

ATTACHMENT D

Park Maintenance

As noted in the Master Plan and the subsequent discussions, park maintenance responsibilities are divided between DPR and the General Services Department (GSD). Because of this divided responsibility, accurate costs and needs are not always easy to obtain. Attached is the adopted Park Maintenance Plan of DPR—indicating areas of park care that are handled by DPR, by GSD, or by some other entity.

Department of Parks and Recreation
Durham, NC

Maintenance Operations Plan
September, 2012



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General

a. Introduction to Park Maintenance

As the steward of the City's parks, the Department of Parks and Recreation's (DPR) goal is to provide aesthetically pleasing and safe parks and recreation facilities for public use. Regular and frequently-scheduled service and monitoring of park and recreation facilities are essential to meet the needs of user groups, to support existing and new programs, and to reduce liability risks throughout the system. This goal can be met by developing, defining, and implementing a maintenance and management plan with operational standards.

Operational standards help to define operational excellence through measures of effectiveness and efficiency. Since responsibility for and oversight of park maintenance in Durham is divided among several departments in the City government, standards can provide benchmarks for consistent levels of service and expectations throughout the park system.

The standards recommended in this manual are considered "norms" in the industry, reflecting outcomes desired and expected by park and recreation facility users. At present, maintenance of parks within the City of Durham often does not meet the anticipated level of care (and the department's adopted performance measures) for parks for several reasons; the two main causes when standards are not met are (1) lack of resources within the maintenance units and (2) vandalism of parks and park structures.

b. Areas of Responsibility in Park and Recreation Facility Maintenance

As the City's work responsibilities are currently structured, responsibility for park and park facility upkeep is divided among several departments:

- DPR: primary maintenance functions include park and facility cleaning, park mowing, ball field and athletic field mowing and care, special event set-up, and large recreation center custodial service

- General Services Department (GSD): primary maintenance functions for parks and recreation facilities include trades repairs (plumbing, electric work, carpentry, etc.), all landscaping other than mowing, forestry work, small recreation center custodial service, and response to specific work requests
- Public Works (PW): assistance includes (as funding allows) work on projects involving paving, grading, and stormwater system repairs

Since GSD and PW both have other departmental missions, the responsibility for defining park maintenance standards falls upon DPR staff. However, transparency in available funding for park maintenance work, more clarity of areas of work responsibility, and a better system of work assignments are needed for this divided structure to function more efficiently.

Park users typically evaluate their park experience based on the type and conditions of the natural environment, the facility experience, and (when present) the service experience. The type and quality of these experiences may vary widely from park to park, giving visitors the range to pick the park that best suits their expectations and desires. However, most park maintenance standards can typically be defined as being focused on one of three large categories: (1) undeveloped natural areas, (2) developed areas and facilities, and (3) maintenance operations practices.

An urban park system does have some undeveloped natural areas, but those areas are mostly small and contained within larger parks. The largest natural area DPR manages is the 400-acre West Point on the Eno Park; it shares management responsibility for some areas around the City Lakes with the Department of Water Management. However, there are many smaller undeveloped areas within some of the larger City parks, and a management regimen for those areas has been developed and is being refined jointly with the City's Stormwater Services Division (PW) and the Urban Forestry Division (GSD). That management plan is detailed at greater length in DPS's Natural Resources Management Plan.

Developed areas and facilities accommodate a higher density and a more intense use. Developed features may include buildings such as recreation centers and aquatic centers, for which maintenance responsibilities fall primarily to GSD; day use facilities such as picnic shelters, playgrounds, athletic fields and courts, for which maintenance is shared between GSD and DPR as detailed item by item in the standards below; and support facilities, such as concession stands, restrooms, bicycles racks, and so on, for which again maintenance is shared and is detailed in the standards below. Developed areas represent the majority of sites in an urban park system.

Defining management operations practices is a key component of a plan. The standards in this plan define the condition of a park facility that is the goal of park maintenance; and a set of clearly defined standards helps to establish what procedures, techniques, and resources (tools, material, labor) are necessary to achieve the desired outcomes and to know what additional resources or training are needed if outcomes are not reached.

Though the following data sets are also important knowledge for the managers of a park maintenance operation, they will be only presented here, not discussed at length, because the required information all exists in other, easily available documents or through contact with other relevant staff members in the City organization.

- **Legal Requirements:** numerous requirements exist, and often seem to multiply daily, to the extent that a maintenance staff needs a person specifically designated to keep records and manage all required training and certification of staff members. The four key areas that will require maintenance staff/manager awareness include the following:
 - a. **Building codes:** more for GSD staff than DPR, but issues come up with any work on mechanical, electrical, or plumbing in facilities and include mandated upfits to increase accessibility of all facilities;
 - b. **Environmental protection:** generally comes into play with any work around streams or ponds, any use of chemical applications, and any grading work;
 - c. **Health Department regulations:** particularly important with swimming pools, concession areas, and public events; and
 - d. **Safety and Loss Control procedures:** maintenance staff members typically engage in higher risk activities than other park and recreation personnel, such as operating machinery, driving heavier vehicles, and performing more physical labor. The City (as well as the State and Federal governments) sets a high bar for safety training for all staff members, and training must be repeated regularly and reinforced on the job site.

- **Facility Safety and Security:** very important for both staff and park users, and maintenance staff as the front-line personnel in a park site and the department's eyes and ears in a park.
 - a. **Building security:** more for GSD staff but also monitored by DPR custodial staff in the recreation centers; monitored by regular building inspections;
 - b. **Preventive security:** physical measures, that will necessarily involve more than inspections and checklists; these measures can include lock/key security, fencing, fire protection, safety signage, and lighting. DPR maintenance and

GSD have discussed collaboration on a key control system for park facilities; and this plan needs to go forward when resources are available for implementation. A better system of park lighting may discourage crime and vandalism in parks at nights; and

- c. Playground safety: DPR maintenance staff can work with safety inspectors from DPR Administration and GSD to make regular checks on play areas; these staff members are in the park more frequently than inspectors and can potentially recognize safety hazards as they first become evident.

- Preparation for the Unexpected: parks are not invulnerable to devastating surprises, from human violence to natural events, and the park maintenance staff will likely be asked to assist in some cases.
 - a. Identification potential threats: the Police have offered training to DPR staff on dealing with human violence; and the City's PW Department has taken the lead in creating a natural disaster response plan for the City. Maintenance staff members need to be familiar with their roles in these plans; and
 - b. Emergency Operations Plan for DPR: information exists for how DPR employees are to react in the event of an unexpected situation.

- Vandalism: vandalism is a growing problem in all urban park systems, and cleaning up after a vandal's work is surely one of the most dispiriting jobs of a park maintenance unit. Since it is one of the DPR units most directly affected by vandalism, staff members need to be solicited regularly for input when opportunities come up for park facility design, more signage and lighting, improved maintenance techniques, removal/protection of "temptations" in park settings, increased surveillance, expanded law enforcement efforts, and increased public education/involvement in protecting parks. DPR is undertaking a security initiative in several pilot parks in 2012-13 to target vandalism reduction.

c. Goals

Our operational standards are designed toward allowing us to implement six key functional categories of park maintenance:

- ✓ Maintain park areas and facilities that are clean, safe, and aesthetically pleasing.
- ✓ Develop and implement regularly scheduled routine and preventative maintenance programs.

- ✓ Develop and implement maintenance and operations support of recreation programs and special events, including facility modifications and equipment set-up and removal.
- ✓ Develop and implement a maintenance program to react to unplanned or emergency needs.
- ✓ Assist in identifying maintenance implications for proposed new capital projects or proposed renovations of existing facilities.
- ✓ Assist in identifying hazardous conditions in any park or facility and recommending or implementing remediation.

d. Inventory of Park and Recreation Facility Assets

Information on specific dates and conditions of acquisition of individual park properties is contained in the “Park Site Property Information” volume.

Detailed information on facilities on a park by park basis is contained in the spread sheet following.

NAME	ADDRESS	ZIP	ACRES	Athletic Field	Basketball	Boating	Camping	Disc Golf	Dog Park	Adult Softball	Adult Baseball	Youth Baseball	Fishing	Greenway/Trail Access	Grills, quantity	Field lights	Picnic tables, quantity	Playground	Restrooms	Picnic shelter	Sprayground	Tennis courts, quantity	Water fountain
American Village Park	4703 American Dr.	27705	4.2												1		6						•
Bay-Hargrove Park	208 Hargrove St.	27701	0.59														2						
Belmont Park	2207 Sovereign St.	27705	0.49														1						
Bethesda Park	1874 Stage Rd.	27703	20.45												2		8						•
Birchwood Park	3105 Hursley St.	27703	4.9																				•
Burch Avenue Park	816 Burch Ave.	27712	0.57												1		2						•
Burton Park	1100 Sima Ave.	27701	10.34												1		4						•
C. M. Herndon Park	511 Scott King Rd.	27713	25.18												2		6						•
C. R. Wood Park	417 Commonwealth Ave.	27703	17.4												1		4						•
Campus Hills Park	2000 S. Alston Ave.	27713	28.6												2		2						•
Carroll Street Park	815 Carroll St.	27701	0.79														1						•
Durham Central Park	502 Foster St.	27701	5.2																				•
Cook Road Park	602 Cook Rd.	27707	8.11												2		4						•
Cornwallis Road Park	2830 Wade Rd.	27705	19.97																				•
Crest Street Park	2503 Crest St.	27705	6.83														8						•
Drew / Granby Park	1100 Drew St.	27701	0.44														2						•
Duke Park	106 W. Knox St.	27701	17.24														5	18					•
East Durham Park	2500 E. Main St.	27703	9.01												1		2						•
East End Park	1200 N. Alston Ave.	27701	9.46												2		10						•
Edgemont Park	205 S. Elm St.	27701																					•
Elmira Avenue Park	540 Elmira Ave.	27707	11.86														1	4					•
Forest Hills Park	1639 University Dr.	27707	45.86												2		12						•
Garrett Road Park	8815 Garrett Rd.	27707	7.64														2	2					•
Grant St. Park	918 Linwood Ave.	27701	5.48																				•
Hillside Park	1301 S. Roxboro St.	27707	13.82												4		9						•
Holt School Road Park	4102 Holt School Rd.	27704	4.69												1		3						•
Indian Trail Park	1701 Albany St.	27705	8.5														5						•
Lake Michie Recreation Area																							•
Holly Grove Area	Archery Range Rd.	27503															1	3					•
Lake Boatouse	2802 Bahama Rd.	27503	65.4														2						•
Spruce Pine Lodge	2235 Bahama Rd.	27503	1.5														2	9					•
Wilkins Road Park	Wilkins Rd.	27503															4	14					•
Lakewood Park	3500 Dearborn Dr.	27704	5.87														1	2					•
Leigh Farm Park	370 Leigh Farm Rd.	27514	96.1															3					•
Little River Fishing Facility	1500 Orange Factory Rd.	27712	9.2														2						•
Long Meadow Park	917 Liberty St.	27701	15.58												2		4						•
Maplewood Park	1530 Chapel Hill Rd.	27701	5.4														1						•
Lyon Park	1200 W. Lakewood Ave.	27701	12.23														4						•
Morreene Road Park	1102 Morreene Rd.	27705	11.96														2						•
Northgate Park	300 W. Club Blvd.	27704	30.35														2	4					•
Oakwood Park	411 Holloway St.	27701	1.2																				•
Old Chapel Hill Road Park	3751 SW Durham Dr.	27707	23.7																				•
Old Farm Road Park	7 Hedgerow Pl.	27704	13.39												1		3						•
Old North Durham Park	310 W. Geer St.	27701	3.58														5						•
Orchard Park	1000 S. Duke St.	27701	7.39												3		5						•
Oval Drive Park	2300 W. Club Blvd.	27704	3.44														3	3					•
Piney Wood Park	400 E. Woodcroft Pkwy.	27713	39.47														7	35					•
Red Maple Park	3320 Hinson Dr.	27704	11.13														1	3					•
River Forest Park	1000 Windermere Dr.	27712	67.65																				•
Rock Quarry Park	701 Stadium Dr.	27704	46.1														1	4					•
Rockwood Park	2310 Whitley Dr.	27707	12.23														2	6					•
Rocky Creek Park	1014 N. Elizabeth St.	27701	1.37												2		4						•
Sandy Creek Park	3510 Sandy Creek Rd.	27707	101.74														3						•
Shady Oaks Park	2400 Nebo St.	27707	1.4																				•
Shenwood Park	2325 Cheek Rd.	27703	15.1																				•
Solite Park	4704 Fayetteville Rd.	27713	11.35														2	6					•
Southern Boundaries Park	100 Third Fork Dr.	27707	29.7																				•
Trinity Park	410 Watts St.	27701	0.69												2		5						•
Twin Lakes Park	439 Chandler Rd.	27703	49.8														2	13					•
Unity Village Park	2011 Mailene St.	27707	3.7												1		4						•
Valley Springs Park	3805 Valley Springs Rd.	27712	50.36												3		5						•
Wailtown Park	1308 W. Club Blvd.	27705	6.69														1	6					•
Weaver Street Park	3000 E. Weaver St.	27707	7.5																				•
West Point On The Eno	5101 N. Roxboro Rd.	27712	381.8														5						•
Westover Park	1900 Maryland Ave.	27705	1.8														2	4					•
Whipponwill Park	1632 Rowemont Dr.	27705	25.27														6	13					•
White Oak Park	2504 Dallas St.	27707	1.2														1						•
Wrightwood Park	1301 Anderson St.	27707	12.85														3						•

Maintenance Standards

a. What are Standards?

The following recommendations represent DPR's approved maintenance standards. As such, it is appropriate to begin by clearly defining what a maintenance "standard" is versus a "procedure." As stated, one of our goals as an organization is to "maintain park areas and facilities that are clean, safe and aesthetically pleasing." A "standard" defines the minimum level of outcome that is acceptable to the agency in order to achieve this goal. Maintenance standards describe what the asset should look like after it has been maintained to the standard. Procedures are different from standards in that a "procedure" describes what tools, materials and/or techniques are used to achieve the desired outcome standard.

For instance, the standard that "paths shall be free of debris" states the desired outcome but says nothing about how the outcome is to be achieved. Whether the maintenance professional chooses to use a blower or a broom is a matter of procedure as both will achieve the desired outcome, that is, "free of debris"; though experience or conditions often dictate that one procedure will be preferred or be more effective than the other.

Standards do not address maintenance frequency since this is addressed as part of a work unit's maintenance schedule which may fluctuate depending on the season, a particular special event, or some safety need, for example. Standards need to be reviewed and updated periodically to reflect input of staff, residents and priorities. All employees should be encouraged to offer suggestions on how to improve the standards as this will ultimately benefit the whole organization by making the standards a mutually agreed upon knowledge base of our individual experiences. Procedures are determined by the experience, the knowledge, and—very importantly—the resources available to the maintenance staff. The standards recommended by this plan translate into DPR performance standards whose outcomes are reportedly regularly to the City Council and City Manager.

Why does an organization need clear, published standards? Standards serve to support our goals and to measure our progress in the areas which they address. Without standards, DPR's goal of maintaining a park to be "clean," "safe," and "aesthetically pleasing," could have as many interpretations and outcomes as there are opinions about what is important to maintain. When maintaining benches, some might say as long as the structure is structurally sound it's fine, while others might expect the bench boards to be nicely painted, and still others might be worried about rust on the nuts and bolts. Having a standard allows employees

to refer to what the agency has agreed needs to be done to have the bench be within its determined goals. It also insures that a body of knowledge is passed down to newer generations of maintenance professionals.

b. Levels of Care

The standards following are applicable to all the City's park and recreation facilities, except recreation centers. Standards for those buildings are defined in a different document. However, the criterion of park usage will always define how many resources are allocated to different parks to get them as close to meeting the standards as possible. Some parks, identified as Tier 1 sites, have a high number of users and/or a high level of rental activity (of fields, courts, or shelters). Those Tier 1 sites will receive park maintenance and/or park clean up at least once per day during the primary park use seasons (spring through fall). Tier 2 parks, with more infrequent users and lower use or no fields, courts, or shelters for rentals, will receive park maintenance and/or park clean up services no more than every other day or three times per week during the primary park use seasons.

Additional services to Tier 1 park rentals, as an additional clean up or field maintenance visit between back-to-back rentals, may be provided as possible.

The park maintenance staff members in the parks will, as possible, inspect the sites for any obvious safety or maintenance concerns that need to be reported. The staff supervisors will inspect their crews' work regularly, as well as the park sites, and will general work requests to GSD as needed.

c. Standards

As noted above, a "standard" defines the minimum level of outcome that is acceptable to the agency; maintenance standards describe what the asset should look like after it has been maintained or repaired. But as also noted previously, the City's current structuring of work responsibilities divides the maintenance of park and recreation facilities among three different departments.

Thus, while the following specific standards do describe the desired condition of park and recreation assets, DPR maintenance staff have the responsibility only for a portion of them. Department responsibility for the achievement of each of the standards is noted as a part of that standard's description (DPR, Department of Parks and Recreation; GSD, General Services Department; PW, Public Works). "Vols" indicates that the work is performed by volunteers under some cooperative agreement or Adopt-a-Park program.



1. GENERAL

1.1. Maintenance Work Standards

	Item	Maintenance Standard	Staff
1.1.1	Professional Judgment	Professional Judgment – All full-time Parks Maintenance employees are professionals. Regardless of how specific standards or directions are, there will be times when a Park Maintenance Professional has to exercise professional judgment. Professional judgment is the ability of an individual to form and be able to justify an opinion or make a decision based upon his/her knowledge, skill and experience.	all
1.1.2	Craftsmanship	All work will be done in a safe, timely, craftsman like and professional manner, so as to insure the safe and functional condition of all that is maintained. Safety is of the utmost concern.	all
1.1.3	Repair Work	All new and repair work shall be done in accordance with applicable building codes.	all
1.1.4	Clean Up	When working on projects, trash and work debris will be cleaned up from the work site at the end of each workday, or at the completion of the task.	all
1.1.5	Litter	Parks shall be free of litter. The removal of litter will be assigned to certain crews/individuals, but no City employee should neglect removing a piece of litter assuming someone else will pick it up.	all
1.1.6	Amenity Location	All park amenities shall be in their assigned locations, except as moved to facilitate other work.	all
1.1.7	Construction/Work Signage	Construction/work signage will be posted at worksites (wet paint, keep out, etc.) and removed when the project/work is complete.	all
1.1.8	Fencing	Fencing is to be installed to secure the work area from park patrons, and be maintained on a daily basis.	all
1.1.9	Broken Glass	Broken glass shall be swept up immediately upon discovery.	all
1.1.10	Vandalism and Graffiti	Vandalism and graffiti shall be reported to a supervisor immediately and repaired as soon as possible after discovery.	all
1.1.11	Metal Components	Metal components, unless designed to be uncoated, shall have a coating/paint that prevents the development of rust and covers metal surfaces uniformly and completely.	all

		Galvanized components shall not be painted except as directed. Whether coated, painted or galvanized, coatings shall not be worn through, chipped or peeling and components shall be free of rust.	
1.1.12	Wooden Components	Wooden components, unless designed to be unfinished, shall be uniformly painted, stained or clear coated. Finish shall not be faded, worn-through, peeling or chipped.	all
1.1.13	Manufacturer's Recommendations	All products incorporated into work performed by staff shall be used in accordance with the manufacturer's recommendations and for the intended purpose.	all

2. STRUCTURES

2.1. Picnic Shelters

	Item	Maintenance Standard	
2.1.1	Floors	Floors shall be free of dirt, litter, debris and standing water.	DPR
2.1.2	Structure	Structure shall be free of cracked, broken or missing components	GSD
2.1.3	Exterior	Exterior surfaces shall be free of holes, gaps and peeling paint.	GSD
2.1.4	Roofs	Roofs shall not leak and shall be free of limbs, litter and debris. Grounding system shall be in working order.	GSD
2.1.5	Fixtures	Lighting fixtures and electrical outlets shall be in proper working order and timers set per the timer schedule or activated by photocell.	GSD
2.1.6	Built-In Grills	Grills shall be firmly secured, free of missing or broken components and free of ashes, litter and debris.	GSD, DPR

2.2. Concession Buildings

	Item	Maintenance Standard	
2.2.1	Floors	Floors shall be free of dirt, litter, debris and standing water.	DPR
2.2.2	Structure	Structure shall be free of cracked, broken or missing components	GSD
2.2.3	Exterior	Exterior doors, shutters, windows and associated hardware shall function as designed and be free of holes, gaps and peeling paint.	GSD
2.2.4	Roofs	Roofs, and roof vents shall not leak and shall be free of limbs, litter and debris.	GSD
2.2.5	Fixtures	Electrical and plumbing fixtures shall be in proper working order and timers set per the timer schedule or activated by photocell.	GSD
2.2.6	Stored Items	Stored items shall be stored safely and not block access or egress, fire extinguishers, pull stations or light switches.	DPR, Vols
2.2.7	Flammables	Flammable liquids and aerosols shall be stored in an approved flammable cabinet.	DPR
2.2.8	Interior	Interior doors, shutters, windows, casework and associated hardware shall function normally and be free of holes, gaps and peeling paint.	GSD

2.3. Mechanical and Storage Buildings

	Item	Maintenance Standard	
2.3.1	Floors	Floors shall be free of dirt, litter, debris and standing water.	DPR
2.3.2	Structure	Structure shall be free of cracked, broken or missing components	GSD
2.3.3	Exterior	Exterior doors, shutters, windows and associated hardware shall function normally and be free of holes, gaps and peeling paint.	GSD
2.3.4	Roofs	Roofs shall not leak and shall be free of limbs, litter and debris.	GSD
2.3.5	Fixtures	Electrical and plumbing fixtures shall be in proper working order and timers set per the timer schedule or activated by photocell.	GSD
2.3.6	Stored Items	Stored items shall be stored safely and not block access or egress, fire extinguishers, pull stations or light switches.	DPR
2.3.7	Flammables	Flammable liquids and aerosols shall be stored in an approved flammable cabinet.	DPR

2.4. Restrooms

	Item	Maintenance Standard	
2.4.1	Floors	Floors shall be free of dirt, dust, debris, cobwebs and shall be disinfected and free of standing water.	DPR
2.4.2	Ceilings	Ceilings and walls shall be free of debris, dirt, cobwebs, peeling or chipped paint.	DPR
2.4.3	Light Fixtures	All light fixtures (including emergency and exit lights) shall have the correct number of working bulbs of a type and wattage specified by the manufacturer. Fixtures shall have no cracked, broken or missing components and be free of dirt and debris.	DPR, GSD
2.4.4	Toilets	Toilets and urinals shall be in proper working order, free of dirt and debris and disinfected inside and out.	DPR, GSD
2.4.5	Toilet Paper Dispensers	Toilet paper dispensers shall be stocked with paper, firmly attached to the walls, locked and be free of dirt and debris.	DPR, GSD
2.4.6	Toilet Partitions	Toilet partitions shall be free of dirt, debris and cobwebs.	DPR
2.4.7	Handicap Rails	Handicap rails shall be firmly attached and be free of dirt and debris.	DPR, GSD
2.4.8	Switches and Devices	Switches, plates and fire alarm pulls shall be in working order and free of dirt and debris.	DPR, GSD
2.4.9	Signage	Signage shall be free of dirt and debris and have no cracked broken or missing pieces and be clearly legible.	DPR, GSD
2.4.10	Sinks	Sinks shall be disinfected and free of dirt and debris. Faucets shall operate per manufacturer's specifications. Drains and drain screens shall be clog and debris free.	DPR, GSD
2.4.11	Counter Tops	Counter tops shall be disinfected, be free of dirt and debris and shall be firmly attached to the wall.	DPR, GSD
2.4.12	Mirrors	Mirrors shall be free of dirt, debris, water spots and streaks.	DPR
2.4.13	Soap Dispensers	Soap dispensers shall work as designed, be firmly attached to the wall and be full of soap.	DPR, GSD

2.4.14	Hand Dryers	Hand dryers shall be free of dirt and debris, disinfected and shall work as designed by the manufacturer.	DPR, GSD
2.4.15	Exhaust Fans	Exhaust fans shall be running as per manufactures specifications and vents shall be free of dirt and debris.	DPR, GSD
2.4.16	Fasteners and Hardware	All fasteners and hardware shall be secure.	GSD

3.0. GENERAL, GROUNDS

3.1. Parking lots, Roadways, Walks, Paths, Trails

	Item	Maintenance Standard	
3.1.1	Paved Surface	All surfaces shall be free of pot holes, cracks, trip hazards, weeds, debris and clippings.	DPR, PW
3.1.2	Curbs and Gutters	Curbs and gutters shall be free of debris and weeds.	DPR
3.1.3	Inlets and Grates	Inlets and grates shall be free of dirt and debris.	DPR
3.1.4	Catch Basins	Catch basins and manholes shall be free of debris and silt to within 3" of the bottom of the outflow.	PW
3.1.5	Penetrations	Storm drainage penetrating manholes shall be mortared on both sides of the penetration	PW
3.1.6	Drainage Components	All storm drainage components shall be unobstructed and free of cracks and/or missing components.	PW
3.1.7	Parking Bumpers	Parking bumpers shall be in their specified location, anchored securely and free of excessive cracks.	GSD
3.1.8	Pavement Markings	Parking lot markings shall be legible.	GSD
3.1.9	Gravel Pathways	Pathways shall be free of dips, roots, and ruts from water run off	DPR, GSD

3.2. Drainage

	Item	Maintenance Standard	
3.2.1	Inlets and Grates	Inlets and grates shall be free of dirt and debris.	DPR
3.2.2	Catch Basins	Catch basins and manholes shall be free of debris and silt to within 3" of the bottom of the outflow.	PW
3.2.3	Penetrations	Storm drains penetrating manholes shall be mortared on both sides of the penetration.	PW
3.2.4	Drainage Components	All storm drainage components shall be unobstructed and free of cracks and/or missing components.	PW
3.2.5	Drainage Pipe	Whether perforated or non-perforated, all drainage pipe shall be of rigid PVC unless designed otherwise.	DPR, GSD, PW
3.2.6	Drainage Slope	Drainage pipe shall be laid at a minimum of ½ percent slope.	DPR, GSD, PW
3.2.7	Inlet Rims	Inlet rims shall be flush with surrounding grade.	PW

3.3. Commons Lawn (Non-Athletic Turf Grass)

	Item	Maintenance Standard	
3.3.1	Turf Health	Turf shall be healthy, free of diseases, pests and invasive species.	DPR
3.3.2	Cutting Height – commons	Turf shall be cut uniformly to 2.5 inches in height. Maximum height before mowing shall be 4.0 inches	DPR
3.3.3	Turf Condition	Turf shall have no holes or trip hazards and free of clumped grass clippings.	DPR
3.3.4	Litter and Debris	Turf areas shall be free of litter and debris prior to mowing.	DPR

3.4. Forestry

	Item	Maintenance Standard	
	Trees, General		
3.4.1.1	Tree Health	All trees shall be healthy, free of life threatening disease and insect infestations.	GSD
3.4.1.2	Limbs	Trees shall be free of dead, diseased or broken limbs within equipment limitations or budgetary resources. ⁽¹⁾	GSD
3.4.1.4	Encroachment	Tree limbs shall not encroach on utilities ⁽²⁾ or overhang walkways.	GSD
	Trees, Planting		
3.4.2.1	Planting Hole	Verify that utility locate has been done. Planting hole shall be approximately one foot wider than the root ball unless directed otherwise.	GSD
3.4.2.2	Hole Depth	The depth of the planting hole shall be deep enough so that the root flare is slightly above finished grade.	GSD
3.4.2.3	Wire Cage	Twine and wire cage will be removed from the top half of the root ball ⁽¹⁾ and all tags removed.	GSD
3.4.2.4	Plumbness	Tree shall be centered in the planting hole, plumb and staked if necessary.	GSD
3.4.2.5	Backfill	Planting hole shall be backfilled flush with existing grade with soil ensuring that large clumps are broken up.	GSD
3.4.2.6	Lip (Saucer)	A raised lip shall be left around the edge of the hole to aid in holding water.	GSD
	Trees, Pruning		
3.4.3.1	Suckers and Watersprouts	The turf-free zone of the tree shall be free of suckers and the trunk of the tree shall be free of watersprouts up to the first structural branch.	GSD
3.4.3.2	Pruning Height	Established trees, except for some evergreens and ornamental trees, shall be pruned up a minimum of 6 feet in turf areas.	GSD
3.4.2.7	Watering	Newly planted trees shall be initially watered to saturate the soil (about 25 gallons of water), and subsequently watered as needed to maintain optimum soil moisture content.	GSD
	Trees, Mulch		

3.4.4.1	Mulch	Trees less than five years old shall have an area of mulch (tree ring) 3-4" deep, covering the planting area, approximately 2-3 feet in diameter.	GSD
3.4.4.2	Tree Rings	All trees in turf areas shall have a turf free zone (tree ring) of mulch or native soil, a minimum 1' in radius from the edge of the trunk.	GSD
3.4.4.3	Weeds	All turf free zones (tree rings) shall be free of weeds.	GSD
	Stumps, Grinding		
3.4.5.1	Grinding Depth	Stumps, in turf areas and planting beds, shall be ground to a depth of 6" below grade.	GSD
3.4.5.2	Grindings	Grindings shall be removed, and replaced with topsoil and seeded or planted.	GSD

3.5 Horticulture

	Item	Maintenance Standard	
3.5.1	Plant Health	All plants shall be free of diseases and pests that affect the aesthetic appearance of the plant or threaten the health of otherwise healthy plants.	GSD
3.5.2	Plant Health	Parks shall be free of plants with incurable diseases.	GSD
3.5.3	Weeding	All annual flowerbeds will be hand weeded prior to planting.	GSD
3.5.4	Moisture	Container grown and B&B plant material will be kept at the optimum moisture content.	GSD
3.5.5	Initial Watering	All flowers and shrubs will be watered immediately after planting.	GSD
3.5.6	Maintenance Watering	All flower beds will be watered to maintain optimal moisture content.	GSD
3.5.7	Weeds	All annual and perennial flower beds shall be free of weeds to the greatest extent possible without damaging ornamental plants.	GSD
3.5.8	Litter and Debris	Beds shall be free of trash and dead plant material.	GSD, DPR
3.5.9	Restoration After Weeding	Soil and mulch disrupted during weeding shall be raked smooth to provide a neat and orderly appearance.	GSD
3.5.10	Clean-Up	Soil, mulch, weeds and plant containers deposited on sidewalks and roadways shall be cleaned up prior to leaving the work area and will not at any time impede traffic.	GSD
3.5.11	Edging	Plant bed edging shall be continuous with no missing or broken components and not create trip hazards.	GSD
3.5.12	Encroachment	Shrubs shall not encroach upon sidewalks and paths.	GSD
3.5.13	Pruning and Health	Shrubs shall be free of crossed branches, broken and diseased limbs, airflow impediments and other items that affect the health of the plant.	GSD
3.5.14	Pruning Priorities	Pruning shall be done so as to produce plants that are aesthetically pleasing with safety and plant health being the primary concerns.	GSD

3.7. Garden Plots

	Item	Maintenance Standard	
3.7.1	Corner Stakes	Garden plots shall be staked at the corners of the plot	Vols
3.7.2	Plot Number	Each plot shall have a stake with the plot number on it.	Vols
3.7.3	Litter and Debris	Plots shall be free of litter and debris.	Vols
3.7.4	Unused Plots	Unused plots shall be mowed as directed.	DPR
3.7.5	Hydrants	Watering hydrants shall be free of leaks and painted.	GSD, DPR
3.7.6	Aisles	Aisles shall be mowed and free of excess weeds and debris.	Vols
3.7.7	Compost Areas	Compost areas shall be emptied as needed.	Vols

3.8. Park Amenities

	Irrigation and Electric Boxes	Maintenance Standard	
3.8.1	Irrigation and Electric Boxes	Boxes that house components for mechanical, electrical or plumbing systems shall be structurally sound and be uniformly painted to prevent rust or made of a material that does not require painting. Paint shall not be cracked, peeling or chipped. Concrete pads shall be structurally sound.	GSD
	Chain Link Fencing		
3.8.2	Fence Ties	Fence fabric shall be attached securely with fence ties.	GSD
3.8.3	Fence Fabric	Fence fabric shall not be rusted or misshapen.	GSD
3.8.4	Poles	Poles shall be capped.	GSD
3.8.5	Rails and Posts	Rail and posts shall be straight and secured together firmly. There shall be no cracked, broken or missing components. Posts shall be plumb and rails shall follow contours of land.	GSD
3.8.6	Footings	Footings shall not be heaved or shall be finished so as to eliminate rough edges if designed to be exposed.	GSD
	Retaining Walls		
3.8.7	Walls	Walls shall be plumb and free of loose and missing blocks.	GSD
3.8.8	Caps	Cap stones shall be present and firmly attached.	GSD
	Split Rail Fencing		
3.8.9	Rails and Posts	Rails and posts shall be securely fastened.	GSD
3.8.10	Aesthetics	Posts shall be plumb and rails shall follow the contour of the land.	GSD
3.8.11	Structural	No cracked, broken or missing posts or rails.	GSD
	Ornamental Fencing		
3.8.12	Aesthetics	Posts shall be plumb and rails shall follow the contour of the land.	GSD
3.8.13	Coatings	Unless designed to be uncoated, all components shall be uniformly coated/painted with no rust, chips or peeling.	GSD

3.8.14	Structure of Fence	Fence components shall not be bent, broken or missing.	GSD
3.8.15	Footings	Footings shall not be heaved or shall be rounded if designed to be exposed.	GSD
	Drinking Fountains		
3.8.16	Bowls	Bowls shall be free of dirt and debris and disinfected.	DPR
3.8.17	Bubbler	Bubbler shall be free of clogs and adjusted to the correct height.	GSD
3.8.18	Valves and Plumbing	Valves and plumbing shall function as specified.	GSD
3.8.19	Drains	Drains shall be free of clogs.	GSD
3.8.20	Fountain Base	The base of the fountain shall be free of dirt and debris.	DPR
	Benches		
3.8.21	Bench Components	All bench components shall be structurally sound and tightly fastened together.	GSD
3.8.22	Metal Frames	Metal frames shall be firmly anchored.	GSD
3.8.23	Bench Boards	Bench boards shall not be cracked, split, broken or missing.	GSD
3.8.24	Replacement Hardware	Replacement hardware shall meet or exceed the original equipment manufacturers specifications.	GSD
3.8.25	Plastic Coatings	Plastic coated benches shall not have exposed metal substrates.	GSD
	Picnic Tables		
3.8.26	Cleanliness	Picnic tables shall be free of dirt, debris and stains.	DPR
3.8.27	Structural	Bench and table boards shall not be cracked, broken or missing.	GSD
3.8.28	Fasteners	All picnic table components shall be structurally sound and fastened together firmly.	GSD
3.8.29	Exposed Threads	Threads shall not protrude more than ¼ inch.	GSD
3.8.30	Plastic Coatings	Plastic coated tables shall not have exposed metal substrates.	GSD
	Bike Racks		
3.8.31	Anchoring	Bike rack shall be firmly anchored.	GSD, PW
3.8.32	Structural Components	All structural components shall be sound.	GSD, PW

3.8.33	Structural Conditions	No cracked, broken or missing components.	GSD, PW
	Grills		
3.8.34	Structural Concerns	Grill posts shall be firmly anchored and grills firmly attached to posts.	GSD
3.8.35	General Condition	Grills shall be free of rust, holes, and cracked, broken or missing components.	GSD
3.8.36	Cleanliness of Grill	Grills shall be free of ashes, litter and debris.	DPR
3.8.37	Area Around Grill	Area around grill shall be free of ashes, litter and debris.	DPR
	Refuse Containers		
3.8.38	Garbage Bags	Bags shall be used except where directed by the supervisor.	DPR
3.8.39	Container Condition	Containers shall be sound and free of excessive dents or rusted areas.	DPR
3.8.40	Permanent Cans	Permanent refuse containers shall be securely fastened.	DPR
3.8.41	Non-Permanent Cans	Non-permanent containers shall be placed on a hard surface in a designated location, except as directed for special events.	DPR
	Signage (not contracted)		
3.8.42	Installation	All signs shall be installed plumb and/or level with a firmly fixed base	GSD
3.8.43	Fasteners	Signs shall be installed with stainless steel or galvanized, vandal resistant fasteners.	GSD
3.8.44	Exposed Threads	Exposed threads shall not protrude more than ¼ inch.	GSD
3.8.45	Legibility	Signs shall be legible, having no peeling or faded lettering.	GSD
3.8.46	Cleanliness	Signs shall be free of dirt and debris.	GSD
3.8.47	Location	Signs shall be located so as to be accessible but not blocking paths or roadways	GSD

4.0. Athletic Fields and Courts

4.1. Athletic Fields (Soccer, Lacrosse, Football)

	Item	Maintenance Standard	
4.1.1	Holes, Trip Hazards and Wear	Field shall be free of holes, trip hazards and excessive wear on turf.	DPR
4.1.2	Standing Water	Field shall be generally free of standing water 2 to 3 days after a rainfall.	DPR
4.1.3	Litter and Debris	Field shall be free of litter and debris.	DPR
4.1.4	Anchoring of Goals	Goals shall be firmly anchored to the ground, and all goal components shall be tight.	DPR
4.1.5	Nets	Nets shall be free of excessive wear, tears or holes.	DPR
4.1.6	Field Markings	Painted field lines shall be square, straight and clearly visible.	DPR
4.1.7	Turf Health	Turf shall be healthy, free of diseases, pests and invasive species.	DPR
4.1.8	Cutting Height	Turf shall be cut uniformly to 1.5 inches in height. Maximum height before mowing shall be 2.0 inches	DPR
4.1.9	Turf Condition	Turf shall be generally free of holes, trip hazards and clumped grass clippings.	DPR

4.2. Baseball / Softball Fields

	Item	Maintenance Standard	
4.2.1	Infield Wear Areas	Wear areas around home plate, bases and pitching rubber shall not be worn or “dished out” but shall be firm and flush with the surrounding field.	DPR
4.2.2	Lips	Infield/Outfield transition shall not have a build-up of infield material (Lip).	DPR
4.2.3	Standing Water	Infields shall be graded so that they have no standing water.	DPR
4.2.4	Home Plates and Pitching Rubbers	Home plates and pitching rubbers shall not be torn or excessively worn and shall be installed with the top of the rubber or plate flush with or slightly below the surrounding grade.	DPR
4.2.5	Weeds	Infields, fence lines and warning tracks shall be free of weeds.	DPR
4.2.6	Dugouts	Dugouts shall be free of litter and debris.	DPR
4.2.7	Outfields	Outfields shall be generally free of holes, litter, debris and clumped grass clippings.	DPR
4.2.8	Surface	Batting cage surface shall be level and free of holes, wear spots and weeds and accumulate no standing water.	DPR
4.2.9	Structure	Structure of batting cage shall be sound and have no cracked, broken or missing components.	DPR

4.3. Artificial Turf Fields

	Item	Maintenance Standard	
4.3.1	Dirt and Debris	Turf shall be free of dirt, debris and foreign objects.	DPR
4.3.2	Rips and Tears	Turf shall have no cuts or rips.	DPR
4.3.3	Rubber Infill	Rubber infill shall be evenly distributed with all turf fibers at a uniform height above rubber infill.	DPR
4.3.4	Painted Markings	Painted lines shall be square, straight and clearly visible.	DPR
4.3.5	Brushing	Field may be brushed to clean and fluff surface.	DPR

4.4. Basketball Courts

	Item	Maintenance Standard	
4.4.1	Structural	Poles, backstops and rims shall be securely anchored and attached and have no cracked, broken or missing components.	DPR, GSD
4.4.2	Nets	Nets shall be securely fastened to rims and free of tears.	DPR
4.4.3	Court Surface	Court surface shall be free of holes, cracks, weeds and foreign surface matter.	DPR, GSD
4.4.4	Court Markings	Court lines shall be clearly visible.	DPR
4.4.5	Litter and Debris	Court shall be free of litter and debris.	DPR

4.5. Bleachers

	Item	Maintenance Standard	
4.5.1	Litter and Debris	Seating area and underneath shall be free of litter and debris.	DPR
4.5.2	Fasteners	All fasteners shall be tight.	GSD
4.5.3	Structural	No loose, broken or missing components and shall be free of sharp edges.	GSD
4.5.4	Location	Bleachers shall be in their designated location.	DPR

4.6. Tennis Courts

	Item	Maintenance Standard	
4.6.1	Net Height	Nets shall be adjusted to 36" in height at the strap and 42" at the ends.	DPR
4.6.2	Net Straps and Ropes	Straps and ropes securing nets shall be taught and free of frays and tears.	DPR
4.6.3	Nets	Nets shall have no holes or tears.	DPR
4.6.4	Court Surface	Court surface shall be free of dirt, debris and standing water.	DPR
4.6.5	Color Coat	Court color coat shall not be worn through.	GSD
4.6.6	Cracks	Cracks in court surface with a vertical separation of ¼" or a lateral separation of 1/8" shall be reported and evaluated for possible repairs.	GSD, DPR
4.6.7	Court Markings	Court markings shall be clearly visible.	GSD
4.6.8	Net Posts	Net posts shall be securely anchored and free of broken or missing components and peeling paint.	GSD
4.6.9	Hitting Wall	Hitting wall shall be structurally sound, clean and free of chipped or peeling paint. Painted markings shall be clearly visible.	GSD

4.7. Wind Screens

	Item	Maintenance Standard	
4.7.1	Fastening	Windscreens shall be fastened horizontally at mid-point with rope and fastened at the top, bottom and sides with zip ties in every other grommet unless manufacturer instructions dictate otherwise.	DPR
4.7.2	Rips and Tears	Windscreens shall have no rips or holes.	DPR
4.7.3	Wind Flaps	Windscreens shall have flaps or windows with sewn or reinforced edges.	DPR
4.7.4	Size	Windscreens shall be sized to leave 1'-0" of exposed fence at the top and the bottom.	DPR

4.8. Disc Golf Course

	Item	Maintenance Standard	
4.8.1	Litter and Debris	Tees shall be free of litter and debris.	DPR, Vols
4.8.2	Tee Wear	Tee surface shall be free of holes, wear spots and pitched to drain.	DPR, Vols
4.8.3	Targets	Targets shall be plumb and have no cracked, broken or missing pieces.	DPR, Vols
4.8.4	Fairways	Fairways shall be open and unobstructed by limbs, weeds, or tall grass	DPR, Vols

4.9. Irrigation

	Item	Maintenance Standard	
4.9.1	Heads	All heads shall be at grade and free of grass and other obstructions.	DPR
4.9.2	Leaks	All irrigation components shall be free of leaks.	DPR
4.9.3	Condition of Components	All irrigation components shall be in proper working order.	DPR
4.9.4	Controllers	Controller programs shall be maintained to insure optimal moisture content.	DPR
4.9.5	Quick Couplers	Quick couplers shall be in a box with the lid installed flush with or slightly below grade.	DPR

4.10. Court and Field Equipment (Scoreboards, Goals/Nets, Bases, etc.)

	Item	Maintenance Standard	
4.10.1	User-Group Condition	User group equipment shall be maintained (by user groups) to comply with all DPR maintenance and safety standards, any agreements, and original equipment manufacturers, specifications.	Vols
4.10.2	Identification	All user group equipment shall have the owners identification clearly marked.	Vols
4.10.3	Storage	Per any written agreement, user group equipment shall be stored off site during the off season.	Vols

5.0. Playgrounds

	Item	Maintenance Standard	
5.0.1	Compliance	Play equipment shall comply with ASTM and CPSC guidelines.	DPR, GSD
5.0.2	Structure	Play equipment shall have no cracked, broken, overly worn or missing components.	DPR, GSD
5.0.3	Footings	All play equipment components shall be firmly attached to footings.	DPR, GSD
5.0.4	Fasteners	All play equipment fasteners shall be securely tightened.	DPR, GSD
5.0.5	Litter and Debris	Playground area shall be free of debris.	DPR
5.0.6	Safety Surface	Safety surface shall be at the appropriate height, uniformly level and free of weeds.	DPR, GSD
5.0.7	Replacement Components	Replacement components shall meet or exceed original manufacturer's specifications as well as ASTM and CPSC.	GSD

6.0. Outdoor Lighting

	Item	Maintenance Standard	
6.0.1	Fixtures	All fixtures shall be in proper working order and free of cracked, broken or missing components.	GSD
6.0.2	Poles	Light poles shall be plumb and level.	GSD
6.0.3	Timers / Sports lighting	Times shall be set per the timer schedule or shall be on computer-controlled lighting link.	DPR, GSD
6.0.4	Illumination	Field lighting shall be checked regularly for maintenance of acceptable lighting levels for activities.	GSD

7.0. DPR Vehicles and Equipment

	Item	Maintenance Standard	
7.0.1	Inspection	Vehicles and equipment are to be inspected daily before use per the vehicle inspection checklist. Vehicle inspection sheets shall be turned in daily. Problems with equipment shall be reported to the Facilities Maintenance Supervisor or Parks Superintendent upon discovery.	DPR
7.0.2	Cleanliness	Interiors of vehicles shall be cleaned daily of debris and litter. Exteriors and interiors to be cleaned as needed, but at a minimum of every three weeks.	DPR
7.0.3	Tools and Materials Stored in Beds	Beds of trucks shall be emptied of tools and materials at the completion of a project or when the vehicle is no longer being used on that project.	DPR
7.0.4	Tools and Equipment	All tools and equipment will be returned in clean, working condition and properly stored in their designated location.	DPR
7.0.5	Weekly Maintenance Mowers	Weekly maintenance of equipment shall consist of washing, sharpening blades, lubricating and checking/tightening any loose nuts and/or bolts.	DPR
7.0.6	Fuel Level	Vehicles shall be at least ¼ full with fuel.	DPR
7.0.7	Oil and Lubrication	All equipment shall be properly oiled and lubricated prior to use.	DPR
7.0.8	Preventive Maintenance	Designated staff member shall be responsible for monitoring mileage and responding to request from Fleet Maintenance that vehicle be brought in for servicing.	DPR

Recommended Action Items

- The DPR mowing/clean up unit is currently operating with 15 FT staff and between 11 and 14 PT seasonal staff. Additionally, the unit is supported by one PT administration staff person. With the addition of new facilities and trail miles in Spring, 2013, with an increased responsibility for management of the event stage, and with increased expectations on performance—both as expressed by internal and external customers and by the department’s adopted performance standards—the hours of funded staff time are too low. The unit needs additional funding for overtime pay for FT workers and/or additional pay for PT seasonal workers and/or additional staff members to adequately meet the work load needs from March through October yearly.
- Maximum efficiency in the use of staff and equipment must be a goal in scheduling park maintenance routes of staff and equipment; these routes need to be adjusted seasonally as needed.
- When the unit moves into the new Operations Facility (expected in Spring 2013), the PT administrative staff member needs to be increased to a FT position to handle anticipated new responsibilities – such as receiving and logging in materials shipped to the department.
- Some additional equipment would assist in the efficiency of the unit’s work: an aerator, a top dresser, a turbine blower, and some compact vehicle that can be used on the City’s greenways. Increased efficiency would reduce the need for additional staff hours.
- A park inspector position needs to be added to DPR, both to implement regular safety inspections of all park facilities and to be responsible for work requests on parks that are not meeting the standards of this document. This person could also be the intake for internal and external customer requests for service. He or she could also serve as the safety training person for DPR maintenance staff members, since safety is a key component of park standards.
- A park operations budget is needed that reflects the real costs of (1) routine park maintenance and (2) preventive care of park facilities so that serious (and expensive) renovation situations can be avoided. This budget can be pegged to preventive

upkeep cost estimates for such regular items as, for example, re-sodding soccer field goal mouths (seasonally), top-dressing poured-in-place playground surfacing (yearly), and re-surfacing of tennis and basketball courts (every 5 years).

- The work request system and maintenance liaison between DPR and GSD is critical for park standards, and yet this system is seriously flawed: (1) requests for service are entered in several different ways based on where they originate and to what unit they are addressed, (2) there is no method in place for tracking the progress of service requests, (3) GSD's maintenance budget is unknown by DPR as are the priorities within GSD units for repair priorities. A standard system for work requests needs to be implemented, with access for entering and reporting out data accessible by staff in both departments. Each department's budget amount allocated to maintenance needs to be known by the other, as do (1) maintenance priorities for the year and (2) amount available for emergency repairs.

- Preventive maintenance must be set up to be completed on a systematic basis; park assets need to be tracked for necessary regularly –scheduled upkeep and potential replacement.