



Fort Ward District Park Maintenance Operations

2008 Fiscal Year Cost Center Report
July 2008

Fort Ward District - Park Maintenance Operations
Fort Ward Cost Center 2008

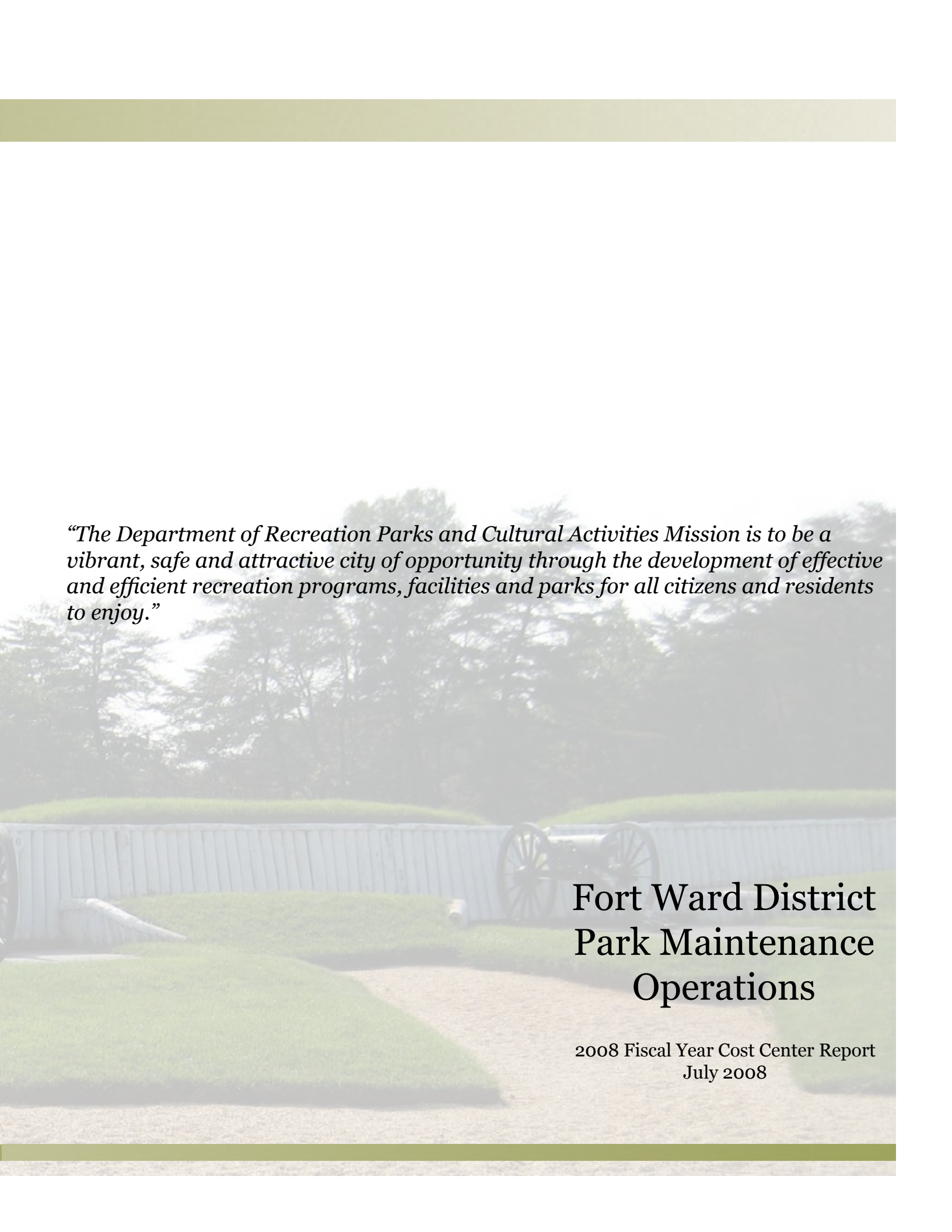
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The City of Alexandria
Department of Recreation, Parks & Cultural Activities
Kirk Kincannon, Director
Roger Blakeley, Deputy Director

Written by
Steve Tompkins, Park Superintendent
John Boone, Assistant Superintendent
Walter Powell, Park Manager

Photography
Craig Alexander, Park Superintendent
Beth Carton, Park Planner
Mike Harris
Walter Powell, Park Manager
Mary Stephenson, Park Planner
Photos courtesy of Department of Recreation, Parks & Cultural Activities Staff
Moseley Architects

Technical Layout, Graphics, and Design
Beth Carton, Park Planner

Digital Imaging Assistance
Beth Carton, Park Planner

The background of the page is a faded photograph of a park. In the foreground, there is a light-colored gravel path. To the left of the path is a large, rounded green lawn. In the middle ground, a blue corrugated metal fence runs horizontally across the frame. Behind the fence, a large, dark-colored cannon with two large spoked wheels is visible. The background is filled with tall, leafy green trees under a bright sky.

“The Department of Recreation Parks and Cultural Activities Mission is to be a vibrant, safe and attractive city of opportunity through the development of effective and efficient recreation programs, facilities and parks for all citizens and residents to enjoy.”

Fort Ward District Park Maintenance Operations

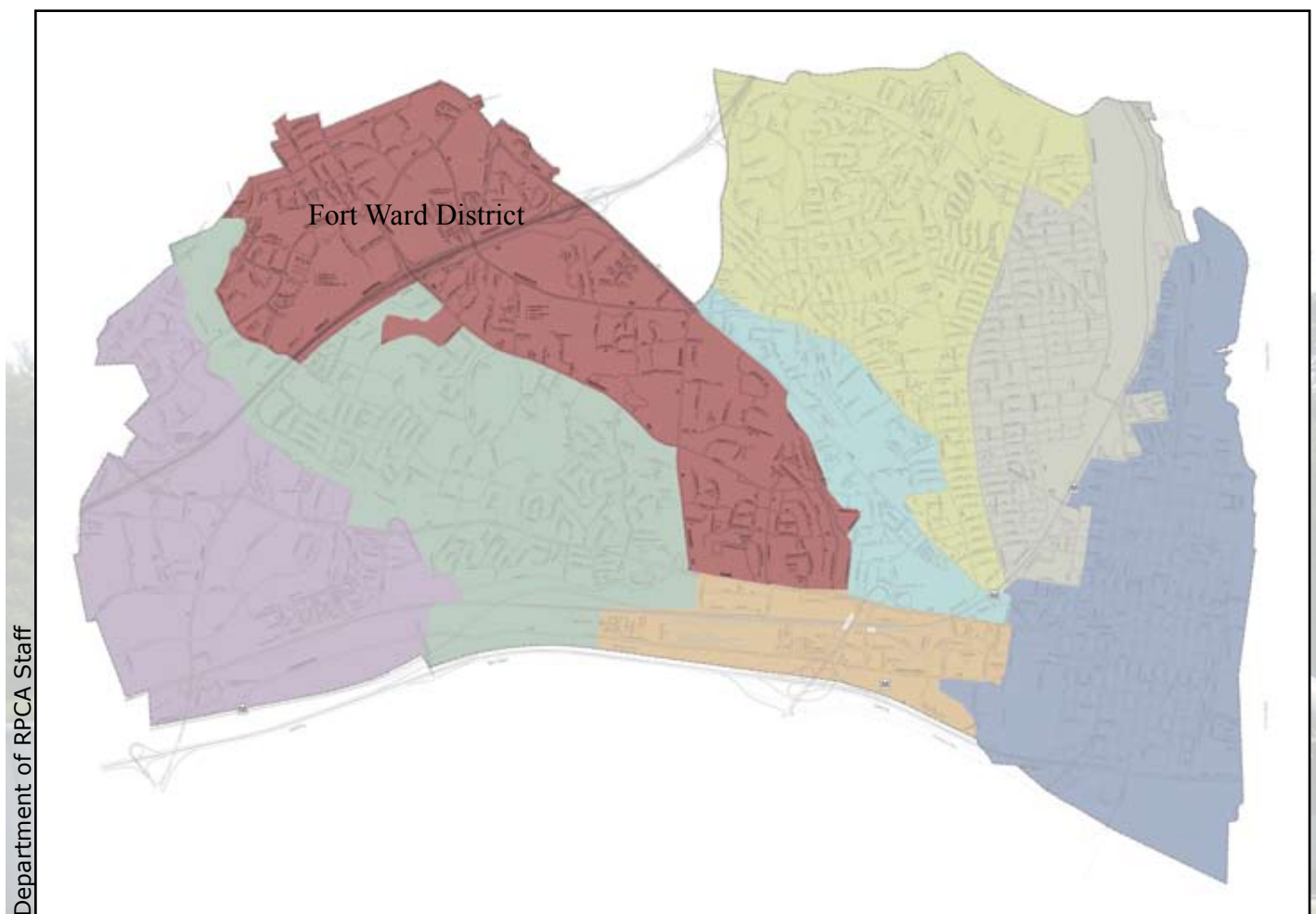
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M. Harris

City of Alexandria
Department of Recreation,
Parks & Cultural Activities
July 2008

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Department of RPCA Staff

Park Operations District Map - Fort Ward District

City District Organization

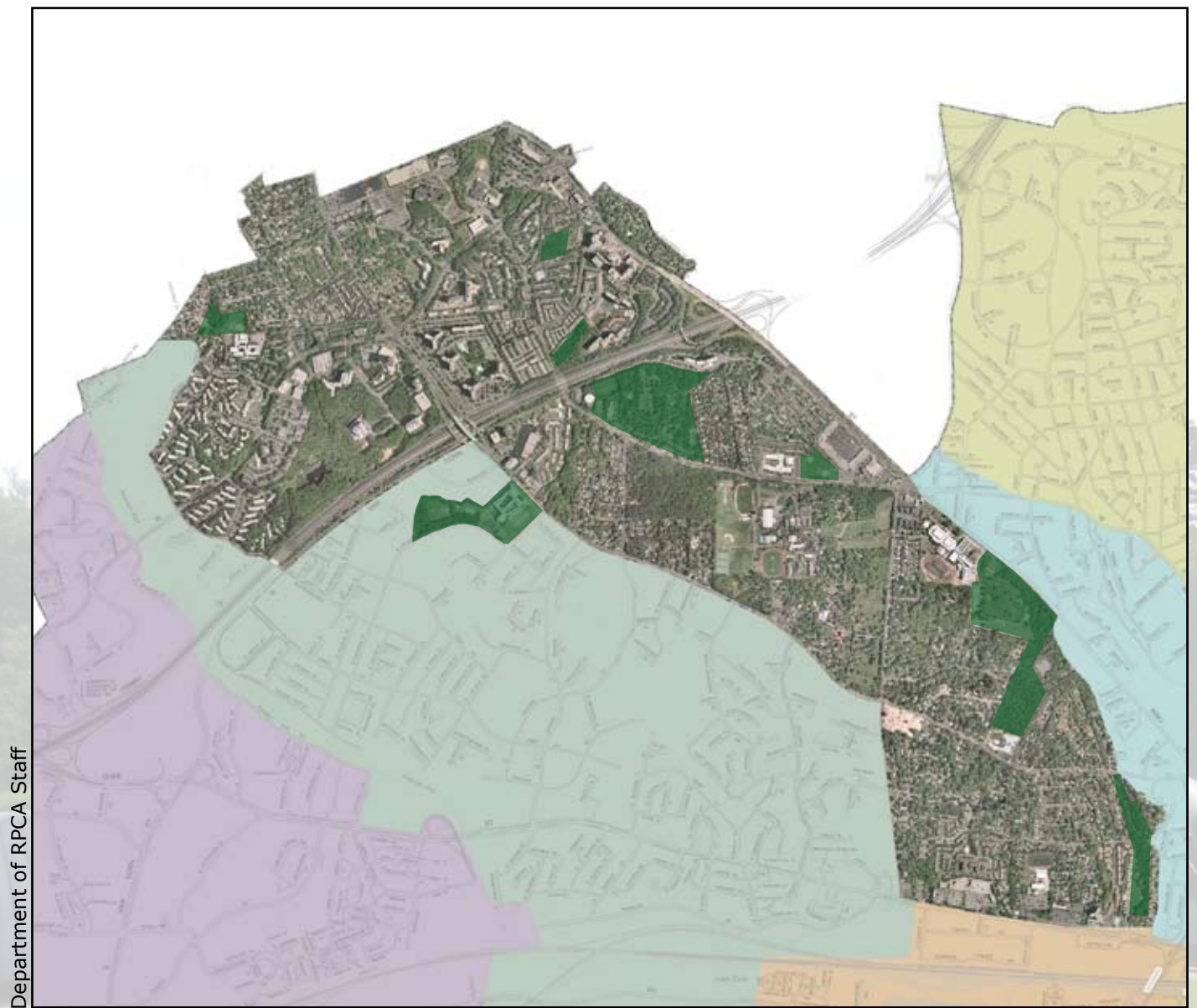
District Organization

The City is divided into eight maintenance districts consisting of Ben Brenman, Fort Ward, Four Mile Run, Holmes Run, Simpson/ Potomac Yard, Waterfront, Witter and Contracted Work. These districts were created to maximize efficiencies by providing localized service. All park maintenance operations services are provided from a satellite district office located within each district's boundaries. This localization allows crews to capture time previously spent en route to maintenance sites and put that time back into caring for the City's open space.

The district organization provides an effective means of accomplishing detailed cost center accounting verses Citywide expense accounting and is compatible with the City Manager's "Managing for Results" initiative. The districts, or cost centers, will aid park personnel to track expenses more accurately, supervise designated facilities more efficiently, and elevate the level of service provided.

Staffing

The City maintenance districts are coordinated by the Park Superintendents, and directed by Park Managers located at the satellite district offices. Each Park Manager is assisted by a staff of Laborers, Equipment Operators and Seasonal Employees according to the needs of each district.



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Fort Ward Aerial

Current Operations

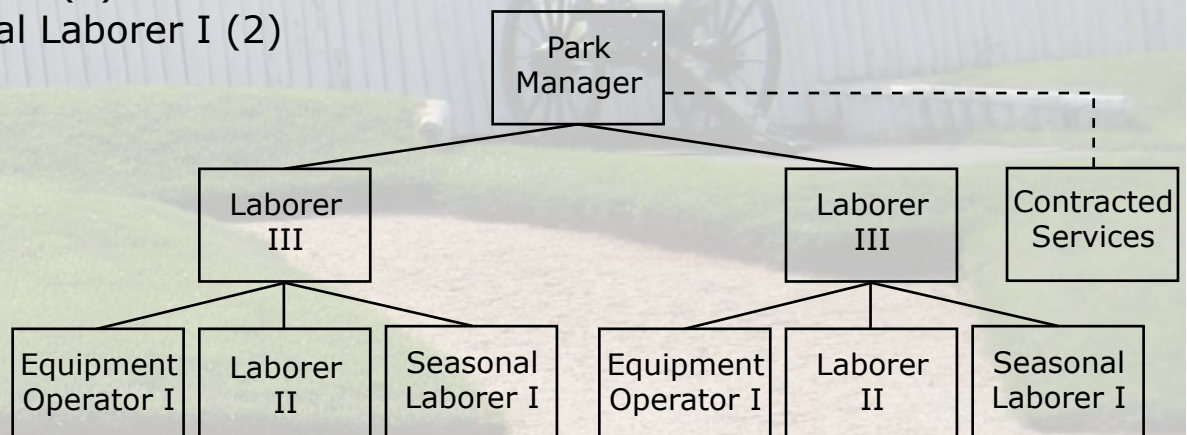
The Fort Ward District covers 132.79 acres in the northwest portion of the City. Operations staff maintain the following:

- 5 Playgrounds
- 14 Basketball Courts
- 13 Tennis Courts
- 2 Tennis Practice Courts
- 1 Volleyball Court
- 6 Natural Turf Athletic Fields
- 1 Synthetic Infill Turf Athletic Field
- 2 Recreation Centers - Indoor Athletic Equipment
- 4 School Sites
- 3 Dog Exercise Areas

Staff also maintains an amphitheater, a historic fort, five covered picnic areas, and garden plots.

Organization

- Park Manager
- Laborer III (2)
- Equipment Operator I (2)
- Laborer II (2)
- Seasonal Laborer I (2)



Fort Ward Park

Overview

Fort Ward is a community park best known for its historic resources and seasonal events. The park's namesake is the historic landmark of Fort Ward, a Civil War earthen fort. The restored bastion and museum comprise the historic grounds, which are used for Civil War and Revolutionary War re-enactments. The site also hosts local schools for field trips every year.

The park's approximately 42 acres contain a playground, dog exercise area, walking trail, and picnic areas in addition to the historic grounds. The site's amphitheater is used extensively for festivals, special events, and concerts including the City's Music at Twilight concert series. The amphitheater is also available for summer rentals.

Adjacent to the park site are the Fort Ward athletic field and tennis courts. The field is used for community soccer leagues and also accommodates the physical education activities of the adjacent school. The field is currently undergoing renovation and is scheduled to be completed in the Fall of 2008.



Aerial View



Historic Fort

Park Maintenance

Fort Ward Park Costs

Staff Hours	3,100
Contractor Hours	0
Material Costs	\$11,000
Total Costs Per Annum	\$181,500

Department of RPCA Staff



Fort Ward Picnic Area

Fort Ward Park Seasons

Spring

- Maintain 2 Restrooms, Remove Trash Daily
- Police Litter, Collect Garbage 4 Times/Week
- Prepare for Rental Reservations 4 Times/Week
- Mow/Trim Turf, Mark Ball Field 1 Times/Week

Summer

- Maintain 2 Restrooms, Remove Trash Daily
- Police Litter, Collect Garbage 4 Times/Week
- Mow/Trim Turf, Mark Ball Field 1 Times/Week
- Prepare for Rental Reservations 4 Times/Week

Fall

- Maintain 2 Restrooms, Remove Trash Daily
- Police Litter, Collect Garbage 4 Times/Week
- Mow/Trim Turf, Mark Ball Field 1 Time/Week
- Maintain Picnic Area, Remove Leaf Litter
- Aerate/Seed Cool Season Grasses 1 Application
- Remove Leaf Litter 3 Times/Week

Winter

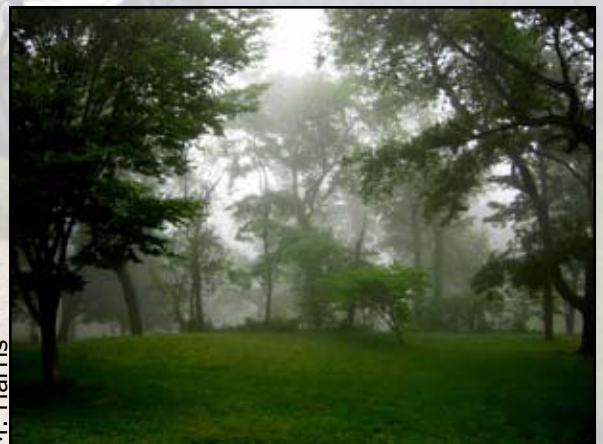
- Maintain 1 Restroom, Remove Trash Daily
- Police Litter, Collect Garbage 3 Times/Week
- Perform General Maintenance Repairs
- Remove Leaf Litter 3 Times/Week
- Remove Snow as Needed

Department of RPCA Staff



Fort Ward Playground

M. Harris



Fort Ward Meadow

Minnie Howard Field

Overview

Minnie Howard Field is located adjacent to Minnie Howard School along Braddock Road. This site is equipped with the Department's first Synthetic Infill Turf Field. The field, renovated in 2007, is used year-round for field hockey, soccer, and lacrosse. The school uses the field for physical education classes during school hours, hosts school sports practices after school and is used for regulated games during the evenings and weekends. Scheduled community leagues also use the field during the evenings and on weekends. The field is equipped with full cut-off lighting as part of the City's effort to reduce light pollution.

Minnie Howard has a basketball court and two lighted tennis courts, with a tennis practice wall located adjacent to the restroom building. The tennis courts were renovated in June of 2008. A park shelter is located near the tennis courts for public use. There is also a softball field and a batting cage on site.

The use of synthetic infill turf decreases the number of game cancellations, maintenance requirements and required resources, resulting in better scheduling and more playing time.



Full Cut-Off Lights at Minnie Howard



Field Hockey at Minnie Howard

Park Maintenance

Minnie Howard Field Costs

Staff Hours 1,080

Contractor Hours 0

Material Costs \$3,500

Total Costs \$62,900
Per Annum

Minnie Howard Park Seasons

Spring

- Maintain Restroom, Remove Trash Daily
- Police Litter, Collect Garbage 3 Times/Week
- Groom/Maintain Synthetic Field Biweekly
- Painting and Irrigation Maintenance as Needed
- Mow/Trim Edge Turf 1 Times/Week

Summer

- Maintain Restroom, Remove Trash Daily
- Police Litter, Collect Garbage 3 Times/Week
- Maintain Irrigation System as Needed
- Groom/Maintain Synthetic Field Biweekly
- Mow/Trim/Edge Turf 1 Times/Week

Fall

- Maintain Restroom, Remove Trash Daily
- Police Litter, Collect Garbage 3 Times/Week
- Maintain Irrigation System as Needed
- Groom/Maintain Synthetic Field Biweekly
- Mow/Trim Turf, Mark Ball Field 1 Time/Week
- Aerate/Seed Cool Season Grasses 1 Application

Winter

- Maintain Restroom, Remove Trash Daily
- Police Litter, Collect Garbage 50 Times/Week
- Perform General Maintenance Repairs
- Remove Leaf Litter 3 Times/Week
- Remove Snow as Needed

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Minnie Howard Tennis Practice Court

B. Carton/Department of RPCA



Lacrosse at Minnie Howard

W. Powell/ Department of RPCA



Minnie Howard Tennis Courts

Chinquapin Park and Recreation Center

Overview

The park, centrally located within the City, is programmed for a number of uses. At approximately 28 acres, the park is fairly large, and provides amenities for a number of sports. Chinquapin accommodates both active and passive recreation. The center has courts for tennis, basketball, and volleyball. The rectangular fields accommodate football, lacrosse, soccer, band practices, recreation summer camp, and are used by the community leagues, as well as T.C. Williams High School.

The park also has trails, a playground, community garden area, picnic grounds and a recreation center. There is a picnic shelter located toward the rear of the complex that can be rented for special events.



GIS Division/Department of P&Z

Chinquapin Aerial

Park Maintenance

Chinquapin Costs

Staff Hours 2,006

Contractor Hours 0

Material Costs \$6,000

Total Costs \$116,330
Per Annum

Department of RPCA Staff



Chinquapin Playground

Chinquapin Seasons

Spring

- Police Litter, Collect Garbage 3 Times/Week
- Mow/Trim Turf, Mark Ball Field 1 Times/Week
- Maintain Garden and Irrigation as Needed
- Painting as Needed

Summer

- Police Litter, Collect Garbage 3 Times/Week
- Mow/Trim Turf, Mark Ball Field 1 Times/Week
- Maintain Garden and Irrigation as Needed
- Aerate/Seed Warm Season Grasses

Fall

- Police Litter, Collect Garbage 3 Times/Week
- Mow/Trim Turf, Mark Ball Field 1 Time/Week
- Maintain Garden and Irrigation as Needed
- Aerate/Seed Cool Season Grasses 1 Application
- Remove Leaf Litter 2 Times/Week

Winter

- Police Litter, Collect Garbage 2 Times/Week
- Perform General Maintenance Repairs
- Remove Leaf Litter 2 Times/Week
- Remove Snow as Needed

B. Carton/Department of RPCA



Chinquapin Field

Department of RPCA Staff



Community Garden Plots

Fort Ward District generates approximately \$50,000 in revenue from picnic area rentals. Currently there are seven areas within Fort Ward Park that are available to the general public for rental and one area in Chinquapin Park. The Amphitheater is also available for rent.

Staffing for Fort Ward Park and Chinquapin Park to accommodate the seasonal rentals between the months of April and October, costs approximately \$73,920. This amount covers two staff members eight hours per day on the weekends. Note, the estimated amount also accounts for the cost of materials i.e. trash bags and restroom cleaning supplies.

Area 1 is located in the southeast corner of the park close to the entrance parking lot and is visible from Braddock Road. Area 1 can accommodate 50 people and includes the following:

- 1 Pavilion
- 2 Small Grills
- 1 Hot Coals/ash Can
- 8 Picnic Tables
- 3 Trash Receptacles

Area 2 is located on the east side of the park near the playground and adjacent to parking. This area is being renovated Summer of 2008. Area 2 can accommodate 25 people and it includes:

- 1 Pavilion
- 1 Small Grill
- 1 Hot Coal/Ash Can
- 4 Picnic Tables
- 2 Trash Receptacles

Area 3 is located on the east side of the park near the dog exercise area. Area 3 can accommodate 25 people and includes the following:

- 1 Small Grill
- 1 Hot Coal/Ash Can
- 4 Picnic Tables
- 2 Trash Receptacles

W. Powell/ Department of RPCA



Area 1

Revenue

Area 4 is located on the north side of the park and is the largest of the picnic areas. Area 4 can accommodate 100 people and it includes:

- 2 Small Grills, 2 Large Grills
- 4 Hot Coal/Ash Can
- 15 Picnic Tables
- 5 Trash Receptacles
- 1 Large Pavilion
- 1 Handicap Parking Spot

Area 5 is located near the amphitheater and is adjacent to parking. Area 5 can accommodate 25 people and includes the following:

- 1 Small Grill
- 1 Hot Coal/Ash Can
- 4 Picnic Tables
- 2 Trash Receptacles

Area 6 is located adjacent to the parks restroom and the historic Fort. Area 6 can accommodate 50 people and includes the following:

- 1 Large Grill, 1 Small Grill
- 3 Hot Coal/Ash Can
- 8 Picnic Tables
- 4 Trash Receptacles
- Several Handicap Parking Spaces

Area 7 is located adjacent to St. Stephens School and is the closest picnic area to the restroom. Area 7 can accommodate 50 people and it includes:

- 1 Large Grill, 1 Small Grill
- 2 Hot Coal/Ash Can
- 8 Picnic Tables
- 4 Trash Receptacles



Area 4



Area 6

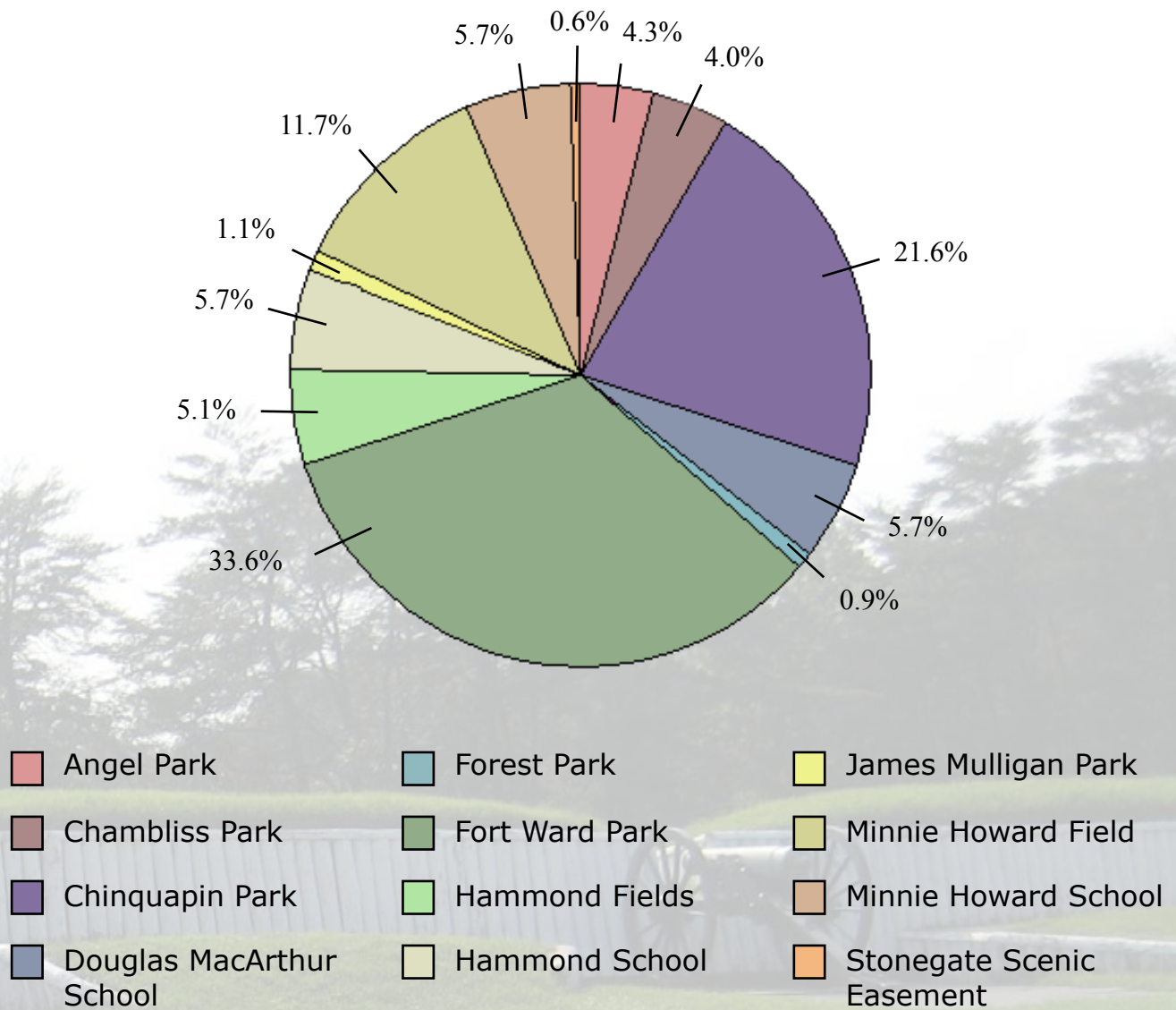
Fort Ward Sites

Current Maintenance Requirements

Site	Staff Hours	Contractor Hours	Material Costs	Total
Angel Park	400	0	\$1,100	\$23,100
Chambliss Park	384	0	\$500	\$21,620
Chinquapin Park	2,006	0	\$6,000	\$116,330
Douglas MacArthur School	416	0	\$8,000	\$30,880
Forest Park	78	0	\$500	\$4,790
Fort Ward Park	3,100	0	\$11,000	\$181,500
Hammond Upper & Lower Fields	384	0	\$6,500	\$27,620
Hammond School	416	0	\$8,000	\$30,880
James Mulligan Park	74	0	\$2,000	\$6,070
Minnie Howard Field	1,080	0	\$3,500	\$62,900
Minnie Howard School	416	0	\$8,000	\$30,880
Stonegate Scenic Easement	50	0	\$600	\$3,350
T.C. Williams(online FY 2009)	0	0	\$0	\$0
Fort Ward Sites Total	8,804	0	\$55,700	\$539,920
% Budget	89.7%	0.0%	10.3%	

Historic Operating Costs

Operating Costs



Additional Sites 2007-2008

- Douglas MacArthur Elementary School
- Francis C. Hammond Middle School
- Minnie Howard High School

Additional Sites 2008-2009

- T.C. William High School - July 2008
- Fort Ward Synthetic Infill Turf Field - Fall 2008
- Fords Park - 2008



T.C. Williams School Plan

Maintenance Options

Maintenance Levels

Level 1 - Premier Program

Install 1 Synthetic Athletic Field per year
 Provide Lights on all Fields
 Install New Shelters, Grills, Benches, Paths
 Increase Seasonal Staff for Fort Ward
 Reservations
 Replace Failing Landscape Plantings and Trees
 Install State of the Art Irrigation System
 Purchase Equipment for Increased Maint.
 Contract a Turf Maintenance Program
 Maintain Playgrounds and Restrooms
 Edge all Sidewalks and Remove Leaves/Snow
 Remove Litter and Collect Garbage

Costs including labor and materials:

Total \$2,246,918.00

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Level 1

Level 2 - Mid-Level Program

Increase Staff for Fort Ward Park
 Install State of the Art Irrigation System
 Purchase Equipment for Increased Maintenance
 Replace Failing Landscape Plantings and Trees
 Retrench/Weed/Mulch Plant Beds/Trees
 Maintain Outdoor Equipment/Park Amenities
 Mow/Groom/Trim Park Turf/Open Space/Fields
 Fertilize and Seed all Natural Turf
 Maintain Playgrounds and Restrooms
 Remove Litter and Collect Garbage

Costs including labor and materials:

Total \$932,010.00

W. Powell/ Dept. RPCA



Level 2

Level 3 - Basic Program

Maintain Outdoor Equipment/Park Amenities
 Mow/Groom/Trim Park Turf/Open Space/Fields
 Fertilize and Seed all Natural Turf
 Maintain Playgrounds and Restrooms
 Remove Litter and Collect Garbage

Costs including labor and materials:

Total \$539,929.00

W. Powell/ Dept. RPCA



Level 3

Recommendations

In January of 2007, City Council passed a document that established estimated operating costs of maintaining different types of open space. The following figures are listed as cost per acre:

- \$2,000 - \$5,000 Natural Area with low or no public use (includes streams, wooded areas, etc, with no to few plantings)
- \$5,000 - \$10,000 Turf/lawn with passive uses (includes benches, trash cans, etc. with plantings)
- \$10,000 - \$15,000 Active recreational uses and programming (includes playgrounds and small fields)
- \$15,000 - \$40,000 Heavy landscape/hardscape areas and active recreational fields/uses (includes athletic fields, Market Square level of landscaping, ball courts, etc.)

The Fort Ward District operating costs per acre are shown below with estimates given for lowest figures, mid-range figures, and highest end figures.

Type of Open Space	Acreage (approximate)	Low Cost Estimate	Mid-Range Cost Estimate	High Cost Estimate
Natural Area	59.14	\$118,280	\$206,990	\$295,700
Passive Use	38.87	\$194,350	\$291,525	\$388,700
Active Use	14.08	\$140,800	\$176,000	\$211,200
Heavy Use	20.70	\$310,500	\$569,250	\$828,000
Total	132.79	\$763,930	\$1,243,765	\$1,723,600

Recommendations

The current budget for Fort Ward District is \$539,929. This figure is \$224,001 below the lowest cost estimate using the figures approved by City Council.

In order to provide efficient and effective services, the Park Operations staff requires additional equipment, staff, and park improvements.

- \$1,500,000. Upgrade one field to synthetic turf surface. Renovating the fields will decrease resting time between games and following inclement weather. It will also decrease time and resources spent on maintaining the playing surface.
- \$300,000. Install seven new park shelters in Fort Ward Park.
- \$150,000. Install new park furnishings.
- \$100,000. Irrigation. Install irrigation at the four schools within the Fort Ward District. Incorporate existing irrigation projects into remote controlled system.
- \$85,000. Provide new equipment for the maintenance of synthetic fields to increase the level of service and user satisfaction.
- \$75,000. Special events staff to improve customer service. Provide additional funding for temporary and contract staff to ensure efficient and well staffed events, including weekend reservations and field supervision of the synthetic field at Minnie Howard, while reducing the costs spent on overtime pay.

Appendices

Contractor Sites

Contractor Sites

MacArthur Triangle	0.64 acres
Taylor Run Park	10.40 acres
Fort Ward Soccer Field	2.00 acres
East & West Taylor Run Parkway	2.71 acres
Francis Hammond Parkway	0.59 acres
Kinston Circle	0.05 acres
West Braddock Road Medians	1.16 acres
Calhoun Street & Seminary Road	0.01 acres
Fairbanks & Foster Streets	0.08 acres
Fort Worth Street Medians	0.08 acres
Hampton Street Island	0.18 acres
King Street	3.43 acres
Seminary Road Lot	0.55 acres
Seminary Road Right Of Ways	0.55 acres
Van Dorn Street Medians	4.55 acres
4575 Seminary Road	0.83 acres
Total	27.81 acres

W. Powell/ Department of RPCA



East Taylor Run Parkway

W. Powell/ Department of RPCA



MacArthur Triangle

Park Acreage

Acreage Totals by Park

Angel Park - 10.40 acres
 Chambliss Park- 8.08 acres
 Chinquapin Park- 28.46 acres
 Forest Park - 15.90 acres
 Fort Ward Park - 42.75 acres
 Hammond - 15.51 acres
 James Mulligan Park - 3.50 acres
 Minnie Howard Field - 4.94 acres
 Stonegate Scenic Easement - 3.25 acres
Total = 132.79 acres

Acreage by Type of Open Space Category

Natural Area

Angel Park - 8.08 acres
 Chambliss Park - 3.79 acres
 Chinquapin Park - 9.28 acres
 Forest Park - 15.90 acres
 Fort Ward Park - 8.33 acres
 Hammond - 7.15 acres
 James Mulligan - 3.38 acres
 Stonegate - 3.23 acres
Total = 59.14 acres

Passive Area

Angel Park - 1.27 acres
 Chambliss Park - 2.31 acres
 Chinquapin Park - 9.81 acres
 Fort Ward Park - 20.76 acres
 Hammond - 3.07 acres
 James Mulligan - 0.06 acres
 Minnie Howard - 1.57 acres
 Stonegate - 0.02 acres
Total = 38.87 acres

Active Use

Angel Park - 0.06 acres
 Chambliss Park - 0.40 acres
 Chinquapin Park - 1.94 acres
 Fort Ward Park - 11.43 acres
 Hammond - 0.19 acres
 James Mulligan - 0.06 acres
Total = 14.08 acres

Heavy Use

Angel Park - 0.99 acres
 Chambliss Park - 1.58 acres
 Chinquapin Park - 7.43 acres
 Fort Ward Park - 2.23 acres
 Hammond - 5.10 acres
 Minnie Howard - 3.37 acres
Total = 20.70 acres

Synthetic Field Care

- Proper equipment is needed for grooming, sweeping, painting and paint removing. This allows a lacrosse game in the morning, a soccer game in the afternoon and a Friday night lights football game in the evening. This could occur every day of the week.
- A storage building on site is recommended for storage of repair materials.
- A field supervisor should be on site during regulated games to assure all safety rules are being followed. This person would also be able to assist emergency vehicles with accessing the field, managing the irrigation system, policing the grounds and turning the field from one sport's layout to another as needed. This would truly maximize use of the field and assure public safety.
- Professionally trained staff will be needed to properly repair the synthetic turf.

The listed recommendations would prolong the life of the fields as well as increasing the overall safety of everyone in attendance.

On the next page you will see photographs of what happens when the fields are not properly attended to.

Synthetic Field Care

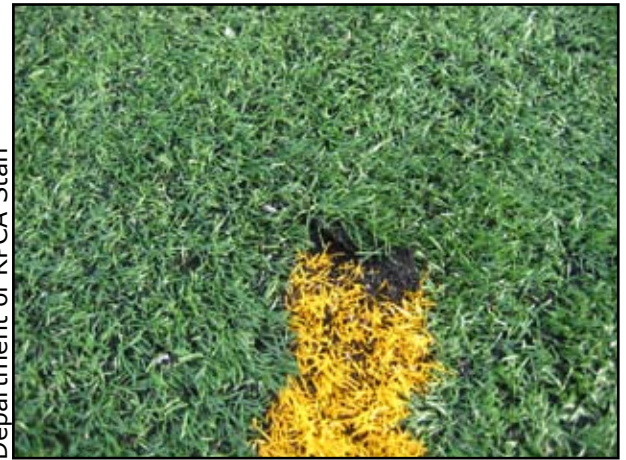
When a synthetic field is not properly staffed the risk for damages increase. Often sports leagues drag equipment such as soccer and lacrosse goals across the field causing hundreds of dollars in damages and down time for play.

Dragging equipment snags the turf and produces tares. The tares require special crews from outside the City to repair the turf.

Also, when an emergency vehicle needs access to the field, there is a danger of damaging the irrigation system. An on-site field supervisor would be able to direct emergency vehicles around the irrigation system and prevent water values from being damaged.

Repairs to irrigation valves vary according to the damage, but typically require two staff members and eight hours to complete.

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Dragging Sharp Objects

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Dragging Sharp Objects

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Irrigation Damage from Emergency Vehicles