

Comprehensive Recreation, Parks and Open Space Plan

**Millstone Township
Monmouth County, NJ**

July, 2007



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I. INTRODUCTION

Millstone Township has long been committed to preserving its open space, farms and natural features. That foresight and dedication to the ideal in large part is responsible for maintaining the rural character that makes it so attractive. Within Millstone Township, there are approximately 3,795 acres of land currently owned by the State, County or Township that are permanently dedicated and preserved as open space, parks or outdoor recreation facilities. The State owns 1,944¹ acres of the open space listed above; the County owns another 1,256² acres while the Township has preserved the remaining 595³ acres. The County is proposing to acquire 1,200 additional acres around Perrineville Lake Park and an additional 230 acres at Charleston Springs Golf Course².

The primary responsibility for planning and maintaining the open space system is shared by public agencies at various levels of government, each with a different role. The role of the state is to preserve and manage natural, cultural, and historic resources of statewide significance. Typically State facilities are large, resource-dependent recreational areas that attract visitors from across a multi-state region. The role of County government is to preserve and manage large tracts of land which have countywide significance and support resource-based recreation. County open space typically includes large park spaces that focus primarily on outdoor recreation activities and nature appreciation. It is left to the Municipal government, as the entity most closely attuned to its residents, to provide for their day-to-day community based and neighborhood recreation needs.

A well conceived open space plan should provide for a variety of uses and activities that are tailored to the needs of its residents. During preparation of this plan, it became clear that Municipal lands set aside as open space are skewed toward passive recreation and preservation. The existing active recreation facilities owned by the Township can no longer adequately service its growing youth population and expanding active recreation programs. This fact has been acknowledged by officials of the Township's athletic organizations and elaborated upon in the Open Space, Recreation, Conservation and Farmland Preservation Element of its 2002 Master Plan.

The Millstone Parks and Recreation Master Plan will guide the Township in achieving a balanced variety of recreational opportunities suited to its current and future needs. The Plan has three principal purposes:

The Plan assesses the Township's existing open space and recreation facilities in meeting its defined role.

The Plan establishes direction and priorities for enhancing the Township's open space and recreation facilities in order to meet the obligations of its defined role.

¹ Unknown document (possibly Green Acres info)

² Monmouth County Open Space Plan (8-21-06 Adopted)

³ Millstone Township Recreation and Open Space inventory

The Plan communicates to the residents of Millstone Township the vision for enhancement and expansion of recreational opportunities that can be made available to them.

The Millstone Parks and Recreation Master Plan was formulated in consultation with various Township committees. The participating groups with direct input to the Plan included the Millstone Recreation Commission, the Open Space and Farmland Preservation Council and the Recreation Study Ad Hoc Committee. As a result of that consultation, the following objectives were established:

Evaluate existing improved and unimproved open space and recreational facilities within Millstone Township.

Establish current and future recreational needs based upon interviews with various township committees and comparison of existing facilities with national standards.

Determine the feasibility of enhancing and/or expanding existing recreation facilities.

Determine the number and types of athletic fields and facilities necessary to meet current and future recreational needs of the community.

Develop specific land acquisition requirements and strategies.

Develop a five year implementation strategy and ten year capital improvement plan to address the recreational needs of Township residents.

We wish to thank everyone who participated for their support and input during the preparation of this Plan.

MILLSTONE RECREATION COMMISSION

Robert Faber, Chairman
Jim Bell, Vice Chairman
Al Morrone, Treasurer
Nicole Vladimirov, Secretary
Gary Dorfman, Member at large
Mike Kuczinski, Member at large
Fiore Masci, Member at large
Mike Turner, Member at large
Bill Hanson, Alternate #1
Steve Henig, Alternate #2

RECREATION STUDY AD HOC COMMITTEE

Jim Bell III, Recreation Commission Vice Chairman
Manny Blanco
Pat Butch, OSFP Chairperson
Robert Faber, Recreation Commission Chairman
Nancy Grbelja, Mayor
Robert Kinsey, Deputy Mayor
James Pickering, Township Administrator
Matthew Shafai, Township Engineer
Jeff Torno, Environmental Commission

OPEN SPACE AND FARMLAND PRESERVATION COUNCIL

Pat Butch, Chairperson
Cory Wingerter, Vice Chair
Elias Ablheria
Anthony Alves
Manny Blanco
Charles DeNardo
Diane Morelli
Rich Mullarkey
Anthony Romano
Kristin Schloss
Merrill Siedman

SPORTS CONTACTS

Joe Paglia, Baseball
Bill Hanson, Men's Softball
Bob Brown, Basketball
Fiore Masci, Football
Matt Deiner, Boy's Lacrosse
Lisa Belotti, Girl's Lacrosse
Steve Henig, Recreational Soccer
Brian Walkly, Travel Soccer (MUTS)
Al Morrone, Tennis
Mike Turner, Wrestling

SCHOOL OFFICIALS

Dr. William Setaro

TOWNSHIP OFFICIALS

Maria Dellasala, Township Clerk
Nicole Vladamirov, Recreation Secretary

YMCA CAMP TOPANEMUS

William C. Fox

BLACK BEAR LAKE

Mark Magid

FROGBRIDGE DAY CAMP

Frank Pugliese

MONMOUTH COUNTY PARKS SYSTEM

Faith Hahn, Supervising Planner

II. COMMUNITY BACKGROUND

Community Setting

Millstone Township is located in the southwestern section of Monmouth County New Jersey. The Township comprises an area of 23,700 acres or 37.2 square miles of which 36.8 square miles is land and 0.4 square miles is water. Despite tremendous growth pressure resulting from the suburban expansion of both Philadelphia and New York metropolitan area, the Township has maintained a rural character. The Township borders Upper Freehold Township, Freehold Township, Jackson Township, and East Windsor Township, in Monmouth County, Washington Township, Mercer County, and Monroe Township, Middlesex County. The Township was formed by an Act of the New Jersey Legislature on February 28, 1844 from portions of Freehold Township, Upper Freehold Township and Monroe Township. The portions of the Township taken from Monroe Township were relinquished in 1845. Portions of Millstone Township were taken, on May 29, 1937 to form the borough of Jersey Homesteads, now know as Roosevelt.

The Township's first residents were the Lenape Indians. Later the Europeans came to clear land for homesteads, which in turn became the farmlands of today. Millstone was named after the Millstone River that originates in the township. The river was first named by the Lenape Indians as the Mattawong and later renamed by early settlers as Millstone River. Seven waterways originate in this area: Millstone River, Rocky Brook, Ivanhoe Brook, Manalapan Brook, Assunpink Creek, Toms River and Doctors Creek.

The Township was originally comprised of several historic villages. They were known as Cars Tavern, Holmeson, Smithburg, Sweetman, Bergen Mills, Bairdsville, Stone Tavern, Clarksburg, and Perrineville. Clarksburg and Perrineville remain today. Clarksburg was reported to be settled in the pre-Revolutionary era by an English tanner named Clark. John Perrine purchased a large tract of land north of Clarksburg, which became known as Perrineville.

The Township takes an active role in saving its heritage. There are two building that are listed on the National Register of historic places: the Clarksburg Episcopal Methodist Church that was built in 1845 and now owned by the Township and the Clarksburg four-room schoolhouse that was built in 1923.

The Township Boards and Commissions take an active role in keeping safe the principals of what makes Millstone unique among its neighbors. The Township works to keep an equal balance between its farmland and new development. The Township strives to save the old along with the new and to keep the countryside green and its waters free from pollution. The Township is an environmentally concerned community, with high standards, creating a desirable place to live.

The Township's environmental sensitivity is due to its location on a major drainage divide that separates the Raritan River Drainage Basin, the Delaware River Drainage Basin and the Atlantic Coastal Basin. The presence of freshwater wetlands, prime agricultural soils, steep sloped hills and exceptional water quality contribute to the environmental sensitivity. Balancing

these natural and indigenous qualities while providing for planned growth creates a challenge to the community.

Political Composition

The Millstone Township Committee is made up of five elected officials. Township residents elect either one or two new committee-persons each year on the first Tuesday in November, to serve three-year terms in office. At its first meeting after each election, the committee elects a Mayor and Deputy Mayor, each of whom serve a term of one year or until the election and qualification of a successor.

The Township Committee is Millstone's legislative body. It sets policies, approves budgets, determines municipal tax rates, and passes resolutions and ordinances to govern the town. The Committee also appoints citizen volunteers to advisory boards, the Zoning Board of Adjustment, committees, and commissions. The Committee may investigate the conduct of any department, officer or agency of the municipal government. They have full power of subpoena permitted by Statute.

The current Millstone Township Committee consists of Mayor Nancy A. Grbelja (term ends December 31, 2009), Deputy Mayor Bob Kinsey (2007), Elias Abilheira (2009), Ray Dulfanian (2008) and Steven Sico (2008).

Recreation Philosophy

The Township states its Recreation Philosophy as follows:

It is the desire of this commission to provide recreational opportunities for the whole community. We feel strongly that all recreational activities sponsored through the Recreation Commission must provide instruction and opportunity equally to all participants. We recognize the competitive aspect of all sports programs, but believe that competition must be secondary to the recreational needs of the participants. To this end, all sports programs sponsored by the Recreation Commission must provide equal opportunities for every child in the area of instruction, playing time, and skill development.

The Recreation Commission meetings for 2007 are held the first Monday of every month unless otherwise noted. The public session begins at 8:00 PM. at the Millstone Township Meeting Room, 215 Millstone Road Perrineville, NJ 08535. Current Commissioners are:

Ron Faber-Chairman
Al Morrone-Treasurer
Gary Dorfman-Member at Large
Bill Hanson-Alternate #1
Mike Turner-Member at Large

Jim Bell-Vice Chairman
Nicole Vladimirov-Secretary
Steve Henig-Alternate #2
Mike Kuczinski-Member at Large
Fiore Masci-Member at Large

III. DEMOGRAPHICS

Introduction

When Millstone Township was formed in 1844 it consisted of approximately 1,500 residents. According to the 2000 Census of Population, the Township has 8,970 residents. There are a total of 2,708 households and 2,426 families in the Township in 2000. The US Census reports that there were 2,797 housing units of which 2,708 were occupied. Of these, 2,611 were owner occupied and only 97 were renter occupied. Racial composition in the Township is 91.83% white non-Hispanic, 3.5% Hispanic or Latino, 3% Black, and 3.4% Asian. American Indian and Alaska Native, two or more races and others comprise the remaining residents.

The US Census reports that the median income for a household in the Township in 2000 was \$94,561, and the median income for a family was \$96,116. Males had a median income of \$74,333 versus \$50,036 for females. The per capita income for the township was \$37,285. About 3.8% of families and 4.9% of the population were below the poverty line, including 6.0% of those under age 18 and 4.8% of those age 65 or over.

CHARACTERISTICS OF POPULATION Millstone Township, NJ

	1990	2000	% Increase
Under 5 years	405	758	87%
5 to 9 years	398	980	146%
10 to 14 years	385	837	117%
15 to 19 years	336	525	76%
20 to 24 years	264	249	-6%
25 to 34 years	633	766	21%
35 to 44 years	1,107	2,076	88%
45 to 54 years	740	1,506	104%
55 to 59 years	179	487	172%
60 to 64 years	160	248	55%
65 to 74 years	322	302	-6%
75 to 84 years	111	176	59%
85 years and older	29	60	107%
Total Pop:	5,069	8,879	75%
School Age	1,119	2,342	109%
School Age %	22%	26%	(x)
# of housing units	1,574	2,710	72%
	71%	86%	

Note: In 2000 only 54.5% of households have children

Source: 1990 and 2000 US Census

The Characteristics of Population figure shows the population growth from 1990 to 2000 for people of all ages. The most significant changes are seen in the ages of 5 to 14, 45 to 59, and 85 years and older, all with over 100% increase. The 20 to 24 age group had a significant 40% decline. The figure shows the increase in school age persons, the percent of the population made up by school age persons, as well as the number of housing units in the Township. According to the data from the US Census Bureau, all three of these numbers are on the rise. The US Census Bureau also reports that the median age in the Township for males is 37.1 and for females it is 36.9. Average household size is 3.28 and average family size is 3.46.

Existing and Future School Age Children By Grade

**EXISTING AND FUTURE SCHOOL AGE CHILDREN BY GRADE
Millstone Township School District, Millstone, NJ**

Grade	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
K	141	190	231	183	176	179	179	179	179	179	179
1	190	159	214	260	206	198	202	202	202	202	202
2	170	197	165	222	270	214	206	210	210	210	210
3	171	179	207	174	234	284	225	217	221	221	221
4	195	175	183	211	178	239	290	230	222	226	226
5	199	202	181	190	219	184	248	300	238	230	234
6	172	201	204	182	192	221	186	250	302	240	232
7	172	178	208	212	189	199	229	193	259	313	249
8	140	176	182	212	216	193	203	234	197	264	320
SP ED	28	30	32	33	34	35	36	36	37	38	37
Subtotal	1,578	1,687	1,807	1,879	1,914	1,946	2,004	2,051	2,067	2,123	2,110
9	133	121	152	157	183	186	166	175	202	170	227
10	129	135	123	154	159	186	189	169	178	205	173
11	74	123	129	118	147	152	178	181	162	170	196
12	90	77	128	134	123	153	158	185	188	168	177
SP ED	1	1	1	1	1	2	2	2	2	2	2
Subtotal	427	457	533	564	613	679	693	712	732	715	775
K-12 Total	2,005	2,144	2,340	2,443	2,527	2,625	2,697	2,763	2,799	2,838	2,885
% Increase		7%	9%	4%	3%	4%	3%	2%	1%	1%	2%

Source: Dr. William Setaro, Millstone Township Superintendent of Schools

The Existing and Future School Age Children By Grade figure represents projections for the number of children in the Millstone Township School District up to 2011. This information was provided by Dr. William Setaro, Superintendent of Schools. Looking at the total percentage increase, there was a 7% and 9% increase from 2001 to 2002 and 2002 to 2003. Projecting into the future, there is projected to be minor increases from the growth shown between 2007 and 2011.

Housing Units Authorized by Building Permits 1985-2005

The Housing Units Authorized by Building Permits 1985-2005 chart shows the number of construction and demolition permits issued from 1985 to 2005 as cited by the Millstone Master Plan 2002 and the NJ DCA Division of Codes and Standards. There was a period of significant growth in Millstone Township from 1988 to 1994. Up until 1992, Millstone Township incurred many demolitions as well. There was a drop in demolitions after 1992 until 1996 when they were on the rise again. After 2000, growth in Millstone Township slowed considerably with low numbers of construction permits and high numbers of demolition permits.

HOUSING UNITS AUTHORIZED BY BUILDING PERMITS 1985-2005 Millstone Township, New Jersey

Year	Construction Permits	Demolition Permits	Net Units
1985	87	1	86
1986	109	4	105
1987	96	2	94
1988	106	4	102
1989	110	7	103
1990	103	2	101
1991	151	3	148
1992	131	4	127
1993	119	0	119
1994	114	0	114
1995	28	0	28
1996	123	3	120
1997	126	3	123
1998	68	3	65
1999	128	8	120
2000	81	7	74
2001	70	4	66
2002	76	3	73
2003	96	5	91
2004	64	6	58
2005	44	5	39
Totals	2030	74	1956

*Source: 1996 to 2005 - NJ DCA Division of Codes and Standards
1985 to 1995 - Millstone Master Plan 2002*

Population Projections

POPULATION AND HOUSEHOLD PROJECTIONS Millstone Township

Year	Population	Households	Net Pop Increase	Net HH Increase	% Pop Increase	% HH Increase
2000	8,970	2,710				
2005	9,810	2,960	840	250	9%	9%
2010	10,660	3,220	850	260	9%	9%
2015	11,500	3,470	840	250	8%	8%
2020	12,320	3,720	820	250	7%	7%
2025	13,150	3,970	830	250	7%	7%
2030	13,980	4,220	830	250	6%	6%

Source: New Jersey Transportation Planning Authority

The Population and Household Projections figure shows a summary of projected population and household increases to the year 2030. The numbers appear relatively steady with a range from 6% to 9% increase in both population and households.

The New Jersey Council on Affordable Housing (COAH) projects job and household growth to 2015 based on projections by the respective Metropolitan Planning Organization (MPO). For Millstone Township, the MPO is the New Jersey Transportation Planning Authority. COAH projects that by 2015 Millstone will have an additional 510 households from the 2,960 households in 2005. Average household size for 2000 is 3.28 so the 2015 population is estimated at 11,500 in accordance with the Population and Household Projections figure above. COAH does not carry their projections beyond 2015.

During the course of this plan, Millstone Township provided projections of their “Build-out” condition. Millstone projected that based on remaining parcel and their size and zoning, the Township could accommodate an additional 1,590 units. The additional 1,590 units would yield an additional population of 5,215 persons beyond the 2005 population of 9,810 for a Build-out population of 15,025 residents. Given the current growth trend, the “Build-out” of 1,590 units or Build-out population of 15,025 residents is not expected to be reached until sometime after 2030.

IV. PARK AND RECREATION OPEN SPACE INVENTORY

A. Inventory of Municipally Owned Active Recreation Facilities

Millstone-Roosevelt Little League Complex (ROSI Symbol 2)

The Millstone-Roosevelt Little League Complex is located at 771 Perrineville Road in Millstone Township. It is identified on municipal tax maps as Block 12.01, Lot 7 and consists of 26.88 acres.

The complex is owned by the Township of Millstone and leased exclusively to the Millstone-Roosevelt Little League (MRLLE). The MRLLE plays all its home games at the facility. There are five fields located on the complex. They include:

One senior baseball field
Two little league fields
One softball field
One Tee Ball field

The senior baseball field and two little league fields have lights and are each entirely fenced. The softball field is skinned and has a movable pitcher's mound. The mound is moved to accommodate different age groups. It is used exclusively for softball. It has no fencing or lights. The Tee Ball field has 50' base paths. It has no fence or lights.

In addition to the playing fields, the complex has ancillary facilities that include:

One concession stand
One bathroom each for men and women
One full kitchen
One indoor eating area
One Storage area

The complex has a paved access road and two separate stone parking areas. It has 3-phase electric service and an irrigation system. The MRLLE maintains the facility and pays for improvements.

The complex hosts three seasons during the course of the year. The spring season has the most participants. It lasts from April to mid-June. After the spring season ends, the All-Star season begins and lasts until August. The fall season starts in mid-September and lasts until the first week of November. In addition to the three seasons mentioned above, six tournament games are held during the year.

There is a lighting curfew of 10:00 pm imposed on the complex, which is strictly enforced. As a consequence, the last scheduled game starts no later than 7:45 pm.

Suggested Improvements

The complex is well maintained and in good condition. However, there is a lack of playing fields available for practice during the spring season. The shortage cannot be addressed without expanding the size of the facility or extending the use of lighting to increase the use time of the existing fields. The MRLC complex is surrounded by residential development which precludes expansion. The use time of the fields could be extended with a repeal of the lighting curfew. Extending the use time would cause practices to extend late into the evening which would be problematic for the participants because of colder temperatures and bed times. The additional use would also cause deterioration in the quality of the fields.

Wagner Farm Park (ROSI Symbol 14)

The Wagner Farm Park is located at 4 Baird Road in Millstone Township. It is identified on municipal tax maps as Block 24.03, Lot 15.15 and consists of 23.31 acres. The complex is owned by the Township of Millstone and is used primarily by the football and lacrosse teams. The outdoor facilities include:

- One football/lacrosse field*
- One lacrosse Field*
- One multi-purpose practice area*

In addition to the playing fields it has ancillary facilities that include a community building. The building contains bathrooms, a meeting room, a kitchen, men's and women's locker rooms and a multi-purpose room that includes a half-basketball court. The multi-purpose room is utilized as a practice facility by older members of the wrestling program. There are also outdoor play structures that provide unstructured play opportunities for children.

The park has two paved parking areas that can accommodate approximately 182 cars. The fields are in generally good condition; however intense use by the football program in the fall and lacrosse program in the spring does not permit sufficient time for adequate recovery of the turf. Consequently, the quality of the turf is deteriorating. The turf on the football/lacrosse field is in fair condition. Turf on the lacrosse field is in fair to poor condition. There is conduit to supply electric for lighting at the park; however the Township has not yet installed lighting.

Suggested Improvements

Wagner Farm is well maintained and the facilities are in good condition. The turf on the fields needs to be aerated and top dressed to improve its quality. Ideally there would be more fields at the facility to allow for rotation and recovery of the turf. Unfortunately, the area available within the current property is insufficient for construction of additional fields. There is a parcel of privately owned, undeveloped land situated to the north of Wagner Farm Park that is identified as Block 24.03, Lots 12 & 13. It is known as the Hantz property and consists of 16.48 acres. The Hantz property is also adjacent to undeveloped lands to its north identified as Lyle Farm open Space, which is owned by Millstone Township. The portion of the Lyle Farm open space adjacent to the Hantz property is currently wooded but could be developed for recreational use. The Hantz Farm is currently utilized as a poultry farm but could be developed with supplemental fields and infrastructure lacking at Wagner Farm Park. It is recommended that the Township investigate purchase of the Hantz property in order to consolidate it, the Lyle Farm

open space and Wagner Farm Park into a single parcel capable of accommodating additional facilities.

There is another parcel owned by the Township situated on the southerly side of Baird Road. It is identified as parcel S on the Park and Recreation Open Space Inventory. It appears that portions of the property could be developed as fields or additional parking. It is separated from Wagner Farm Park by Baird Road and there are existing power lines and topographical variation that compromise its development potential to an extent. It is recommended that the Township investigate development of it if acquisition of the Hantz property is not feasible.

Brandywine Fields (ROSI Symbols 11, 12 & 15)

The Brandywine complex is located at 156 Stillhouse Road. It consists of three separate parcels that are identified on municipal tax maps as Block 62.02, Lots 1 and 48, and Block 62.03, Lot 1. The total acreage of the complex is 33.68 acres. The complex is owned by the Township of Millstone, which also performs maintenance on its facilities.

During the fall, the facility is used by both recreational and travel soccer teams for games and practice. The largest parcel in the complex includes 23.18 acres and contains seven soccer fields. Only two of the fields are regulation size with permanent goals, however. The remaining five fields have movable goals and are used primarily for practice. Millstone Township is developing a field hockey program that is scheduled to commence in the fall of 2007. At this time it is anticipated that practice and games will be held at Brandywine fields on one of the smaller parcels comprising the facility.

During the spring, the facility is used by the recreation soccer program as well as the boys and girls lacrosse programs for practice.

Parking for the facility is accommodated on the parcel located north of the fields described above, across Grove School Drive. The parcel includes 7.02 acres. Individual parking areas are separated with post and rail fencing. A bituminous roadway provides access to the parking areas from Stillhouse Road. The bituminous drive terminates inside the property. The parking area consists of grass surfacing. There is an additional, non-regulation size soccer fields adjacent to the parking area that are used for practice.

A bathroom has been constructed on the larger parcel. As of this writing it is not yet functional however. A bituminous handicap parking area has been constructed adjacent to the main parking areas. A depressed curb and bituminous path access the bathroom and main fields.

The third parcel is located south of the two parcels described above, across Lucas Lane. It includes 3.48 acres and consists of an open, grassed area that is used for practice.

Restrictions imposed on the complex include a prohibition against lighting and starting games before 1:30 pm on Sundays.

Suggested Improvements

It is recommended that construction of a concession stand be provided in the vicinity of the bathroom. There is a grotto of existing trees in the same area that could be enhanced with additional landscape material to create a picnic area with tables and seating.

Installation of an irrigation system was requested. The fields are subject to intense use. The only down time is in the summer months when lack of moisture inhibits recovery of the turf.

Improvements to the parking area should be considered. It was noted by soccer officials that after heavy rain events the grass parking area can become muddy for periods until it dries out. Compaction from cars also makes it difficult to retain the turf. If the parking area is paved, increased stormwater runoff would have to be accommodated, most likely with the installation of a stormwater collection system and construction of a detention basin. Another option would be to install stone surfacing that would permit some infiltration of stormwater.

The two main fields used for games show considerable wear in the goal areas. It is recommended that the fields be relined periodically to allow for turf recovery and to access suitable turf. In addition, all playing areas should be aerated and topdressed at least once a year to help alleviate irregularities and stressed areas of the fields. It is also recommended that the township begin a program of revegetating the perimeter and selected interior areas of the facility to create a more park like ambiance.

Abate Park (ROSI Symbol R)

Abate Park is located on Charleston Spring Road. It is identified as Block 45, Lot 5.33 and consists of 25.21 acres. The park is owned and maintained by the Township of Millstone. It is located adjacent to residential development.

As of the date of this study, the park is only partially complete. There are two existing soccer fields at the park. Existing and proposed improvements intended for Abate Park are detailed on a site plan prepared by Leon S. Avakian, Inc., dated 4/25/06. Based upon information contained on the plan, both fields are the minimum size allowed for regulation play (300'x165'). They are oriented in an east/west direction which is counter to the preferred north/south alignment. The grading is somewhat irregular, ranging from 2% in the westerly portion to 1.3% in the easterly part of the fields. The northerly portion of Abate Park is currently undeveloped

Recreation improvements that are ultimately to be constructed on it include:

Three basketball courts
Three tennis courts
One handball court
One Multi-purpose field
Two soccer fields
One bituminous walking trail

Work to construct some improvements at Abate Park began on August 28, 2006 and is anticipated to be complete in the spring of 2007. Park improvements in the current construction phase include:

Three basketball courts
Three Tennis Courts
One handball court
One bituminous walking trail

Ancillary improvements constructed to date include a bituminous drive and a 68 car gravel parking lot.

Suggested Improvements

The area in which the two soccer fields are situated is too small to orient them correctly. Ideally they should be properly oriented and reconstructed to provide a consistent grade that does not exceed 1.5%. At a minimum, it is suggested that they be aerated and topdressed to improve turf quality.

The Township should investigate the possibility of providing additional ball fields in the northerly, undeveloped portion of Abate Park. It appears that several softball fields or a regulation soccer field could easily be accommodated in the area available.

It is recommended that additional landscape material be planted on and adjacent to the existing berm that separates the park from the surrounding residential development.

Rocky Brook Park (ROSI Symbol 8)

Rocky Brook Park is located at 901 Perrineville Road. It is identified on municipal tax maps as Block 29, Lot 13. It is owned and maintained by the Township of Millstone. It consists of 5.18 acres.

The park is located adjacent to the Township public works facility. The public works facility and the park share a common paved parking area. Improved recreation facilities contained within the park include:

Four tennis courts

One basketball court

One children's play area

There is a bituminous walkway that provides access throughout the interior of the park, including the children's play area. Portions of the pathway are cracked and buckling to the point of becoming a tripping hazard and impeding handicap access. The equipment in the children's play area is contained within timber edging. There is no opening in the edging to permit handicap access to it from the bituminous path.

Storm runoff from the tennis courts is conveyed along the bituminous path leading from the courts to the play area. The runoff is eroding the soil in the area, leaving it unvegetated.

Suggested Improvements

Deteriorated portions of the bituminous walkway should be reconstructed. An opening in the edging surrounding the children's play area should be constructed in order to provide handicap accessibility. It is recommended that the Township investigate remediation of the stormwater runoff currently eroding the area around the play area.

It is recommended that the Township install lighting around the tennis courts to allow for extended play.

B. Inventory of Public School Facilities

Millstone Township Elementary/Middle School Complex

The Millstone Township Elementary/Middle School complex is located on Schoolhouse Road. The property is composed of two lots identified on municipal tax maps as Block 49, Lots 1 and 2.01. It is comprised of 40.54 acres.

Outdoor recreation facilities at the complex include:

One baseball field

One softball field

One tee ball field

One multi-purpose field (between the baseball and softball fields)

Indoor recreation facilities at the complex include:

One gymnasium (Elementary School)

One gymnasium (Middle School)

The existing gymnasiums are used extensively by various recreation groups and organizations. Normal use times during the fall and winter months are Monday through Friday from 6:00-11:00 pm. On Saturday the normal hours are 8:00 am to 3:00 pm. High demand for the facilities during the fall months has forced an expansion of the use times. The facilities are often used from 6:30 am to 9:30 pm on Saturday and 7:00 am to 9:30 pm on Sunday. Weekend hours beyond the normal 8:00 am to 3:00 pm on Saturday are billed to the township to pay overtime to custodial staff.

Township recreation groups that utilize the school's indoor facilities include:

Travel basketball

Wrestling

Recreation volleyball

There is also demand for use of the gymnasiums from outdoor recreational teams during winter months or inclement weather. Teams that utilize the facilities include:

Travel soccer

Recreation women's soccer

Lacrosse

Baseball

In addition to demand from Township recreation groups for use of the school's indoor facilities, school associated functions and organizations also utilize them. The Parent Teacher Organization (PTO), school plays and concerts, speakers, Teen Night, Boy and Girl Scouts, community education, etc., all compete for use. School functions and activities take priority over other activities for scheduling. Demand for utilization of the indoor school facilities far exceeds supply.

The primary user of outdoor recreation fields at the complex is the MRLL during their spring season. They reserve the fields for practice during weekdays after school teams finish

using them for games or practice. Weekday hours are generally 5:30 pm to dusk on weekdays and all day Saturday and Sunday.

Millstone Township Middle School

The new Millstone Middle School is under construction as of this writing. The scheduled date for completion of the school is September, 2007. The property fronts on both Baird Road and Roberts Road. It is identified on municipal tax maps as Block 25, Los 1.08 and 1.09. It is comprised of 73.15 acres.

Outdoor recreation facilities proposed for the new school include:

- One soccer field*
- One field hockey field*
- One lacrosse field*
- One baseball field (overlap with soccer field)*
- One soccer field (overlap with field hockey field)*

Indoor recreation facilities proposed for the new school include:

- Two gymnasiums*

As indicated above, the new school is scheduled for completion in September of 2007. The fields however are currently involved in some controversy with the developer who is supposed to construct them. Consequently, completion of the fields is not anticipated until September of 2008.

Once construction of the school is complete the two new gymnasiums will be made available to various Township recreation groups and should relieve some of the excess demand.

C. Inventory of County Facilities

Monmouth County Facilities

The Monmouth County Park System currently operates a Regional Park in Millstone Township known as Perrineville Lake Park. It is located on Perrineville Road and Sweetmans Lane. An additional 131 acres of land was recently purchased that extends the park into Roosevelt Township. With the added land the park currently consists of approximately 491 acres. It is the County's goal to expand the park to eventually include 1,200 acres.

The Monmouth County Open Space Plan indicates that a regional park should combine the functions of recreation and conservation areas, providing a mix of recreational opportunities while preserving a major portion of the park in a natural, undeveloped state. During an interview with Faith Hahn, the Supervising Planner for the Monmouth County Park System, she indicated that Perrineville Lake Park is currently in litigation with the former owner over its taking of the property by eminent domain. As a consequence, County staff has not had access to the core of the property, where it is anticipated that active recreational facilities would be constructed, since it took over possession of the property.

During further conversations with Ms. Hahn, she indicated that it is the County's policy to pursue a program of land acquisition rather than improve parcels with active recreation facilities. She indicated that the County is short of funds to meet its acquisition goals and she does not foresee funding for facility improvements or their operation becoming available in the near future.

There are four recreation areas in the Monmouth County Park System that offer athletic fields for use by county organizations and municipalities. None of the parks are located in Millstone Township. The fields are for Games only. No pickup games or practice sessions are permitted. Reservation of the fields is on a first come, first serve basis and are made on a year to year basis. The procedure for reserving fields is as follows:

1. The team requesting a field must complete and submit an Athletic Facility Request. The request must be completed for each season regardless of whether changes to the organization/club/league have occurred or not.
2. When requesting fields, a current certificate of liability insurance must accompany the request. The County of Monmouth must be named as additional insured.
3. Field requests must be made at least 15 days in advance of the desired date.

Three of the four County parks are located more than 20 miles from Millstone. They include:

1. Wolf Hill Recreation Area is located in Oceanport, approximately 27 miles from the Millstone municipal building. It features two (2) softball fields.
2. Thompson Park is located in Middletown, approximately 23 miles from the Millstone municipal building. It features Three (3) full size soccer fields and one (1) small soccer field, one (1) rugby field and one (1) boy's lacrosse field.
3. Dorbrook Recreation Area is located in Colts Neck, approximately 20 miles from the Millstone municipal building. It features one (1) field hockey field, two (2) soccer fields, one (1) flag football field and one (1) softball field.

The fourth field is Turkey Swamp Park. It is located in Freehold, approximately 11 miles from Millstone. It has two (2) soccer fields.

Bob Ward, the County supervisor for sports and fitness indicated that the primary user of the fields are high school and travel teams with no other access to game fields. He indicated that the county facilities are not for recreational use or practice.

D. Inventory of Quasi-Public and Private Facilities

There are three quasi-public and private facilities within Millstone Township that provide use of outdoor, and to a limited extent, indoor recreation facilities to the public. Each has its own set of conditions and required fees. The director of each facility was contacted to determine if they could provide access to the facilities identified in the Needs Assessment. Each was asked specifically for access to baseball facilities during the spring season and soccer facilities during the fall season. Individual responses to the inquiries are provided below.

Black Bear Lake

Mr. Mark Magid is the owner of Black Bear Lake. The facility has a baseball/softball field and a soccer field. He indicated during a telephone conversation that he utilizes the baseball field during his summer camp from June to August. In the spring they perform seeding and maintenance on the field in preparation for camp. Consequently, it is not available for use. He indicated that the soccer field is not regulation size or quality and is used for placing tents for special events.

Mr. Magid leases a softball field from the Clarksburg Inn, which is located adjacent to Black Bear Lake. He said that in the past he has allowed the Millstone-Roosevelt Little League to utilize the field. He indicated however, that frequently siblings of the players were left unattended during practice sessions and wandered onto the Black Bear Camp. This has caused liability concerns for Mr. Magid as there are many attractive nuisances at the facility. Nevertheless, he indicated that he would consider allowing the Clarksburg Inn field to be available to the Township if certain conditions were met. In order for the Township to use the field he said that it would have to commit to a specific schedule with defined hours and limit access to players and coaches.

Frogbridge Day Camp

Mr. Frank Pugliese is the owner of Frogbridge Day Camp. He indicated during a telephone conversation that he operates a baseball academy in the spring and a soccer academy in the fall. Consequently, he cannot accommodate the Township's needs in the foreseeable future.

YMCA Camp Topanemus

Camp Topanemus is operated by the YMCA of western Monmouth County. The facility is located at 380 Monmouth Road in Millstone Township. William C. Fox is the Branch Executive Director. Mr. Fox indicated that Camp Topanemus has a regulation grass soccer field, two multi-purpose fields, a combination baseball/softball field and a batting cage. He further indicated that the YMCA would be interested in partnering with Millstone Township and would like to engage directly with the Township in order to reach some form of agreement.

E. Inventory of all Millstone Recreation and Open Space Properties

Following is an inventory of all of Millstone Township's Park and Recreation lands according to the Green Acres Recreation Open Space Inventory (ROSI). The exceptions to this Inventory and the ROSI are the following:

- | | |
|--|---|
| Top Step Farm | Top Step Farm (ROSI Map Key Symbol 9) is shown on the ROSI, however, the 128.8 acres shown on the inventory are privately owned and should not be included in the Township's overall open space acreage. There is an easement however, that provides public access to an existing lake on the property. |
| Rocky Brook Watershed Property | This property is identified on the ROSI as Map Key Symbol I. It is shown to be a 0.75 acre property. The Township has indicated it is owned by Perrineville Jewish Center and should therefore be removed from the ROSI. |
| Unnamed Park Yellow Meeting House Road | This 14.88 acre property is identified on the ROSI as Map Key Symbol T. It was identified as owned by the Township and the State of New Jersey. The Township has indicated it is owned by the State of New Jersey. |
| Unnamed Park Yellow Meeting House Road | This 34.75 acre property is identified on the ROSI as Map Key Symbol U. It was identified as owned by the Township and the State of New Jersey. The Township has indicated it is owned by the State of New Jersey. |

***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	1
Park Facility Identification	Rocky Brook Watershed
Block Lot Location	Block 12 Lot 50
Road Location	791 Perrineville Road
Park Acreage	3.56
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Observations

This property fronts on Perrineville Road and is situated within a residential development. The park is long and narrow in size. It is located north of Park D, 800 Perrineville Road, which is a larger parkland that surrounds an adjacent residential neighborhood. The park is upland and open. There is a cluster of white pine located about 80 feet off the road. The remainder of the site consists of maintained grass area. There does not appear to be any environmental restrictions associated with the parcel. There are no improved facilities on the property.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	2
Park Facility Identification	Roosevelt Little League Complex
Block Lot Location	Block 12.01 Lot 7
Road Location	771 Perrineville Road
Park Acreage	26.88 Acres
Owner	Township of Millstone



Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Senior Baseball Fields	Very Good
2	Little League Baseball Fields	Very Good
1	Softball Field	Very Good
1	Tee Ball Field	Very Good

Other Information

The one senior field and two little league fields are completely fenced. They are lit for night games. The softball field is skinned and has a movable Pitcher's mound. The tee ball has 50' base paths. There is an existing irrigation system.

There is a centrally located concession stand and storage building on the site.

Access to the site is from Perrineville Road. A paved road traverses the interior of the site and the separate stone parking areas.

The property is fully developed with respect to ball fields. The tract itself is separated from other municipally owned lands and is surrounded by residential development.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	3
Park Facility Identification	Rocky Brook Watershed
Block Lot Location	Block 14 Lot 18
Road Location	790 Perrineville Road
Park Acreage	38.20 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Detention Basin	Maintained

Other Information

The property is part of a drainage shed that forms the upper reaches of Rocky Brook. It consists primarily of unimproved and wooded areas and stream along the southerly boundary of a residential development.

The property has limited frontage on Perrineville Road. The portion fronting Perrineville Road is utilized as a detention basin consisting of a maintained grass area that discharges in the lower portion of the same property.

The majority of the property is identified as a flood hazard area. It is also encumbered with wetlands.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	4
Park Facility Identification	Rocky Brook Watershed
Block Lot Location	Block 14 Lot 43
Road Location	50 Hampton Hollow Road
Park Acreage	1.44 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Detention Basin	Maintained

Other Information

The property has frontage on Perrineville Road and Hampton Hollow Drive and is accessible from both. The property is situated adjacent to a residential development. It is separated from other municipally owned property although a narrow, unimproved sliver of open space is located directly across Hampton Hollow Drive along Perrineville Road.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	5
Park Facility Identification	Millstone River Watershed
Block Lot Location	Block 20.01 Lot 18
Road Location	3 Algonquin Terrace
Park Acreage	4.27 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

This park is situated next to a residential development. It is also adjacent to a stream corridor. A large portion of it is identified as wetlands. The property is adjacent to a municipally owned detention basin that services the surrounding residential development.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	6
Park Facility Identification	Millstone River Watershed
Block Lot Location	Block 20.01, Lot 30
Road Location	2 Winding Creek Drive
Park Acreage	1.12 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Detention Basin	Maintained

Other Information

The open space parcel has frontage on Winding Creek Drive and Bergen Mill Road. The property is adjacent to a residential development. It is located adjacent to a larger municipally owned Park #5, Algonquin Terrace, that links it to a stream corridor.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	7
Park Facility Identification	Lyle Farm Open Space
Block Lot Location	Block 24.03 Lot 11.21
Road Location	Lyle Farm Lane Rear
Park Acreage	22.50 Acre
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

This open space property has frontage on Woodville Road (CR 527) and extends west from the road and meanders around the perimeter of a residential development.

The largest portion of the property that also fronts on Woodville Road consists of an unimproved upland, mature oak woodland that extends west to a residential development. At that point the parcel splits and continues around the perimeter of the development, eventually reaching Conover Road. The property near Conover Road becomes part of a drainage way that is mapped as containing wetlands.



The property connects to Parks #14 and #5 to the south. The large unimproved portion adjacent to Woodville Road offers development potential for active recreational use.

**PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP**

Park Information

ROSI Map Key Symbol	8
Park Facility Identification	Rocky Brook Park
Block Lot Location	Block 29 Lot 13
Road Location	901/905 Perrineville Road
Park Acreage	5.18 Acre
Owner	Township of Millstone



Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
4	Tennis Courts	Good
1	Basketball Court	Good
1	Children's Play Area	Good

Other Information

This park is located adjacent to a public works facility and shares a common bituminous parking lot. In addition to the facilities listed above, there is graded level grassed area suitable for volleyball or badminton. The children's play area has several pieces of apparatus, including one large play structure, one climbing structure, a two-bay swing set, and two rocking pieces. The play equipment is contained within timber edging and set on rubber mulch. There is a bituminous walkway leading directly to the play structures from the parking lot. At its intersection with the timber edging enclosing the play area there is no opening for handicap access. Another portion of the bituminous walkway extends into the interior of the path for access to the other facilities described above. Portions of the path are cracked and/or buckling to the point of creating a tripping hazard and impending handicap access. The property fronts on Sweetmans Lane and is adjacent to a small unimproved municipal property that is wooded and low-lying. The park is located between Park H to the east and unidentified open space to the west.



Observations

An opening that is handicap accessible should be provided to the play structure area. Deteriorated portions of the bituminous walkway should be reconstructed.

***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	10
Park Facility Identification	Millstone River Watershed
Block Lot Location	Block 40.01 Lot 15
Road Location	1 Rooney Ct.
Park Acreage	2.08 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Detention Basin	Maintained

Other Information

The property is located within a residential development. It is separated from other municipally owned property. It is currently utilized as a detention basin that services the residential development that surrounds it.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	11
Park Facility Identification	Soccer Field Parking
Block Lot Location	Block 62.02, Lot 1
Road Location	156 Stillhouse Road
Park Acreage	7.02 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Soccer Field	Good
	Parking Areas	Good

Other Information

The park is improved with a graded grass playing field as well as segregated parking areas with grass surfacing. The individual parking areas are separated with post and rail fencing. A bituminous roadway provides access from Stillhouse Road. The bituminous paving terminates inside the property. Vehicular circulation to most of the property is over grassed area that appears to be in reasonably good condition. Parks #12 and #15 are located to the south and Potential Park #10 is situated to the west.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	12
Park Facility Identification	Soccer Fields
Block Lot Location	Block 62.03 Lot 1
Road Location	160 Stillhouse Road
Park Acreage	23.18 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
	Multiple Soccer Fields	Very Good

Other Information:

The area is used exclusively for soccer. There are two defined fields and multiple portable goals that provide flexibility for practice. The site appears to be entirely in uplands. Park #11 is located to the north, Park #15 is to the south and a Potential Park #10 is located to the west of this park.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	13
Park Facility Identification	Orchard Buffer / RB Watershed
Block Lot Location	Block 12 Lot 37
Road Location	280 Disbrow Hill Road
Park Acreage	14.81 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Detention Basin	Maintained

Other Information

The property is utilized as a detention basin that services a residential development. The basin opens up to a larger open space in the development's interior. The majority of the interior portions of the site are wetlands.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	14
Park Facility Identification	Wagner Farm Park
Block Lot Location	Block 24.03 Lot 15.15
Road Location	4 Baird Road
Park Acreage	23.31 Acres
Owner	Township of Millstone



Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
1	Football Field	
1	Lacrosse Field	Good
1	Field Hockey Field	Good
1	Multi-Purpose practice area	Good
1	Children's Play Area	Good

Other Information

This park is situated on the eastern side of the Township along Baird Road. The property is improved with the facilities listed above as well as a large parking area and a community building. The park is located south of Parcel #7 and north of Parcel #S.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	15
Park Facility Identification	Soccer Field Parking
Block Lot Location	Block 62.02 Lot 48
Road Location	170 Stillhouse Road
Park Acreage	3.48 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
	Open turf area	

Other Information:

The property is located across Lucas Lane. Parcels #11 and #12 are north of Parcel #15. The park has been graded into a level grass area that has multiple use capability. It is maintained but does not appear to be currently utilized. It appears there is adequate land to accommodate several soccer fields or multiple practice areas.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	A
Park Facility Identification	Apple Orchard Buffer
Block Lot Location	Block 12 Lot 53
Road Location	805 Perrineville Road
Park Acreage	7.73 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

The property is undeveloped and is a successional orchard. NJDEP mapping indicates the site is entirely uplands. The property is located north of Parcel D. Because the park appears to be entirely in uplands, it has excellent potential for development as an active recreational facility.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	B
Park Facility Identification	Farmland (3 yr lease)
Block Lot Location	Block 13 Lot 2.01
Road Location	756 Perrineville Road
Park Acreage	22.77 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Observations

Parcel B is currently in use for cultivating sunflowers. The property slopes downward to Rocky Brook. NJDEP mapping indicates the majority of the site contains wetlands except for the northeast corner.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	C
Park Facility Identification	Farmland (3 yr lease)
Block Lot Location	Block 13.01 Lot 1
Road Location	770 Perrineville Road
Park Acreage	10.09 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel C is mapped by NJDEP as uplands. It is currently a successional field with a variety of herbaceous vegetation through an old cornfield. The site has potential for development into an active recreation area. The park is adjacent to Parcels 2 and 3 to the east and Parcel B to the west.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	D
Park Facility Identification	Apple Orchard Buffer
Block Lot Location	Block 14.01 Lot 31
Road Location	800 Perrineville Road
Park Acreage	42.86 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel D is mapped as uplands according to NJDEP information. The site is surrounded by residential development and has potential for active open space or park use. The park is located to the south of Parcels A and #1 to the north and Parcel 4 to the east.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	E
Park Facility Identification	Conover Road Buffer
Block Lot Location	Block 23 Lot 13.02
Road Location	29 Conover Road
Park Acreage	1.08 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel E is a narrow linear area adjacent to Conover Road. The site is maintained in lawn vegetation and white pine hedge. It is situated to the north of Parcel G which is also a narrow linear park.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	F
Park Facility Identification	Hickory Drive Forest
Block Lot Location	Block 23 Lot 13.15
Road Location	17 Hickory Drive
Park Acreage	23.28 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel F is large in size but approximately fifty percent is identified as wetlands adjacent to the Millstone River. The area adjacent to the roadway is maintained lawn with the remainder wooded.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	G
Park Facility Identification	Conover Road Buffer
Block Lot Location	Block 23 Lot 13.26
Road Location	29A Conover Road
Park Acreage	1.01 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel G is a narrow linear area adjacent to Conover Road. The site includes maintained lawn with a white pine hedge on a berm.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	H
Park Facility Identification	Rocky Brook Watershed
Block Lot Location	Block 29 Lot 12.02
Road Location	219 Millstone Rd.
Park Acreage	1.17 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel H is a small triangular lot situated in wetlands and low-lying areas. The parcel is wooded.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	J
Park Facility Identification	White Birch Open Space Trail
Block Lot Location	Block 39.01 Lot 19.01
Road Location	96 Backbone Hill Road
Park Acreage	30.41 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

The parcel is comprised of wooded, generally unimproved land, a dirt trail/roadway, and a Green Acres sign at the frontage along Back Bone Road. The central portion of the site contains a bank of wetlands. The park is located to the east of Potential Park #11.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	K
Park Facility Identification	Gravatt Circle Open Space
Block Lot Location	Block 47 Lot 9.01
Road Location	60 Brookside Rd.
Park Acreage	11.77 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Gravatt Circle Open Space is located within a residential development. The parcel is unimproved successional field with small trees and herbaceous vegetation. Parcel K is located to the south of Parcel L.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	L
Park Facility Identification	Gravatt Circle Open Space
Block Lot Location	Block 47 Lot 9.09
Road Location	70 Brookside Rd.
Park Acreage	5.5 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Gravatt Circle Open Space is located within a residential development. The parcel is unimproved successional field with small trees and herbaceous vegetation. Parcel L is located to the north of Parcel K.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

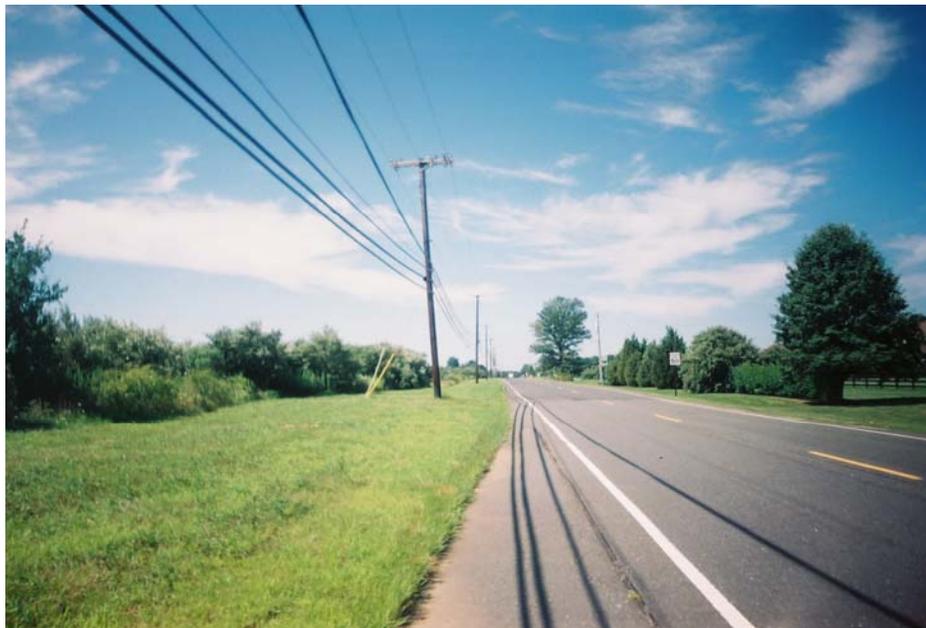
ROSI Map Key Symbol	M
Park Facility Identification	Trenton Road Buffer
Block Lot Location	Block 55.01 Lot 6
Road Location	Bruere Drive
Park Acreage	5.01 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel M is a narrow bank of open space located adjacent to Trenton Road. The parcel serves as a buffer between the adjacent residential development to the south and Trenton Road. The site includes a number of plantings including white pine, spruce, russian olive, callery pear, and herbaceous vegetation.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	N
Park Facility Identification	Stagecoach Road Open Space
Block Lot Location	Block 62 Lot 13.02
Road Location	105 Stagecoach Road
Park Acreage	1.3 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

This parcel is small, low lying, and adjacent to a stream with wetlands. The parcel appears to have use solely for passive open space.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	O
Park Facility Identification	Manalapan Branch Watershed
Block Lot Location	Block 62.02 Lot 28
Road Location	16 Lucas Lane
Park Acreage	5.83 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel O is situated at the end of Lucas Lane. A small area of upland lawn vegetation is adjacent to the road. The property then slopes down to wetlands along Manalapan Brook.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	P
Park Facility Identification	Wolcott Drive Open Space
Block Lot Location	Block 62.04 Lot 1
Road Location	1 Wolcott Drive
Park Acreage	5.01 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

This property contains upland lawn area and upland oak forest. Parcel P is situated within a residential neighborhood and has potential for use as a mini park.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	Q
Park Facility Identification	Wetherill Drive Open Space
Block Lot Location	Block 62.05 Lot 1
Road Location	3 Wetherill Drive
Park Acreage	5.15 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Parcel Q contains upland lawn area and upland oak forest. The NJDEP mapping indicates a portion of the parcel is wetlands.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	R
Park Facility Identification	Abate Park
Block Lot Location	Block 45 Lot 5.33
Road Location	Charleston Springs Road
Park Acreage	25.211 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
2	Soccer Fields	
3	Tennis Courts	Good
3	Basketball Courts	Good
1	Handball Court	Good
1	One Walking Trail	Good

Other Information

Abate Park has been partially improved as a Community Park. The majority of the site is identified by NJDEP as uplands. A small section of the northeastern side of the tract is mapped as wetlands. The Township has plans for the parcel that includes construction of additional recreational improvements.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	S
Park Facility Identification	Unnamed/Trail
Block Lot Location	Block 25 Lot 1.10
Road Location	Baird Road
Park Acreage	40.56 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

This property is an expansive open area with major overhead power lines. However, only the northeastern side of the site appears to be uplands according to the NJDEP wetland maps. A tributary of Millstone River bisects the southern half of the parcel. The Parcel is located directly south of Wagner Farm Park.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	V
Park Facility Identification	Shield Road Open Space
Block Lot Location	Block 43.01 Lot 1
Road Location	Shield Road
Park Acreage	34.72 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Shield Road Open Space contains major overhead power lines. The site is primarily uplands with a linear band of wetlands in the southern quarter of the site.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	W
Park Facility Identification	Shield Road Open Space
Block Lot Location	Block 43.01 Lot 15.02
Road Location	Shield Road
Park Acreage	32.75 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel W in the Shield Road Open Space is a narrow linear wooded area behind residential lots.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

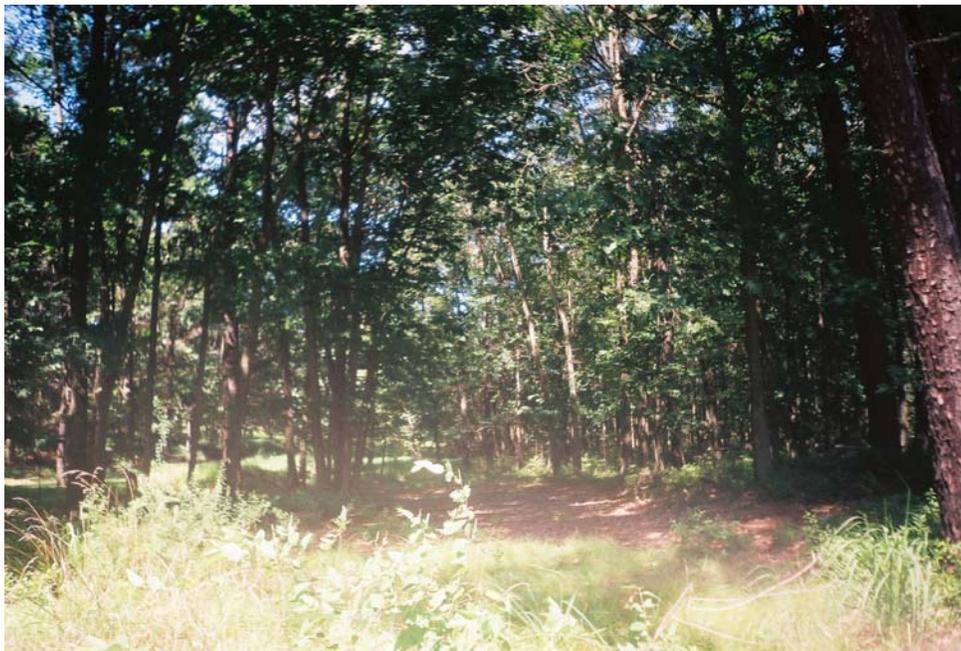
ROSI Map Key Symbol	X
Park Facility Identification	Unnamed
Block Lot Location	Block 31.02 Lot 15
Road Location	Agress Road
Park Acreage	1.26 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel X is a trail, the same as identified as TAE behind Alpine Road at Agress Road. The trail is approximately 3,700 feet in length and is located at the rear of residential properties fronting on Alpine Drive.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	Y
Park Facility Identification	Ridings Wildlife Corridor
Block Lot Location	Block 6 Lot 6.02, 6.04, 6.05 & 6.06
Road Location	3, 4, 5 and 8 Dressage Court
Park Acreage	1.48 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Oty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel Y is a wildlife corridor that runs along the rear of a number of residential lots that front on Dressage Court.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	Z
Park Facility Identification	Jacob Wildlife Corridor
Block Lot Location	Part of Block 37.01 Lots 8, 12, 13, 14
Road Location	10, 12, 14, 19 Agress Road/ Jacob Drive
Park Acreage	.55 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Oty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Parcel Z is a 1,600 foot long corridor that connects Agress road to Robbins Road through the rear of properties along Jacob Drive and Ivy Court.



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Index	AA
Park Facility Identification	Robbins Wildlife Corridor
Block Lot Location	Part of Block 37.02 p/o Lot 25
Road Location	38 S. Robbins Road
Park Acreage	.17 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

This parcel is a small strip of wooded land between two residential lots and Robbins Road.

***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Index	AB
Park Facility Identification	Unidentified
Block Lot Location	Block 46 Lot 5
Road Location	111 Backbone Hill Rd. Trail
Park Acreage	19.02 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Park AB is wooded, undeveloped uplands that contain a trail through the woodlands. The trail is identified as Chisano Trail which extends beyond Park AB along the Halka Trail (Trail TE).



***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	AC
Park Facility Identification	Scotto Open Space
Block Lot Location	Block 17 Lot 18.06
Road Location	156 Baird Road
Park Acreage	21.95 Acres
Owner	Township of Millstone



Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Scotto Open Space is located on Baird Road. The park contains wetlands in the northern and southern ends. Scotto Farm Trail (TZ) bisects the park in a south to north direction.

***PARK AND RECREATION OPEN SPACE INVENTORY
MILLSTONE TOWNSHIP***

Park Information

ROSI Map Key Symbol	AD
Park Facility Identification	Lebers Open Space
Block Lot Location	Block 47 Lot 7
Road Location	Lebers Lane
Park Acreage	15.68 Acres
Owner	Township of Millstone

Inventory of Facilities and Conditions

<u>Qty.</u>	<u>Facilities</u>	<u>Condition</u>
-	Unimproved	

Other Information

Lebers Open Space is located at the end of Lebers Lane between two residences. The open space contains wetlands along the northern boundary with the southern end identified to be in uplands.



V. NEEDS ASSESSMENT

A. National Recreation and Park Association Park Classifications

The National Recreation and Park Association (NRPA), in its 1995 report “Park, Recreation, Open Space and Greenway Guidelines” describe a system for park classification. The individual park types that typically make up a park system are also described. Using these park types as a benchmark, NRPA standards can then be reviewed and used as a basis for establishing standards for park development within a municipality.

It should be noted however, that in the report cited above, the NRPA determined that there was no “national standard” for park development. Instead, the latest NRPA study recommends that each community is unique, and that standards which reflect the local “uniqueness” should be established.

The 1996 NRPA report proposes a series of parks of various size and function. The park types are as follows:

Mini Parks: This is the smallest park type. The mini park is typically less than one acre in size and usually offers a playground, and/or seating area. Mini parks are typically provided by local governments.

Service Area:	¼ mile radius
Acreage/Population Ratio:	0.5 Acres per 1000 persons
Desirable size:	2500 square feet to 1 acre
Typical Facilities:	playground, ½ basketball court, open play area, benches

Neighborhood Parks: Typically these parks range from 7-10 acres and provide a variety of active and passive recreation opportunities. These parks usually do not provide heavy athletic programming and like mini parks are generally offered by the local municipality.

Service Area:	½ to ¾ mile radius
Acreage/Population Ratio:	2 acres per 1000 persons
Desirable Size:	5 to 10 acres
Typical Facilities:	playground, court games, informal play field, volleyball, trails/walkways, picnic tables with grills, benches 7-10 parking spaces

School Parks: The school park reflects the trend toward joint use facilities. The school park may offer a variety of activities, but typically contain a variety of athletic facilities which are jointly used for school and park recreation activities.

Service Area:	varies
Desirable Size:	varies
Typical Facilities:	varies

Community Parks: These parks are a primary building block of most park systems, because they are large enough to provide a full array of recreation activities; including league play athletics. These parks also present opportunities for nontraditional types of recreation. Fifty percent of the park should be developed for only passive recreation. Ideally, Community Parks should have varying topography and vegetative communities. One or more natural water features such as a lake or creek is also desirable.

Service Area:	0.5 to 3 miles
Acreage/Population Ratio:	2.5 acres per 1000 persons
Desirable Range:	30 to 50 acres
Typical Facilities:	recreation center, basketball courts, tennis court (lighted), baseball/softball fields (lighted), multi-purpose fields, soccer fields (lighted), swimming pool, amphitheater, observation decks, picnic shelters, picnic tables with grills, restroom/concessions, benches, playgrounds, volleyball courts, lakes, fishing piers/boat docks, parking

Sports Complex: The sports complex is designed for heavily programmed athletic use. The sports complex is usually a minimum of 25 acres, with 40-80 acres preferred.

Service Area:	1 to 2 ½ mile radius
Acreage/Population Ratio:	5 Acres per 1000 persons
Desirable Range:	25 to 80 acres
Typical Facilities:	playground, basketball courts, tennis courts (lighted), tournament level tennis facilities, tournament level baseball/softball fields, multi-purpose fields, tournament level soccer fields, volley ball courts, restrooms/concessions, service yards, parking

B. Millstone Township Park Classifications

Millstone Township has five parks that fit within the classifications cited above. Together they comprise a total of 114.26 acres. They are listed individually in the chart below.

Improved Municipal Recreation Property

SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
2	Millstone-Roosevelt Little League Complex	771 Perrineville Road	12.01	7	26.88	Sports Complex
8	Rocky Brook Park	901/905 Perrineville Road	29	13	5.18	Neighborhood Park
11, 12 & 15	Brandywine Fields	156 Stillhouse Road	62.02 62.03	1 & 48 1	33.68	Sports Complex
14	Wagner Farm Park	4 Baird Road	24.03	15.15	23.31	Community Park
R	Abate Park	Charleston Springs Road	45	5.33	25.211	Community Park
				Total	114.261	

In addition to the park types listed above, the 1995 guidelines recommend a community also include a variety of other park and recreation facilities. These include the following park types:

- Greenways
- Natural Resource Areas
- Special Use Facilities
- Private Park/Recreation Facility
- Park Trails/Connector trails
- On Street Bikeways
- All Terrain Bike trails
- Equestrian Trails

The Township owns an additional 459 acres that remain generally undeveloped. Many of the parcels can be classified within one of the categories listed above. Portions of some of the parcels function as stormwater facilities to service nearby residential development. For planning purposes, the undeveloped parcels have been separated into two categories. One category is Unimproved Municipal Open space where limited development is possible. The other category is identified as Unimproved Municipal Open Space where development is restricted.

Parcels listed in the Unimproved Municipal Open Space (Development Limited) category offer the possibility for development of active recreation parks. Development of the properties within this category is typically limited in some fashion however, because of size, irregular shape, proximity to residential development or other conflicting use. They may also be affected, to varying degrees, by environmental conditions such as the presence of wetlands, floodplains or deed restrictions. Often, the properties are affected by a combination of the factors cited above.

Millstone Township has approximately 186.29 acres of open space that fall within this category. In actuality, the acreage that is truly developable is somewhat less because of various constraints that affect the individual parcels. For planning purposes, it is estimated that approximately 100 acres of Township's undeveloped open space within this category can be considered developable. The factors cited above limit development potential of individual parcels within this category to neighborhood and/or mini parks. The individual parcels within this category are identified and described on the following pages.

Unimproved Municipal Open Space – Development Limited

SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
1	Rocky Brook Watershed	791 Perrineville Road	12	50	3.56	Open Space
7	Lyle Farm Open Space	Lyle Farm Lane Rear	24.03	11.21	22.5	Open Space
17	Livak Farm	Forman Road	43	12.06	15.6	Open Space
A	Apple Orchard Buffer	805 Perrineville Road	12	53	7.73	Open Space
C	Farmland (3 year lease)	770 Perrineville Road	13.01	1	10.09	Open Space
D	Apple Orchard Buffer	800 Perrineville Road	14.01	31	42.86	Open Space
E	Conover Road Buffer	29 Conover Road	23	13.02	1.08	Open Space
G	Conover Road Buffer	29A Conover Road	23	13.26	1.01	Open Space
K	Gravatt Circle Open Space	60 Brookside Road	47	9.01	11.77	Open Space
L	Gravatt Circle Open Space	70 Brookside Road	47	9.09	5.5	Open Space
P	Wolcott Drive Open Space	1 Wolcott	62.04	1	5.01	Open Space
S	Unnamed/Trail	Baird Road	25	1.1	40.56	Open Space
AB	Unidentified	111 Backbone Hill Rd. Trail	46	5	19.02	Open Space
				Total	186.29	

Parcels listed in the Unimproved Municipal Open Space (Development Restricted) category exhibit constraints that make them generally unsuitable for development. The restrictions include environmental factors such as wetlands and wetland buffers, floodplains, steep topography, limited size or irregular shape. Some have extensive mature woods. In general, the parcels listed in this category are best suited for preservation as natural resource areas, greenways and trails.

Millstone Township has approximately 277.70 acres that fall within this category. The individual parcels are listed below.

Unimproved Municipal Open Space – Development Restricted

SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
3	Rocky Brook Watershed	790 Perrineville Road	14	18	38.2	Natural Resource Area
4	Rocky Brook Watershed	50 Hampton Hollow Rd.	14	43	1.44	Special Use Facility
5	Millstone River Watershed	3 Algonquin Terrace	20.01	18	4.27	Special Use Facility
6	Millstone River Watershed	2 Winding Creek Drive	20.01	30	1.12	Special Use Facility
10	Millstone River Watershed	1 Rooney Court	40.01	15	2.08	Special Use Facility
13	Orchard Buffer/RB Watershed	280 Disbrow Hill Road	12	37	14.81	Special Use Facility
16	Scenic View	24 Yellow Mtg. Hse.	53.01	2.01	12.3	Natural Resource Area
18	Livak Farm Easement	Forman Road	42	3.08	-	Trail
B	Farmland (3 year lease)	756 Perrineville Road	13	2.01	22.77	Special Use Facility
F	Hickory Drive Forest	17 Hickory Drive	23	13.15	23.28	Natural Resource Area
H	Rocky Brook Watershed	219 Millstone Road	29	12.02	1.17	Natural Resource Area
J	White Birch Open Space Trail	96 Backbone Hill Road	39.01	19.01	30.41	Natural Resource Area
M	Trenton Road Buffer	Bruere Drive	55.01	6	5.01	Open Space
N	Stagecoach Road Open Space	105 Stagecoach Road	62	13.02	1.3	Natural Resource Area
O	Manalapan Branch Watershed	16 Lucas Lane	62.02	28	5.83	Natural Resource Area

Unimproved Municipal Open Space – Development Restricted (Continued)

SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
Q	Wetherill Drive Open Space	3 Wetherill Drive	62.05	1	5.15	Open Space
V	Shield Road Open Space	Shield Road	43.01	1	34.72	Open Space
W	Shield Road Open Space	Shield Road	43	15.02	32.75	Open Space
X	Unnamed	Agress Road	31.02	15	1.26	Park Trail
Y	Ridings Wildlife Corridor	3,4,5, & 8 Dressage Court	6	p/o 6.02,6 .04,6. 05,6.0 6	1.48	Wildlife Corridor
Z	Jacob Wildlife Corridor	10, 12, 14 & 19 Agress Road/Jacob Drive	37.01	p/o 8,12,1 3 &14	0.55	Wildlife Corridor
AD	Lieber Open Space	Lebers Lane	47	7, p/o 6	15.68	Open Space
AA	Robbins Wildlife Corridor	38 S. Robbins Road	37.02	p/o 25	0.17	Wildlife Corridor
AC	Scotto Open Space	156 Baird Road	17	18.06	21.95	Open Space
			Total		277.70	

C. Millstone Township Park Needs Assessment

There are several methodologies that have been developed to assess the adequacy of a municipality’s recreation system. One method to assess the amount of parks and recreation areas a community needs is through the core system standard. This method was developed by the National Recreation and Park Association (NRPA). The core system standard is used to estimate need based on existing and projected population. The NRPA standards, published in *Recreation, Park and Open Space Standards and Guidelines* established by the NRPA provide guidance for developing a core system of public parks for local close to home recreation uses. The standards suggest that neighborhood and community public park and recreation areas be provided to local residents at the ratio of 6.25 to 10.5 acres of parkland per 1,000 people. There has been a trend away from such an approach however; to increasing community self-direction where the number of acres for park and recreation land is based on what the citizens determine is best for themselves.

Applying the rigid standard of 6.25 to 10.5 acres/1,000 persons indicates that Millstone is currently within the recommended parameters for satisfying its current recreational needs. Based

on the 2015 population projection, the Township would need to provide additional 5.25 acres to comply with its future needs.

Core System Calculation
Standard = 6.25 to 10.50 Acres of local park space per 1,000 people

Year	Population	Calculated Need
2000	8,970	56.03 to 94.19
2005 ¹	9,709	60.68 to 101.94
2015 ¹	11,382	71.14 to 119.51

The methodology utilized by the Monmouth County Park System and the New Jersey Department of Environmental Protection in setting the long-term goals for preserving and developing public recreation and open space land is the Balanced Land Use (BLU) approach. BLU guidelines anticipate likely future recreation land needs as communities approach build out and recommend that a minimum of 3% of the developable area within a municipality be acquired for municipal-level public recreation. “Developable area” means, as the term implies, that it can be developed. It excludes slopes over 12 percent, wetlands, federal and state owned land as well as any other land that is restricted or otherwise unsuitable for development.

Millstone Township is comprised of 23,700 acres, approximately 9507 of which are considered wetlands² and therefore not developable. In order to comply with BLU guidelines, Millstone Township should have ownership and control of 426 developable acres. As discussed in the Open Space Inventory portion of this report the Township has developed 114.26 acres into active recreation parks. It owns approximately 100 additional acres of open space that can be considered “developable”. As a consequence, the Township should purchase, at a minimum an additional 211 acres to comply with BLU recommendations.

Planning recommendations contained in this report for improving recreation and open space in Millstone Township are based on a systems approach developed by the NRPA. This approach includes a level of service guideline that is based on needs, facilities and land in order to assist communities in developing recreational facilities. Involvement of the community is essential to this process. The systems approach emphasizes locally determined values, needs and expectations in applying the guidelines. As a consequence, the process is less dependent on generic formulas that were used in the past.

Within the systems approach, a level of service is determined. The level of service is a quantification of the park and open space philosophy of the community. This approach can be used to determine the type of park or park classification, recreation activities to be provided at the park and size of the facility necessary to accommodate the stated needs. A recreation activity menu is developed from a list of activities, programs and facilities that are needed to satisfy current needs as determined by community participation. Needs are then converted to facilities which are converted into spatial requirements. The level of service is then calculated based on

¹ Population projection from The North Jersey Transportation Planning Authority, Inc. (NJTPA)

² NJDEP GIS Disc for Total Area and Wetlands, Township base map for County & State sites Compiled by Townplan Associates

the present supply of the recreation activity choices, the expressed demand for the choices, and the minimum population service requirements. The level of service for each individual park and the recreation and open space system as a whole is then determined. The level of service reflects the minimum amount of park land and recreation facilities needed to meet the demand as determined by the needs assessment.

D. Facilities Assessment

The table below identifies national standards of facility type, the number of facilities of each type recommended per 1,000 residents and the actual number Millstone currently provides. There are a number of recent trends for which widely accepted municipal standards have not yet been established. These include facilities where dogs and their owners can interact in an access controlled facility. Another trend is a growing interest in skate parks, which provide obstacles and ramps that are commonly used in conjunction with bicycles, in-line rollerblades, and skateboards.

NATIONAL STANDARDS AND MILLSTONE FACILITIES

Facility Type	*NRPA Standard	Calculated NRPA Qty	Existing or Scheduled	Location
Full Basketball Courts	1 per 5,000	2	3 1	Charles Abate Park Rocky Brook Park
Senior Baseball	1 per 5,000 1 per 30,000 lighted	2 1	1 1	MRLC Complex (Lighted) Middle School
Little League	1 per 5,000 1 per 30,000 lighted	2 1	2	MRLC Complex (Lighted)
Football Fields w/ Uprights	1 per 20,000	1	1	Wagner Farm Park
Multi-Purpose Court	1 per 10,000	1	0	0
¼ Mile Running Track	1 per 20,000	1	0	0
Youth Soccer Facilities	1 per 10,000	1	2 2	Brandywine Field Abate Park
General Softball	1 per 5,000	2	1 1	MRLC Complex Middle School

* NRPA standard is to be used as a general guide only. The current trend is away from generalized standards and toward a community specific approach where the number and types of facilities are based on what the citizens determine is best for themselves.

Facility Type	NRPA Standard	Calculated NRPA Qty	Existing or Scheduled	Location
Tennis	1 per 2,000	5	3 4	Abate Park Rocky Brook Park
Volley Ball	1 per 5,000	2	0	
Practice Tennis Wall	1 per 22,000	1	1	Abate Park
Horseshoe Pits	1 per 15,000	1	0	
Shuffleboard Courts	1 per 20,000	1	0	

E. Inventory and Assessment of Recreation Programs, Leagues and Clubs

The Township of Millstone has a wide range of recreation groups that currently utilize the recreation facilities listed in the Open Space Inventory. A representative of each organization was contacted to establish a level of service for their individual activities. Following is a summary of the information provided.

The Millstone-Roosevelt Little League (MRLL)

MRLL is a private organization that leases the Millstone-Roosevelt Little League complex from Millstone Township. They are the exclusive user of the facility. The league has three different seasons throughout the year, the Spring Season which lasts from April to mid-June, the summer All-Star season which lasts from mid-June to August and the fall season which typically lasts from mid-September to the first week of November. The program is very successful and has been averaging 40 to 50 new registrants each year.

The Spring Season has the most participants and consequently exerts the most pressure on available facilities. There are 507 registrants comprising 40-45 individual teams for the spring league. The age of the participants range from 5 and 6 (T-Ball) through 13 and 14 (Juniors) for boys baseball. There are three divisions for girls softball, ages 7 and 8 (Colonials), 9 and 10 (Minors), and 11 and 12 (Majors).

The MRLL complex on Perrineville Road is used exclusively for games during the Spring Season. Practice is prohibited at the facility during spring because of the huge demand for games and also to limit the stress imposed on the fields from overuse. The primary practice facility used has been the Middle / Elementary School complex located off Schoolhouse Road. During the spring season the MRLL reserves the Middle / Elementary School complex during the week and on weekends. During the week practice times are limited to late afternoon / early evening to allow middle school teams to practice and play games. Because of the limited number of fields and large number of teams, practice times and duration are limited. Use of the fields in their entirety by individual teams is precluded because of the number of teams utilizing the facility at any given time. Consequently, practice drills are scattered throughout the available space. The younger players, for instance are forced to utilize the outfield area for infield practice. The MRLL also utilizes the softball field at the Clarksburg Inn and the little league field at the Roosevelt School for practice. Those facilities, however, are in marginal condition.

The Summer All-Star Season has fewer participants than the Spring Season. There are two teams for girls softball, ages 9 through 12. There are also generally 5 to 6 boy's teams for ages 7 through 12. Because of the fewer number of teams, practice facilities are adequate during the All-Star Season although they generally practice or play games every day.

The Fall Season generally includes 7 to 8 teams. Games are played home and away on Sunday. There is a limited practice schedule.

Needs

The primary need expressed by the MRLC is to have additional practice facilities, particularly during the Spring Season. Because of the limited number of fields currently available and the concentrated use times, league officials feel that development of the players is limited. The rapid expansion of the league is exerting more pressure on existing facilities. If more fields do not become available the League will be forced to limit participation.

In addition to practice facilities, League officials expressed a need for more game fields and extended playing times. The existing 10:00 pm lighting curfew at the MRLC complex limits the number of games that can be played there. The curfew effectively limits the last scheduled game to a start time of 7:45 pm. All games must be halted at 10:00 regardless of the inning or number of outs. Officials have expressed an interest in holding tournaments, particularly in the summer months. The limits imposed by the lighting curfew restrict the times tournaments can be held as well as the number of teams that can participate.

Officials have also expressed a need for indoor facilities. During the off season and times of inclement weather teams generally have no place to practice. There is often competition with other user groups for the limited indoor facilities available in the Township. League officials indicated that construction of a multi-purpose indoor facility is desired.

Millstone United Travel Soccer (MUTS) Club

The MUTS consists of 11 travel teams. The club consists of boys and girls teams ranging in age from under 8 to under 17. MUTS utilizes the Brandywine fields located on Stillhouse Road for all its games. The program has been expanding in the number of teams and participants. They currently have nearly 200 players in the travel program.

There is both a fall and spring season. The fall season begins in September and lasts until November. The spring season begins in April and lasts until mid-June. MUTS also utilizes Brandywine exclusively for practice.

Needs

The primary need expressed by MUTS is to have additional dedicated regulation game fields and practice facilities, preferably with lighting available for extended playing times. The Brandywine complex currently only has two regulation size fields. Play on weekends is limited

to a 1:30 pm start time on Sundays as well as the onset of darkness. As a consequence, it is generally only possible to schedule a maximum of eight home games for the entire weekend. There is also competition for practice and game times with the recreation soccer leagues. Often team practice is restricted to half the field in order to accommodate demand.

Improvements to the Brandywine complex requested by MUTS officials include construction of bathrooms, a concession stand, and pavement in parking areas to prevent muddy conditions after rain events. There was also a request for installation of an irrigation system to relieve stress on the turf during dry summer months and facilitate its recovery from overuse.

It is recognized by MUTS officials that restrictions imposed on the Brandywine complex limit the improvements that can be constructed upon it. Ideally, new fields would be located in a larger complex that also includes ancillary facilities such as bathrooms, a concession stand and storage buildings for flags and equipment.

Officials also expressed the desire for an indoor facility that could be utilized in the off season and during inclement weather. It was noted that soccer, travel soccer in particular, has become a year round sport and that there is a demand for continuing development of player skills in the off season.

Fall & Spring Recreation Soccer

The fall and spring soccer leagues typically have about 400 participants during each season. They utilize Brandywine fields for games and practice. Their seasons run concurrent with the Millstone Travel Soccer Club.

Needs

As indicated above, there are intense demands placed upon the limited facilities available to the recreation soccer leagues as well as the travel program. The needs of the recreation soccer leagues mirror those of the travel clubs.

Millstone Eagles Football

The Millstone Eagles Football program is comprised of players ranging in age 5 through 15. The program offers five divisions separated by weight and/or age. Practice begins in the beginning of August; the first game is the last Sunday in August. A total of eight games (4 home and 4 away) are played. Playoffs start immediately after the last game. During the season the teams practice three times a week. All home games are played at Wagner Farm Park.

Needs

Football League officials expressed the need for additional practice areas and a dedicated field that can be rested during the off season.

Millstone Township Field Hockey

Millstone Township is currently developing a field hockey program for girls aged 6-10 years old. The program is anticipated to commence in the fall of 2007. It is anticipated that practices and games will be held at Brandywine fields.

Millstone Township Lacrosse

The Millstone Township Lacrosse offers boys and girls, in grades 3 through 8 the opportunity to play lacrosse. There are currently 170 children enrolled in the program.

The season starts March 1 and ends June 14. Games are played on Saturdays, Sundays and occasionally mid-week at Wagner Farm Park. Practices are also held at Wagner Farm Park and Brandywine Fields.

Needs

Officials have identified the need for more game fields so tournaments could be held. They also indicated a need for lights at the practice facilities so hours could be extended. Because of the lighting curfew at Wagner Farm, the fields would have to be constructed in a location where there are no restrictions. In addition to more outdoor fields there is an expressed need for an indoor facility to be used in the off season and during inclement weather.

Recreational Basketball

The recreational basketball program in Millstone Township has 48 teams comprised of 478 children. Practice begins the week before Thanksgiving and the season ends by the first week of March. Before actual games are played practices are held on the weekends. Once game play starts practices are held during the week. The Elementary and Middle School gymnasiums are used for both games and practice. Because of the high demand for use of the gymnasiums by numerous groups, practice times are of short duration. All games are played on Saturday (8:00 AM to 5:00 PM) and Sundays (10:00 am to 2:00 pm).

Needs

Basketball officials have indicated a current need for additional facilities. With the opening of the new Middle School, anticipated in September of 2007, and its two new gymnasiums, space should be adequate for the current number of participants. It should be noted, however, that school functions, such as plays, concerts, speakers, etc., take priority over recreational sports and could reduce available time slots. Furthermore, as the basketball program

as well as other Township teams and organizations expand, competition for available time slots will continue to grow.

Wrestling

The Millstone Township wrestling program is open to children in grades K through 8th. It has teams organized according to weight. The season starts in early November and ends in March. Practices are conducted three times a week. The younger children practice at the Middle School gymnasium. The older children practice at the Wagner Farm complex.

Needs

Wrestling officials have indicated that the existing facilities used for practice are adequate. There was, however, an expressed need for a larger facility in which to hold meets and tournaments.

Tennis

The Millstone Township tennis program runs from April to October. The program uses facilities at Rocky Brook Park and Abate Park.

Needs

Tennis officials have expressed a desire to have an indoor facility with a pro shop that could serve as a year round facility. The addition of lighting at Abate Park was also requested

Millstone Eagles Cheering

The Eagles cheer squads are comprised of participants in age ranging from 5-15 years old. It is open to both girls and boys. The season, as well as the start of practice coincides with that of the Millstone Eagles Football program. Before the football season starts practice is held four nights a week, Monday through Thursday. Once the football season starts, practice times are reduced to three times a week, Tuesday, Thursday and Friday.

In addition to cheering for the football team, the squad participates in various competitions that, depending on results, culminate in a national competition in December.

VI. STAFF AND ADMINISTRATION

Introduction

A public recreation department's primary responsibility is the development of programs that strive to meet the diverse needs of all people. Programming consists of planning, scheduling and implementing an organized series of sponsored recreation activities. Millstone Township takes a team approach to addressing this responsibility through the Recreation Commission, Township Administrator, Recreation Coordinator and outside organizations.

Over the past several years, participation levels have grown consistently and some facilities are presently at their maximum usage as new facilities are constructed to address growing needs. Scheduling has been able to alleviate some of the usage concerns but other factors such as noise and light limitations make it difficult to play full games at some facilities, increasing usage at all fields and not allowing fields to be rotated out and rested. All of this contributes to increased maintenance necessary to maintain the fields in optimal condition.

Parks Maintenance

The Township of Millstone uses a variety of resources to handle the current maintenance needs of its parks, athletic fields, play areas and other recreational areas as shown in the below.

MAINTENANCE ACTIVITY	Wagner Farm Field	Brandywine Fields	Abate Park (under construction)	Rocky Brook Park	MRLC Complex
Grass Cutting	PW	PW	PW	PW	MRLC
Building Maintenance	PW/BOE	PW			MRLC
Court Maintenance			PW	PW	
Field Maintenance	IP	PW			MRLC
-Grading Infields	IP				MRLC
-Lining	IP	IP			MRLC
-Setting up Bases / Goals	IP	IP			MRLC
-Maintaining Equipment	IP	IP	PW	PW	MRLC
-Reseeding	OS/PW	PW			MRLC
-Fertilizing	OS	OS			MRLC
Trail Maintenance	PW		PW	PW	
-Maintaining Paths	PW		PW	PW	
-Brush removal	PW		PW	PW	
Landscaping	PW	PW	OS	PW	MRLC
Garbage Pick up	PW	PW	PW	PW	MRLC

BOE = Board of Education; IP = Individual Program; OS = Outsourced; MRLC = Millstone Roosevelt Little League; PW= Public Works

As more recreation and parks programs are added the need for additional support personnel will increase respectively. If the Township proceeds with the recreation areas as described in the Recommendations section of this study the number of maintenance personnel required to maintain all of the recreations properly may increase to two additional full time individuals. The Township may consider one full time person and the addition of seasonal workers as needed.

Administrative Personnel

The Millstone Recreation Department has two full time administrative people that coordinate the planning and scheduling of recreation activities for the Township. In addition to the Recreation Coordinator and the Assistant to the Recreation Coordinator positions the Township Administrator assumes some of the responsibilities that are commonly associated with a Parks and Recreation Director. The administrative positions are further complimented with the Millstone Recreation Commission whose members and positions are referenced below.

MILLSTONE RECREATION COMMISSION	
Robert Faber	Chairman
Jim Bell	Vice Chairman
Al Morrone	Treasurer
Nicole Vladimirov	Secretary
Gary Dorfman	Member at large
Mike Kuczinski	Member at large
Fiore Masci	Member at large
Mike Turner	Member at large
Bill Hanson	Alternate #1
Steve Henig	Alternate #2

Recreation Programs and Personnel

Millstone offers its residents a variety of recreation opportunities. In addition to Millstone Recreation Departments offerings there is the Millstone - Roosevelt Little League, the Trailblazers (equine), the Horseman's Association of Millstone Township, and the Millstone Township Seniors. The table¹ below shows the many current recreation programs, location of parks sponsoring the program and the liaisons to those activities.

MILLSTONE RECREATION PROGRAMS AND PERSONNEL

Recreation Programs	Wagner Farm Field	Brandywine Fields	Abate Park (under construction)	Rocky Brook Park	Elementary School	Liaison	Volunteer Coordinator
<u>Basketball</u>							
-Men's					X	Rob Faber	Mike Scerbo
-Warriors					X	Rob Faber	BB Board
Cheerleading	X					Fiore Masci	
Football	X					Fiore Masci	
Lacrosse	X	X				Fiore Masci	Matt Deiner (Boys) Lisa Belotti (Girls)
<u>Soccer</u>							
-Adult Soccer					X	Jim Bell	Tracy Littlefield
-Fall Soccer		X				Steve Henig	
-Spring Soccer (Instr.)		X				Steve Henig	
<u>Softball</u>							
-Men's					X	Bill Hanson	
Summer Rec. (Camp)					X	Jim Bell	
Tai Chi	X					Mike Kuczinski	
Teen Night					X	Mike Turner	
Tennis				X		Al Morrone	
<u>Volleyball</u>							
-Men's					X	Mike Kuczinski	Tim Reardon
-Women's					X	Mike Kuczinski	Donna Gulics
Wrestling	X					Mike Turner	Rich Giglia & Rich Williams
Yoga / Pilates	X					Mike Kuczinski	

¹ Nicole Vladimirov, Millstone Recreation Coordinator

Finance

Millstone Township has established fees and charges for participation in recreation programs. Recreation programs are open to non-residents, when there are scheduling opportunities, after residents have been served and currently the same fee applies to residents and non-residents. Parks that have been funded in whole or in part with Green Acres funding are required to allow non-resident participation² however non-residents may be charged more for participation. (See Section VIII for additional funding options.)

The programs are self-supporting and the fees are placed in a revolving account known as the Recreation Trust Fund Account. The following is a list of some of the programs offered and shows the fees associated with participation in those programs.

<u>PROGRAM</u>	<u>AGES</u>	<u>FEE</u>
<u>Basketball</u>		
Warrior's	Grades 2-8	\$75.00
Men's	18 and up	\$40.00
<u>Football</u>		
Pop Warner	5-15	\$135.00
Cheerleading	5-15	\$135.00
<u>Lacrosse</u>		
Boys	Grades 3-8	\$50.00
Girls	Grades 3-8	\$50.00
<u>Soccer</u>		
Spring "Instructional"	Grades K-6	\$50.00
Youth	Grades K-10	\$50.00
Adult		\$40.00
<u>Softball</u>		
Men's		\$40.00
<u>Tennis</u>		
Lessons		\$125.00
<u>Volleyball</u>		
Men's	18 and over	\$40.00
Women's	18 and over	\$40.00

² Dave Smith, NJ DEP Green Acres Program

Wrestling

Youth “Instructional”

Grades K-8

\$50.00

Youth

Grades K-8

\$50.00

Tai Chi

\$75.00

Yoga / Pilates

Beginner/Intermediate

\$75.00

VII.FACILITIES AND MAINTENANCE

Concept Park Maintenance

Maintenance is a factor affecting the usability and desirability of a park, and is an on going, day-to-day requirement for a municipal park system. The present level of maintenance varies from park-to-park, but it is generally good. As more parks and recreation facilities are developed, it will be necessary to expand the maintenance operation commensurate with the increase in park care needs.

The level of maintenance appropriate for each site is based on the physical character, facilities, and use. Three classifications are used: High, moderate, and low maintenance. High maintenance parks are sites that should receive the highest level of maintenance. These parks are intensively used, requiring a great amount of manpower to keep clean and safe, and attractive areas and facilities. Low maintenance parks, often passive recreation sites or undeveloped open space, should receive the lowest level and frequency of maintenance.

The Township should institute a systematic maintenance program designed to evaluate the annual manpower, equipment, and supply needs for the park system and set a productive and efficient means of keeping the parks orderly. Annually, a qualified individual should tour the park system to identify remedial maintenance measures that should be taken to keep parks in good condition. This and loss control audits are conducted to identify safety hazards and liability problems requiring corrective action. By regularly inspecting and maintaining parks and their facilities, the physical well-being of park visitors is enhanced, and municipal liability against personal and property damages is reduced.

To further prevent liability problems, all “parks” staff, especially maintenance personnel, should be properly trained to recognize, mitigate and correct safety hazards at recreation areas and facilities. Worker training also plays an important role in promoting the safe proper use of equipment and machinery during the actual maintenance of parks, thereby reducing the likelihood of on-the-job injuries and equipment/facility damage.

GENERAL MAINTENANCE PLAN FOR ALL DEVELOPED OPEN SPACE AREAS

Mowing:

- Under normal conditions, turf foliage should be cut whenever it exceeds a height of 3 inches.
- In the summer it is sometimes wise, especially during drought conditions, to allow grass to reach a height of 3 ½ but no more than 4 inches.

- It is important that grass-cutting equipment be properly sharpened and calibrated to achieve uniform cutting and to avoid damaging grass plants.
- As a rule of thumb, it is suggested to cut grass frequently during the growing season and never to cut more than one-third of the grass blade at one time. Using the aforementioned heights, if the grass is 3 inches in height it should not be cut lower than 2 inches.
- For field preparation for cold weather sports, such as field hockey on bluegrass fields, the height could be reduced to a minimum of 1 ½ to 2 inches. This practice should be avoided on tall fescue fields and grass should be kept at a minimum height of approximately 2 ½ inches.
- It is also a good practice to leave the clippings on the ground to provide additional organic nutrients. However, if grass is allowed to grow to excessive lengths or is cut in damp weather, large clumps and other heavy cuttings often appear. These should be removed because they will smother healthy grass.

Irrigation:

- Keep germinating seeds and young plants damp with daily watering (that is if no natural rainfall occurs) until the seedlings are well established.
- Healthy grass, cut at the proper levels, will recover rapidly from wear if there is sufficient moisture in the root system.
- If foot marks, mower tire marks, etc., take an inordinate amount of time to disappear, it is a sign that the plants are in need of water and/or feeding (lab tests would prescribe kind and rates of nutrients needed).
- Occasional deep root watering is preferred over frequent surface watering.
- If irrigation system with timers exist, it is best to set them for early morning or, as a second choice, late afternoon watering. Night watering or early afternoon waterings are usually not desirable.
- Healthy turfgrass can best be maintained by applying approximately one (1) inch of water per week spread over two (2) or three (3) waterings. An empty container can be placed on the fields to determine when a third, half or a full inch of water has been delivered.

Liming/Fertilization:

- Soil sampling and testing should be completed regularly. Variations in testing frequency are dependent on the subsurface soil texture.
- PH (hydrogen ion concentration) should be maintained in the 6.5 to 7.0 range. This pH range keeps the macro and micro nutrients available to the plant in optimum concentrations.
- Never apply more than 5 lbs. /acre nitrogen to a field per year. Over-application of nitrogen will result in rapid plant growth, but will also greatly weaken the plant and make it more susceptible to diseases.
- Fertilization should take place from early Spring through late Fall. Recommendations on fertilization types and application rates should come from a professional landscaper.

Herbicide/Insecticide/Fungicide:

- Whenever possible the Township should minimize the use of herbicides, insecticides, and fungicides and use ecologically friendly alternatives such as Integrated Pest Management.
- Pesticide application should strictly adhere to all manufacturer recommendations and is to be applied by NJ Licensed personnel only.

Overseeding/Mechanical Procedures:

- Mechanical procedures are procedures used to relieve compaction and promote water, air and nutrient access to the plant roots. Some forms of mechanical procedures include:
 - core aeration
 - slicing or verti-cutting
 - shattering
 - dragging
 - roto-tilling
 - plowing
 - discing
 - harrowing
 - raking
- Overseeding should occur at the end of the sports season in the autumn.

Scheduling Ballfield Use:

- Certain ballfields are often over-used. This is particularly the case when the ballfield is utilized for league play and is lighted.

- The maintenance practices necessary to retain high quality turfgrass cover may require that a particular field be ‘rested’ for a portion of a season. This will be necessary to complete the required maintenance practices and allow the turfgrass to recover.

Courts:

- Outdoor acrylic surfaces are relatively easy to maintain due to natural cleaning by rains. Problems may develop due to lack of proper drainage or soil erosion. Surfaces may become coated with mud, dirt, pine needles and leaves as well as other foreign matter, which should be removed as necessary.
- Suggested maintenance for outdoor acrylic surfaces is to keep the court clean at all times by occasional sweeping, so that dirt and foreign particles do not get ground into the surface by foot traffic. Use of a soft nylon broom is preferable to a stiff bristle broom for sweeping. During the tennis season the courts should be hosed off with water periodically (once a month) and allowed to dry. Use normal water pressure for hosing (approx 70lbs per sq inch or less). Should there be any stains on the court, they can be removed by application of a mild cod-water detergent and scrubbing with a hair type scrub brush. Should mold or mildew form on the courts in shady areas, an application of dilute strength household bleach (minimum two parts water to one part bleach) may be used to remove the fungus and retard its further growth. Where areas are treated, they should be rinsed off after a few minutes to remove the surface contamination. (Not: Fungus grows on surfaces contaminated by food stuffs, soft drinks and decaying matter. Acrylic coatings do no support fungus growth).
- Black marks from the use of improper shoes are difficult if not impossible to remove. Therefore, this type of shoe should be prohibited from use on a tennis court.
- Warning: Most acrylic surfaces take 72 hours to reach optimum strength. No playing on or cleaning of a new surface should be allowed for that period of time to reduce the probability of damage to the new surface.

Tennis Courts:

- Mother Nature does an adequate job of washing and rinsing the surface on a routine basis, assuming there is positive drainage to move rainwater completely off the surface. Attention should be taken to ensure that landscaping, debris, fencing, or design features have not created any sort of damming effect at the low end of drainage, causing water and/or leaves to pond on the surface. It is especially important that maintenance personnel remove fallen leaves and pine needles inside the fencing and dasherboard enclosures in the Fall. Failure to do so inevitably leads to ponding and formation of mildew and funguses which will ultimately stain and deteriorate the surface.
- Tennis courts are easily maintained, principally because tennis is a more gentle sport whose participants are, for the most part, wearing smooth soled and non-marking shoes.

Occasional skateboarders and in-line skaters love to intrude and leave their telltale black curls. As per the U.S.T.A. handbook, these are very difficult to eliminate. Citrus-based detergents reportedly work best, however few park departments' budgets allow for this kind of never-ending expense. The U.S.T.A. handbook says to "prohibit" these activities on a tennis court. This prohibition might be workable at the tennis club, but not in a public park.

Basketball Courts:

- Basketball courts present a special wearing condition in the "keys" under each basket. 99% of the play is in this area and regardless of ongoing maintenance, the color coatings are going to wear down. Popular, lighted basketball courts are often fully utilized 18 hours a day with 99% of the wear being shuffling feet in the key areas. Use a hard, clear acrylic coating designed to prevent heavy play from wearing through the color coatings and spoiling the aesthetics of the facility. However, this acrylic coating will also wear through quickly at a heavily used facility and must be routinely maintained. Typically, one or two coats are installed initially. Most park districts that use this acrylic coating roll a coat on all keys in the park district once or twice a year, as dictated by wear. This approach is very inexpensive and keeps the courts looking good. The important point here is that no coating can withstand the constant abrasion in the key on a basket ball court - it must be maintained.

In-Line Hockey:

- In-line hockey is one of the toughest surfaces to maintain to ideal aesthetics. This surface really takes a literal beating. It receives a great number of nicks and dings due to the nature of the game. Often players start play before the coating system has fully cured, creating early nicks. Black marks abound from wheel brakes, and shoes. Certain surfaces create correct coefficients of friction so that the game can be played enjoyably- the puck slides and the players can make hockey stops. Higher wear and aggregate "knuckling" are typical in the goal crease areas due to high traffic and the severe point loads from in-line skates. Some owners may chose to resurface an approximate 10 to 15 feet radius around the goal crease areas to maintain ideal play characteristics if there is constant league activity.

Re-Coating:

- Re-coating, i.e. color coating of courts, will be dictated by the intensity of use and how "particular" the owner is. The general rule is a follows every 6-7 years.

Playgrounds:

Suggested General Monthly Maintenance Checklist

General Upkeep of Playgrounds

- ✓ Check the entire playground area for miscellaneous debris or litter.
- ✓ Check for missing trash receptacles and for those which are full.
- ✓ Check for any damage to equipment or other playground features caused by vandalism or wear. For example, check for any broken or missing handrails, guardrails, protective barriers, or steps or rungs on ladders, and damage to any fences, benches or signs.

Surfacing

- ✓ Check equipment for adequate protective surfacing under and around it and for surfacing materials that have deteriorated.
- ✓ Check loose surfacing materials for foreign objects or debris.
- ✓ Check loose surfacing materials for compaction and reduced depth, with special attention to heavy-use areas such as those under swings and slide exit regions.

General Hazards

- ✓ Check all equipment and other playground features for any hazards which may have developed.
- ✓ Check for sharp points, corners, and edges. For example, check the sides and sliding surface of slide chutes for sharp or rough edges caused by deterioration.
- ✓ Check for protrusions and projections.
- ✓ Check for missing or damaged protective caps or plugs.
- ✓ Check for potential clothing entanglement hazards, such as open s-hooks.
- ✓ Check for pinch, crush, and shearing points or exposed moving parts.
- ✓ Check for trip hazards, such as exposed footings on anchoring devices and rocks, roots, or any other environmental obstacles in the play area.

Deterioration of Equipment

- ✓ Check all equipment and other playground features for rust, rot, cracks and splinters, giving special attention to possible corrosion where structures come in contact with the ground.
- ✓ Check for unstable anchoring of equipment.

Security of Hardware

- ✓ Check for any loose or worn connecting, covering or fastening hardware devices. For example, check the S-hooks at both ends of suspending elements of swings and all connection points on flexible climbing devices for wear.
- ✓ Check all moving parts, such as bearing hangers, for wear.

Equipment Use Zones

- ✓ Check for obstacles in equipment use zones.

Drainage Systems

- ✓ Check the entire play area for drainage problems, giving special attention to heavy-use areas such as those under swings and slide exit regions.

Swings Not Recommended for Public Playgrounds

The following types of swings are not recommended for use in public playgrounds:

Multiple Occupancy Swings

- With the exception of tire swings, swings that are intended for more than one user are not recommended because their greater mass, as compared to single occupancy swings, presents a risk of impact injury.

Animal Figure Swings

- These are not recommended because their rigid metal framework results in a high mass presenting a risk of impact injury.

Rope Swings

- Free swinging ropes that may fray or otherwise form a loop are not recommended because they present a potential strangulation hazard.

Swinging Exercise Rings and Trapeze Bars

- These are generally considered to be items of athletic equipment and are not recommended for public playgrounds.

A monthly work plan might look something like the following:

MAINTENANCE WORK PLAN FOR MARCH

1. Buildings

Finish interior painting at recreation center.

Finish interior painting at _____ park.

Start exterior painting at (1) _____ (2) _____ (3) _____ (4) _____ parks.

2. Tennis Courts

(1) Sweep, repair and line courts in the following parks:

_____, _____, _____, _____.

(2) Finish lines in _____, _____, _____, _____ parks.

3. Game Courts

(1) Sweep, repair and line courts in the following parks:

_____, _____, _____, _____.

(2) Line courts in _____, _____, _____, and _____ parks.

4. Walks & Trails

Check all trails and order materials, supplies.

5. Landscaping

Check beds and get in shape for planting beginning March 19. All beds to be planted by May 26. Check with nursery or greenhouse for delivery schedule - negotiate prices for next year by June.

6. Play Apparatus

Need to finish painting at _____ Park and start at _____, _____, and _____ parks. Painting to complete by May 1. Set up inspection repair crews to get everything fixed before it's painted. Check on welder, pipe supply and fence stocks.

7. Ball Diamonds

Check for winter damage and get list of materials and supplies by March 14. Coordinate backstop repairs with play apparatus crews.

8. Turf Areas

Check out spreaders, fertilizer and weed control chemicals. Seed new areas in _____, _____, parks and all baseball infields.

VIII. FUNDING OPTIONS

Development Ordinance

The Township has adopted an ordinance that requires all new residential development to provide recreational facilities as part of the overall recreation program of the Township or pay a development fee. The development fee ordinance requires developers to provide contributions to a general fund so that the Township can provide for or maintain recreation facilities throughout the Township.

Recreation Tax

The Township currently has a Municipal Open-Space Tax of \$.06 per \$100 of assessed value but no Recreation Tax. The Township should consider adding a Recreation Tax to supplement the funds the collected through registration fees. This would increase funding in the Recreation Trust Fund Account.

Dedicated Public Funds

The Township should continue to apply for and explore the use of dedicated Public Funds. Following are several very popular funds:

1. Federal ISTEA Funds: The Intermodal Surface Transportation Efficiency Act is administered at the state level by the New Jersey Department of Transportation and provides funds relevant to projects such as bike paths and hiking trails.
2. NJDEP Green Acres Bond Funds: The Green Acres program includes a combination of grant and low interest loan options for municipalities, counties and private nonprofit organizations to acquire land for conservation or recreation purposes. In addition, a State acquisition program exists for fee simple acquisitions and/or easement purchases in selected project areas or critical habitats. The Green Acres Program also includes grants and low interest loans for recreation development.
3. County Farmland & Open Space Preservation Tax: New Jersey legislation allows counties and municipalities to implement a preservation plan for the purposes of acquiring farmland or open space for preservation purposes. These funds are available for recreational development projects or can be used to acquire land for recreational purposes.

Private Nonprofit Funding:

Another funding option is Private Nonprofit Funding. There are many nonprofit organizations each with specific mission goals which determine what role they may or may not play in preserving land. These funding sources range from Federal and State programs and foundation grants to their own funds raised through membership events. Nonprofits may participate in land acquisition by the following methods.

1. Fee Simple Acquisition: The nonprofit can pursue fee simple acquisition with funds from a number of possible sources. Once acquired, the nonprofit may retain ownership or transfer ownership to another preservation entity, government agency, or nonprofit. They may also maintain ownership and have another entity manage the property, or vice versa.
2. Easement Purchase: Nonprofits may acquire an easement which limits the use of a property for the purposes of habitat protection or farmland preservation. Easements usually limit or eliminate the option to develop the property involved. The nonprofit may hold the easement or it may turn it over to another preservation entity. This also applies to management options.
3. Bargain Sale: Nonprofits may acquire a property or an easement through a bargain sale, when the property owner sells below the appraised market value. In this instance, the seller has the benefit of a possible tax deduction resulting from this donation.
4. Donation: Donations of land can be accepted by nonprofits with the benefit of a potential tax deduction for the donor. Depending on the donor's wishes and the nonprofit's strategy, the property may be preserved or may be developed, in whole or part, for the purpose of raising funds for the preservation of more critical areas.
5. Facilitation: Frequently nonprofits serve to facilitate acquisitions, easement purchases or habitat enhancement projects. This role may include creating funding resources through the development of foundation grant proposals. Similarly, preservation funds from foundation or court settlements (where fines are stipulated to be used for land preservation) can be managed by a nonprofit. Often a nonprofit will serve to promote and coordinate a preservation project and may not contribute monetarily.
6. Partnerships: Projects are frequently carried out in partnership with other nonprofits, foundations and with federal, state, or local governments. In these cases the nonprofit may: Acquire land and transfer ownership to another nonprofit, the state, or municipality, partially fund the project in conjunction with other funding agents, facilitate the project, be the entity that agrees to take ownership of the land, be the management entity, or assist in leveraging funds for the buyer through creative fiscal strategies such as zero coupon bonds.

7. Partial Development/Sale Back or Lease: Nonprofit may acquire property, restrict or guide development through deed restriction and then resell or lease the property at a profit.
8. Land Exchange: Nonprofit may carry out or arrange for exchanges of land appropriate for development with land best suited for preservation.
9. Bequest or Reserved Life Estate: Nonprofit may accept bequests of land through a Will or may accept Life Estate bequests in which property owners maintain residence during their lifetime, but relinquish ownership. (Many variations on this theme involve significant tax advantages.)
10. Tax Foreclosure: Nonprofit can take advantage of tax foreclosure options. The nonprofit community can offer significant resources towards the accomplishment of a region's open space protection, recreational needs and farmland preservation goals.

Private Incentives:

The primary motivating force behind land development is financial gain for the property owner. When there is an opportunity for financial gain from keeping a property in its natural state, land owners may opt for preserving their properties instead of developing them. The following economic incentives can be promoted by the municipality to encourage preservation.

Ecotourism:

Ecological tourism is a strategy which encourages the preservation of natural resources, such as open space, by focusing on the economic benefits of doing so. A community can boost its local economy by drawing on its natural resource base. Traditional tourism may include environmentally related activities, but ecotourism focuses solely on the environment and its protecting. Several counties in New Jersey have developed ecotourism programs. Cumberland County to the south recently adopted an Ecotourism Plan.

Depending on the natural resources of an area ecotourism can take a number of directions. In Cape May County, birding has become a major source of ecotourism dollars. The Audubon Society's World Series of Birding, centered in Cape May, includes bird census taking in the State as well. Many regions have developed brochures and nature guides to help tourists experience the natural resources of the area. Examples of ecotourism business include boat rentals services, restaurants, overnight accommodations, birding and outdoor equipment shops, guided nature walks, museums, and any endeavor that benefits economically from protecting and maintaining the natural resources of an area.

Financial assistance for the start up or expansion of ecotourism-related business may be available through the County in the form of loans or grants through the Community Development Block Grant Program.

IX. POTENTIAL PARK AND RECREATION LANDS

The Ad Hoc Committee requested Environmental Resolutions, Inc. to investigate a number of potential park and recreational land sites. Some of the parks investigated were eliminated from further consideration due to environmental factors, potential future land use issues or other factors. Following is a summary of the remaining parcels that the Township should consider for purchase as future open space.

**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	1
Identification	Lee Property
Block Lot Location	Block 52 Lot 13 and Part of Lots 1.01 & 1.07
Road Location	Red Valley Road/CR 526
Acreage	160 Acres

Description

Potential Park #1 is located in the southwesterly portion of Millstone Township. It has frontage on two roads. The entire western perimeter of the property fronts on Red Valley Road and the southern perimeter fronts on County Route 526.

A stream corridor and wetlands bisect the property along a north-south axis and another stream corridor and wetlands system bisects the mid-section of the property in an east-west axis. The two streams and wetlands systems effectively segregate the property into two halves above the east-west corridor and five isolated upland sections below the east-west corridor.

The northwesterly section and a portion of the northeasterly section are utilized for crop production. A stream crossing appears to have been constructed to link both sections. The southerly portion of the property appears to be a fallow farm field undergoing successional re-vegetation.

In the summer of 2006, Environmental Resolutions, Inc. assisted the Township with an application for a Monmouth County Municipal Open Space Grant to purchase the Lee Parcel. On December 14, 2006 the board of Chosen Freeholders awarded the Township a \$250,000 to purchase the Lee Parcel.

Conclusion

The northerly portion of the property appears to be the most developable. It features two large upland areas that are separated by a road crossing. The upland on the western side of the stream is approximately 37 acres in size and the upland on the eastern side of the stream is approximately 21 acres in size.

The southerly portion of the property is comprised of small, isolated upland areas separated by wetland fingers extending out from the stream corridor described above. Two upland areas along County Route 526 total approximately 12 acres. Accessibility and the difficulty of developing on soils associated with wetlands make the remainder of the southerly portion of the property unattractive for development.



**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	2
Identification	Thueng c/o May Lai
Block Lot Location	Block 52 Lot 7
Road Location	Spring Road/CR 526
Acreage	89.83 Acres

Description

Potential Park #3 is located in the southwesterly portion of Millstone Township. It has approximately 400 feet of frontage on County Route 526. The entire easterly portion of the lot (approximately 1,800 feet) fronts on Spring Road. The surrounding area is generally undeveloped and wooded or in agricultural use.

State mapping indicates that approximately forty percent of the property contains wetlands. The wetlands are located primarily along the perimeter of the property. It appears that a wetlands crossing would be required to access the property from either County Route 526 or Spring Road.

The northerly and easterly portions of the property are under cultivation. Most of the westerly portion and a small strip along the southern boundary are wooded.

Conclusion

The large percentage of wetlands areas makes development of this property difficult and expensive.



**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	3
Identification	Frank Palma Property
Block Lot Location	Block 11 Lot 17
Road Location	Disbrow Hill Road/Battle Ground Road
Acreage	180.75 Acres

Description

Potential Park #5 is located in the north western section of Millstone Township. Its northernmost boundary is situated along the municipal border with the Township of Monroe. It has approximately 740 feet of frontage along Disbrow Hill Road (CR 28A) and approximately 2,800 feet of frontage along Battle Ground Road. A private road traverses the southern end of the site in an east to west direction.

The interior of the property has a stream that flows into Rocky Brook. Based upon state mapping, approximately eighty percent of the property appears contain wetlands. An upland area of approximately 14 acres is located in the southeasterly portion of the property, along Battleground Road. Another six acre upland is located to the north of the 14 acres along Battleground Road.

The eastern and central portions of the lot are utilized for field crops. The northwesterly portion appears to be fallow fields undergoing successional re-vegetation. The southerly portion of the lot is generally wooded with pockets of abandoned fields under successional re-vegetation.

Conclusion

The majority of the property appears to contain wetlands. Consequently, the property has limited potential for development but could be utilized for passive open space.



**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	4
Identification	Ceronics, Inc.
Block Lot Location	Block 17 Lot 19
Road Location	Baird Road/Prodelin Way
Acreage	39.12 Acres

Description

Potential Park #6 is located in the northern portion of Millstone Township. It has approximately 1,000 feet of frontage on Baird Road and approximately 1,600 feet of frontage on Prodelin Way. Based on state mapping, approximately 6 acres in the northeasterly corner of the property is wetlands. The remainder of the property is mapped at uplands.

The approximate 30 acres of upland are currently utilized for crop production. The wetland portion in the property's northeast corner is wooded and undeveloped.

Conclusion

The property is located adjacent to an undeveloped municipally owned parcel (AC-Scotto Open Space) situated to its east. The property has very good accessibility and high development potential for active recreational use.



**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	5
Identification	Iacono Property
Block Lot Location	Block 17 Lot 24
Road Location	Prodelin Way
Acreage	82 Acres

Description

Potential Park #7 is located in the northern portion of Millstone Township. It has approximately 700 feet of frontage on Prodelin Way which provides its only access from a public street.

The property is irregularly shaped. The bulk of the property lies approximately 950 feet south of Prodelin Way and extends in a southerly direction another 2,100 feet to the rear property lines of residential lots.

Based upon state database information, the property is comprised primarily of uplands. There is a stream indicated in the middle of the larger portion of the property that is set back from Prodelin Way. The stream appears to segregate the western portion of the lot from the eastern side. Another stream and wetlands system is indicated along the southern property line.

The northern portion of the lot, which fronts Prodelin Way is clear and has been used for crop production. The middle portion of the lot, adjacent to the stream is wooded area unimproved. The southeastern portion of the lot has been cleared and used for crop production. State database information indicates that most of the property is upland. Areas associated with the drainage ways in the middle and southerly portions have wetlands associated with them. A narrow band of wetlands separates the approximately 15 acre portion fronting Prodelin Way from the larger portion of the lot that extends south. The southern side of the tract contains approximately 49 acres of uplands according to NJDEP mapping. A wetlands permit will be required in order to extend the roadway access to the southern portion of the property. Approximately 4,000 feet of roadway would be required because the property is deep and limited to a single access point (Prodelin Way).

Conclusion

The majority of the site is uplands. Two isolated wetland areas exist and two wetlands systems along stream corridors flow through the southern end of the site and in the north-central section. There are wetlands and stream crossing issues but these do not appear insurmountable to develop the site for active recreation use.



**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	6
Identification	Levchuk Property
Block Lot Location	Block 27 Lot 2.01, Block 28 Lot 3
Road Location	Pine Hill Road
Acreage	111.94 Acres

Description

Potential Park #9 is located in the central portion of Millstone Township. It has approximately 1,100 feet of frontage along Millstone Road and approximately 2,600 feet of frontage on Pine Hill Road.

The majority of the property is cleared and used for agricultural production. The eastern side that is approximately 21 acres is wooded. Similarly, much of the property's frontage along Pine Hill Road, extending approximately 500 feet south is wooded. The northwesterly corner, at the intersection of Millstone Road and Pine Hill Road has been cleared for agricultural production as has most of the area situated in the southwestern and south central portion of the property. Based upon state mapping, the majority of the site is uplands. An area along Pine Hill Road is designated as wooded wetlands.

Conclusion

The majority of the property appears to be desirable for development for active recreation. The property has extensive road frontage, although the wooded wetland area adjacent to Pine Hill Road may require a permit to cross the wetlands. It is possible that with the frontage provided, a crossing could be avoided.



**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	7
Identification	Greenback Realty
Block Lot Location	Block 47 Lot 5
Road Location	Stillhouse Road and Stage Coach Road
Acreage	78.34 Acres

Description

Potential Park #10 is located in the southeastern portion of Millstone Township. It has approximately 2,600 feet of frontage on Stillhouse Road and approximately 1,600 feet of frontage on Stage Coach Road (CR 524). The entire lot, with the exception of a small area in the property's northeast corner (at the intersection of Stillhouse and Stage Coach Roads) has been cleared and is used for agricultural production. NJDEP wetlands mapping indicates that approximately 5 acres are wetlands with the remainder as uplands. The wetlands are situated in the northwestern side of the site.

The property is situated across Stillhouse Road from a large municipally owned Parks 11, 12 and 15 which are used for soccer fields and parking.

Conclusion

The property has excellent accessibility because of its dual frontage. The majority of the property is uplands and appears to have few development constraints except for the wetlands in the northerly limits. The site's location relative to other improved municipal recreational areas and extensive uplands make it attractive for active recreational use.



**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	8
Identification	Manzo/Stavola
Block Lot Location	Block 39.01 Lots 20.02, 20.05, 21, 21.01, 21.02, 21.03, 21.04, 21.05, 21.06, 21.07, 21.08, 21.10, 21.12, 30.02, 30.03
Road Location	Back Bone Hill Road
Acreage	100+ Acres

Description

Potential Park #11 is located in the central portion of the Township. It has approximately 950 feet of frontage on Back Bone Hill Road. The property extends approximately 320 feet north from Back Bone Road. The majority of the property is wooded. A portion of the interior of the property has been cleared and used as a gravel pit. Based on NJDEP mapping, the entire parcel is shown as uplands. An unimproved 30 acre municipally owned parcel is located along the property's southeasterly corner. The municipally owned parcel extends out to Back Bone Hill Road.

Conclusion

The parcel is almost entirely wooded. The most remote interior portion of the property is almost 3,200 feet from the nearest public road. Consequently, road improvements would be necessary to access the furthest extent of the property. The wooded, undeveloped nature, as well as its proximity to other municipally owned land make the parcel attractive for passive, nature oriented used. Use as an active recreational facility would require major clearing and infrastructure improvements.

**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	9
Identification	Campo Mines Property
Block Lot Location	Block 28 Lots 2, 13.02, 14, 14.01, 10,20 & 21
Road Location	Baird & Pine Hill Road
Acreage	82.18 Acres

Description

Potential Park #12 is located in the northeasterly portion of Millstone Township. It has frontage on two roads. The northerly limit of the property fronts on Baird road. The southerly limit fronts on Pine Hill Road.

The property has been subjected to extensive resource (sand) extraction activities. Approximately 90% of the tract has been cleared and mined. Mining activities have resulted in surface irregularities and unstabilized ground surfaces. Extraction activities have also created depressions that have become ponds.

NJDEP mapping indicates that the northwesterly quadrant of the property is encumbered with wetlands. Portions of the property's northeasterly and southeasterly limits are included in the headwaters of the Millstone River.

Conclusion

The ground surface of the property needs to be vegetatively stabilized to prevent erosion. The topographical variation resulting from the mining activities limits the development potential of the property for active recreation. The physical characteristics of the property make it most suitable for passive recreation.

**POTENTIAL PARK AND RECREATION LANDS
MILLSTONE TOWNSHIP**

Information

Parcel	10
Identification	Hantz Property
Block Lot Location	Block 24.03 Lots 12 & 13
Road Location	Monmouth Road (CR 537)
Acreage	16.48 Acres

Description

Potential property #13 is located in the northwesterly portion of the Township. It has approximately 700 feet of frontage on Monmouth Road (CR 537). It is situated between the Wagner Farm Park to its south and a portion of the Lyle Farm open space to its north.

The property is currently being used as a poultry farm. The portion fronting Monmouth Road is improved with chicken coops and other structures used to support the poultry operations. The rear portion of the property is under cultivation.

NJDEP mapping indicates that the central portion of the property is encumbered with wetlands that run in an east/west direction and extend onto residential development located to its west.

Conclusion

The subject tract is strategically located between two other parcels owned by Millstone Township. As stated above, Wagner Farm Park is located south of the subject tract. Purchase of the Hantz property would allow the Township to expand Wagner farm Park north to include developable portions of The Lyle Farm Open Space as well as the subject parcel itself.

X. RECOMMENDATIONS

Recommendations for Active Recreation

Research conducted during preparation of this report indicates that Millstone Township is in need of additional active recreational facilities to adequately service some of its programs. Other programs offered by the Township are adequately serviced or soon will be with the addition of new facilities currently under construction. Following is a discussion of recreational programs offered by Millstone Township and recommendations for meeting their current needs.

Baseball

The MRLL has exclusive use of the primary baseball complex in Millstone Township. Access to public fields by other township residents is limited to one baseball field and one softball field at the elementary school complex. Those fields must be shared with the middle school teams as well as the entire little league which uses them for practice during the spring season. The resulting demand limits the availability of field access to other residents of the Township, such as the adult softball league offered by the Township.

It is recommended that two little league fields and one softball field be constructed to accommodate the demand for practice facilities and to provide additional access to fields by other residents of the township not currently being served.

Soccer

Millstone Township has a large, successful soccer program that includes both recreational and travel teams. Both programs use the Brandywine Complex exclusively for games and practices. There are currently only two regulation game fields at the complex. During the fall season there is intense demand for games and practice between the teams. As a consequence, practice times and space are limited, make up games are difficult to schedule and the fields are subject to severe stress.

It is recommended that three regulation soccer fields be reserved for game use. This would require, at a minimum, that one new regulation field be constructed. It is also recommended that a multi-purpose practice area be constructed that can accommodate a minimum of four fields. The practice area would be in addition to the existing facilities at Brandywine Park. The fields should feature portable goals that could be moved to prevent excessive wear in high traffic areas such as the goal area. The multi-purpose area could service the practice requirements for a variety of sports including lacrosse and baseball.

Football

The Millstone football program currently operates at the Wagner Farm Park complex. Football is a high intensity sport that inevitably degrades natural turf during the course of the season, especially during wet periods. The season lasts beyond the prime seeding and aeration period when the field should undergo annual maintenance and restoration procedures. Compounding the narrow window available for turf maintenance is the fact that the Lacrosse program utilizes the facility during the spring. It is therefore recommended that the Township consider upgrading the football field at Wagner Farm Park with synthetic turf in order to provide a stable playing surface regardless of conditions or duration of use. If selected, the synthetic turf should be lined to accommodate both football and lacrosse. Replacement of the existing grass turf would take advantage of the existing infrastructure at Wagner Farm Park and provide the durability of the synthetic turf.

The football program could also utilize the synthetic field as a supplemental area for practice in order to rest portions of the natural turf and to perform maintenance operations during optimum seasonal periods.

Lacrosse

It is recommended that the lacrosse teams utilize the multi-purpose fields recommended above for practice as well as games if the Wagner Farm Park complex is not upgraded to synthetic turf. Regardless of whether Wagner Farm Park is upgraded or not, it is recommended that the lacrosse program utilize the proposed multi-purpose fields for practice in order to reduce the stress currently imposed on the facilities at Wagner Farm Park and Brandywine.

Recreational Basketball

No additional improvements are recommended for the basketball program at this time. The new middle school is scheduled to open in September of 2007. It will provide two additional gymnasiums that can accommodate the anticipated needs of the basketball program.

Wrestling

No additional improvements are recommended for the wrestling program at this time. Wrestling officials have indicated that current facilities are adequate to meet their needs. They expressed a need for a larger facility that could accommodate wrestling meets. The new middle school gymnasiums can satisfy that requirement.

Tennis

No additional expansion of existing facilities is recommended at this time. Three new tennis courts that are near completion at Abate Park will satisfy the anticipated needs of the tennis program.

Cheerleading

No expansion of facilities to service the cheerleading program is recommended at this time. The current facilities at Wagner Farm Park as well as the two gymnasiums under construction at the new middle school complex will satisfy the anticipated needs of the program.

Skateboard Park

During preparation of this report several residents expressed the desire for a skateboard park to be constructed within the Township. It is recommended that Millstone Township solicit additional input from residents on the actual demand for a skateboard park and to determine the scale of it. It has been the experience of ERI that after the initial opening of a skate park facility, interest in it wanes and it becomes an underutilized facility. Unless there is substantial demand expressed for such a dedicated facility, it is recommended that a limited number of component features be incorporated into existing parks such as Wagner Farm Park and Abate Park.

Recommendations for Passive Recreation

Trails

Monmouth County is currently working with the Trailblazers in preparing a Trail Master Plan that links existing trails and public open space into an overall network. It is recommended that access nodes be provided at various locations within the network that accommodate access and parking for horse trailers as well as hikers that utilize the trails.

Existing Parks

Improved Municipal recreation facilities currently available to residents of Millstone are provided at various individual sites. Each site is limited in size and, with the exception of Abate Park, each is fully developed. The ability to expand individual sites is limited because in general, the areas surrounding them are improved with residential development. This limits not only potential expansion of individual facilities, but also their use and flexibility as a result of imposed restrictions such as the use of lighting.

The Township currently has a deficit of practice facilities for baseball during the spring season and soccer during the fall season. There is also a need for at least one additional regulation soccer field for games. The lacrosse program utilizes the same facilities for games

and practice during the spring season that the football program uses in the fall. The result is that the fields are under constant and severe stress. In order to maintain and/or improve field quality, consideration must be given to not only accommodating the immediate practice and game requirements of the individual programs, but also the opportunity to rotate some fields off line for rehabilitation from the stress and wear caused by use during each season.

The Recreation Commission and officials charged with administering individual programs have also expressed the desire for an indoor field house that could be utilized by sports teams during winter months and inclement weather. The uses anticipated would include practice facilities for field sports such as baseball, soccer, lacrosse and football. The sole municipally owned indoor recreation servicing Millstone is located at Wagner Farm Park. Unfortunately it is lacking in size and limited to servicing small groups and clubs.

In addition to its active recreational interests, residents of Millstone Township have expressed the desire to expand the opportunity for more passive recreational opportunities. One is an expansion of equestrian related recreation. Residents have expressed an interest trail riding throughout its borders and beyond. There is a need to provide access and parking for horse trailers so they can utilize municipal land for riding and link to other trails extending through public and private lands. Existing parks within the Township do not currently accommodate those needs.

Other residents of Millstone have expressed the desire to develop a facility that provides a forum for community activities as well as more passive forms of recreation. Each year the Township sponsors "Millstone Day" wherein residents of the community gather for barbequing and other outdoor activities. Because it lacks the facilities to adequately accommodate participants or provide desired activities, Millstone has chosen to utilize a private facility located elsewhere in the Township. In addition to being provided with a venue for sponsored events, residents have expressed a desire for the opportunity to participate in family outings and activities in a park like setting.

In order to accommodate the improvements described above, additional land must be incorporated into Millstone's improved Park inventory. Some of the existing facilities within Millstone Township can be expanded through purchase of adjacent, undeveloped land or consolidation and development of adjacent land owned by the Township. Opportunities to do so were discussed in Section IV. Prior to consolidation, however, consideration must be given to site constraints associated with the undeveloped land that would limit its usability. Consideration should also be given as to whether the available land can meet not only the immediate recreational needs of the Township, but the long term needs and goals of the entire community.

New Parks

In accordance with the objectives of the Comprehensive Recreation, Parks and Open Space Plan, a list of undeveloped parcels within Millstone Township as selected by the Open Space and Farmland Preservation Council were assessed with regard to their capability to address the needs stated earlier in this report. In the event that Millstone Township's current

and anticipated recreational needs cannot be met by utilizing open space lands from its current open space inventory, one of the assessed parcels could be acquired and improved into a new park facility. The ideal parcel, as envisioned by the Township would accommodate a variety of active and passive recreational opportunities and facilities, all set within a larger, pastoral setting.

The Township population is growing and will continue to do so. The parcel selected should be large enough to accommodate the recreational needs identified earlier in this report as well as those likely to become evident in the future. It should be located in an area that frees it from the imposed restrictions that encumber the Township's current facilities, most notably lighting restrictions. To make the park usable, the property must be able to support infrastructure including adequate parking, irrigation for fields, bathrooms, a concession stand and maintenance/storage facilities.

It should also be able to accommodate a variety of uses, both active and passive. In addition to providing needed athletic fields and facilities for the Township's growing athletic programs, a true Community Park should also serve as a community focal point and provide a venue for local events and activities. It should provide recreation options for all its citizens regardless of age or ability. It should incorporate a system of trails for equestrian use and hikers. It should include a variety of land and water features that create an overall pastoral ambiance.

After careful consideration, a property known locally as the Lee property has been identified as one that can accommodate the features described above. The Lee property is identified as Block 52, Lot 13 and includes portions of lots 1.01 and 1.07 as identified on the tax maps of Millstone Township. Based upon tax map information, it consists of approximately 160 acres. The property is located in the southwesterly portion of the Township. It has frontage on two roads. The entire western perimeter of the property fronts on Red Valley Road (Millstone Township 43). The southern perimeter of the tract has approximately 750 feet of frontage on County Route 526, which is classified as an arterial road.

The property consists of varying topography and land cover. A stream corridor and wetlands associated with it bisects the property along a north-south axis. Another stream corridor and wetlands system bisects the mid-section of the property along an east-west axis. The stream has been impounded via control structures to create two separate ponds within the stream corridor. The larger, northerly pond is approximately eight feet deep and is used for irrigation. During dry periods, a 70 gallon per minute well maintains the required water level so irrigation can continue. A service road crosses the southern portion of the irrigation pond to provide a link between both sides of the stream corridor. A road has also been constructed around the southerly portion of the smaller pond as well.

The northwesterly section of the property as well as a portion of its northeasterly quadrant is utilized for crop production. A majority of the southerly portion of the property is also used for crop production. The northeasterly portion of the property contains

approximately 13 acres of mature forest. A band of riparian vegetation surrounds the stream corridor.

The area surrounding the subject property is rural in nature. Most of the surrounding properties are under active cultivation. The subject property, as well as those properties immediately adjacent to it are zoned RU-P (Rural Preservation). The RU-P district is intended to promote the preservation of open space and farmland areas of Millstone Township and to minimize the impact of new development on natural resources and rural features of the community.

Development of the Lee property provides Millstone Township with the opportunity to create a true Community Park that is not only more economical to maintain and operate, but would be capable of sustaining a variety of recreational opportunities that would appeal to different age groups and different recreation preferences of Township residents.

Funding

Current funding sources for Open Space and Recreation for Millstone Township appear to be adequate to sustain existing recreation activities. Millstone Township is encouraged to continue working with the County for Open Space Preservation and development of parks for best utilization of time, effort and money.

As stated elsewhere in this plan the County is in the process of acquiring ~1200 acres around Perrineville Lake and an additional ~230 acres around Charleston Springs Golf Course¹. At this time, the County is focusing more on land acquisition and preservation than on active recreation, however part of the preservation can be for passive recreation uses, such as hiking, biking and equine trails.

A comparison of other municipalities of similar size and density as well as larger communities shows Millstone Township's financial commitment to Open Space Preservation. The table² below shows that in 2005 Millstone Township committed 36% of the local tax levy towards Open Space Preservation. For 2007, the Township has increased the tax rate to \$0.060.

¹ Faith Hahn, Monmouth County Parks System

² DCA, Division of LGS, 2005 Municipal Government Financial Statistical Summary

2005 Tax Levy, Tax Rate, Open Space Percentage Tax Levy and Population

	Tax Levy	Tax Rate	Open Space Percentage of Tax Levy	Population Est/Density
<u>Colt's Neck</u>				
Municipal Government Tax Levy	\$3,713,311	\$0.272		11,628
Municipal Open Space Tax Levy	\$341,455	\$0.025	8%	370
<u>Freehold Township</u>				
Municipal Government Tax Levy	\$10,676,363	\$0.359		33,863
Municipal Open Space Tax Levy	\$892,608	\$0.030	8%	881
<u>Holmdel Township</u>				
Municipal Government Tax Levy	\$8,862,593	\$0.436		16,944
Municipal Open Space Tax Levy	\$508,252	\$0.025	5%	943
<u>Manalapan Township</u>				
Municipal Government Tax Levy	\$11,605,286	\$0.474		36,839
Municipal Open Space Tax Levy	\$489,715	\$0.020	4%	1,195
<u>Millstone Township</u>				
Municipal Government Tax Levy	\$1,190,332	\$0.090		10,123
Municipal Open Space and Farmland Preservation Tax Levy	\$661,017	\$0.050	36%	275

NATIONAL STANDARDS AND MILLSTONE FACILITIES

Facility Type	NRPA Standard	2007 Calculated NRPA Qty	Existing or Scheduled	2007 Recommended	2015 Recommended	Location
Full Basketball Courts <i>Proposed</i>	1 per 5,000	2	3 1	<i>0</i>	<i>0</i>	Charles Abate Park Rocky Brook Park
Senior Baseball <i>Proposed</i>	1 per 5,000 1 per 30,000 lighted	2 1	1 1	<i>0</i>	<i>0</i>	MRLL Complex (Lighted) Middle School
Little League <i>Proposed</i>	1 per 5,000 1 per 30,000 lighted	2 1	2	<i>2**</i>	<i>0</i>	MRLL Complex (Lighted)
Football Fields w/ Uprights <i>Proposed</i>	1 per 20,000	1	1	<i>1**</i>	<i>0</i>	Wagner Farm Park (Upgrade synthetic turf field)
Multi-Purpose Court <i>Proposed</i>	1 per 10,000	1	0	<i>1</i>	<i>0</i>	
¼ Mile Running Track <i>Proposed</i>	1 per 20,000	1	0	<i>0</i>	<i>0</i>	
Youth Soccer Facilities <i>Proposed</i>	1 per 10,000	1	2 2*	<i>1**</i> <i>1**</i>	<i>0</i> <i>0</i>	Brandywine Field Abate Park (Multi-purpose practice area capable of supporting 4 multi-use fields) Regulation size field
General Softball <i>Proposed</i>	1 per 5,000	2	1 1	<i>1**</i>	<i>0</i>	MRLL Complex Middle School
Tennis <i>Proposed</i>	1 per 2,000	5	3 4	<i>0</i>	<i>0</i>	Abate Park Rocky Brook Park
Volley Ball <i>Proposed</i>	1 per 5,000	2	2	<i>0</i>	<i>0</i>	Elementary School
Practice Tennis Wall <i>Proposed</i>	1 per 22,000	1	1	<i>0</i>	<i>0</i>	Abate Park
Horseshoe Pits <i>Proposed</i>	1 per 15,000	1	0	<i>0</i>	<i>0</i>	
Shuffleboard Courts <i>Proposed</i>	1 per 20,000	1	0	<i>0</i>	<i>0</i>	

* These two fields are not regulation size or in the correct orientation.

** The recommended number of fields is based on the local need, which exceeds the NRPA recommendation.

Zoning

Millstone Township currently has three Zoning Districts³ which permit some form of commercial indoor recreation. The use in these zones may be expanded to incorporate a plethora of indoor recreation related activities. By encouraging private development in these areas to provide facilities for some of the Township's recreation programs, it will minimize the amount of funds the municipality needs to appropriate to satisfy the growing needs of the community. These Zoning Districts are listed below.

HC Highway Commercial Zone

- Theaters, bowling alleys and similar forms of indoor commercial recreation
- Ice and roller skating rinks
- Indoor and outdoor tennis courts and swim clubs

HC-1 Highway Commercial Zone

- Theaters, bowling alleys and similar forms of indoor commercial recreation
- Ice and roller skating rinks
- Indoor and outdoor tennis courts and swim clubs

PCD Planned Commercial Development

- Commercial recreation including theaters, skating rinks, bowling alleys, tennis and racquetball facilities

Other benefits for encouraging commercial recreation facilities are:

- ✓ No need to hire additional staff
- ✓ No additional burden on Township services
- ✓ Less liability
- ✓ Close to highways and other commercial development
- ✓ Fewer complaints from residents in close proximity to existing parks
- ✓ Indoor facilities may be utilized for practice during inclement weather
- ✓ Indoor facilities operate year round

³ Millstone Township, Article 5, Zoning District Regulations

Staffing

Millstone Township employs two full time recreation administrative personnel, the Recreation Coordinator and the Assistant to the Recreation Coordinator. In addition to the Recreation Coordinator and the Assistant to the Recreation Coordinator positions the Township Administrator assumes some of the responsibilities that are commonly associated with a Parks and Recreation Director. This arrangement serves the current requirement well, however as the recreation needs of the community continue to grow the Township may benefit from a full time Director of Recreation.

There is a current need for a qualified individual to perform Parks and Recreation inspections and safety inspections. Although this function is not a full time position it is imperative that the inspections are performed by an individual trained to perform such inspections and on a regular basis. It is recommended that inspections occur monthly to ensure any unsafe conditions are addressed. Monthly inspections do not alleviate current maintenance personnel from reporting unsafe conditions that they may encounter through their normal duties, but enhances the overall safety of the parks.

As new parks are added the Township's Recreation Department and Recreation Commission should solicit maintenance staff recommendations from the Department of Public Works. Depending on the number of parks added and the type of recreation activities the maintenance staffing requirement may be addressed with the addition of seasonal labor versus full time personnel. The Township should also consider outsourcing activities to private vendors during periods of high maintenance or to augment a seasonal labor force.

OPEN SPACE INVENTORY MAP

MILLSTONE TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY



COUNTY OWNED LAND						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
CSGC	Charleston Springs Golf Course	Smithburg Road		770		Golf Course
PLP	Perrineville Lake Park	Sweetmans Lane			485	Park
				Total	1255	

IMPROVED MUNICIPAL RECREATION PROPERTY						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
2	Millstone-Roosevelt Little League Complex	771 Perrineville Road	12.01	7	26.88	Sports Complex
8	Rocky Brook Park	901.905 Perrineville Road	29	13	5.18	Neighborhood Park
11, 12 & 15	Brandywine Fields	156 Stillhouse Road	62.02, 62.03	1 & 48	33.68	Sports Complex
14	Wagner Farm Park	4 Baird Road	24.03	15, 15	23.31	Community Park
R	Abate Park	Chaleston Springs Road	45	5, 33	25.211	Community Park
				Total	114.261	

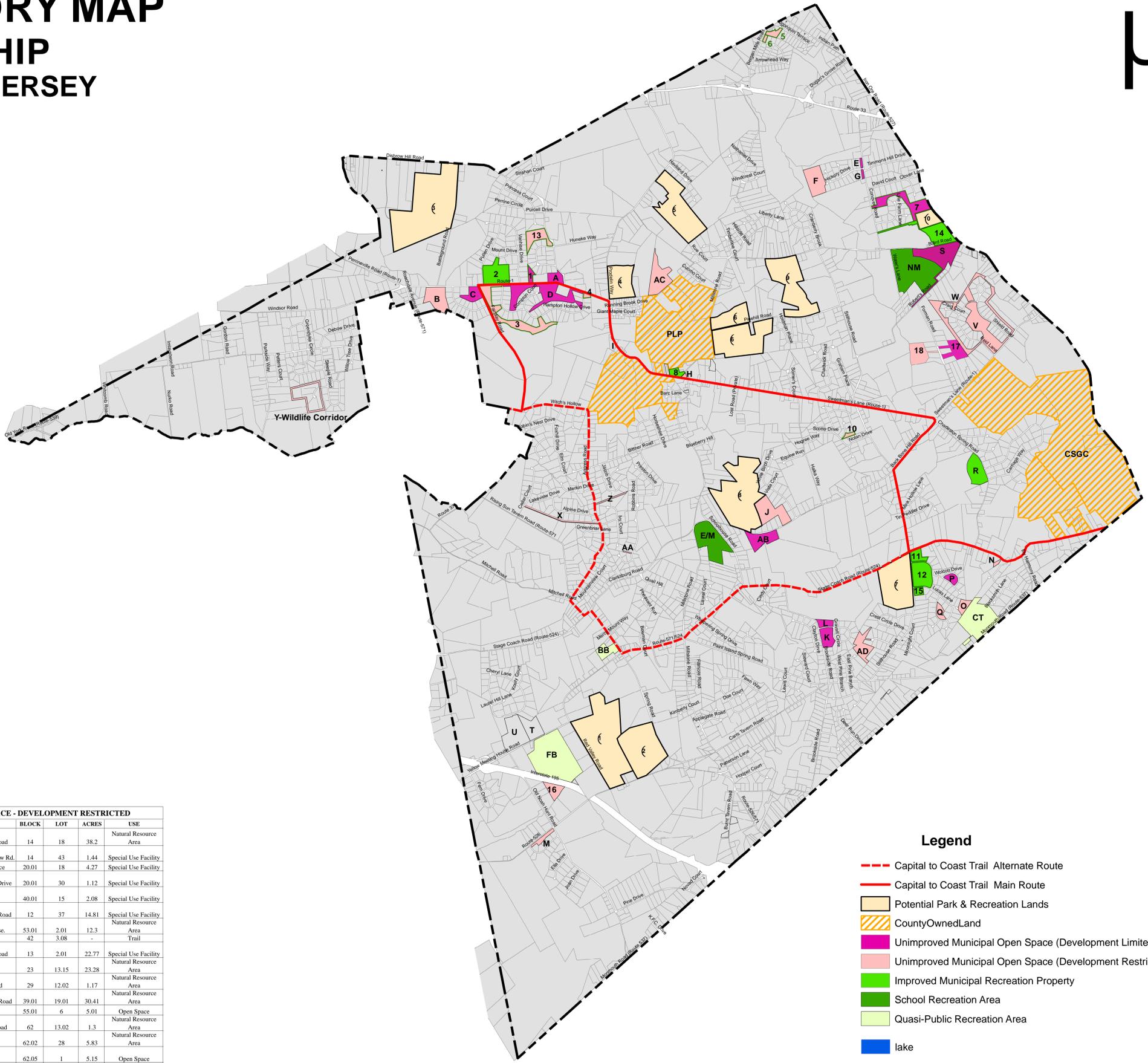
POTENTIAL PARK & RECREATION AREA						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
1	Lee Property	Red Valley Road/CR 526	52	13, p/o 1.01 & 1.07	160	Potential Park Site
2	Thueng c/o May Lai	Spring Road/CR 526	52	7	89.83	Potential Park Site
3	Frank Depalma Property	Dishbrow Hill Road/Battle Ground Road	11	17	180.75	Potential Park Site
4	Cerconics, Inc.	Baird Road/Prodelin Way	17	19	39.12	Potential Park Site
5	Giuglielmo Iacono Property	Prodelin Way	17	24	82	Potential Park Site
6	Levchuk Property	Pine Hill Road	27, 28	2, 01, 3	111.94	Potential Park Site
7	Greenback Realty	Stillhouse Road & Stagecoach Road	47	5	78.34	Potential Park Site
8	Manzo/Stavola	Backbone Hill Road	39.01	20.02, 20.05, 21, 21.01 to 21.08, 21.10, 21.12, 30.02, 30.03, 14.01, 14.02, & 21	100	Potential Park Site
9	Campo Mines Property	Baird & Pine Hill Roads	28	13, 02, 19, 20 & 21	82.18	Potential Park Site
10	Hantz Property	Monmouth Road (CR 537)	24.03	12 & 13	16.48	Potential Park Site
				Total	940.64	

QUASI - PUBLIC/PRIVATE RECREATION AREA						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
BB	Black Bear Lake	Red Valley Road/CR 526			30	Private Camp
FB	Frogbridge Day Camp	7 Yellow Meeting House Road			85.28	Private Camp
CT	Camp Topanemus	380 Monmouth Road			50	Quasi Public Rec.
				Total	165.28	

SCHOOL RECREATION AREA						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
E/M	Elementary/Middle School	Schoohouse Road	49	1 & 2, 01	43.54	School Recreation
NM	New Middle School	Water's Lane	25	1, 08 & 1, 09	73.15	School Recreation
				Total	116.69	

UNIMPROVED MUNICIPAL OPEN SPACE - DEVELOPMENT LIMITED						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
1	Rocky Brook Watershed	791 Perrineville Road	12	50	3.56	Open Space
7	Lyle Farm Open Space	Lyle Farm Lane Rear	24.03	11, 21	22.5	Open Space
17	Livak Farm Open Space	Forman Road	43	12, 06	15.6	Open Space
A	Apple Orchard Buffer Farmland (3 year lease)	805 Perrineville Road	12	53	7.73	Open Space
C	Apple Orchard Buffer	770 Perrineville Road	13.01	1	10.09	Open Space
D	Apple Orchard Buffer	800 Perrineville Road	14.01	31	42.86	Open Space
E	Conover Road Buffer	29 Conover Road	23	13, 02	1.08	Open Space
G	Conover Road Buffer	29A Conover Road	23	13, 26	1.01	Open Space
K	Gravatt Circle Open Space	60 Brookside Road	47	9, 01	11.77	Open Space
L	Gravatt Circle Open Space	70 Brookside Road	47	9, 09	5.5	Open Space
P	Wolcott Drive Open Space	1 Wolcott	62.04	1	5.01	Open Space
S	Unnamed/Trail	Baird Road	25	1, 1	40.56	Open Space
AB	Unidentified	111 Backbone Hill Rd. Trail	46	5	19.02	Open Space
				Total	186.29	

UNIMPROVED MUNICIPAL OPEN SPACE - DEVELOPMENT RESTRICTED						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
3	Rocky Brook Watershed	790 Perrineville Road	14	18	38.2	Natural Resource Area
4	Rocky Brook Watershed	50 Hampton Hollow Rd.	14	43	1.44	Special Use Facility
5	Watershed	3 Algonquin Terrace	20.01	18	4.27	Special Use Facility
6	Millstone River Watershed	2 Winding Creek Drive	20.01	30	1.12	Special Use Facility
10	Millstone River Watershed	1 Rooney Court	40.01	15	2.08	Special Use Facility
13	Orchard Buffer/RB Watershed	280 Dishbrow Hill Road	12	37	14.81	Special Use Facility
16	Scenic View	24 Yellow Mtg. Hse.	53.01	2, 01	12.3	Natural Resource Area
18	Livak Farm	Forman Road	42	3, 08	-	Trail
B	Farmland (3 year lease)	756 Perrineville Road	13	2, 01	22.77	Special Use Facility
F	Hickory Drive Forest	17 Hickory Drive	23	13, 15	23.28	Natural Resource Area
H	Rocky Brook Watershed	219 Millstone Road	29	12, 02	1.17	Natural Resource Area
J	White Birch Open Space Trail	96 Backbone Hill Road	39.01	19, 01	30.41	Natural Resource Area
M	Trenton Road Buffer	Bruere Drive	55.01	6	5.01	Open Space
N	Stagescoach Road Open Space	105 Stagecoach Road	62	13, 02	1.3	Natural Resource Area
O	Manalapan Branch Watershed	16 Lucas Lane	62.02	28	5.83	Natural Resource Area
Q	Wetherill Drive Open Space	3 Wetherill Drive	62.05	1	5.15	Open Space
V	Shield Road Open Space	Shield Road	43.01	1	34.72	Open Space
W	Shield Road Open Space	Shield Road	43.01	15, 02	32.75	Open Space
X	Unamed	Agress Road	31.02	15	1.26	Park Trail
Y	Ridings Wildlife Corridor	3, 4, 5, & 8 Dressage Court	6	p/o 6.02, 6.04, 6.05 & 6.06	1.48	Wildlife Corridor
Z	Jacob Wildlife Corridor	10, 12, 14 & 19 Agress Road/Jacob Drive	37.01	p/o 8, 12, 13 & 14	0.55	Wildlife Corridor
AD	Lieber Open Space	Lebers Lane	47	7	15.68	Open Space
AA	Corridor	38 S. Robbins Road	37.02	p/o 25	0.17	Wildlife Corridor
AC	Scotto Open Space	156 Baird Road	15	18, 06	21.95	Open Space
				Total	277.7	



Legend

- Capital to Coast Trail Alternate Route
- Capital to Coast Trail Main Route
- Potential Park & Recreation Lands
- County Owned Land
- Unimproved Municipal Open Space (Development Limited)
- Unimproved Municipal Open Space (Development Restricted)
- Improved Municipal Recreation Property
- School Recreation Area
- Quasi-Public Recreation Area
- lake
- stream



SOURCE: MILLSTONE TOWNSHIP GIS DATA, NJDEP GIS DATA, AND PLAN PREPARED BY LEON S. AVAKIAN, INC.

PARCEL INFORMATION SHEET

MILLSTONE TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY

QUASI - PUBLIC/PRIVATE RECREATION AREA						
SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
BB	Black Bear Lake	Red Valley Road/CR 526			30	Private Camp
FB	Frogbridge Day Camp	7 Yellow Meeting House Road			85.28	Private Camp
CT	Camp Topanemus	380 Monmouth Road			50	Quasi Public Rec.
				Total	165.28	

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SYMBOL	PARCEL NAME	LOCATION	BLOCK	LOT	ACRES	USE
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2	Thueng c/o May Lai	Spring Road/CR 526	52	7	89.83	Potential Park Site
3	Frank Depalma Property	Disbrow Hill Road/Battle Ground Road	11	17	180.75	Potential Park Site
4	Ceronics, Inc.	Baird Road/Prodelin Way	17	19	39.12	Potential Park Site
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AB	Unidentified	111 Backbone Hill Rd. Trail	46	5	19.02	Open Space
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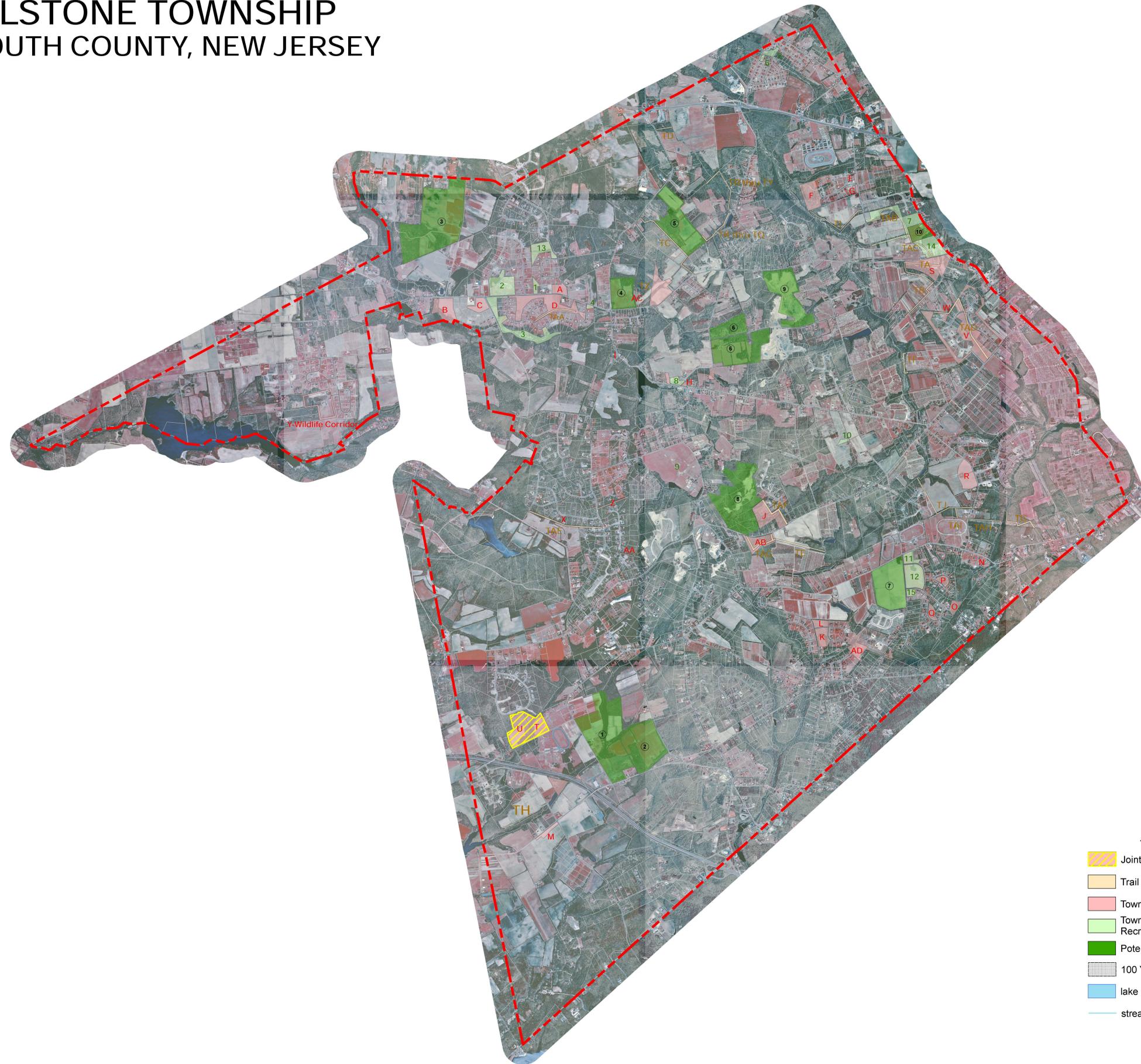
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AD	Lieber Open Space	Lebers Lane	47	7	15.68	Open Space
AA	Robbins Wildlife Corridor	38 S. Robbins Road	37.02	p/o 25	0.17	Wildlife Corridor
AC	Scotto Open Space	156 Baird Road	15	18.06	21.95	Open Space
				Total	277.7	

SEE FOLLOWING PLANS FOR CORESPONDING IDENTIFIED PARCEL LOCATIONS FOR COUNTY OWNED LAND, IMPROVED MUNICIPAL RECREATION PROPERTY, POTENTIAL PARK & RECREATION AREA, QUASI-PUBLIC/PRIVATE RECREATION AREA, SCHOOL RECREATION AREA, UNIMPROVED MUNICIPAL OPEN SPACE - DEVELOPMENT LIMITED AND UNIMPROVED MUNICIPAL OPEN SPACE - DEVELOPMENT RESTRICTED.

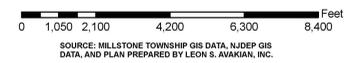
1995-1997 Digital Orthophoto Map

MILLSTONE TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY



- Legend**
-  Joint with State
 -  Trail Easements
 -  Township Owned Developed & Partially Developed Lands Held
 -  Township Owned Wholly Undeveloped Lands Held for Recreation & Conservation
 -  Potential Park & Recreation Lands
 -  100 Year Floodplain
 -  lake
 -  stream

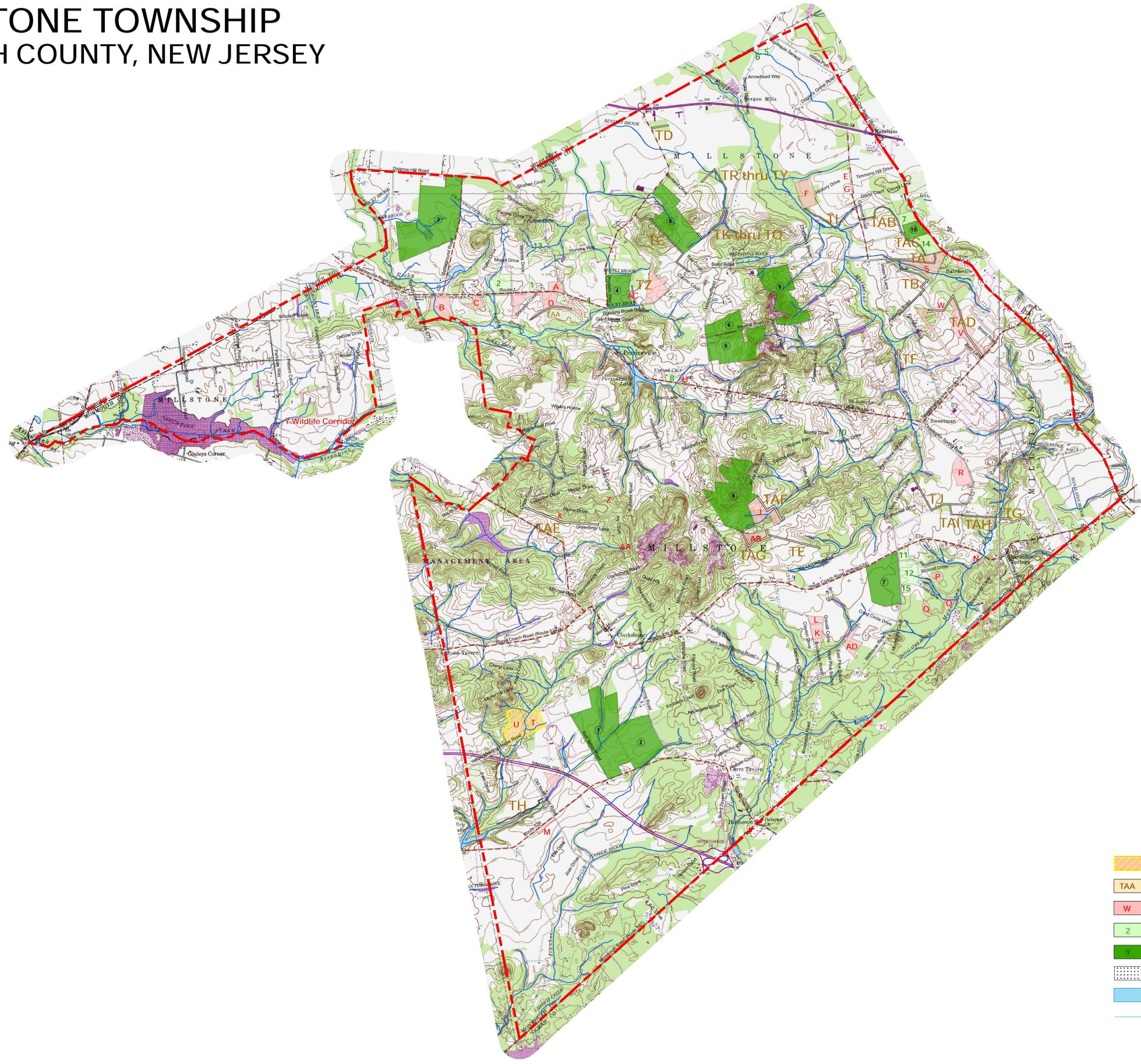


SOURCE: MILLSTONE TOWNSHIP GIS DATA, NJDEP GIS DATA, AND PLAN PREPARED BY LEON S. AVAKIAN, INC.

U.S.G.S. LOCATION MAP

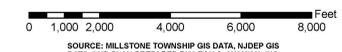
MILLSTONE TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY



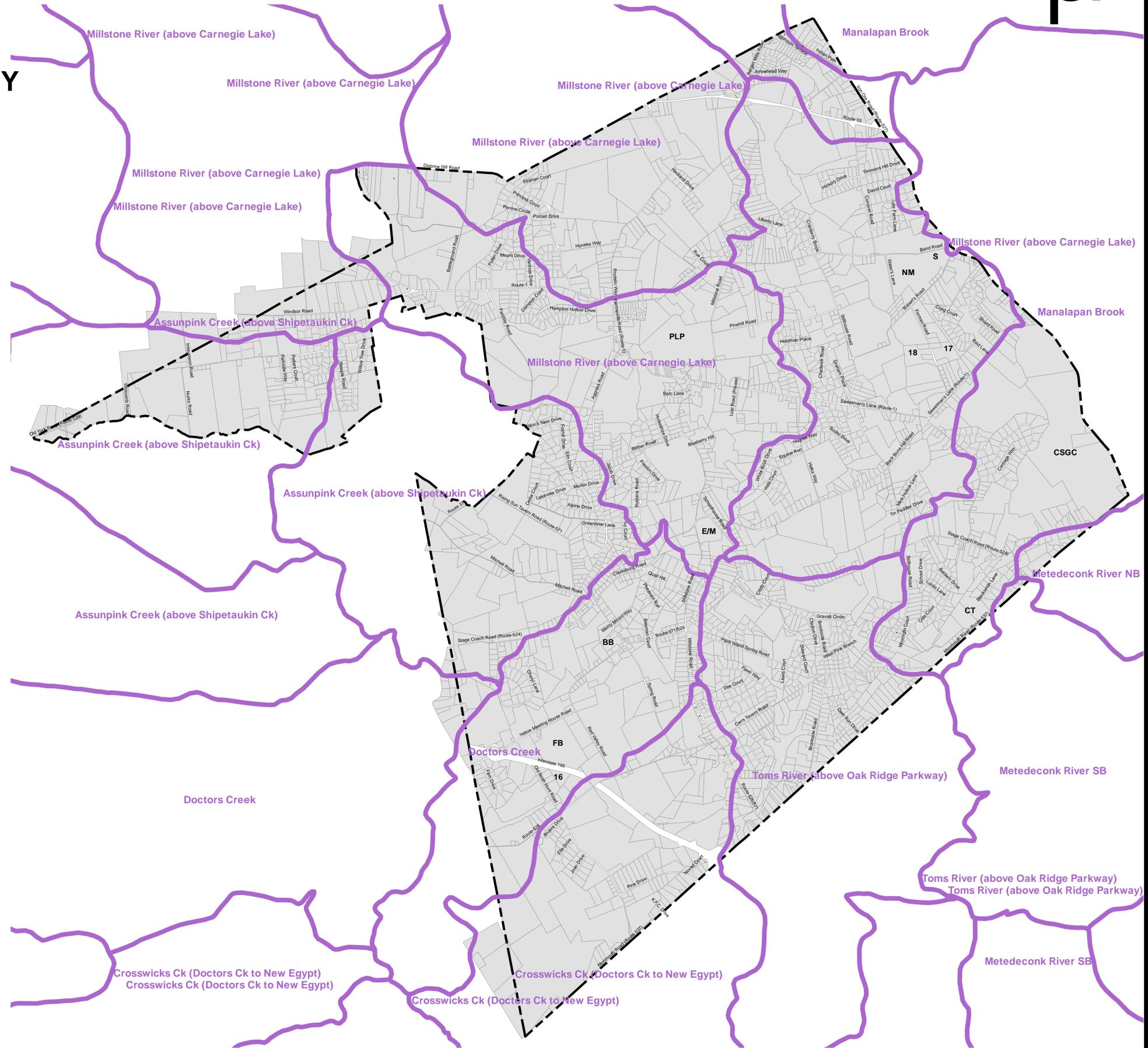
Legend

-  Joint with State
-  Trail Easements
-  Township Owned Developed & Partially Developed Lands Held
-  Township Owned Wholly Undeveloped Lands Held for Recreation & Conservation
-  Potential Park & Recreation Lands
-  100 Year Floodplain
-  lake
-  stream



SOURCE: MILLSTONE TOWNSHIP GIS DATA, NJDEP GIS DATA, AND PLAN PREPARED BY LEON S. AVAKIAN, INC.

WATERSHED MANAGEMENT AREA MAP MILLSTONE TOWNSHIP MONMOUTH COUNTY, NEW JERSEY



Legend

- dephuc14
- lake
- stream
- Wetlands

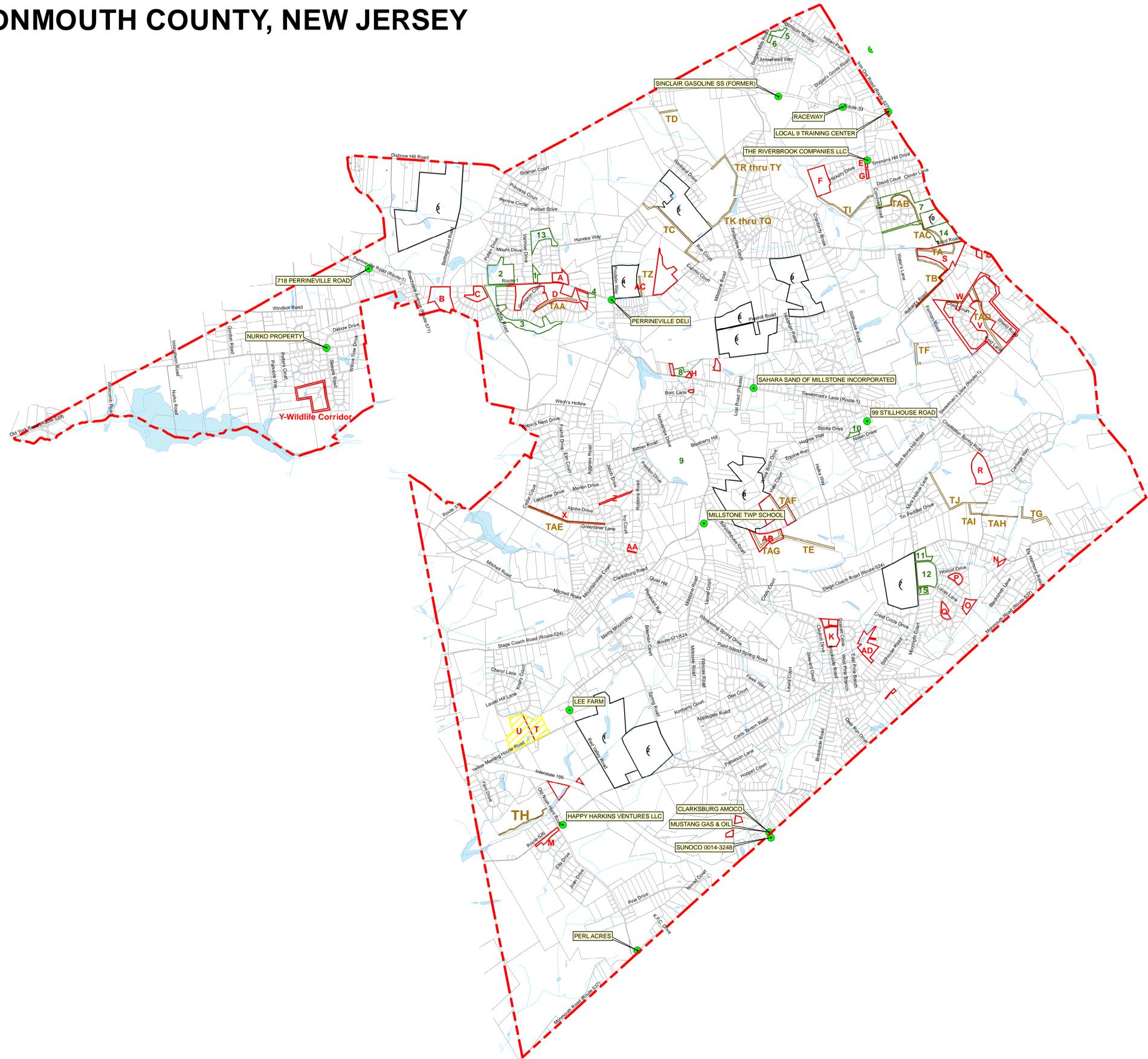


SOURCE: MILLSTONE TOWNSHIP GIS DATA, NJDEP GIS DATA, AND PLAN PREPARED BY LEON S. AVAKIAN, INC.

KNOWN CONTAMINATED SITES LIST

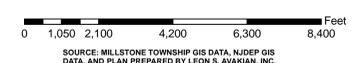
MILLSTONE TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY



- Legend**
- Joint with State
 - TAA Trail Easements
 - Township Owned Developed & Partially Developed Lands Held
 - Township Owned Wholly Undeveloped Lands Held for Recreation & Conservation
 - Potential Park & Recreation Lands
 - lake
 - stream
 - Known Contaminated Sites List for New Jersey 2005

The Known Contaminated Sites List for New Jersey 2005 are those sites and properties within the state where contamination of soil or ground water has been identified or where there has been, or there is suspected to have been, a discharge of contamination. This list of Known Contaminated Sites may include sites where remediation is either currently under way, required but not yet initiated or has been completed. The data included here dates from 2001. It is important to note that some of the cases listed may have been fully remediated and should no longer be listed as known contaminated sites. Additionally new contaminated sites have been identified since the creation of this list and are not included here. For further information contact NJDEP's Site Remediation Program and Waste Management (SRWM) lead program, which are identified with each site listed in this data base. Contact information for SRWM lead program can be acquired at www.state.nj.us/dep/srp.

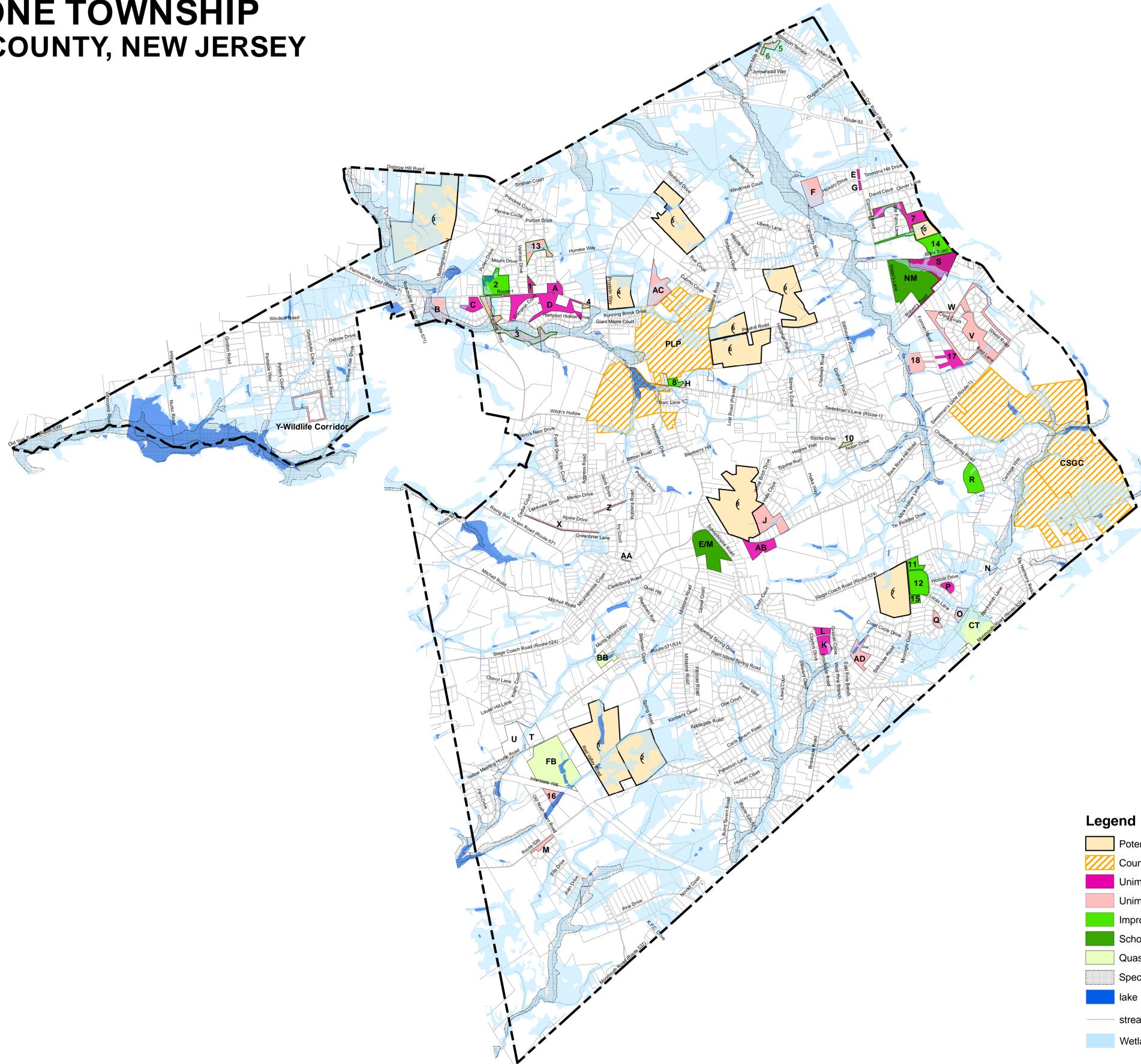


SOURCE: MILLSTONE TOWNSHIP GIS DATA, NJDEP GIS DATA, AND PLAN PREPARED BY LEON S. AVAKIAN, INC.

WETLANDS MAP

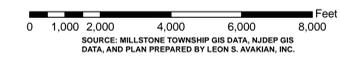
MILLSTONE TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY



Legend

- Potential Park & Recreation Lands
- County Owned Land
- Unimproved Municipal Open Space (Development Limited)
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- Improved Municipal Recreation Property
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- Quasi-Public Recreation Area
- Special Flood Hazard Area
- lake
- stream
- Wetlands

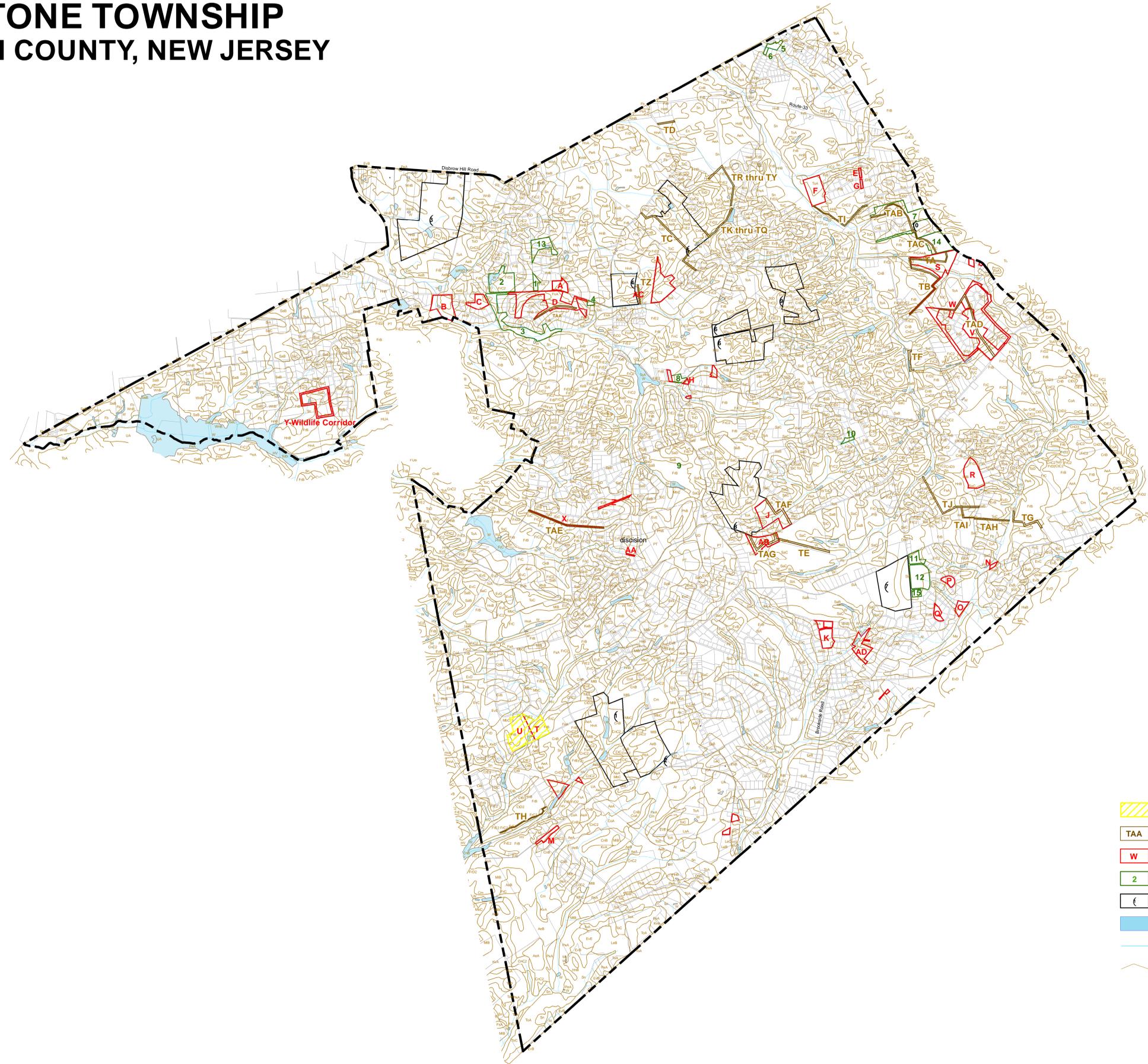


SOURCE: MILLSTONE TOWNSHIP GIS DATA, NJDEP GIS DATA, AND PLAN PREPARED BY LEON S. AVAKIAN, INC.

SOILS LOCATION MAP

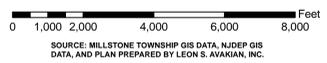
MILLSTONE TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY



Legend

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-  W Township Owned Developed & Partially Developed Lands Held
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-  Potential Park & Recreation Lands
-  lake
-  stream
-  Soil District Line



SOURCE: MILLSTONE TOWNSHIP GIS DATA, NJDEP GIS DATA, AND PLAN PREPARED BY LEON S. AVAKIAN, INC.