# **BARON CAMERON PARK**

Master Plan Revision





**APPROVED 6-25-2014** 

## **ACKNOWLEDGEMENTS**

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## **APPENDIX**

Appendix A: Executive Summary, Market and Feasibility Analysis for Indoor Recreation (May 2013).

Prepared for Reston Community Center by Brailsford & Dunlavey.

## I. INTRODUCTION

## A. PURPOSE AND PLAN DESCRIPTION

The purpose of a Master Plan is to create a long-range vision for the identified park by determining the appropriate uses and resource management for a specific site. During the planning process, the site is considered in the context of the surrounding community and as one park of many within the Fairfax County Park Authority (Park Authority) system. The approved master plan serves as a long-term decision making tool to be referred to before any planning, design/construction projects, resource management activities, or programming is initiated. Master Plans are general in nature and can adapt over time to accommodate changing park users' needs, and management practices. They should be updated as necessary to reflect changes that have occurred both in and around the park.

### **B. PARK MASTER PLANS**

Fairfax County is a thriving community that is home to more than one million residents and the base for over two hundred million square feet of commercial, industrial and retail space. The County's residents, work force, and visitors all greatly benefit from the more than 23,000 acres of parkland and a myriad of recreational opportunities provided throughout the county. In 1950, the Fairfax County Park Authority was established with the charge of maintaining the viability and sustainability of this expansive system of parks and facilities. In providing quality facilities and services while protecting the county's cultural and natural resources, the Park Authority seeks to improve the county's quality of life today and well into the future.

In order to achieve its long-range goals and objectives, the Park Authority has established a consistent and equitable approach in the planning of park property and facilities. A key part of this process includes development of Park Master Plans, specific to each park and intended to establish a long-range vision guiding future site development. During the planning process, the site is evaluated to assess its context within the surrounding neighborhoods as well as within the framework of the entire Fairfax County park system. Potential and desired land uses are considered with regard to the ability to establish them sensitively and sustainably with public input as a key component in the decision-making process. When completed, the individual Park Master Plan will serve as a long-term, decision-making tool to guide all aspects of development related to planning, design, construction, resource management, and programming within that given park. To maintain the viability of the Park Master Plan as an effective tool, periodic updates may occur so that the plan accurately reflects the park and its surroundings, addressing changes that occur over time. The approved Park Master Plan is presented at a conceptual level of detail and future site design and engineering may result in a shift of use location within the park.

## C. PLANNING PROCESS & PUBLIC INVOLVEMENT

The public planning process to revise the Baron Cameron Park Master Plan began in late 2012 after the Board of Supervisors transferred ownership of the site to the Park Authority in 2011. The Park Authority held a public information meeting on May 7, 2013, that was attended by over 150

community members. The majority of the comments centered on the Reston Community Center (RCC) proposal to consider a partnership with the Park Authority to build an indoor recreation center in the park that would provide aquatic, gymnasium, and fitness options. In particular, community members raised questions and expressed concerns regarding traffic impacts, loss of open space, the proposed location, community need for such a facility, and financial responsibilities. Other comments related to possible enhancements of existing facilities and new facilities that would benefit the community.

Concurrent with the Park Authority planning process, RCC initiated its own public input process regarding its indoor recreation center proposal and the potential programmatic features. The RCC process was considered a parallel and independent process and did not replace the Park Authority public planning process.

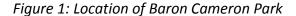
Following the public information meeting, the Park Authority conducted further site analysis, reviewed the public comments, and developed a draft revised Master Plan. During this time period, RCC continued its exploratory efforts regarding its indoor recreation center proposal. At the RCC Annual Public Hearing for Programs and Budget held on June 17, 2013, the RCC Board of Governors approved an initiative to seek 2014 bond financing to fund an indoor recreation center, and directed its Building Committee to review potential sites. The RCC Building Committee completed its review with a report dated October 29, 2013, that recommended pursuing two site options: Baron Cameron Park and Reston Town Center North. The Building Committee determination was accepted and endorsed by the RCC Board of Governors at its monthly meeting on November 4, 2013. Shortly thereafter, RCC submitted a written request to the Park Authority to reiterate the RCC interest in pursuing planning that would realize a comprehensive indoor recreation facility in Reston within the context of the Baron Cameron Park Master Planning process. In addition, RCC submitted a request to the Fairfax County government to consider an indoor recreation center as it master plans the areas in Reston Town Center North. Further, RCC requested to collaborate with the Park Authority to explore both options.

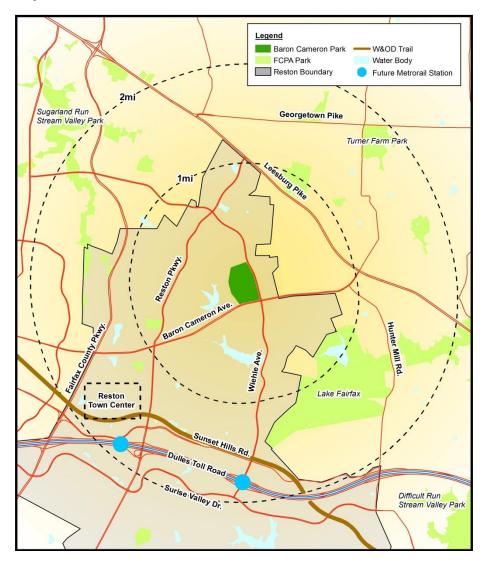
The Park Authority published the draft Master Plan in mid-February 2014 and held a public comment meeting on March 27, 2014, to present the draft Master Plan and gather community input. The meeting was attended by over 130 community members and attracted 24 speakers. A 30-day public comment period followed the March 27 meeting. Public comment during this period predominantly centered on the RCC proposal to consider a partnership with the Park Authority to build an indoor recreation center. Comments also focused on the proposed amount of parking and OLDA relocation option, potential traffic impacts from future park development and opening of the Metrorail Silver Line, and balancing the number of proposed fields and overall playing capacity.

## II. PARK BACKGROUND

## A. GENERAL DESCRIPTION

Baron Cameron Park is a 60-acre, District-classified park in the Hunter Mill Supervisory District, located at 11300 Baron Cameron Avenue in Reston (Figure 1). In accordance with an interim use agreement with Fairfax County Public Schools (FCPS) who previously owned the site, the Park Authority created a park master plan in 1975 and subsequently managed and developed the park for over 35 years. Established recreational facilities include nine rectangle fields, a lighted diamond field, 32 individual garden plots, a playground and picnic area, and a 0.5-acre off-leash dog area. Ownership of the site was transferred to the Park Authority in 2011, as further described below in Section C. ADMINISTRATIVE AND MASTER PLAN HISTORY.

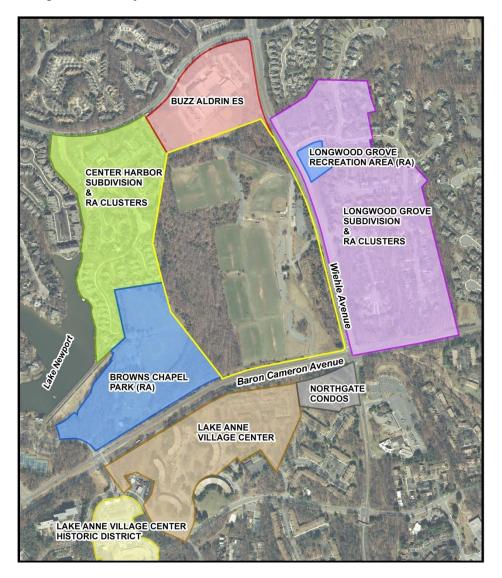




## **B. AREA CONTEXT**

Baron Cameron Park is surrounded by a multitude of uses (Figure 2), including Buzz Aldrin Elementary School, single-family detached homes, single-family attached townhomes, multi-family condominiums, the Lake Anne Village Center, and two Reston Association public parks.

Figure 2: Surrounding Land Uses of Baron Cameron Park



Using the planning geography designated in the Fairfax County Comprehensive Plan, Baron Cameron Park is located in Area III, Upper Potomac Planning District, UP5 Reston Community Planning Sector. The Upper Potomac Planning District is generally bounded by the Potomac River to the north, Loudoun County to the west, Lee Jackson Memorial Highway (Route 50) to the south, and Vale and Stuart Mill Roads to the east. The Reston Community Planning Sector is generally bounded by Leesburg Pike (Route 7), Hunter Mill Road, Stuart Mill Road, Fox Mill Road, and the Fairfax County Parkway.

The Reston Community Planning Sector is primarily comprised of the 7,100-acre community of Reston, which has its own Master Plan because the community was planned and developed as one of the nation's landmark new towns, beginning in the 1960s (Figure 3). Reston is designed around the concept of clustering the community into five "villages," each with its own village center. These centers provide for neighborhood-serving retail, office, and social needs. Lake Anne Village Center, the first developed village center and a designated county Historic District, is located nearby and accessible from Baron Cameron Avenue opposite the park.

Figure 3: Reston Master Plan



In March 2007, the Fairfax County Department of Planning and Zoning kicked off a multi-phase planning study to identify appropriate changes to the Fairfax County Comprehensive Plan in anticipation of the Metrorail Silver Line expansion through Reston. The first phase focused on the areas

near the three proposed Metrorail stations within the Dulles Corridor in Reston. This phase was completed in early 2014 and recommended increased densities reflecting transit-oriented development that provide a mix of regional retail and other attractions, and a balance of residential uses and employment opportunities. The focus of the second phase will be broadened to include the remaining portions of Reston.

In terms of planned growth over the next 25 to 30 years, the first phase resulted in a Comprehensive Plan Amendment that provides an increased development potential above existing conditions of more than 22,000 residential units and 12 million square feet of commercial uses. In order to meet this planned growth, the plan amendment recommends that 12 athletic fields are needed. The plan amendment further provides three broad strategies to help realize this goal, one of which includes enhancing existing athletic fields to increase playing capacities. Baron Cameron Park is a prime candidate for field enhancements as it is located within one mile of a future Metrorail station and has potential for field capacity expansion.

#### C. ADMINISTRATIVE AND MASTER PLAN HISTORY

The single parcel comprising Baron Cameron Park (Tax Map: 011-4 ((1)) 0050) was previously owned by Fairfax County Public Schools (FCPS) until it was declared surplus and subsequently transferred to the Board of Supervisors in 2006, which in-turn transferred ownership to the Park Authority in 2011. Following the ownership transfer, the Park Authority initiated the public planning process in 2012 to revise the master plan.

Prior to owning the site, the Park Authority entered into an interim use agreement with FCPS in 1974 to allow interim recreational uses on the vacant site contingent on the creation of a park master plan, which was established by the Park Authority Board in 1975 (Figure 4). The plan approved in 1975 depicts athletic fields, garden plots, picnic areas, and an area designated for model airplanes. Pursuant to Code of Virginia Section 15.1-456, a public use determination for the park was submitted by the Park Authority and approved by the Fairfax County Planning Commission in 1975; this requirement is now under Code of Virginia Section 15.2-2232. Over the next 15 years, the park was developed in substantial conformance with the plan approved in 1975. In 1990, the Park Authority updated the master plan to reflect the as-built conditions (Figure 5). The 1990 updated plan reflected the addition of five rectangle fields, a playground, and vehicular access from Wiehle Avenue, and the removal of the area designated for model airplanes.

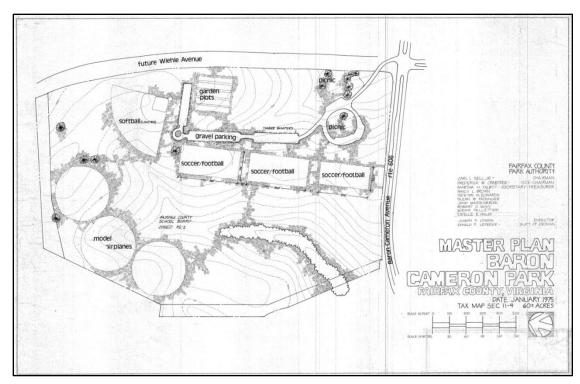
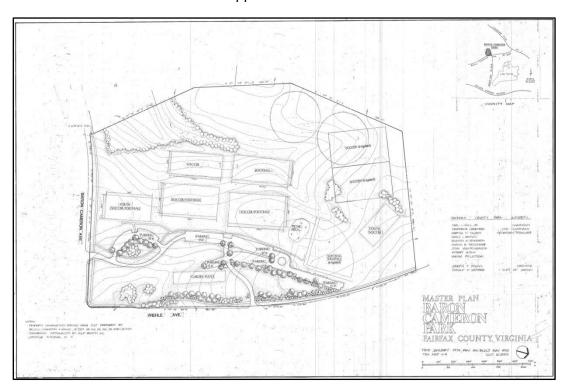


Figure 4: Baron Cameron Park Master Plan approved in 1975

Figure 5: Baron Cameron Park Master Plan approved in 1990



In 2000, the Park Authority received a request from the Reston Dog Park Coalition (Reston Dogs) to consider an off-leash dog area (OLDA) in the park. In order to realize a publicly-accessible OLDA, the use had to be reflected on the approved park master plan. Shortly thereafter, the Park Authority initiated a public planning process to examine the proposed OLDA use. The OLDA request had strong support from the community and was approved by the Park Authority Board in 2001 (Figure 6). The 2001 amendment also reflected the addition of one rectangle field and parking.

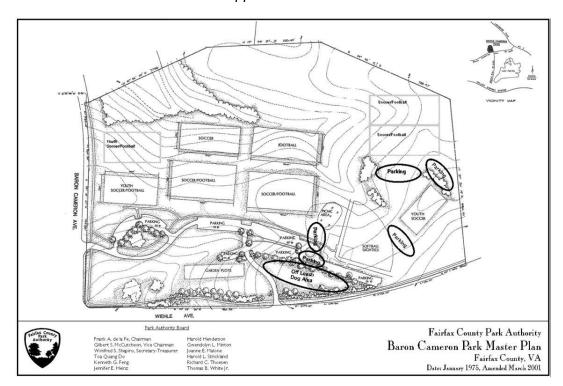


Figure 6: Baron Cameron Park Master Plan approved in 2001

## D. PARK CLASSIFICATION SYSTEM

The Park Classification System is a general framework intended to guide open space and public facilities planning, and also to assist in the development of public and private land management plans, by grouping parks according to certain common typical characteristics. The Park Classification System specifically supports Countywide Policy Plan Objective 1, Policy a. by outlining the primary purpose, location and access, character and extent of development for the following park classifications. The four park classifications include: Local, District, Countywide, and Resource-Based.

Baron Cameron Park is designated as a District Park. District parks are mid-size parks (typically between 50 and 150 acres) that provide a variety of outdoor and indoor recreational facilities and park experiences, as well as natural and cultural resource protection where appropriate. District parks are typically located on major arterial roads to afford vehicular access; public transit and

pedestrian/bicycle access are also frequently provided to encourage non-vehicular use. The service area for District parks can range from three to six miles, although they may attract more distant users.

District parks may combine recreation complex facilities with areas of the park that are undeveloped. The extent of development depends on actual site conditions, such as topography, amount of developable acreage, natural and cultural resources, and access. Appropriate facilities include those that support active and passive recreation, often clustered together, areas for programmed activities and gathering places and areas designated for resource protection. Lighted facilities and extended hours of operation are the norm. Furthermore, typical recreation activities at District Parks include golf, skating, cultural and holiday events, performing arts, field complexes, and sports play and activities scheduled in RECenters. Other desirable features include woodlands, open space, trails, and open play areas. Baron Cameron Park conforms to the district park classification.

## E. PARK LAND COVER

The distribution of land cover is a meaningful indicator of past and current uses within a park. The Park Authority classifies land cover for each park using five categories: Developed, Forested, Managed, Open Field, and Tree Cover.

- "Developed" indicates an area contains constructed features that typically involve significant grading and require frequent maintenance such as playing fields, courts, parking, drives, buildings, dry storm water management ponds, and water features.
- "Forested" indicates a treed area greater than 10 acres in size or smaller if directly contiguous to a functional forested block.
- "Managed" indicates an area has little or no built features, but requires routine maintenance such as lawns, gardens, agricultural fields, and orchards.
- "Open Field" indicates a non-treed area in a mostly natural state including meadows, old growth fields, and certain utility corridors.
- "Treed" indicates a treed area less than 10 acres in size and/or having a significantly impaired vegetative integrity due to human activity, invasive plant species and/or damage due to deer browsing; scattered trees in open areas, buffers along edges of parks or use zones adjacent to development.

Approximately 3,108 acres of Park Authority parkland are located in the Upper Potomac Planning District, which has the following land cover distribution: 8% developed, 72% forested, 9% managed, 6% open field, and 5% treed (Figure 7). The importance of preserving natural resources and landscapes throughout the diverse semi-rural and urban areas of the Upper Potomac Planning District is evidenced by the Park Authority's management that has retained about 83% of parkland in a forested, open field, or treed state. The distribution of land cover in Baron Cameron Park is discussed in Section III. EXISTING CONDITIONS.

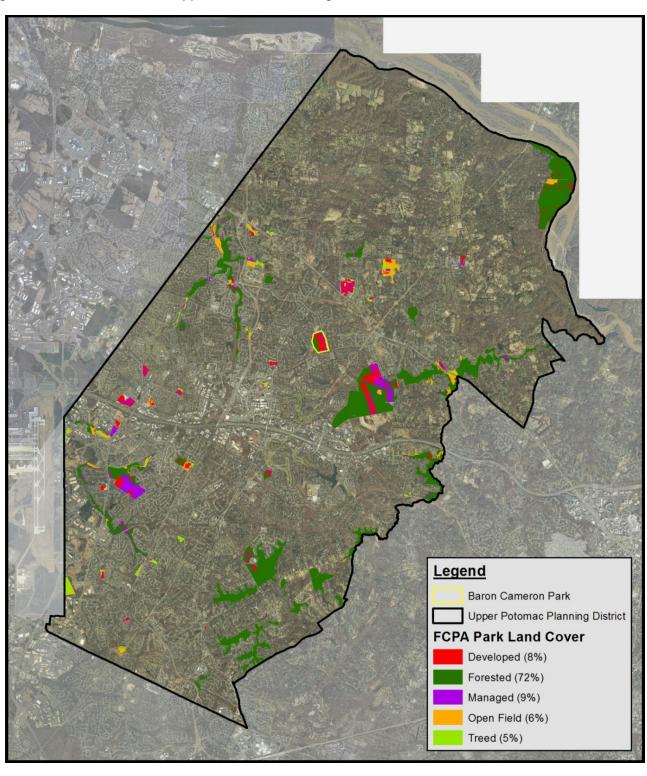
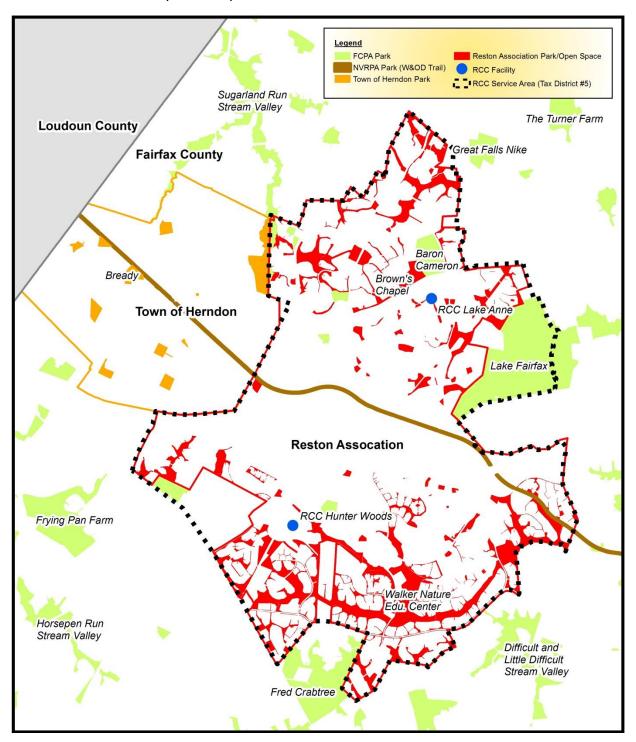


Figure 7: Park Land Cover in Upper Potomac Planning District

## F. PARK AND RECREATION PROVIDERS AND NEEDS

The Reston area is served with multiple park and recreation providers that together serve diverse park and recreation needs, as shown in Figure 8 and described below.

Figure 8: Reston Area Park System Map



- <u>Fairfax County Park Authority (FCPA)</u> offers a wide-range of park and recreational opportunities, including Baron Cameron District Park, Lake Fairfax District Park, and a few local parks.
- Reston Association (RA) is Virginia's first planned community and one of the largest community associations in the United States, covering approximately 12 square miles. RA maintains and operates a vast array of recreational facilities, including 15 pools, 48 tennis courts, 55 miles of paved pathways, ballfields, playgrounds, multipurpose courts, picnic areas, garden plots and a variety of rental facilities for public meetings and gatherings. In addition, RA seeks to protect Reston's natural beauty and environment though maintaining over 1,300 acres of open space, including 4 lakes, 3 ponds, streams, wetlands, forests, and meadows.
- Reston Community Center (RCC), a Fairfax County agency funded by tax revenues of Small District #5 and governed by a nine-member Board of Governors, was established in 1979 through special tax assessment funding to provide a wide variety of leisure-time, recreational, cultural, and aquatics programs and venues. In particular, RCC maintains and operates community centers in Hunters Woods and Lake Anne Village Center.
- <u>Town of Herndon</u> is the third largest town in the Commonwealth of Virginia with a population of about 23,000 residents. Herndon offers a variety of neighborhood-oriented parks and recreational facilities that primarily serve local residents.
- Northern Virginia Regional Park Authority focuses on regional park and recreation needs, as well as the protection of regional natural resources, such as woods, meadows, lakes and streams.

In a collaborative effort, a list of core park and recreation facility needs have been identified for the Reston area, which includes:

- Trails
- Local Parkland
- Playgrounds
- Sports courts
- Athletic fields
- Dog exercise areas and parks
- Memorial Garden of Reflection (outdoor)
- Public art
- Indoor aquatic facility
- Indoor tennis facility
- Indoor performance center

The need for park and recreation facilities in Fairfax County is determined through long-range planning efforts. Planning district-level park plans are provided in the Park Authority's *Great Parks, Great Communities Comprehensive Park System Plan*. Baron Cameron Park is located in the Upper Potomac Planning District. Recreation needs are generally met through the provision of park facilities. The Parks and Recreation Needs Assessment provides guidance for parkland and facility needs, and includes a process that considers industry trends, surveys County citizen recreation demand, and compares itself with peer jurisdictions to determine park facility needs. In addition, the Park Authority Board adopts countywide population-based service level standards for parkland and park facilities. Table 1 reflects projected park facility needs in the Upper Potomac Planning District.

Table 1: Upper Potomac Planning District 2020 Facility Needs Analysis

185,092	2010 population				
196,181	2020 projected population				
Facility	Service Level Standard	2010 Existing Public Facilities	2010 (Deficit)/ Surplus	2020 Needed Facilities	2020 Projected (Deficit)/ Surplus
Rectangle Fields	1 field / 2,700 people	68	0	73	(5)
Adult Baseball Fields	1 field / 24,000 people	8	0	8	0
Adult Softball Fields	1 field / 22,000 people	4	(4)	9	(5)
Youth Baseball Fields	1 field / 7,200 people	27	1	27	0
Youth Softball Fields	1 field / 8,800 people	13	(8)	22	(9)
Basketball Courts	1 court / 2,100 people	18	(70)	93	(75)
Playgrounds	1 playground / 2,800 people	30	(36)	70	(40)
Neighborhood Dog Parks	1 dog park / 86,000 people	2	0	2	0
Neighborhood Skate Parks	1 skate park / 106,000 people	0	(2)	2	(2)

As reflected in the *Great Parks, Great Communities Comprehensive Park System Plan*, the Park Authority also conducted a more localized examination of needs within the Upper Potomac Planning District. Based on the above adopted service level standards, the Upper Potomac Planning District is currently deficient in the provision of rectangle fields, adult and youth softball fields, basketball courts, playgrounds, and neighborhood skate parks. Projected population growth indicates that by 2020 the demand will be greatest within the Upper Potomac Planning District for basketball courts as well as rectangle fields, youth softball fields, and playgrounds. Needs are reassessed every decade and may shift over time.

Great Parks, Great Communities also serves as a long-range plan for the place-based, physical aspects of the park system, its land, its natural and cultural resources, and its facilities. In this respect, the plan offers recommendations and strategies to improve or enhance the overall park system and specifically Baron Cameron Park. Some of the major recommendations and strategies applicable to the Baron Cameron Park master plan revision include:

- Work with transit providers to improve bus transit service to parks in the district, especially the numerous district parks.
- Partner with other park providers to leverage facility capacity and use through shared allocations.
- Where appropriate, convert athletic fields to synthetic turf and add lights to increase playing capacity.
- Undertake athletic field improvements.
- Provide new linkages between remaining public and private natural areas.
- Direct development of park infrastructure to areas that, when inventoried, reflect few or poor quality natural resources, unless otherwise incompatible.
- Construct new park facilities in areas that require minimal removal of trees.

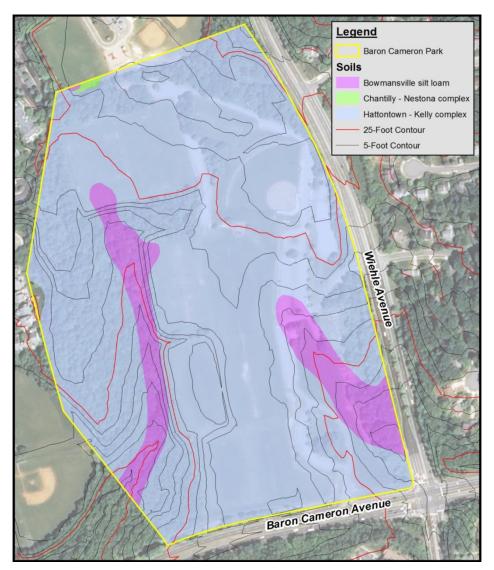
## III. EXISTING CONDITIONS

## **A. NATURAL RESOURCES**

## 1. Topography and Soils

The topography of Baron Cameron Park (Figure 9) is moderately flat in the central and northern portions of the park that have been developed, while the undeveloped areas on the western edge and southeastern corner of the park are characterized as wooded valleys with a high degree of elevation change.

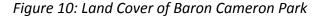
Figure 9: Topography and Soils of Baron Cameron Park



The park is primarily composed of two types of soil, Hattontown – Kelly complex and Bowmansville silt loam soils (Figure 9). Hattontown – Kelly complex soils generally have a high erosion potential and afford poor drainage with a permeability rate of 0.02 to 0.2 inches per hour. These soils have a problem class of IVA, which indicate that the soils have been disturbed or altered as a result of grading or construction. Bowmansville silt loam soils have a low erosion potential and afford poor drainage with a permeability rate of 0.2 to 0.6 inches per hour. These soils have a problem class of III, which indicate that the soils are undisturbed natural soils that have characteristics such as high shrink/swell potential, landslide susceptibility, high compressibility, low bearing strength, and shallow water tables.

## 2. Land Cover and Forest Stands

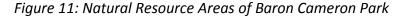
Several land cover types are distributed through the 60-acre Baron Cameron Park (Figure 10). Refer to Section II. PARK BACKGROUND, E. PARK LAND COVER for land cover descriptions.





Land Cover	Acres	Percentage of Total Park
Developed	28	46.5%
Forested (>10 acres)	21.5	36%
Managed	7.5	12.5%
Treed (<10 acres)	3	5%
Total	60	100%

Within these four land cover designations, there are nine natural resource areas that have unique characteristics and plant species (Figure 11).





<u>Natural resource area #1</u> is a small remnant stand of mature oaks (*Quercus spp.*), maples (*Acer spp.*), ash (*Fraxinus spp.*) and tuliptree (*Liriodendron tulipifera*). The understory contains invasive Japanese honeysuckle (*Lonicera japonica*) and autumn olive (*Elaeagnus umbellate*), along with native black cherry (*Prunus serotina*) and flowering dogwood (*Cornus florida*).

<u>Natural resource area #2</u> consists of a variety of meadow species such as Milkweed (*Asclepias spp.*) and Broomsedge (*Andropogon virginicus*).

<u>Natural resource area #3</u> contains a variety of plant species. The edges of the forest stand have a mix of milkweed (*Asclepias spp.*) and blackberry (*Rhubus spp.*) species. A high amount of non-native

invasive species, which is consistent with the amount of disturbance in the area, is also located along the forest edges, including white mulberry (Morus alba), autumn olive (Elaeagnus umbellate), multiflora rose (Rosa multiflora), oriental bittersweet (Celastrus orbiculatus), callery pear (Pyrus calleryana), tree of heaven (Ailanthus altissima), mimosa (Albizia julibrissin), porcelain berry (Ampelopsis brevipedunculata) and Japanese honeysuckle (Lonicera japonica). The forest stand interior contains native devil's walkingstick (Aralia spinosa), red maple (Acer rubrum), tuliptree (Liriodendron tulipifera), blackhaw viburnum (Viburnum prunifolium), ash (Fraxinus spp.), sweetbay magnolia (Magnolia virginiana), and pine (Pinus spp.). The southern portion of the natural resource area contains a section of planted, non-native conifer species, which are not invasive but were probably planted as landscaping in the past.

<u>Natural resource area #4</u> contains a row of planted Higan cherry (*Prunus subhirtella*) trees along with several different invasive species mixed within.

<u>Natural resource area #5</u> contains non-native invasive vines on its edges, while the interior portion consists of tuliptree (*Liriodendron tulipifera*) and black oak (*Quercus velutina*) species. The area lacks a midstory and the understory shows no signs of regeneration and contains some small, but growing patches of invasive oriental bittersweet (*Celastrus orbiculatus*). The western portion of the forest stand contains black locust (*Robinia pseudoacacia*) and oak trees (*Quercus spp.*) as well as a dirt pile for park operations use, which may have contributed to the spread of invasive princess tree (*Paulownia tomentosa*).

<u>Natural resource area #6</u> is a small remnant white oak (*Quercus alba*) stand with an understory of non-native invasive species; however, several large and healthy oaks remain today.

<u>Natural resource area #7</u> is a small remnant stand that contains black cherry (*Prunus serotina*) and red maple (*Acer rubrum*) trees with a mowed understory.

Natural resource area #8 encompasses the entire western side of the park. The edges adjacent to the park's developed areas contain a variety of non-native invasive plants such as mile-a-minute (Persicaria perfoliata), tree of heaven (Ailanthus altissima) and autumn olive (Elaeagnus umbellate). The stand interior contains an overstory of red maple (Acer rubrum), black cherry (Prunus serotina), tuliptree (Liriodendron tulipifera), ash (Fraxinus spp.) and black walnut (Juglans nigra) trees. The interior midstory contains a small amount of some dogwood trees (Cornus florida). The interior understory contains numerous invasive species, such as autumn olive (Elaeagnus umbellate), Japanese honeysuckle (Lonicera japonica), garlic mustard (Alliaria petiolata) and mile-a-minute (Persicaria perfoliata). Stormwater run-off generated from the nearby rectangular fields flows down into the southern half of the area, resulting in an incised stream bed with a high amount of bank erosion due to the high volume and velocity of water.

<u>Natural resource area #9</u> is a narrow strip of vegetation that contains mostly non-native invasive plants, such as tree of heaven (*Ailanthus altissima*).

#### 3. Hydrology and Watershed

Baron Cameron Park contains one stream in the western forested area of the park. The stream receives stormwater runoff generated from the upland park and nearby athletic fields in particular. The large, disproportionate amount of water that flows through the smaller stream has resulted in stream incision and bank erosion. The only other hydrological feature in the park is a drainage swale located in the southeastern corner that provides stormwater drainage underneath Wiehle Avenue via a culvert.

Baron Cameron Park is situated in the Difficult Run watershed and Colvin Run sub-watershed. According to the Difficult Run Watershed Management Plan prepared by the Fairfax County Department of Public Works and Environmental Services, the Colvin Run sub-watershed is characterized as one of the more densely developed subwatersheds found within the Difficult Run watershed and contains nearly 13 miles of streams, of which the majority are considered to be in fair condition for aquatic habitats. The watershed management plan does not include any recommendations for watershed improvements in Baron Cameron Park.

#### 4. Wildlife

The Park Authority has not conducted a formal wildlife survey for Baron Cameron Park, but staff observations revealed a variety of commonplace, non-rare species, such as deer, squirrels, and birds.

## **B. FACILITIES AND INFRASTRUCTURE**

Since the first athletic field was constructed in 1975, Baron Cameron Park has been developed according to the master plan as revised through 2001. Consequently, the park provides a variety of recreational opportunities and uses, including nine rectangle fields, one diamond field, an off-leash dog area, 32 individual garden plots, and a playground and picnic area (Figure 12).

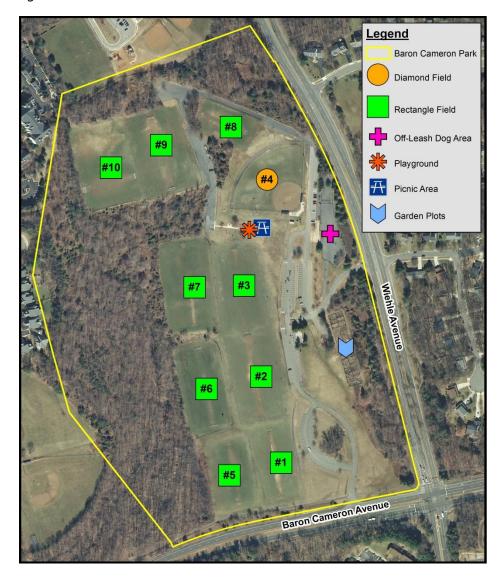


Figure 12: Existing Recreational Facilities at Baron Cameron Park

## 1. Rectangle Athletic Fields

Nine grass rectangle fields encompass the majority of the existing facilities and activity in the park in regard to size and intensity of use. All nine fields are unlit, maintained by the Park Authority and scheduled for public use by the Department of Neighborhood and Community Services (NCS). This is the standard arrangement for public athletic fields. The fields are also available for public use on a first-come, first-serve basis outside scheduled times. On average, each rectangle field is scheduled annually for about 1,000 hours of public use. The size and condition of the nine fields vary dramatically and are recommended for improvements in the Park Authority's *Great Parks, Great Communities* 2010-2020 Comprehensive Park System Plan (Figure 13).



Figure 13: Athletic Field Dimensions in Baron Cameron Park

#### 2. Diamond Athletic Field

Similar to the rectangle fields, the diamond field is maintained by the Park Authority and scheduled for public use by NCS. However, the field is lighted which expands the playing capacity to approximately 1,500 hours of scheduled public use annually. The field is generally scheduled for adult softball.

## 3. Off-Leash Dog Area

The 0.5-acre off-leash dog area (OLDA) was added to the Baron Cameron Park Master Plan in 2001 following a public planning process to amend the master plan. The OLDA was subsequently established as a sponsored use with Reston Dog Park Coalition, locally known as "Reston Dogs", according to the memorandum of understanding between the Park Authority and Reston Dogs. The OLDA consists of a stone-dust surface and affords a large area for all dogs and a smaller area designated for small dogs only.

The OLDA sponsored use is a public-private partnership between the Park Authority and a sponsor group that desires an OLDA for their community and is willing to invest in its development and operation. Sponsor groups serve as the agency's liaison between facility users, local residents, animal control officials, and the police department. The sponsor group is responsible for monitoring the facility, publicizing and communicating OLDA regulations, and reporting maintenance needs.

#### 4. Garden Plots

There are 32 individual garden plots in Baron Cameron Park. The garden plots are 30 feet by 20 feet in size and rented to individuals on an annual basis through the Park Authority from May 1 until November 15.

### 5. Playground and Picnic Area

A playground and picnic area with tables is located between rectangle field #3 and diamond field #4.

#### 6. Vehicular Access, Circulation, and Parking

Vehicular access to Baron Cameron Park is provided from Wiehle Avenue and Baron Cameron Avenue (Figure 14). The Wiehle Avenue entrance is accessible to both southbound and northbound motorists, while the Baron Cameron Avenue entrance is only accessible to westbound motorists due to a right-in/right-out configuration. Once inside the park from either entrance, vehicular circulation is limited to the paved road that generally runs south-north along the eastern side of the park and a gravel road that extends northerly around the diamond field to afford closer access to the rectangle fields in the northwest corner of the park.

There are approximately 325 existing parking spaces in the park, which accounts for 237 stripped spaces on the paved road sections and approximately 88 generally allotted spaces on the gravel road sections. The parking spaces near the Baron Cameron Avenue entrance are designated for Fairfax Connector commuter bus parking on a first-come, first-serve basis as a bus stop is located just outside the park entrance. Based on the current Park Authority standard of 50 parking spaces per athletic field, Baron Cameron Park is approximately 125 parking spaces deficient to adequately serve the existing recreational facilities.

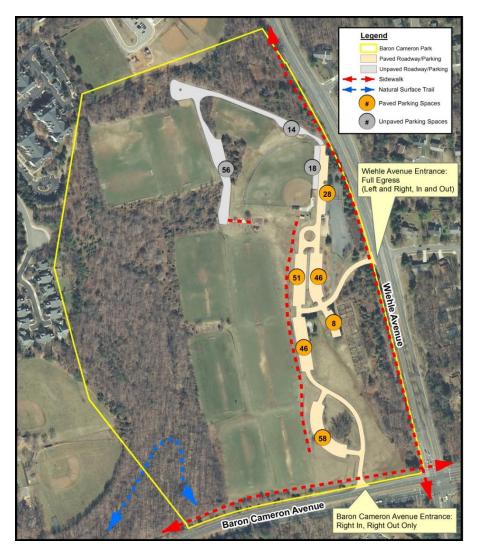


Figure 14: Pedestrian and Vehicular Access to Baron Cameron Park

#### 7. Pedestrian Access

Pedestrian access to Baron Cameron Park is afforded from the paved sidewalks on the west side of Wiehle Avenue and north side of Baron Cameron Avenue (Figure 14). Access is also provided from a natural surface trail that connects the entrance road of the adjacent Reston Association Brown's Chapel Park and sidewalk on Baron Cameron Avenue near the park boundary. Once inside the park, a paved sidewalk is located parallel to the main parking areas. A paved sidewalk is also provided from a portion of the gravel road section to the playground and picnic area.

#### 8. Vendor Pad

Baron Cameron Park has one vendor pad that affords mobile food vending trucks the opportunity to provide food services to park patrons. The vendor pad is located within the roundabout area just south of the existing diamond field.

## IV. PARK ASPIRTATIONS AND MANAGEMENT

#### A. PARK PURPOSE

Park Purpose statements provide high-level guidance for planning and development. The purpose of Baron Cameron Park is to balance:

- Meet community and District-serving recreation and leisure needs;
- Preserve natural resources and substantial wooded buffers; and
- Enhance the user experience of a District-serving park.

#### **B. DESIRED VISITOR EXPERIENCE**

Baron Cameron Park has served as a District-serving park since it was first developed with athletic fields in the 1970s. The park's role in the community only intensified with the construction of Wiehle Avenue and as surrounding neighborhoods began to sprout up, which contributed to the need for additional recreational opportunities. Recreational facilities were added to the park over the past decades that have made the park a destination for youth soccer and adult softball leagues, residents wanting to exercise and socialize, and to enjoy gardening, the forested areas, and open space.

Baron Cameron Park offers diverse experiences and activities that typically involve an individual or group for a time period of up to a half day and may attract spectators or participants. Therefore, the visitor experience should accommodate the broad needs of all users and be enhanced by the addition or upgrading of amenities.

#### C. MANAGEMENT OBJECTIVES

In order to achieve the park's purpose, the following objectives have been developed to guide specific actions and strategies for dealing with management issues. Baron Cameron Park should:

- Provide District-level recreation and leisure elements to address overall needs within Reston and the Upper Potomac Planning District;
- Incorporate complementary uses and amenities;
- Plan within the context of multiple park and recreation providers;
- Consider partnership options that serve the park and its users;
- Seek sustainable site design and optimize facility capacity to the extent feasible;
- Enhance operation efficiencies through site design; and
- Establish natural resource protection zones to protect and manage habitat for different types of ecosystem functions.

## V. CONCEPTUAL DEVELOPMENT PLAN

#### A. INTRODUCTION

The Conceptual Development Plan (CDP) provides recommendations for future park uses and facilities. The CDP contains descriptions of the proposed plan elements and design concerns and is accompanied by a graphic that shows the general location of the recommended park elements. The CDP is shown as Figure 15. In addition, the master plan provides a CDP with alternative options to afford flexibility in park development as opportunities arise, as shown in Figure 16. These alternative options may be pursued and/or implemented on a singular or combined basis.

Development of the CDP is based on an assessment of area-wide needs and stakeholder preferences in balance with the existing site conditions as described in Section III. EXISTING CONDITIONS of this master plan. The scope of the master plan process does not include detailed site engineering; therefore, it should be understood that the CDP is conceptual in nature. Although planning site analysis forms the basis of the design, final facility locations for the planned elements will be determined through more detailed site analysis and engineering design that will be conducted when funding becomes available for park development. Final design will be influenced by site conditions such as topography, natural resources, tree preservation efforts, and stormwater and drainage concerns as well as the requirement to adhere to all pertinent state and county codes and permitting requirements.

Figure 15: Conceptual Development Plan for Baron Cameron Park

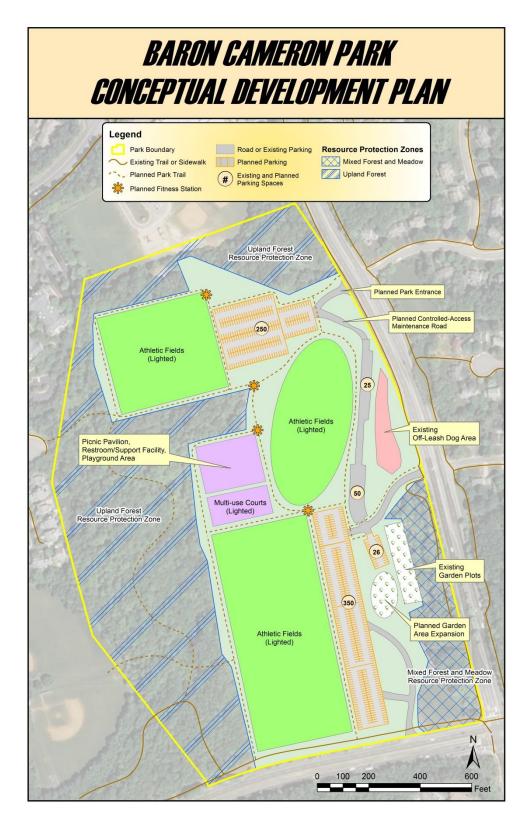
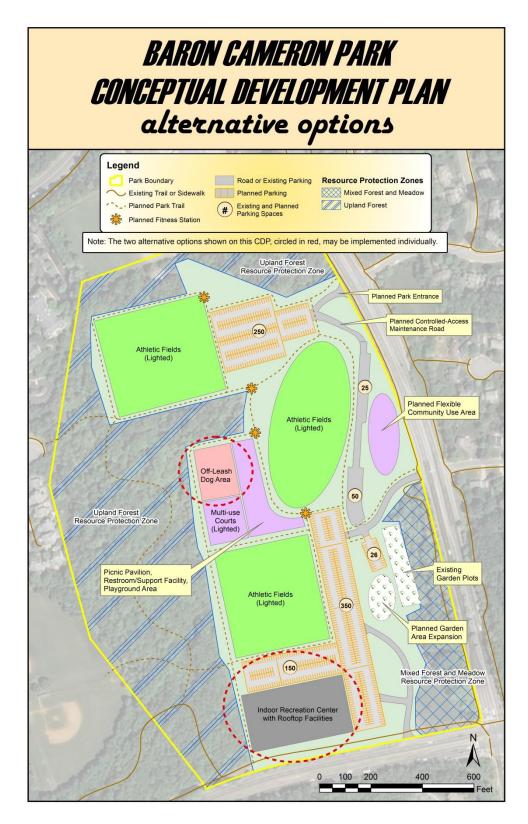


Figure 16: Conceptual Development Plan Alterative Options for Baron Cameron Park



## **B. PLAN ELEMENTS**

#### 1. Vehicular Access, Parking, and Circulation

Vehicular access to Baron Cameron Park will remain from the two existing entrances located on Baron Cameron and Wiehle Avenues. The Baron Cameron Avenue entrance location may be shifted or redesigned as warranted at site plan upon implementation of park improvements. Due to Virginia Department of Transportation (VDOT) intersection spacing and sight distance requirements, this entrance will mostly remain a right-in/right-out unless another configuration is warranted. A third entrance to the park should be provided on Wiehle Avenue in relationship to the new parking lot to help distribute and manage park traffic, as described below. This new park entrance may require a southbound right turn lane, which will be accommodated on park property at site design during implementation; a northbound left turn lane, which already exists that can be utilized; and/or traffic lights, which will be evaluated and determined by VDOT at site design during implementation. Further, the new entrance will comply with VDOT intersection spacing and sight distance requirements.

Additional parking is needed to support existing and planned features in the park. The existing parking lot fronting athletic fields #1-3 should be expanded to increase the amount of parking and to provide for more efficient traffic circulation. The existing parking lot serving the garden plots should also be expanded to accommodate patrons of the existing and future expanded garden plots. The existing parking lots in between the diamond field and off-leash dog area (OLDA) will remain and vehicular access to the existing gravel parking lots north of the diamond field should be eliminated; however, the drive aisle should be improved to a paved surface that connects to a new parking lot described below. The drive aisle is envisioned to be retained for park maintenance use and special events in the park that require onsite traffic management, though regular park traffic is not precluded if it helps improve overall park circulation and/or operations as determined by the Park Authority. The existing gravel parking lots should be consolidated and improved to a paved surface in order to increase the amount of parking and provide an efficient traffic circulation, especially for users of facilities located in the northern end of the park. Vehicular access to this new parking lot is envisioned to be primarily provided from a new park entrance on Wiehle Avenue, as discussed above. Vehicular access is not precluded from the existing parking lot between the diamond field and OLDA by way of the retained drive aisle, as discussed above.

While the ultimate design and configuration of all new parking lots will be determined at site plan during implementation, impact to existing trees should be avoided to the extent possible. In addition, the conceptual development plan illustrates the full build-out of parking, which can be phased over time as needed. In the event the indoor recreation center option is implemented, additional parking should be provided as discussed in Plan Element 12. Indoor Recreation Center Option.

## 2. Athletic Fields

This master plan seeks to increase the playing capacity of the existing athletic fields while concurrently improving field playing conditions. In order to achieve this objective, a combination of adding lights and installing synthetic turf is envisioned. While the number of athletic fields may shift over time to

accommodate these improvements, the overall field playing capacity of the park should increase. The addition of lights and conversion to synthetic turf will add substantial additional hours of play after dark, soon after weather events and during the winter, roughly doubling the annual playing capacity of the existing grass fields. Any installed lighting systems should adhere to the Park Authority Performance Outline Specifications adopted by the Park Authority Board. Field size expansion to full size fields will also provide a high degree of flexibility to accommodate a variety of sports and programming needs, such as using a full-size field as two short-sided fields or using two full-size fields as a cricket field.

## 3. Picnic Pavilion and Restroom/Support Facility

A picnic shelter and restroom/support facility should be centrally located in the park to enhance the user experience of a District-serving park. The pavilion should be able to accommodate large groups and be available for rental by permit to support sport events, family gatherings, and other activities in the park. A restroom facility with additional support features, such as concessions, storage space, multi-use rooms, and utility access should also be included.

## 4. Off-Leash Dog Area

The existing off-leash dog area (OLDA) will remain in Baron Cameron Park. The OLDA is a popular facility in the park and has been strongly supported by the community for over a decade. The OLDA will continue to be operated in accordance with Park Authority standards and the sponsor group's memorandum of understanding unless a new operational model is implemented in the future. Any modifications to the design and configuration of the OLDA should consider and respect noise related issues, as discussed in Section C. COMMUNITY AND DESIGN CONCERNS. This may include, but is not limited to, incorporating sound abatement components related to fencing and landscaping.

The master plan provides an alternative option to relocate the OLDA if the facility cannot be operationally sustained in its current location, configuration, and design. The relocated OLDA is envisioned to be located farther into the park to help address noise-related issues and should conform to Park Authority standards and the sponsor group's memorandum of understanding. The configuration and design of the relocated OLDA will be determined during implementation. Optional OLDA relocation implementation is dependent on the redesign of other park features in the vicinity and would likely not occur independently.

#### 5. Garden Area

The existing 32 individual garden plots will remain in Baron Cameron Park. Access and parking for these garden plots are provided by a designated parking lot for garden plot users. In order to alleviate the long waiting list for garden plots, the garden area should be expanded in the adjacent areas. In addition, the parking lot should be expanded to increase the amount of parking for these users as discussed in Plan Element 1. Vehicular Access, Parking, and Circulation. The expanded garden area may afford an opportunity to explore other community garden models that may differ from the existing individual garden plot model.

#### 6. Playground

The existing playground in Baron Cameron Park will remain; however, the location, configuration, and design may shift over time to accommodate or be co-located with other park facilities, such as the picnic pavilion and restroom facility.

#### 7. Multi-use Courts

A cluster of at least three lighted multi-use courts should be provided in Baron Cameron Park to address the area's deficiency and desire for multi-use courts, as well as to bolster the diversity of recreational opportunities in the District-serving park.

## 8. Natural Resource Management

The Park Authority designates Resource Protection Zones (RPZ) to identify park areas that contain natural resources and provide ecosystem functions by type for protection and management. RPZs may contain resources that are sensitive, rare or unique, but may also contain resources that while not necessarily being of the highest quality may cover large areas, protect water resources, provide important habitat and corridors, and provide educational and recreational opportunities. RPZs are intended to be managed primarily to protect and enhance natural resources, but may also provide for appropriate levels of human access and activities compatible with the resources present at the park level. Two RPZs have been designated for Baron Cameron Park.

#### <u>Upland Forest Resource Protection Zone</u>

This area contains the largest and most contiguous forest stands, and currently does not contain any development besides trails. This stand should be targeted for long term restoration. This will require invasive species removal, white-tailed deer control and native plantings. Any new park facilities built near this resource protection zone should control stormwater runoff utilizing best management practices and include habitat restoration to provide a buffer to the Upland Forest RPZ. There is a unique opportunity to reduce stormwater runoff, construct new wetland habitat and restore the degraded stream located in the southern half of this area as part of a project to install the nearby planned synthetic turf athletic fields. This would create a unique habitat in the park, restore a degraded area and provide improved long term stormwater management. New development in the Upland Forest RPZ should be restricted to sustainably built trails located to minimize ecological impact and uses should be restricted to on-trail activities. Active use activities should not occur in this zone.

#### Mixed Forest and Meadow Resource Protection Zone

This area contains an assemblage of meadow, lowland forest and upland forest species. This is the second largest and contiguous habitat remaining in the park. Restoration efforts should be undertaken in this RPZ focused on the diverse meadow and forested habitat. Restoration should be included as part of adjacent construction and/or stormwater management project. Invasive species removal, white-tailed deer control and native plantings should be included. There is an opportunity in the southern half of the Mixed Forest and Meadow RPZ to construct a wet meadow and/or a rain garden for stormwater management and educational purposes due to the local topography. Visitation in this RPZ should be restricted to educational and passive recreation activities, and new development should

be limited to sustainably built trails located to minimize ecological impacts. No active use activities should occur in this zone.

In addition to the RPZs, management objectives have been established for remnant forest stands, and edge and low quality habitats. Within remnant forest stands, non-native invasive species should be removed and good quality mature shade trees should be preserved. Invasive species removal should coincide with new parking lot construction and then be maintained with regular mowing to suppress any newly established invasive plants.

Edge and low quality habitats are characterized as being heavily degraded and filled with non-native invasive species, but also provide screening and buffers to adjacent developed areas while retaining some habitat value. Subsequently, these areas are considered low priority for control if funding and resources are limited as restoration would require almost complete removal of vegetation and replanting with native species.

#### 9. Trail Network, Pedestrian Access, and Fitness Stations

A sustainable trail network is envisioned to support recreational use, nature observation, and pedestrian connections to facilities in the park as shown on the CDP. The trail network is shown as a general concept and will be field located at the time of implementation. Trails through the Resource Protection Zone (RPZ) should be located and designed to minimize impacts to natural resources and discourage off-trail disturbances within the RPZ while also providing opportunities for enhanced connectivity and for users to enjoy and interpret the natural resources.

Pedestrian access to Baron Cameron Park is currently afforded from the sidewalks along Baron Cameron and Wiehle Avenues that surround the park on two sides. To enhance this pedestrian access, a direct pedestrian connection to the westerly adjacent Reston Association's Brown's Chapel Park should be provided with Reston Association coordination. The pedestrian connection is envisioned to connect to the existing looped dirt path near the Baron Cameron Avenue sidewalk and the overall trail network in the park. A pedestrian connection should be provided in the northwest section of the park to provide direct access from the westerly adjacent neighborhoods as well.

To contribute to the diversity of recreational opportunities in the park, a series of fitness stations is envisioned to be clustered along the trail network. While the exact number and location of the fitness stations will be determined during implementation, the stations should accommodate a range of ages and skill levels.

#### 10. Vendor Pad

The existing vendor pad in Baron Cameron Park will remain as an opportunity to provide food services to park patrons, such as the mobile food vending program and other concessions. The current location of the vendor pad may shift over time to accommodate new or modified park facilities; however, the ultimate location is envisioned to be in close proximity to high-pedestrian activity areas, such as the picnic pavilion and restroom facility.

#### 11. Stormwater Management

Construction of stormwater management facilities may be necessary to address water runoff from the addition and/or enhancement of park facilities. Low Impact Development (LID) principles should be used to the extent possible for this purpose, such as pervious pavers, innovative rooftop systems, rain gardens, and/or bio-retention areas. The master plan identifies two areas in Baron Cameron Park for stormwater management: the southeast corner of the park at the Baron Cameron and Wiehle Avenues intersection, and the western forest stand in between the park and Reston Association's Brown's Chapel Park. A third potential stormwater management area is the indoor recreation center rooftop if it is pursued, as discussed in Plan Element 12. Indoor Recreation Center Option.

## 12. Indoor Recreation Center Option

Included in the Baron Cameron Park Master Plan is an option for an indoor recreation center. The indoor recreation center is framed around a feasibility study conducted by Reston Community Center (RCC) in May 2009, later updated in May 2013, concerning the feasibility and market analysis for such a facility in the Reston area. The executive summary from the updated May 2013 study report can be found in Appendix A of this master plan. The updated study report details two possible options for an indoor recreation center: a 52,000 square foot facility, and a 90,000 square foot facility. For site analysis and planning purposes, this master plan considers the 90,000 square foot facility; however, specific indoor components were not thoroughly evaluated and may change over time.

The indoor recreation center option is envisioned to be located at the southern end of the park near Baron Cameron Avenue, and will generally require the removal of athletic fields. Building design should provide rooftop recreational facilities as well as innovative stormwater management components. While the ultimate configuration and design of the indoor recreation center will be determined at the time of site plan during implementation, at least 250 parking spaces should be provided based on the RCC May 2013 study report for a 90,000 square foot facility. Operational details of the facility, including fee schedule and parking management, will be determined upon implementation.

#### C. COMMUNITY AND DESIGN CONCERNS

#### 1. Importance of Open Space

Public comment reflects that Baron Cameron Park is regarded and valued as an oasis of open space that should be preserved. While nearly 60% of the park has been developed or is actively managed, the types of facilities in the park afford mostly unobstructed vistas throughout the park. Community members enjoy going to the park and experiencing the feel of open space; therefore, this characterization of the park should be retained to the extent possible. This can be achieved by limiting land use-intensive, large-scale new development to prescribed locations.

## 2. Traffic Impacts

The current level of vehicular traffic in the immediate area of Baron Cameron Park is already of a concern to many nearby residents. The Virginia Department of Transportation (VDOT) estimates that 41,000 cars pass through the intersection of Baron Cameron and Wiehle Avenues on a daily basis

based on 2010 traffic count data. Specifically, about 25,000 cars travel east or west on Baron Cameron Avenue, and about 16,000 cars travel north or south on Wiehle Avenue.

According to the Reston Community Center (RCC) May 2013 updated report concerning the feasibility and market analysis for an indoor recreation center (see Plan Element 12. Indoor Recreation Center Option), the typical number of patrons visiting at the same time could possibly range from 228 to 454, with a total daily capacity of about 1,800. The peak usage time is estimated to be from 5 p.m. to 7 p.m. To supplement this capacity and demand analysis, VDOT trip generation rates were examined for the indoor recreation center. Based on the Institute of Transportation Engineers' *Trip Generation Manual, 8<sup>th</sup> Edition (2008)*, a recreational community center generates approximately 1.45 trip generations per 1,000 square feet of facility at the p.m. peak hour. For site analysis and planning purposes, this master plan considers a 90,000 square foot facility, which corresponds to about 130.5 trip generations at the p.m. peak hour, which generally coincides with the 5 p.m. to 7 p.m. peak usage time estimated in the RCC May 2013 updated report.

While an indoor recreation center will add only a fraction of trip generations to the daily total of 41,000 cars passing through the Baron Cameron and Wiehle Avenues intersection, park management objectives will strive to address traffic impacts through provision of adequate entry and exit points, efficient internal circulation patterns, and an adequate amount of parking for proposed and retained facilities.

## 3. Preservation of the Western Forest Stand

Similar to the appreciation of open space mentioned above, public comment reflects the desire to leave Baron Cameron Park's western forest stand undeveloped. To bolster this desire, the western forest stand contains a high degree of elevation change and natural resources that would make any development inherently difficult. Subsequently, no new development is proposed that would require significant tree removal in this area.

## 4. Interim Park Facility Improvements

The existing facilities and amenities found in the park are well used and enjoyed by the community, which is shown in their respective physical conditions. A significant portion of the public comment reflected the desire to retain either some or all existing facilities and amenities, and frequently recommended enhancements. These comments aided the Park Authority in determining which facilities and amenities to prioritize for enhancement. In particular, the physical conditions of the rectangle fields are worn and both public comment and the *Great Parks, Great Communities* 2010-2020 Comprehensive Park System Plan recommends repair and/or enhancement.

## 5. Noise Generated from Off-Leash Dog Area

Public comment reflects that the existing off-leash dog area (OLDA) in Baron Cameron Park is strongly supported and used by the community. However, public comment also reflects that there is some concern about OLDA generated noise. During the master plan revision process, the Park Authority

explored noise abatement and facility relocation options. While the master plan provides a relocated OLDA option, the Park Authority should prioritize mitigating noise concerns through facility operations.

## 6. Athletic Field Lighting

Installation of athletic field lighting is a means to increase annual field playing capacity, which some public comment reflected as a concern. The Park Authority utilizes best practices and new technology in athletic field lighting that minimizes light trespass (spillover) and glare, such as using full cut off lighting with shields and web-based controls to ensure lights are only on during scheduled use. Performance Outline Specifications are adopted for Park Authority athletic field lighting systems, which guide containment of light in athletic field light installations. In addition, preserved forested areas and distance to nearby residential homes also provide additional buffering.

#### 7. Fiscal Responsibility

Economic realities require that public park funding be supplemented by revenue generated by park offerings, sponsorships, donations, and volunteerism. Fiscal sustainability, as outlined in the agency Financial Sustainability Plan, is essential to be incorporated into the master plan implementation. Successful implementation of the fiscal sustainability plan and master plan will allow the agency to address community needs, as well as critical maintenance, operational and stewardship programs by providing latitude in funding options and decisions. Together these plans will serve the public, park partners and the Park Authority by providing a greater opportunity for fiscal sustainability while managing the inevitable needs for capitalized repairs and replacements.

#### 8. Broader Programming Opportunities

Given the proximity of Baron Cameron Park to Lake Fairfax Park and Reston Association's Brown's Chapel Park, opportunities to design and program facilities to serve in the broader park context should be considered to gain efficiencies and optimize event and program planning, such as camps and tournaments.

## MARKET ANALYSIS UPDATE

# RESTON COMMUNITY CENTER

MAY 2013







## **EXECUTIVE SUMMARY**

#### INTRODUCTION

In February of 2013, Brailsford & Dunlavey ("B&D") was engaged by the Reston Community Center ("RCC") to update key information from a market study conducted in 2008. The objective of the study was to understand public interest and financial parameters associated with developing a new indoor recreation center. B&D's approach involved both qualitative and quantitative research that included input from RCC's Board of Governors, RCC staff, and the general community. B&D examined existing conditions with respect to current operations, demographic composition of Reston, and general market conditions, and used these analyses to quantify demand for a new facility.

## SCOPE OF WORK

B&D's work effort commenced with a meeting of the Board of Governors to understand the drivers and vision associated with the prospective development of a new recreation center. Based on feedback from the Board, B&D updated key components of the previous market analysis to include Reston's demographic composition and existing facilities in the region. Several meetings were also conducted with the community to understand interest and concerns with developing a facility. The results of the analysis are instrumental in framing issues that would affect demand for a new facility relative to key market characteristics. The methodologies employed in this study included the following:

- *Focus groups* conducted with the community to gain qualitative information regarding interest or concerns with a new facility;
- A *demographic analysis* was updated to understand changes within the makeup of Reston;
- A *competitive context analysis* was updated to assess the environment within which any new facility would compete, with consideration of facility conditions, amenities, plans for future development, and pricing;
- A *financial analysis* was completed to analyze potential revenues, expenses, capital costs, and general financial performance of a recreation project.

#### MARKET FINDINGS

B&D conducted a market analysis update to examine critical factors in order to frame the issues that would affect demand and financial feasibility for this project. Below is a summary of key findings:

- There was substantial input from several users and community organizations regarding the need for additional aquatic facilities to support a variety of user groups and programs. Aquatics are a big part of Reston, and serve all age groups and abilities. It was stated that current demand exceeds the capacity of existing facilities, forcing programs to turn away potential users. The conditions of the current pool limit the functionality and ability to appropriately serve multiple types of users.
- The demographic make-up of Reston suggests a higher propensity to participate in recreation activities. Two key factors that are the basis of this assumption include household income and education attainment. The median household income in Reston is nearly double that of the national average. Reston also has a high percentage of residents with either a high school or undergraduate degree.
- The median age within Reston as well as the surrounding area continues to increase.
   The ability to provide services, programs, and facilities that cater to an ever increasing active adult market will be critical.
- With the continued development of Reston, there are plans to introduce two new private recreation facilities to the area, LifeTime Fitness, and Crunch Fitness. B&D identified seven existing facilities within Reston, as well as two that are planned to open within the year.
- B&D compared the average rates of private facilities to those of public facilities. An adult private monthly membership is 10% higher than a public sector membership. A family can expect to pay 18% more for a private club membership. In comparing annual membership rates, the private sector is 45% and 46% higher for adult and family membership. RCC rates are well below that of comparable public facilities.
- In order to estimate the amount of square footage required to support expressed demand, B&D updated the analysis focused on the demand from the primary market. As a conservative estimate, B&D assumed a 10% capture rate of the extended market. Based on this assumption there is current demand for 15,700sf of fitness spaces (multipurpose rooms), 21,600sf of weight and fitness spaces, and 19,200sf of gymnasium space.

Activity	SF Demand		
Fitness Activities	15,713		
Weight and Fitness	21,629		
Gymnasium	19,264		

#### FINANCIAL ANALYSIS

To understand the financial implications of developing a new indoor recreation center, B&D created a financial model to test different scenarios with respect to program, operating revenues, and expenses based on the results of the market study and current economic conditions.

The facility's program, development budgets, revenue, and operating assumptions are inputs within the model, thereby allowing any changes in assumptions within one of these components to automatically force a corresponding adjustment throughout the model. B&D's use of conservative assumptions throughout the analysis allows RCC to proceed with the knowledge that detail-related decisions can be made within the established financial parameters without compromising the project's scope or quality.

B&D developed two scenarios of the financial model that correspond with the proposed facility options. The assumptions, with respect to revenues, expenses, and debt service correspond to the building scope. The detailed financial model can be found in Appendix C of this report.

#### Project Economics

In B&D's experience, most of the successful recreation facilities are able to cover 80-90% of operating costs with the remaining expenses subsidized by various public monies. In the case of Fairfax County, all of the recreation facilities operate at break-even or better. The ability to assess fees close to market rates and generate revenue through a comprehensive menu of programs provides the opportunity to achieve financial stability. The following chart represents the cost recovery for each option based on preferred rate structure assuming a four-year ramp up period. Based on these parameters, each scenario is able to cover between 60% and 81% of operating expenses in year 4 (stabilized year).

#### OPTION A:

Cost Recovery Percentage	Low	Moderate	Market
Year 1	53%	59%	65%
Year 2	55%	61%	67%
Year 3	56%	62%	68%
Year 4	57%	63%	69%
Year 5	57%	63%	69%
Year 6	57%	63%	69%
Year 7	58%	64%	70%
Year 8	58%	64%	70%
Year 9	58%	64%	71%
Year 10	59%	65%	71%

#### OPTION B:

Cost Recovery Percentage	Low	Moderate	Market
Year 1	60%	66%	73%
Year 2	61%	68%	75%
Year 3	63%	69%	76%
Year 4	63%	70%	77%
Year 5	63%	70%	77%
Year 6	64%	71%	78%
Year 7	64%	71%	78%
Year 8	65%	72%	79%
Year 9	65%	72%	79%
Year 10	65%	73%	80%

#### **NEXT STEPS**

The results of this study serve as a guide for RCC as well as the Reston community to make an informed decision as it relates to developing a future indoor recreation facility. The next steps involve engaging the community in order to determine the best course of action for moving forward. These steps include:

- Present the findings of the Study to RCC Board Members and the community
- Develop a preferred program based on feedback from the community and other entities as necessary
- Work with the community and interested agencies to determine the best options associated with potential sites