and Recreation Plan should be consistent with the NJ State Development and Redevelopment Plan. The State Plan contains several open space and recreation policies that pertain to local governments as detailed below:

Goal#7 Preserve and Enhance Areas with Historic, Cultural, Scenic, Open Space and Recreational Value.

Strategy: Enhance, preserve and use historic, cultural, scenic, open space and recreational assets by collaborative planning, design, investment and management techniques. Locate and design development and redevelopment and supporting infrastructure to improve access to and protect these sites. Support the important role of the performing and cultural arts in contributing to community life and civic beauty.

In addition to the goal stated above the redevelopment plan has statewide policies that are designed to improve both planning and coordination of public policy among all levels of government through flexible application of the policies. These policies provide guidance for municipal, county, regional and state planning initiatives. The statewide policies corresponding to open space and natural lands are noted below:

“Protect biological diversity through preservation and restoration of contiguous open spaces and connecting corridors; manage public land and provide incentives for private land management to protect scenic qualities, forests and water resources; and manage the character and nature of development for the protection of wildlife habitat, critical slope areas, water resources, and for the provision of adequate public access to a variety of recreational opportunities.”

- a. Funds for acquisition of open space and farmland retention should be used for the following features: critical environmental sites, land containing areas of significant agricultural value, recreational value, scenic value or with environmentally sensitive features, land in agricultural production that achieves other open space goals, land needed to meet existing and future needs for active recreation; parks, plaza and public spaces in urban areas that enhance community character and support redevelopment efforts.
- b. Prepare and maintain a detailed open space and outdoor recreation plan, including appropriate maps, for existing and

needed recreational open space land in New Jersey.

- c. Coordinate regional, county and municipal plans with the state Open Space and Outdoor recreation plan to ensure there are adequate lands available to meet the needs of future generations and to ensure that the character, location and magnitude of development is compatible with the recreational and open space value of existing and needed recreational and open space facilities.
- d. Ensure that adequate indoor and outdoor recreational facilities exist in appropriate locations for the year round enjoyment and health of residents and tourists.
- e. Ensure that the character, location, magnitude and timing of development and redevelopment are linked to availability of adequate recreational facilities and open space land needed to serve the resultant growth.
- f. Locate recreational facilities and open space as close as possible to the populations they serve, taking into account the nature of the recreational facility or open space.

5.4 Open Space and Recreation Goals and Policies

This section sets forth the goals and objectives that are the basis for the borough’s open space and recreation plan. These goals and objectives are intended to be utilized in conjunction with the goals and objectives of the borough’s land use element.

1. To maintain and enhance the existing public open spaces to ensure their continued contribution to the character of the community.
2. To support conservation efforts that preserve environmentally sensitive land, maintain natural features and establish open space, and protect residential neighborhoods.
3. To upgrade recreation facilities by adding new facilities and refurbishing existing facilities to ensure that all meet or exceed current state and recreation industry standards in order to maintain the high quality of the borough’s existing recreational complexes.

4. To provide various types of recreational facilities that address the recreational needs of the communities wide-ranging population, and to ensure that sufficient open space exists in all sections of the borough for equal access for all residents.
5. The borough recognizes that preserving the character of a community goes beyond open space and therefore encourages the preservation of existing historic and scenic sites in the borough to enhance their presence by incorporating them into a comprehensive preservation plan.
6. To encourage the design and location of open space features that take advantage of existing facilities by locating new facilities adjacent to existing facilities.
7. To upgrade of existing recreation facilities with the addition of new equipment and replacement of older equipment that does not meet current state standards as well as the creation of new facilities in appropriate locations.
8. To adopt new and strengthen existing ordinances for the protection of environmentally sensitive lands. In particular, the borough seeks to limit development to that which preserves forested areas, steeply sloped areas (defined to include any slope of minimally fifteen percent grade), wetlands and floodplains, as well as retains such natural resources as existing vegetation and habitats for endangered, threatened or rare species.
9. To educate public about various environmental and open space issues and the need for open space preservation.

6.0 BACKGROUND INFORMATION

6.1 Regional Setting

The Borough of Westwood is located in the Pascack Valley region of Bergen County, New Jersey. Similar to the surrounding communities, Westwood is a suburban community within the New York City metropolitan area. The borough is largely developed with a mix of uses, including a vibrant downtown that is a regional attraction.

Several major county roadways traverse Westwood. The closest major highway is the Garden State Parkway, located in Washington Township. County Route 502 runs east and west, while Route 503 runs north and south through the borough. The Pascack Valley line of the NJ Transit rail line also passes through Westwood.

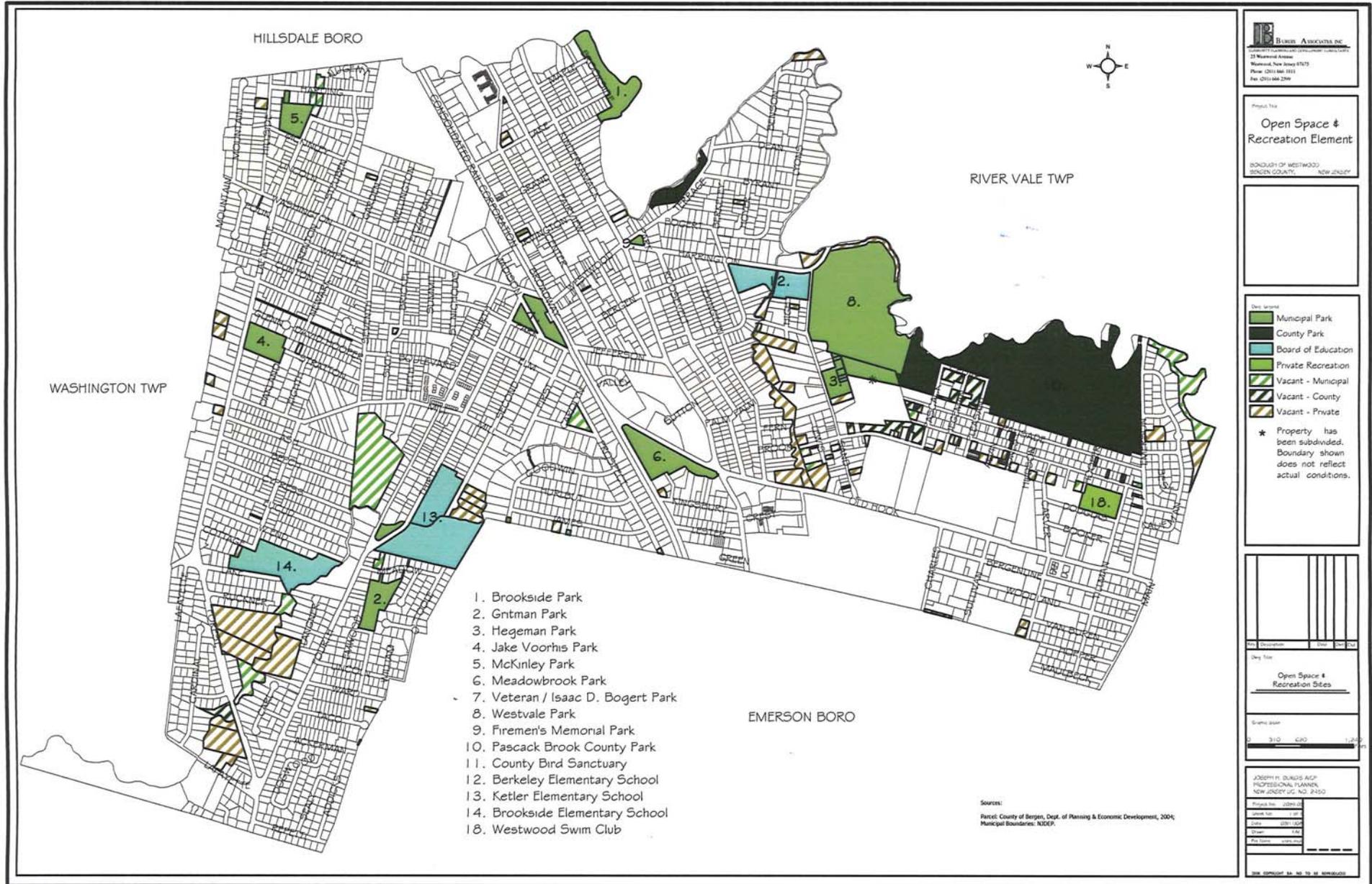
6.2 Demographic Data

Recent demographic trends reflect the developed nature of Westwood and the stabilization of its growth. Tables are provided in the Appendix depicting demographic data. After two consecutive censuses in 1980 and 1990 whereby population actually decreased, population growth has increased, though at very moderate levels. The forecasts indicate growth will continue to be moderate, increasing from 10,999 in 2000, to 11,630 in 2025. It should also be noted that age cohorts maintained a similar pattern between 1990 and 2000.

6.3 Inventory of Existing Facilities

The map contained on the following page depicts the location of all existing open space and recreation lands within the borough. In addition, this map provides a detailed inventory of the municipal and county parks, and Board of Education property. The borough contains the following distribution of park and open space parcels.

Table 1		
Type	Acres	% of Borough
Municipal Park	61.44	5
County Park	57.98	4
Board of Education	29.86	2
Vacant Municipal	22.41	1.5
Vacant - County	5.72	0.04
Vacant - Private	45.4	3
Private Recreation	3.1	0.02
Total	225.91	15.56



6.4 Environmental Resource Database

The preservation of the open space in the borough requires the study of an area's physical characteristics to determine environmental constraints and development potential. This study is also useful in assessing a site's natural resource value to prioritize the protection for an effective Action Plan.

The principal environmental features that are typically assessed within the framework of a master plan include water bodies, topography, soils and wetlands. Each of these are described below. Data concerning threatened and endangered species was also reviewed, though there are none in Westwood. Although, the following descriptions and accompanying map provide a good overview of these features, they be combined with a site inspection by a professional to determine definitive conditions. An Environmental Constraints Map is located on the following page illustrating the overlay of the constraints encumbering the borough.

6.4a Water Bodies & Floodplains

Westwood contains two streams and several bodies of water identified as lakes by the NJDEP. These lakes are small and unnamed. Most are part of a stream system, and the others are artificial. Two of these are located in Pascack Brook County Park, two are in Westwood Cemetery, and another in Gritman Park.

The Musquapsink Creek enters Westwood in the southwestern portion of the borough from Washington Township and flows northeast, draining into the Pascack Brook. The Pascack Brook forms much of the boroughs northern border and flows east, draining into the Oradell Reservoir. Both of these streams have been identified as Category One, or C1, streams by the NJDEP. Category One waterways, as well as those areas within 300 feet of the stream, receive special protection under New Jersey's Surface Water Quality Standards (SWQS) because of their exceptional ecological, water supply, and/or recreational significance. In addition, protection is afforded to those waterways with exceptional shellfish or fisheries resources. Most notable for the streams in Westwood is that they drain into the Oradell Reservoir.

In those waters designated as Category One and their surrounding buffers, known as Special Water Resource Protection Areas (SWRPA), exist-

ing development is not regulated. However, new construction or expansion to existing structures that will disturb one acre or more of the property or that would increase impervious surfaces on-site by at least one-quarter of an acre is prohibited within SWRPAs.

As noted on the attached map, portions of Westwood are located within floodplains associated with the previously mentioned streams. Most of the areas in the 100-year floodplain are vacant or part of the existing open space and recreation features in the community. The 100-year floodplain is the measure of flooding often used as the measure of what is developable land and what is not. It locates land at an elevation with a 1% chance of being flooded each year, not land that is likely to flood once in a one-hundred year period. It is important when determining the need for flood insurance. There are several vacant parcels in the 100-year floodplain and 300 foot C1 buffer area that are privately owned that the borough should review for consideration of acquisition as open space or for recreation purposes.

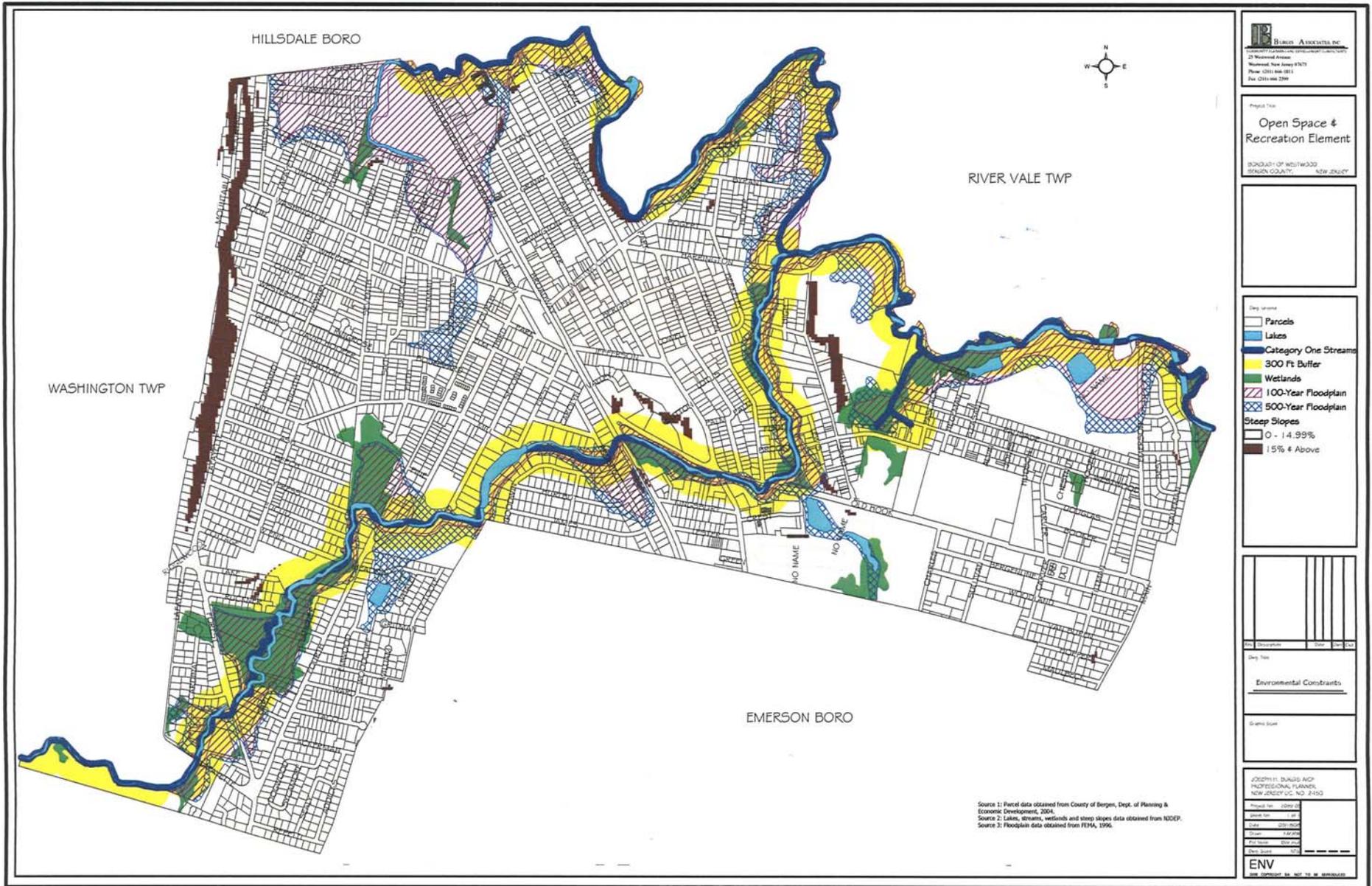
The most significant area covered by the 100-year floodplain is located in the northwestern portion of the borough from its boundary with the Borough of Hillsdale, reaching south to Irvington Street. This floodplain impacts the Westwood Shopping Center and adjacent commercial properties along Broadway.

6.4b Topography & Slope

The topography of Westwood varies only slightly and contains a limited amount of steeply sloped land. The lowest point in elevation is around 30 feet in the northeastern portion of the borough along the Pascack Brook. The highest point of 140 feet is near the border between Westwood and Washington Township. In this area, the topography provides the largest band of steep slopes, defined here as slopes in excess of 15%, in Westwood. Steep slopes are depicted on the accompanying map. Given their extent and location, overall, steep slopes do not pose a significant obstacle to development in Westwood, although site specific analysis is necessary to assess a site's development potential.

6.4c Wetlands

The National Wetlands Inventory, prepared by the United States Department of the Interior Fish and Wildlife Service, provides an inventory of wetland areas in Westwood as well as other communities in the



State of New Jersey. The wetland delineations are based upon vegetation, visible hydrology and geography in accordance with acknowledged source data pertaining to wetlands classifications. The data has been mapped by the New Jersey Department of Environmental Protection (NJDEP) and is illustrated on the accompanying Environmental Constraints map.

The overwhelming majority of wetlands in Westwood are riverine wetlands, associated with the streams in the community and their floodplains. The wetland areas are fairly small, with a few notable exceptions as depicted on the accompanying Environmental Constraints map.

The adoption of the Freshwater Wetlands Act in 1988 established a series of regulations to preserve New Jersey's wetlands as well as transition areas, or buffers. Specifically, the Act requires that NJDEP review all activities proposed in wetlands. In addition, the DEP must determine the width of transition areas, or buffers, around wetlands, which is dependent on the sensitivity of the particular wetland. For example, especially valuable wetlands may require a 150-foot buffer. On the other hand, no buffer may be required for others. In addition, transition area averaging can be utilized to manage buffer depths on site. Most wetlands, however, require a minimum 50-foot buffer. A proposed activity within these transition areas typically require permits from the NJDEP.

6.4d Soils

The soil types found in Westwood reflect the developed nature of the community. The location of each soil type can be found on the accompanying Soils Map. Most of the soil types are characterized as an urban land complex, or urban land. In these types of areas, soil compaction presents concerns regarding drainage and root growth. The different soil categories are closely tied to slope, stability and drainage.

Soil types have different types of limitations for buildings, roads and even open space. These limitations can include being prone to flooding, subsidence, depth to saturation zone, prone to water erosion and large stone content.

Soil type plays an important role in the planning for open space and recreation facilities.

A table is included in the Appendix provided detailed characteristics regarding each soil type found in Westwood.

6.4e Known Contaminated Sites

The NJ DEP maintains a list of known contaminated sites within the state, and also provides GIS data depicting these sites locations. As seen on the accompanying Environmental Constraints Map, there are several known contaminated sites within Westwood. These are sites where there has been confirmation that the ground and/or water is contaminated. Accordingly, it is important to review the location of these sites when planning for open space and recreation facilities. It is important to note that sites may have been added or remediated since this mapping data was created in 2005.

6.5 Existing Recreation Programs

The Westwood Recreation Department and the Westwood Recreation Advisory Board is responsible for the oversight of the sports and recreation activities and facilities for the children and adult residents of the community. The Westwood Community Center is the central location for the department and numerous indoor activities. While the borough has several recreational facilities in the borough, the community does combine some recreation activities with the adjacent Township of Washington. This includes fields and indoor facilities such as the Westwood Regional Junior Senior High School. The table on the following page lists all of the programs administered by the Westwood Recreation Department (see the appendix for the 2008 Westwood Recreation Department schedule for additional detail):

FALL PROGRAMS (alphabetical)

1. *Baseball*: The Westwood Baseball Association operates a informal fall baseball program consisting of 2 to 3 teams but this is generally considered offseason. They play primarily at Westvale Park on field "A", Meadow Brook and Brookside (Little League).
2. *Basketball (adult)*: The recreation department operates an adult basketball program starting in the fall at the Community Center.
3. *Cheer League*: The Westwood Cheerleading Association conducts fall girls cheerleading practices at the Community Center. The program contains groups between 8 to 14 years old.
4. *Dance Programs*: A creative and ballet program operates a level I and II program at the Community Center for ages 3 to 12 years old. The pro-

gram starts in the fall and extends into the winter season. A Senior Fellowship Club operates a dancing program also at the Community Center for adults. This program operates all season.

5. ***Football:*** The Westwood Wolverines Football Association operates a Mighty Mites, Pee Wee, Junior and Senior football program and is available for children of Westwood in the 1st through 8th grades. The fall season begins in August and extends to the end of November and operates at Westvale Park.
6. ***Pre-School Play Group:*** The recreation department conducts a Pre-School play group at the Community Center starting in the fall and extending into the spring, coordinated with the school calendar. This program is for 3 to 5 year olds.
7. ***Roller Hockey:*** The Roller Hockey Association operates a roller hockey program at a rink in the borough of Glen Rock beginning in the summer season and extending into the fall season. The program has midget, junior and senior leagues.
8. ***Softball:*** The softball association operates an adult softball league in the fall. They play at Meadowbrook and Brookside Parks.
9. ***Soccer:*** The Westwood/ Washington Township (WTSA) Soccer Association and Dragons Soccer Club conducts a recreational and club soccer program. The recreation program conducts a instructional , PeeWee and a Division 5 and 4/3, while the Dragons Soccer Club is a traveling club. Play is held on the board of education fields of Ketler, and George Schools (Washington Township). As well as the use of Westvale Park open play fields.
10. ***Tennis:*** A tennis program is offered in the borough over four seasons. The program is run by a private company, Tennis Dynamics who play at McKinley Park during the warm months of the year.
11. ***Teen Center:*** A Teen night program is conducted at the Community Center during the school year starting in the fall.
12. ***Volleyball:*** The Westwood Recreation Department conducts a adult volleyball program at the Ketler School, Westwood High School Gym and the Community Center. This program operates during the school year.
13. ***Zumba / Pilates:*** The Recreation Department conducts a Zumba and pilates exercise program at the Community Center during the year. This program is open to teens and adults.

WINTER PROGRAMS

1. ***Basketball:*** The Recreation Department operates a coed basketball program in the winter season at the Community Center. The program also uses the Westwood schools as additional court space.
2. ***Basketball (adult):*** The recreation department continues from the fall to conduct adult basketball at the Community Center.
3. ***Cheerleading Dance Squad:*** The Westwood Cheerleading Association conducts a cheerleading dance squad practices at the Community Center during the winter months. The program is for ages 8 to 14 years old.
4. ***Dance Programs:*** The creative and ballet program continues the level I and II program at the Community Center. The Senior Fellowship Club continues a dancing program also at the Community Center for adults. This program operates all season.
5. ***Pre-School Play Group:*** The recreation department continues the Pre-School play group at the Community Center extending into the spring.
6. ***Soccer:*** The Westwood/ Washington Township (WTSA) Soccer Association and Dragons Soccer Club conducts indoor soccer programs in the Community Center through the winter season.
7. ***Tennis:*** The tennis program offered in the borough play at the Washington Township Racket Club during the winter months
8. ***Teen Center:*** The teen night program continues from the fall season at the Community Center.
9. ***Volleyball:*** The Westwood Recreation Department continues the adult volleyball program at the Ketler School, Westwood High School Gym and the Community Center.
10. ***Zumba / Pilates:*** The Recreation Department continues to offer the Zumba and Pilates exercise program at the Community Center.
11. ***Wrestling Program:*** A wrestling program is available to the borough through the Washington Township program conducted at the high school.

SPRING PROGRAMS

1. ***Baseball (youth):*** The Westwood Baseball Association operates the

regular season activities in the spring beginning in April. The association operates a T-ball, Pee-Wee 7 and 8, Minors, Major and Alliance Leagues. The program uses Meadowbrook and Brookside Park and Westvale "B" fields.

2. *Baseball (adult)*: The Westwood "A League of Our Own" group runs a adult baseball league at Westvale "A" field. This program runs into the summer season.
3. *Basketball (adult)*: The recreation department continues from the winter to conduct adult basketball at the Community Center.
4. *Dance Programs*: The Senior Fellowship Club continues a dancing program also at the Community Center for adults in the spring season.
5. *Pre-School Play Group*: The recreation department continues the Pre-School play group at the Community Center which concludes at the end of the spring season.
6. *Softball (youth)*: The Westwood Softball Association operates a youth softball league in the spring. They play at Berkley School A fields, Westvale B field and Westwood High School fields. The association operates for levels from kindergarten thru 9th grade.
7. *Softball (adult)*: The New Jersey Woman's Softball Association operates a adult softball league at Meadowbrook and Brookside Park in the spring.
8. *Soccer*: The Dragons Soccer Club conducts outdoor soccer programs at Ketler , and George Schools (Washington Township).
9. *Tennis*: The tennis program offers in the borough program at the McKinley Park during the spring months
10. *Teen Center*: The teen night program continues at the Community Center until the end of the spring.
11. *Volleyball*: The Westwood Recreation Department continues the adult volleyball program at the Ketler School, Westwood High School Gym and the Community Center.
12. *Zumba / Pilates*: The Recreation Department continues to offer the Zumba and Pilates exercise program at the Community Center.

SUMMER PROGRAMS

1. *Baseball (youth)*: The Westwood Baseball Association operates a

travel team during the summer months. This program uses Meadowbrook and Brookside Park and Westvale "B" fields.

2. *Basketball (adult)*: The recreation department continues from the spring to conduct adult basketball at the Community Center.
3. *Dance Programs*: The Senior Fellowship Club continues a dancing program also at the Community Center for adults in the summer season.
4. *Flag Football Association*: The Westwood Flag Football Association has a summer program at Saint Andrews Field during the summer months.
5. *Roller Hockey*: The Roller Hockey Association operates a roller hockey program at Ketler School and a rink in the borough of Glen Rock beginning in the summer season and extending into the fall season. The program has midget, junior and senior leagues.
6. *Summer Playground Association*: The Westwood Recreation Association operates a summer playground camp at Brookside, Jake Voorhis Park and Berkley School and field. This program is open to 3 to 14 year old children.
7. *Softball (youth)*: The Westwood Softball Association operates a small softball league in the summer. They play at Berkley School A fields and Westvale B fields.
8. *Soccer*: The Dragons Soccer Club conducts outdoor soccer programs at Ketler , and George Schools (Washington Township) in the summer months.
9. *Tennis*: The tennis program offers a camp at McKinley Park during the summer months
10. *Zumba / Pilates*: The Recreation Department continues to offer the Zumba and Pilates exercise program at the Community Center.

7.0 NEEDS ANALYSIS

A needs analysis is performed only after an inventory of the borough's existing open space and recreation facilities has been performed. The needs analysis can then determine what the borough currently provides in an adequate manner, and what is lacking. It is based on three factors, the borough population, the size and distribution of existing open space and recreation facilities. There are three methods commonly used to determine a community's open space and recreation needs. Based upon these factors.

The first method utilizes a standardized formula calling for a municipality to have a minimum of three percent of its developed and developable land for open space/recreation purposes. The Borough of Westwood has approximately 1,485 acres of land. Of this area, 149 acres are dedicated to open space/recreation purposes, which translate to 10% of the land area. This calculation does not include the categories identified as Vacant-Public, and Private Recreation, as shown on the Open Space and Recreation Sites map or in Table 1.

The second method used to determine open space and recreation needs is based on the National Park and Recreation Association (NPR) criteria outlined in the publication entitled *Recreation, Park and Open Space Standards and Guidelines*. These criteria are based on the existing and projected population for the municipality. The guidelines indicate that there should be a minimum of ten acres of open space for every 1,000 people. Of this, it recommends that 6 acres per 1,000 people be provided at the local level and the remainder be provided by County, State or other regional authority. Based on the borough's estimated 2005 population of 10,994 people, the imposition of the NRPA guidelines suggests a need for 110 acres of open space to accommodate the community's existing population, including 66 acres at the local level. Westwood presently meets this standard, and projections for future growth suggest that the borough's foreseeable development pattern would result in consistency with this criterion.

The distribution of recreational acreage and its allocation for active and passive use are more difficult to achieve than the establishment of the total acreage per 1,000 persons. It is desirable for every resident to have reasonable access to a variety of recreational uses. Generally, the types of facilities most commonly provided in a community are divided into the following categories:

1. Play lots. This is an active recreation facility for school age children. They generally range in size from $\frac{1}{4}$ to $\frac{1}{2}$ acre, with a one acre lot considered the maximum size for such a use. They generally have miscellaneous play equipment for toddlers, benches and areas shaded from direct sunlight. The lots can be combined with play equipment for older children if properly separated from the toddler area. An existing example of this type of facility is Hegeman Park on Sand Road.
2. Neighborhood Playground. These are larger facilities and accommodate adults as well as school age children. They generally average about 6 acres in size to provide adequate separation of activities. They are generally developed with ball fields, courts, a children's playground and often, a small shelter. They are usually provided at a ratio of 1.25 acres per 1,000 population and each facility should be designed to serve a population of 4,000 to 5,000 people. This translates into approximately 2 facilities for the borough's current population. An existing example of this type of park is Jake Voorhis Park on Lafayette.
3. Neighborhood Parks. These are passive facilities for all ages. They are designed for walking and sitting rather than active games and sports. The main features include walkways, benches and landscaping. The site size for neighborhood parks is comparable to that of a neighborhood playground. There should be about one acre of park space per 1,000 population, ranging in size from one to five acres. This translates into approximately 2 neighborhood parks, based on the current borough population. An existing example of this type of park is Gritman Park on Meadow Road.
4. Community Parks. These facilities accommodate both active and passive space and are considerably larger than the neighborhood type facility. They should be provided at a ratio of 1.25 acres per 1,000 populations, serving from 12,000 to 20,000 people living in a one mile radius. They are designed for field sports requiring large open areas and should contain from 12 to 20 acres of land. They should also include an indoor recreation center to accommodate a comprehensive active and passive recreation program. An example of this type of park will be what is planned for Westvale Park on Sand Road and Harrington Avenue.

Additional facilities should also be provided including open space areas maintained in their natural state, hiking and riding trails, shelters and special features such as community gardens. These parks generally encompass areas of 100 acres and are designed at a ratio of 2.5 acres per 1,000 population. The accompanying table #2 summarizes general planning guidelines for recreation facilities in communities.

However, population and land area ratios are two overviews of assessing whether an appropriate amount of open space and recreation opportunities exists in the borough. The means of assessing the adequacy of existing recreation does not consider important issues such as accessibility, population density, and physical character or needs. The third methodology used to determine open space need is based on a reliance on local experience, knowledge of the local population, and recognition of the unique character or needs of the borough.

In order to gather this assessment, input was obtained from the Westwood Recreation Department and several of the Westwood Recreation Associations that manage the various recreational programs of the borough. The Westwood Recreation Department provided input into the management needs of the various facilities and a summary of all of the current recreation programs. The recreation associations offered specific utilization needs, issues and contributed recommendations for consideration in the planning of future recreation facilities and improvements noted herein

Table 2
General Open Space and Recreation Guidelines

Open Space System	Developed Open Space			Undeveloped Open Space
	Quantity of Open Space Recommended	Size of Parcels	Area Served	Quantity Recommended
Mini-Park (Play lots/ neighborhood playground)	0.25 to 0.5 acres/1,000 population (<i>NRPA</i>)	1 acre or less (<i>NRPA</i>) 500 sf to 2 acres (<i>D&K</i>)	Less than ¼ mile radius	At least 5% of total area of every residential development in permanent useable open space (<i>Brough</i>) For all other authorities, amount of open space required will vary depending on the conditions.
	2.5 acres/1,000 population expected to reside in development, at least 15% of which should be in tot lots unless less than 5% of residents are likely to be under age 12 (<i>Brough</i>)	Not less than 2,000 sf or more than 30,000 sf	100 yards to ¼ mile radius (<i>D&K</i>)	
Neighborhood Subdivision Level (Neighborhood parks)	1 to 2 acres/1,000 population (<i>NRPA</i>)	15+ acres (<i>NRPA</i>)	¼ to ½ mile radius to serve population up to 5,000 (<i>NRPA</i>)	
		4 to 20 acres (<i>D & K</i>)	¼ to ½ mile radius to serve population up to 5,000 (<i>D&K</i>)	
Community Level (Community Parks)	5 to 8 acres/1,000 population (<i>NRPA</i>)	25+ acres	Several neighborhoods, 1 to 2 mile radius (<i>NRPA</i>) Several neighborhoods, 15,000 to 25,000 population (<i>D&K</i>)	

NRPA: National Park and Receptions Association, Recreation Parks and Open Space Standards and Guidelines, 1983

D & K: DeChiara and Koppelman, Time-Saver Standards for Site Planning, 1984

Brough: Michael Brough, A Unified Development Ordinance, 1985.

7.1 Needs Analysis for Recreation Facilities

As previously noted the NPRA provides the nationally accepted standards for the provision of open space and recreation facilities at the local and regional level. The following table details how the existing municipal open space and recreation facilities match up to the guidelines set forth in this report.

Table #3

Computations of Existing Recreation and Open Space Facilities

Recreation Facilities	Acreage Recommended for Westwood	Number of Facilities	Total Acreage of Facilities
Mini Park	2.75-5.5 acres	7	17.88 acres
Neighborhood Park	11-22 acres	1	5.50 acres
Community Park	55-88 acres	1	30.26 acres
Regional Park/Reserve	Variable	1	55.00 acres
Special Use: Schools	Variable	3	29.86 acres
Special Use: Westwood Swim Club	Variable	1	3.10 acres
Conservancy– Bird Sanctuary	Variable	1	2.50 acres

As noted above the municipality is generally well served based upon the general guidelines. Some of the recreational facilities in the borough are below the recommended acreage for neighborhood and community parks but consideration should be given to the amount of parkland in the mini parks category and the needs these facilities are providing towards the neighborhoods that they are near. In addition, the special use category and the conservancy lands help to also offset this difference.

Table #4 on the following page provides an analysis of the specific active recreation recommended facilities based upon the guidelines noted and the comparison to the borough's existing facilities. The service areas noted on the table are depicted individually on the sports service area maps provided in the appendix of this document. These maps are intended as a guide only of potential need for further review and evaluation in consideration of additional recreation facilities.

Table #4

Existing Active Recreation Facilities							
ACTIVITY/ FACILITY	RECOMMENDED SPACE REQUIREMENTS	RECOMMENDED SIZE AND DIMENSIONS	NO. OF UNITS PER POPULATION	NO. OF UNITS RECOMMENDED FOR WESTWOOD	NO. OF UNITS IN WESTWOOD	SERVICE RADIUS	LOCATION NOTES
Basketball 1. Youth 2. High School 3. Collegiate	2400-3036 sq. ft. 5040-7280 sq. ft. 5600-7980 sq. ft.	46-50'x84' 50'x84' 50'x94' with 5' unobstructed space on all sides	1 per 5000	2	5	¼ - ½ mile	Outdoor courts in neighborhood and community parks, plus active recreation areas in other park settings.
Tennis	Minimum of 7,200 sq. ft. single court (2 acres for complex)	36'x78'. 12' clearance on both sides; 21' clearance on both ends.	1 court per 2000	5	5	¼-1/2 mile	Best in batteries of 2-4. Located in neighborhood/ community park or adjacent to school
Volleyball	Minimum of 4,000 sq. ft.	30'x60'. Minimum 6' clearance on all sides	1 per 5000	2	2	¼ - ½ mile	Same as other court activities (e.g. badminton)
Baseball 1. Official 2. Little League	3.0-3.85 A minimum 1.2 A minimum	Baselines – 90' Pitching distance 60 ½' foul lines – min. 320' Center field – 400'+ Perimeter to play area - 10' Baselines – 60' Pitching distance – 46' Foul lines – 200' Center field – 200' – 250'	1 per 5000 Lighted 1 per 30,000	2	4 Two Fields Lighted	¼ - ½ mile	Part of neighborhood complex. Lighted fields part of community complex.
Football	Minimum 1.5 A	160' x 360' with a minimum of 6' clearance on all sides. Perimeter - 10 yards to spectators buffer.	1 per 20,000	1	1 at Westvale Park	15-30 minutes travel time	Same as field hockey.
Soccer	1.7 – 2.1 A	195' to 225'x330' to 360' with a minimum 10' clearance all sides.	1 per 10,000	1	2 at Ketter 1 Westvale (future)	1-2 miles	Number of units depends on popularity. Youth soccer on smaller fields adjacent to schools or neighborhood parks.
¼ Mile Running Track	4.3 A	Overall width – 276' Length – 600.02' Track width for 8 to 4 lanes is 32'.	1 per 20,000	1	1	15-30 minutes travel time	Usually part of high school, or in community park complex in combination with football, soccer, etc.
Softball	1.5 to 2.0 A	Baselines – 60' Pitching distance- 46' min. 40'women Fast pitch field Radius from Plate – 225' Between foul Lines. Slow Pitch – 275' (men) 250' (women)	1 per 5,000 (if also used for youth baseball)	2	7	¼ - ½ mile	Slight differences in dimensions for 16" slow pitch. May also be used for youth baseball.
Multiple Recreation Court (basketball, volleyball, tennis)	9, 840 sq. ft.	120' x 80'	1 per 10,000	1	0	1-2 miles.	
Swimming Pools	Varies on size of pool and amenities. Usually ½ to 2 A site.	Teaching- minimum of 25 yards x 45' even depth of 3 to 4 ft. Competitive – minimum of 25 m x 16 m. Minimum of 27 square feet of water surface per swimmer. Ratios of 2:1 deck vs. water.	1 per 20,000 (Pools should accommodate 3 to 5% of total population at a time.)	1	1	15 to 30 minutes travel time	Pools for general community use should be planned for teaching, competitive and recreational purposes with enough depth (3.4m) to accommodate 1m and 3m diving boards. Located in community park or school site.

Table #5

SCHEDULED ACTIVE RECREATION

		Brookside Park	McKinley Park	Meadowbrook Park	Westvale Park	Berkley Elementary School		Ketler Elementary School		Brookside Elementary School		Community Center
Facility		Field	Tennis Court	Field	Field	Field	Indoor	Field	Indoor	Field	Basketball Court	Indoor
WINTER	January											
	February											
SPRING	March											
	April											
	May											
SUMMER	June											
	July											
	August											
FALL	September											
	October											
	November											
WIN.	December											

Legend

-  Baseball
-  Football
-  Tennis
-  Volleyball
-  Softball
-  Soccer
-  Roller Hockey
-  Basketball
-  Indoor Recreation (Cheerleading, Pilates)

7.2 Needs Analysis for Open Space

Based on the borough's land area of approximately 1,485 acres, the amount of existing open space available is greater than the NRPA guideline. The guidelines set forth a minimum of 5% of the total land area devoted to residential development be devoted to permanent open space this equates to approximately 74 acres of open space. The following is the borough owned vacant land.

Site #	Block	Lot	Land Area (approximate)	Location (Street Address)
1	103	8	14,820 square feet	HARDING AVE
2	106	10	11,250 square feet	111 HARDING AVE
3	106	11	11,250 square feet	105 HARDING AVE
4	106	26	9,975 square feet	678 LAFAYETTE AVE
5	201	3	1,580 square feet	WASHINGTON AVE
6	402	1	466,092 square feet	REAR OF FOURTH AVE
7	504	7	2,327 square feet	FOREST AVE
8	504	8	63,150 square feet	FOREST AVE BY BROOK
9	504	35	38,065 square feet	RUCKNER RD & BROOK
10	506	6	12,150 square feet	FOREST AVE BY BROOK
11	917	1	21,780 square feet	SIXTH AVE-PARK
12	1003	1	39,204 square feet	BOGERT AVE- GOODWIN PARK
13	1007	23	4,350 square feet	GOODWIN TERR- BOGERT DAM CROSSING
14	1102	17	1,000 square feet	MEADOW ROAD- DRAIN
15	1102	22	20,000 square feet	MEADOW ROAD- DRAIN
16	1701	10	7,500 square feet	228 WESTWOOD BLVD- 15F15F
17	1701	15	3,000 square feet	PASCACK RD
18	1701	20.01	151,153 square feet	SAND ROAD
19	1802	1	11,000 square feet	PASCACK RD

Table # 6 (Cont.)
Borough Owned Vacant Land

Site #	Block	Lot	Land Area (approximate)	Location (Street Address)
20	1802	2	2,500 square feet	LEWIS PLACE
21	1802	5	9,447 square feet	LEWIS PLACE
22	1906	7	2,500 square feet	PALISADE AVE
23	1906	12	5,000 square feet	PALISADE AVE
24	1908	2	2,500 square feet	PALISADE AVE
25	1908	13	6,000 square feet	84 EMERSON RD
26	1908	21	2,500 square feet	WESTWOOD BLVD
27	2109	2	1,265 square feet	HOPPER AVE
28	2201	1	158,122 square feet	EMERSON RD- ALONG BROOK
29	2207	3	3,050 square feet	EMERSON RD
30	2207	5	3,536 square feet	EMERSON RD
31	2208	9	11,500 square feet	HOOPER ST

TOTAL: 1,097,566 S.F.

7.3 Local Need Assessment and Recommendations

As previously noted the Westwood Recreation Department, the Westwood Advisory Board and several of the borough's recreational associations were consulted to gain local experience of the recreation needs of the community. The following summary for each park, categorizes the needs based upon the priority expressed by the input received. The listing is provided as a guide and should be reviewed further by the borough to assign priorities over time.

Westvale Park:

1. Finalize the remainder of the sports fields not completed to date, to establish minimum usability by recreation associations with consideration of future upgrades.
2. Provide an irrigation system for all sports fields. Consider hose bibs at baseball fields for wetting infields.
3. Provide identification and directional signs and a sense of entry from Harrington Avenue to adequately direct residents and visitors to the park.
4. Install remote defibrillators in all parks for emergencies. Consider sponsorship opportunities to maintain these installations.
5. Limit vehicular trespass onto ball field areas.
6. Install bike racks to promote cycling to the field sports.
7. Implement a municipally supported maintenance plan on all fields to provide maximum usability including fertilization, weed control, top dressing with topsoil and reseeding.
8. Study the feasibility of providing a pedestrian connection between Westvale Park and Pascack Brook County Park for greater connectivity. Consider improvements for fishing access to adjacent Pascack Brook.
9. Add fields to accommodate the lacrosse program in the borough.
10. Install roller hockey rink and storage in park to provide a facility in the borough for this program.
11. Install male and female restroom facilities.
12. Improve handicapped access to sports facilities.
13. Implement control strategies for geese waste on fields.
14. Pursue a lighting installation for field areas to extend the time frame available for scheduling fields and expand the time between field use to provide time for field recovery.
15. Expand storage facilities at park to allow for storage of a mower to dress fields by the recreation associations.
16. Improve parking area for sports fields for safety, efficiency and containment of parking.
17. Add drinking water fountains
18. Increase the number of movable bleachers on the fields.
19. Study the alternatives available for the police shooting range facility.
20. Add batting cage near ball fields for practices.
21. Park security should be considered during design development of park improvements.
22. Park furniture, ie. benches, trash receptacles, and bike racks, should be unified within park and in all parks of the borough.
23. Provide landscape buffering between DPW facility and park improvements.
24. Where possible, install playground area near field sport area.
25. Consider a location for a sand volleyball court.
26. Add lights to the softball field.
27. Consideration should be given to relocating the community center to the park.
28. Install covered pavilion for community events and picnics.
29. Study the feasibility of installing energy efficient lighting including LED lights.

Ketler Elementary School Fields

1. The fields used should be top dressed and re-seeded to level off uneven surfaces.
2. Improve the irrigation system to extend the playability and recovery time of the fields.
3. Explore options to remove existing infield areas to expand the options for field usage and recovery.
4. Explore options to improve drainage in the easterly section of the grounds to improve usability of fields.
5. Consider adding portable restroom facilities during sport seasons.

Berkley School Fields

1. Improve outfield turf surfacing to re-level rutted areas and improve drainage.
2. Consider adding portable restroom facilities during sport seasons.

Brookside Park

1. Explore options to expand off-street parking where possible to ameliorate the existing parking in adjacent residential areas.
2. Reduce parking nuisances to adjacent residential neighborhoods by minimizing game overlap and expanding practice options by the expansion of additional fields in the borough at Westvale Park.
4. Study potential to install field lighting to expand field usage.
5. Existing basketball courts require renovation.

Meadowbrook Park

1. Install a storage shed for field accessories and equipment.
2. Study potential to install field lighting to expand field usage.

Jake Voorhis Park

1. Renovate existing playground facility to expand the accessibility of playground.
2. Evaluate if use of field space for beginner level soccer instruction is feasible.
3. The existing basketball courts will require renovation in the near future.
4. A storage shed should be installed at this park.

McKinnley Park

1. Consider future renovation of the tennis courts and the addition of lights.

7.4 Bikeway Recommendations

In an effort to improve the connectivity between the borough's parks and open spaces it is recommended that bikeway routes be established in the borough. The bikeway's would provide an alternate source of transportation to parks while defining a policy that encourages connectivity and the installation of accommodations for bicycles where appropriate.

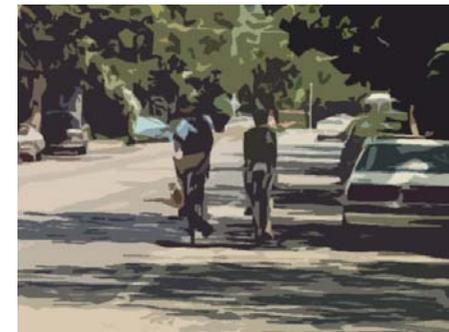
The existing developed character and varied road widths of the borough limits the designation of formal striped bike lanes on the existing roadways. Therefore it is recommended that bikeways be established using what are termed as bike routes, which are designated roadways for bicycle use

through installation of directional and informational signs. a plan has been prepared and provides recommended routes for a system of bike routes included in the appendix of this document for reference.

The goal of the bikeways are as follows:

1. To provide connectivity between the boroughs park and open space amenities.
2. Encourage alternate forms of transportation to various recreation opportunities as well as activity centers of the borough.
3. Provide connections between neighborhoods of the borough and mass transit opportunities.
4. Provide bicycle connections to Board of Education property.
5. Identify these alternate routes for bicycles by signage while warning motorists of the route in the borough.
6. Identify where future infrastructure improvements should incorporate accommodations for bicycles.
7. Provide linkages to adjacent municipalities and their bicycle routes.
8. Provide connectivity to regional parks such as Pascack Brook County Park.

It is recommended that the future installation of the bicycle routes be prepared in consultation with the planning and design guidelines of the New Jersey Department of Transportation Bicycle Compatible Roadways and Bikeways.

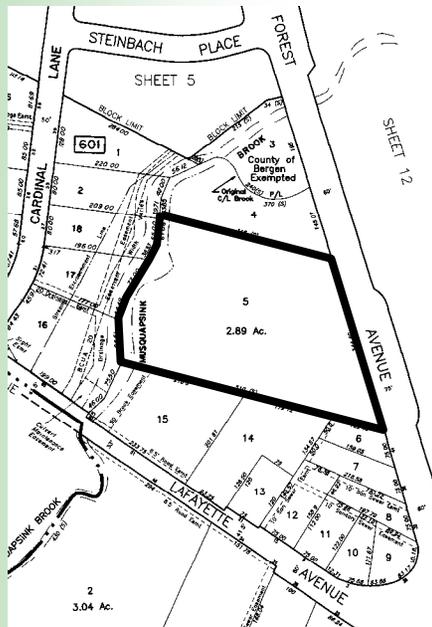


7.5 Open Space Acquisition Study

The study of open space needs noted earlier indicate that Westwood has the requisite amounts of open space lands based upon recommended standards. These standards are based upon population and land area but do not consider the public need to preserve environmentally sensitive lands from development which will negatively impact the community. The following is offered for consideration regarding existing lands that are currently vacant or of a size or contain significant environmental interests that are recommended for preservation and/or open space consideration.

Block 601, Lot 5

This site is in the southwesterly quadrant of the borough and fronts on Lafayette and Forest Avenue, is currently un-developed and contains 2.89 acres. The site is significantly constrained by floodplains, wetlands and Category 1 stream buffers from the Musquapsink Brook. The site has minimal residential development potential due to environmental restrictions.



Block 601, Lot 5 (Source-Borough Tax Maps)



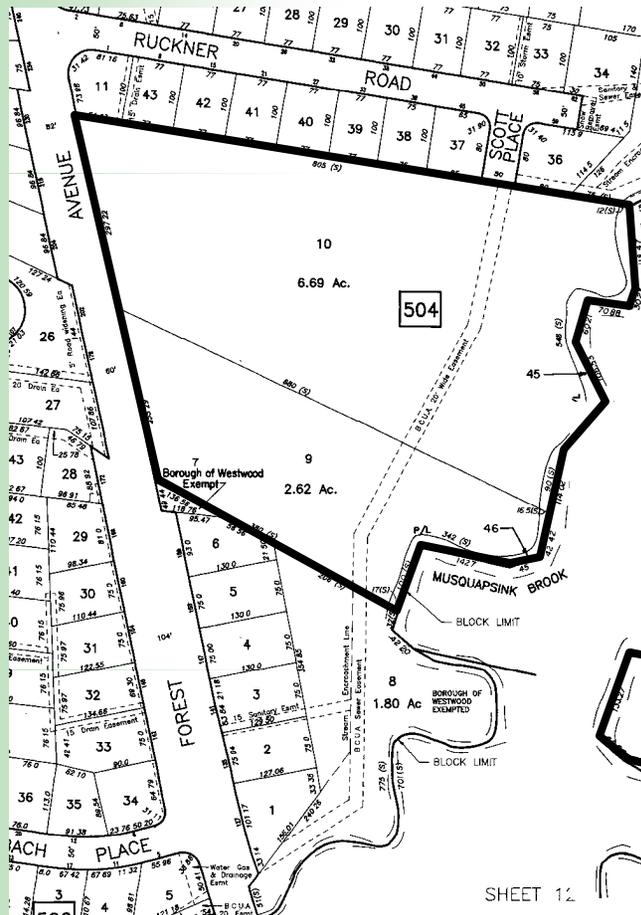
Block 601, Lot 5 (Source-Microsoft)

Block 504, Lot 9-10 and Block 1104 Lot 1

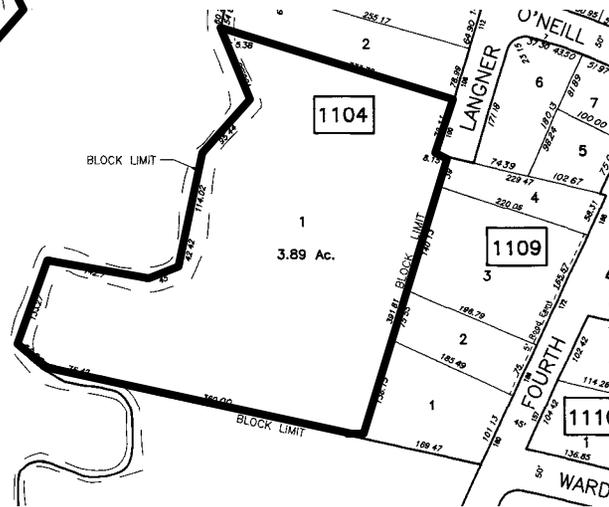
These three lots are in the southwesterly quadrant of the borough and generally front on Forest Avenue. They are currently un-developed and contain a total of 13.2 acres in total. The properties are significantly constrained by floodplains, wetlands and Category 1 stream buffers from the Musquapsink Brook. The properties have minimal residential development potential due to environmental restrictions.



Block 504, Lot 9-10 and Block 1104 Lot 1 (Source-Microsoft)



Block 504, Lots 9-10 (Source-Borough Tax Maps)



Block 1104, Lot 1 (Source-Borough Tax Maps)

Park/Recreation Inventory

Municipal Property

1. BROOKSIDE PARK



Borough Map



Brookside Park Enlargement
Block-710 Lot-25



The park has multiple points where access can be gained to the Pascack Brook.



View of playground; (ages 5-12).



View of open area with trees, picnic tables and views of the brook.



View of shelter building.



View of existing basketball courts.



View of existing little league ballfield.

EXISTING INVENTORY

This 4.83 acre, municipally owned park is located at the east end of Lake Street. On-street parking is provided along Lake Street, but there is no formal parking lot on site. The park amenities include; a Little League ballfield and batting cage, lighted basketball courts, volleyball posts, two playground areas, swing set, picnic area, shelter building with restrooms, and a small memorial. The park also offers views and access to the Pascack Brook.

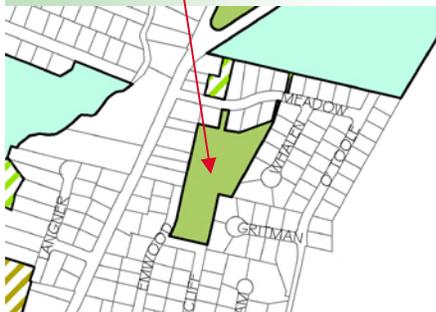
RECOMMENDED IMPROVEMENTS

- PARKING AREAS
- FUTURE HANDICAPPED ACCESSIBLE PLAY STRUCTURE
- BIKE RACKS

2. GRITMAN PARK



Borough Map



Gritman Park Enlargement
Block-1103 Lot-9



Access to the park from Meadow Road.



View of onsite pond surrounded by wooded area.



View of pathway that connects to residential area.



Large open area with trees and picnic tables.

EXISTING INVENTORY

Access to this 2.4 acre, municipally owned park is located along Meadow Road, off Fourth Avenue. The key feature of this park is the large, centrally located pond. An asphalt path runs along one side of the pond, connecting with an adjacent residential area. In addition, benches are provided along the path near a large open area with picnic tables.

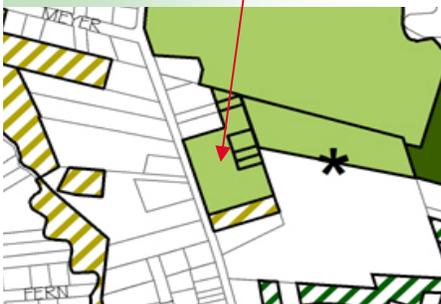
RECOMMENDED IMPROVEMENTS

- THEMATIC LIGHTING FIXTURES
- STYLIZED BENCHES

3. HEGEMAN PARK



Borough Map



Hegeman Park Enlargement
Block-1701 Lot-23



View of tot lot playground.



View of playground; (ages 5-12).



Existing swing set.



View of pavilion area.



View of lighted basketball courts.



View of small picnic area.

EXISTING INVENTORY

This 2.02 acre, municipally owned neighborhood park is located along Sand Road. On-street parking is provided along Sand Road. The park amenities include; tot playground, playground (5-12), swing set, pavilion area, lighted basketball courts, drinking fountain, and a small picnic area. Because of the steep slope, a 6 foot green chain link fence runs along the rear of the park. This park also has a direct connection with Westvale Park (bike path).

RECOMMENDED IMPROVEMENTS

- REPAIR CHAIN LINK FENCE AND REPLACE PAVILION ROOF
- PLAYAREA MULCH EDGING
- BIKE RACKS
- CONSIDER ADDITIONAL SIDEWALK CONNECTIONS TO THE PARK FROM NEIGHBORHOOD
- FUTURE HANDICAPPED ACCESSIBLE PLAY STRUCTURE & UPGRADE SWINGSET TO MODERN SAFETY STANDARDS

4. JAKE VOORHIS PARK



Borough Map



Jake Voorhis Park Enlargement
Block-302 Lot-7



View of tot lot playground.



View of handicap accessible ramp.



View of swing set.



View of basketball courts.



View of existing asphalt walkway.



View of small picnic area.

EXISTING INVENTORY

This 3.5 acre, municipal park is located between Stratton Ave and Oakland Ave. There is no parking onsite for this park. An asphalt path loops around the park, with few benches scattered throughout. The park amenities include; ADA accessible playground, swing set, basketball courts, picnic tables, volleyball posts, a large open grass area, and a small memorial to whom the park is dedicated.

RECOMMENDED IMPROVEMENTS

- ADDITIONAL BENCHES
- ADD BIKE RACKS
- THEMATIC LIGHTING

5. MCKINLEY PARK



Borough Map



McKinley Park Enlargement
Block-106 Lot-27



View of the asphalt pathway.



View of tennis courts.



View of playground; (ages 5-12).



View of basketball courts.



View of swing set.

EXISTING INVENTORY

This 2.7 acre municipal park is located along McKinley Avenue. This park does not have parking on-site. An asphalt path provides circulation. The park amenities include; tennis courts, playground area, lighted basketball court, swing set, and swinging benches. Both tennis courts and the basketball court are in good condition.

RECOMMENDED IMPROVEMENTS

- ADDITIONAL BENCHES
- BIKE RACKS
- TOT LOT / FUTURE HANDICAPPED ACCESSIBLE PLAY STRUCTURE
- THEMATIC LIGHTING

6. MEADOWBROOK PARK



Borough Map



Meadowbrook Park Enlargement
Block-1601 Lot-3



View of Little League ballfield.



View of batting cage.



View of playground; (ages 5-12).



View of adjacent utility yard.



View existing gravel parking lot.



View of adjacent railroad tracks.

EXISTING INVENTORY

This 5.5 acre municipal park is located at the end of Kingsberry Road. The Musquapsink Brook runs across the northern section of the park. The existing parking lot is composed of loose gravel and is difficult to navigate. Adjacent to the existing parking lot is a large, unscreened utility yard. Train tracks run along the west side of the park. The park amenities include; lighted Little League ballfield, batting cage, concession stand, bathrooms, and a playground. The park has some space available that may allow for additional uses and activities. Although an analysis of environmental restrictions will be required.

RECOMMENDED IMPROVEMENTS

- PARKING LOT SURFACING
- LANDSCAPE SCREENING OF THE UTILITY YARD AND RAILROAD TRACKS
- TOT LOT / FUTURE HANDICAPPED ACCESSIBLE PLAY STRUCTURE

7. VETERAN / ISAAC D. BOGERT PARK



Borough Map



View of park bandstand area.



View of Veterans Memorial (1).



View of Veterans Memorial (2).



View of 9/11 Memorial.



View of Cannon Memorial.



View of Westwood train station.

EXISTING INVENTORY

Veteran/Issac D. Bogert Park Enlargement
Block-905 Lot-1
Block-906 Lot-1

This 2.43 acre municipal park is located at the corner of Broadway and Washington Avenue. It is adjacent to the Westwood train station. While there is parking on site, it mainly services commuters using the train. The park amenities include; bandstand, large open area, 9/11 Memorial, Veterans Memorials, Cannon Memorial, Westwood informational sign, a large open area and a holiday tree. Circulation is provided by concrete paths that meander through the entire park.

RECOMMENDED IMPROVEMENTS

- A COMPREHENSIVE PARK MASTER PLAN
- ADDITIONAL BENCHES
- COMPREHENSIVE PATHWAY CONNECTIONS RECOMMENDED
- IMPROVED PARK PROGRAMMING AND HORTICULTURAL DISPLAYS

8. WESTVALE PARK



Borough Map



Westvale Park Enlargement
Block-1701 Lot-1



Aerial view of Westvale Park.



View of lighted Babe Ruth ballfield.



View of storage building.



View of park entrance gate.



View of existing parking lot.



View of softball field.

EXISTING INVENTORY

This 30.26 acre municipal park is located along Sand Road and Harrington Ave. Originally a landfill, this park is currently undergoing substantial master plan improvements. The entrance drive and existing parking lot are in disrepair. The current site amenities include; lighted Babe Ruth ball field, practice field, softball field, storage building and walking / bicycle circuit.

RECOMMENDED IMPROVEMENTS

- PARKING LOT SURFACING
- SIGNAGE / WAYFINDING SYSTEM
- SOCCER FIELDS NEEDED
- POTENTIAL SITE FOR FUTURE COMMUNITY FACILITIES
- BATHROOM FACILITIES NEEDED FOR PARK
- IMPROVE SPECTATOR AREAS AND ADA ACCESS

9. FIREMEN'S MEMORIAL PARK



Borough Map



Block-1403 Lot-1



View of park.



View of memorial bell in park.

EXISTING INVENTORY

This 0.27 acre municipal park was dedicated to Westwood firefighters in 1953. It is prominently located at the “5-Corners” intersection of Westwood Avenue, Harrington Avenue and Kinderkamack Road. This is a small memorial park, and therefore contains few features aside from the memorials. There is no parking dedicated for the park, but on-street parking is available nearby. Sidewalks surround the park, and connect it to the surrounding areas. Because the park is maintained by the fire department, they should be consulted prior to any proposed changes or additions.

RECOMMENDED IMPROVEMENTS

- POSSIBLE SEATING AREAS
- THEMATIC LIGHTING

County Parks

10. PASCACK BROOK COUNTY PARK



Borough Map



Pascack Brook County Park
Enlargement
Block-1901 Lot-1,
Block 1701 Lot-3



Aerial view of Pascack Brook County Park.



View of gazebo.



View of park near entrance.



View of picnic area.



View of tennis courts.

EXISTING INVENTORY

This 55 acre site is operated by the Bergen County park system. It is located on Emerson Road, and is the largest open space/recreation facility in the community. Although it is in the easterly portion of the borough, it contains a number of amenities including a pond, walking paths, two baseball diamonds, a basketball court, tennis courts, and picnic areas.

RECOMMENDED IMPROVEMENTS

- CONSTRUCT SIDEWALK CONNECTION TO PROVIDE ACCESS TO THE PARK FROM THE SURROUNDING NEIGHBORHOODS AND WESTWOOD'S WESTVALE PARK.

10. PASCACK BROOK COUNTY PARK (con't.)



Borough Map



Pascack Brook County Park
Enlargement
Block-1901 Lot-1,
Block 1701 Lot-3



View of baseball fields.



View of restrooms.



View of pond.



View of basketball court.



View of playground.



View of pavilion area.

11. COUNTY BIRD SANCTUARY / OVERBROOK PARK



Borough Map



Block-1306 Lot-4



View of park from Westwood Avenue.



View of Pascack Brook from park.



View of floodplain area within park.

EXISTING INVENTORY

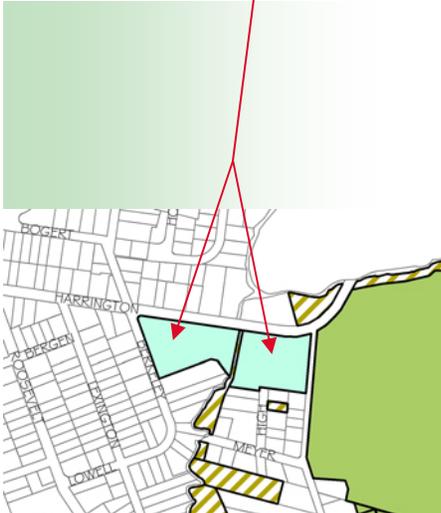
The bird sanctuary / Overbrook Park is included in the county park category herein, although it is not listed by the county as one of their parks. The 2.5 acre parcel is located on Westwood Avenue and lies next to the Pascack Brook. The park is owned by the County but is maintained by the Borough of Westwood. Almost the entire site is within the 100-year floodplain. There is no parking and no sidewalk access to the site. The site is totally undeveloped and vacant except for a couple of garbage receptacles. The park is primarily utilized by nearby residents. Aside from the undeveloped habitat in the river corridor, the sanctuary does not contain many amenities for birds.

RECOMMENDED IMPROVEMENTS

- BENCHES
- BIRD HOUSES
- LANDSCAPE IMPROVEMENTS TO ENHANCE WILDLIFE FOOD SOURCES
- POSSIBLE CANOE LAUNCH LOCATION

Board of Education Property

12. BERKELEY ELEMENTARY SCHOOL



Block-1409 Lot-6,7



Aerial view of school.



Aerial view of soccer/baseball fields.



View of basketball courts.



View of playground; (ages 5-12).



View of swing set play area



View of open grass area.

EXISTING INVENTORY

Berkeley Elementary School is located on Berkeley Avenue, and Harrington Avenue on two parcels owned by the Board of Education. The parcels are separated by the Musquapsink Creek. In total, the site is 5.78 acres. Lot 6, located on the west side of the brook contains the school and a playground. On the east side of the brook, there are two baseball fields and a soccer field. The soccer field overlaps the outfields of the baseball diamonds. A sidewalk connects the school and the fields. There is limited off-street parking. Environmental restrictions limit future expansion.

RECOMMENDED IMPROVEMENTS

- SOCCER / BALL FIELDS NEED RE-SURFACING AND IRRIGATION.

13. KETLER ELEMENTARY SCHOOL



Aerial view of school.



View of tot lot playground.



View of picnic area.



View of basketball court.



View of playground; (ages 5-12).



View of adjacent track and fields.

Block-1006 Lot-1
Block-1102 Lot-26

EXISTING INVENTORY

The Ketter School, located on Third Avenue, occupies two parcels owned by the Board of Education. The parcels are separated by the Musquapsink Creek and total 15.21 acres in area. Circulation between the two parcels is provided by a sidewalk along Third Avenue and by a bridge across the creek. Block 1006, Lot 1 contains the school and playgrounds. Block 1102, Lot 26 contains a track, football field, soccer fields, stands, scoreboard and concession stand. There is a limited amount of off-street parking on Block 1006, Lot 1, and no on-street parking.

RECOMMENDED IMPROVEMENTS

- IRRIGATION IMPROVEMENTS ARE RECOMMENDED TO IMPROVE FIELD USABILITY AND REHABILITATION.

14. BROOKSIDE ELEMENTARY SCHOOL



Aerial view of school.



View of picnic area.



View of play structures (ages 5-12).



Block-501 Lot-11



View of basketball courts.



View of swing set.



View of play structures.

EXISTING INVENTORY

Brookside Elementary School is located on Lake Drive and contains 8.87 acres of property owned by the Board of Education. The property contains basketball courts and a small baseball field. The school also provides a small picnic area, two swing sets, and play equipment suitable for children 5-12. A small parking lot is located in front of the school and on-street parking is provided along Lake Drive.

RECOMMENDED IMPROVEMENTS

- IMPROVE MAINTENANCE OF ALL FIELDS TO EXTEND THE USABILITY.

15. WESTWOOD REGIONAL Jr./Sr. HIGH SCHOOL



Aerial view of school



View of track.



View of electronic scoreboard.



View of tennis courts.



View of pole vault area.



View of backstop and ball fields.

EXISTING INVENTORY

Westwood Regional Jr./Sr. High School is located on Ridgewood Road, in the Township of Washington. The facility contains a track and field facility, baseball fields, tennis courts, and a batting cage. The facility is used jointly by both the borough of Westwood and the Township of Washington. The community has the recreational use of the indoor gymnasium and court areas.

16. JESSIE F. GEORGE ELEMENTARY SCHOOL



Aerial view of school.



View of tot lot playground.



View of backstop and benches.



View of basketball courts.



View of swing set.



View of playground; (ages 5-12).

EXISTING INVENTORY

Jessie F. George Elementary School is located on Palm Street in the Township of Washington. The cooperative soccer program between Westwood and Washington Township cooperatively use the field space available for the soccer program.

17. WASHINGTON ELEMENTARY SCHOOL



Aerial view of school.



View of basketball courts.



View of swing set play area.



View of school and backstop area.



View of play structures.



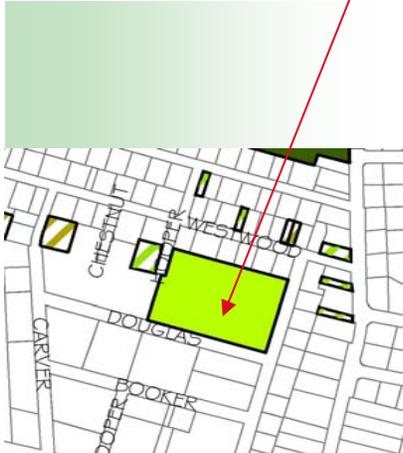
View of playground; (ages 5-12).

EXISTING INVENTORY

Washington Elementary School is located on School Street in the Township of Washington. Located on the school grounds are basketball courts, a playground, swing set, and other play structures. The open fields provide play space for the cooperative soccer program of Westwood and Washington Township.

Other Facilities

18. WESTWOOD SWIM CLUB



Block-2208 Lot-17



View of swim club property.



View of swim club from Tillman Street.



Diving area.



Picnic area.

EXISTING INVENTORY

The Westwood Swim Club is a privately owned club located on Tillman Street. The 3.10 acre property is located in a space between commercial and residential uses. The property contains an Olympic sized pool and a kiddy pool. There is a picnic area, playground, lockers, showers, diving boards, an ice cream stand and vending machines. The club provides various types of equipment and activities including swim school, diving, first aid and CPR classes and lifeguard training. The pool is open from Memorial Day to Labor Day and membership is open to the public of all communities.

APPENDIX

Rate of Population Change—Westwood, New Jersey 1920-2005

Year	Population	Population Change	Percent Change
1920	2,597	-	-
1930	4,861	2,264	87.2
1940	5,388	527	10.8
1950	6,766	1,378	25.6
1960	9,046	2,280	33.7
1970	11,105	2,059	22.8
1980	10,714	(-391)	(-3.5)
1990	10,446	(-268)	(-2.5)
2000	10,999	553	5.3
2005*	10,994	(-5)	(-0.0)
2015**	11,090	96	0.09
2025**	11,630	540	4.9

Source: Bergen County Data Book 2003, 1990 & 2000 Census, NJ Department of Labor.

* NJ Department of Labor estimate.

**NJ Transportation Planning Authority estimate.

Age Characteristics 1990 & 2000—Westwood, New Jersey

Age Group	1990		2000	
	Number	Percent	Number	Percent
Under 5	634	6.1	762	6.9
5-9	544	5.2	644	5.9
10-14	534	5.1	641	5.8
15-19	510	4.9	489	4.4
20-24	714	6.8	455	4.0
25-34	1,869	17.9	1,719	15.6
35-44	1,630	15.6	1,972	17.9
45-54	1,173	11.2	1,528	13.9
55-59	524	5.2	576	5.2
60-64	565	5.4	471	4.3
65-74	899	8.6	808	7.3
75-84	617	5.9	624	6.7
85+	233	2.2	320	2.9
Total	10,446	100	10,999	100
Median Age	39.2	-	38.6	-

Source: U.S. Census, 1990 & 2000.

Soil Analysis—Westwood, New Jersey

Soil Name and Symbol	Dwellings without Basements	Dwellings with Basements	Small Commercial Buildings	Local Roads and Streets	Shallow Excavations	Lawns and Landscaping	Paths and Trailways
AdrAt (0 to 2% slopes) Adrian muck	Very limited: subsidence, flooding, depth to saturated zone, organic matter content, ponding	Very limited: subsidence, flooding, depth to saturated zone, ponding	Very limited: subsidence, flooding, depth to saturated zone, organic matter content, ponding	Very limited: depth to saturated zone, subsidence, frost action, flooding, ponding	Very limited: depth to saturated zone, cutbanks cave, ponding, organic matter content, flooding	Very limited: Flooding, organic matter content, depth to saturated zone, ponding	Very limited: depth to saturated zone, organic matter content, ponding, flooding
BohD (15 to 25% slopes) Boonton moderately well drained gravelly loam	Very limited: slope, depth to saturated zone	Very limited: slope, depth to saturated zone	Very limited: slope, depth to saturated zone	Very limited: slope, frost action, depth to saturated zone	Very limited: slope, depth to saturated zone, cutbanks cave	Very limited: slope, gravel content, depth to saturated zone, large stones content, droughty	Very limited: water erosion, slope
BouB (0 to 8% slopes) Boonton-Urban land complex	Not limited	Not limited	Somewhat limited: slope	Somewhat limited: frost action	Very limited: cutbanks cave	Not limited	Not rated
BouC (8 to 15% slopes) Boonton-Urban land complex	Somewhat limited: slope	Somewhat limited: slope	Very limited: slope	Somewhat limited: slope, frost action	Very limited: cutbanks cave, slope	Somewhat limited: slope	Not rated
BouD (15 to 25% slopes) Boonton-Urban land complex	Very limited: slope	Very limited: slope	Very limited: slope	Very limited: slope, frost action	Very limited: slope, cutbanks cave	Very limited: slope	Not rated
BouE (25 to 45% slopes) Boonton-Urban land complex	Very limited: slope	Very limited: slope	Very limited: slope	Very limited: slope, frost action	Very limited: slope, cutbanks cave	Very limited: slope	Not rated
CarAt: (0 to 2 % slopes) Carlisle muck, frequently flooded	Very limited: subsidence, flooding, depth to saturated zone, organic matter content, ponding	Very limited: subsidence, flooding, depth to saturated zone, organic matter content, ponding	Very limited: subsidence, flooding, depth to saturated zone, organic matter content, ponding	Very limited: depth to saturated zone, subsidence, frost action, flooding, ponding	Very limited: depth to saturated zone, organic matter content, ponding, flooding, cutbanks cave	Not rated	Very limited: depth to saturated zone, organic matter content, ponding, flooding
DuuA: (0 to 3% slopes) Dunellen-Urban land complex	Not limited	Not limited	Not limited	Somewhat limited: frost action	Very limited: cutbanks cave	Not limited	Not rated
DuuB: (3 to 8% slopes) Dunellen-Urban land complex	Not limited	Not limited	Not limited	Somewhat limited: frost action	Very limited: cutbanks cave	Not limited	Not rated
DuuC: (8 to 15% slopes) Dunellen-Urban land complex	Somewhat limited: slope	Somewhat limited: slope	Very limited: slope	Somewhat limited: slope, frost action	Very limited: cutbanks cave, slope	Somewhat limited: slope	Not rated
DuuD: (15 to 25% slopes) Dunellen-Urban land complex	Very limited: slope	Very limited: slope	Very limited: slope	Very limited: slope, frost action	Very limited: slope, cutbanks cave	Very limited: slope	Not rated
FmhAt: (0 to 3% slopes) Fluvaquents, loamy, frequently flooded	Very limited: flooding, depth to saturated zone, ponding	Very limited: flooding, depth to saturated zone, ponding	Very limited: flooding, depth to saturated zone, ponding	Very limited: depth to saturated zone, frost action, flooding, ponding	Very limited: depth to saturated zone, ponding, flooding, cutbanks cave	Very limited: flooding, depth to saturated zone, ponding	Very limited: ponding, flooding, depth to saturated zone
OtsE: (25 to 35% slopes) Otisville gravelly loamy sand	Very limited: slope	Very limited: slope	Very limited: slope	Very limited: slope	Very limited: slope, cutbanks cave	Very limited: slope, droughty, gravel content, large stones content	Very limited: slopes, too sandy
RkrA: (0 to 3% slopes) Riverhead sandy loam	Not limited	Not limited	Not limited	Somewhat limited: frost action	Very limited: cutbanks cave	Not limited	Not limited
RkrB: (3 to 8% slopes) Riverhead sandy loam	Not limited	Somewhat limited: depth to saturated zone	Somewhat limited: slope	Somewhat limited: frost action	Very limited: cutbanks cave, depth to saturated zone	Not limited	Not limited
RkrC: (8 to 15% slopes) Riverhead sandy loam	Somewhat limited: slope	Somewhat limited: slope	Very limited: slope	Somewhat limited: slope, frost action	Very limited: cutbanks cave, slope	Somewhat limited: slope	Not limited
UdkrtB: (0 to 8% slopes) Udorthents, loamy, frequently flooded	Not limited	Not limited	Not limited	Very limited: frost action, low strength	Somewhat limited: too clayey, cutbanks cave	Not limited	Not limited
UdrB: (0 to 8% slopes) Udorthents, refuse substratum	Somewhat limited: depth to saturated zone	Very limited: depth to saturated zone	Somewhat limited: depth to saturated zone	Very limited: low strength, depth to saturated zone	Very limited: depth to saturated zone, cutbanks cave	Somewhat limited: depth to saturated zone.	Not limited
UdwB: (0 to 8% slopes) Udorthents, wet substratum	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated
UdwuB: Udorthents, wet substratum-Urban land complex	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated
UR: Urban land	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated
WATER: Water	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated	Not rated

See Appendix Maps PDF for additional mapping