



# 07 | OPERATIONS + MAINTENANCE ASSESSMENT

## IN THIS CHAPTER

- Methodology
- Interviews + Field Assessment Findings
- Operational Standards
- Summary of Findings
- Maintenance Standards





The objective of the operations and maintenance assessment is to provide an overall evaluation of how the PRCR Department provides maintenance services for its facilities, greenways, parks, athletic fields and open spaces. The project team understands that the parks system is growing and putting additional demand on the current staff to continue to provide high quality services the residents expect from the Department. As the Town population continues to increase, the PRCR Department will need to have a robust staffing organization and maintenance management plan to ensure sustained service for existing amenities while developing new parks and facilities to meet the growing recreational demand.

#### METHODOLOGY

The project team conducted two work sessions with Apex Parks, Recreation and Cultural Resources Department maintenance staff and supervisors in October 2021. These interviews informed the project team about the department organization, the staff's role in the organization, their positions and job duties, as well as their view of internal processes to manage and operate the parks system. The staff provided feedback regarding key issues in the park system and specific opportunities this Master Plan can incorporate as part of the recommendations. The groups were asked a series of questions and given the opportunity to ask the interviewer for clarification or explanation, as well as receive information about the overall master planning process. The interview questions are in bold text, answers summarized, and some direct answers were chosen to appear in the bullet point list. The report also includes key recommendations for parks maintenance strategies.

#### INTERVIEWS AND FIELD ASSESSMENT FINDINGS

##### Approach to Parks and Facilities Maintenance

- › Staff adheres to basic parks and facilities maintenance standards established by the Department.
- › Staff currently takes care of the developed

##### Staff Comments on Approach to Parks and Facilities Maintenance:

- › We have not done a lot of (level of service) maintenance for park amenities except maybe for sports fields.
- › Equipment should be put on a three-year replacement plan instead of five.
- › We do not factor in overhead into our costs.
- › Most things we do are basic standards.
- › Facility usage – such as not enough pickleball courts.
- › Complaints about the restrooms and over used trash cans.
- › Overcrowding of space and trash cans.
- › Ninety percent of the complaints are overuse of the existing facilities.
- › Anything for grounds we do including park tree plantings.
- › We base our equipment time on 600 hours a year, so we are in a five-year replacement schedule.
- › Ninety-five percent of the projects we are engaged in maintaining we have the right equipment to do the job right.



parkland and the four joint-use school sites. The school sites maintenance work is also contracted out.

- › Staff conducts park maintenance such as mowing, picking up trash, cleaning restrooms on a cyclical basis except for sports fields and greenway inspections.
- › The staff indicates they react sporadically to many issues that happen, instead of being proactive in their efforts to address maintenance in a systematic manner.
- › With an open culture, the resources the Department receives are put to effective use across the staff and operations, as well as in all programs. Currently, many staff members work on different aspects of the services because the Department is understaffed.
- › With a variety of different facilities and many types of programs, different skill sets are needed to provide effective supervision and all other tasks required per facility. The Department also assures all scheduling is in place, and managing partnerships are especially important to the staff.
- › Varied approaches are used to manage people, so sharing staff is difficult. Previously, there were management plans for the buildings and separate plans for the facility division, and the facility division was responsible for a portion of the buildings. However, those arrangements were not effective and are no longer used. It is important to keep supervisors informed of park activity and what goes on in other departments through inter-system reports. A functional organizational structure is not in place and should be considered to help address the issues present and clarify job descriptions and duties.
- › The maintenance staff does some tree planting and care. However, with no horticulturist on staff, it would be beneficial to collaborate with the Town Arborist for the landscape and foliage needs of the department.
- › The maintenance staff gets good support from public works, and the staff indicated the teams work well together.

**Key Challenges with Current Parks and Facilities Maintenance**

- › Overuse of facilities and overcrowding of spaces are the main complaints. Poor maintenance of restrooms and overflowing trash cans create unsightly parks.
- › Park facilities and amenities need updating, as well as indoor workspace, staff office areas, and outdoor storage areas of the maintenance facilities. Many of these areas are too small and functionally inefficient.
- › Wi-fi is not present in the offices and workshop areas of the maintenance shop which makes it impossible for the staff to attend virtual meetings.
- › Understaffing and staff retention creates issues where tasks are not accomplished and there are not enough personnel to cover work tasks while

**Staff Comments on Key Challenges with Parks and Facilities Maintenance:**

- › Staffing levels are not appropriate for the expectations of key leaders in the Town or the Department – as we are always putting out fires so we cannot be more proactive than reactive.
- › We need some updated facilities like restrooms in the parks.
- › We need cross training so other team members can do other jobs when needed.
- › Staff resources are the most challenging with the low staffing levels for what we can provide to the town.
- › They need to do a salary study. Yes, they have done this, but we are out of touch with what we are offering. It has been difficult to find people and staff training takes a lot of time.
- › We get asked to do a lot of things by council, and we are the go-to department.
- › There is a list of things that we should be doing. We need a rapid response team to react to things the council wants us to do without taking people off routine and scheduled tasks.
- › Social media has affected us tremendously and this puts us in a defensive position.

others attend meetings / training. The number of staff employees is low in all areas, from the front desk personnel to programmers and is compounded by the additional problem of finding people to hire retain. The Town is making strides to evaluate their pay scale in order to be competitive with other employers in town. Cross training and specific job training are desired by the staff so team members can learn to perform other tasks, when necessary, instead of attempting to “put out fires”.

- › The staff needs to determine maintenance standards to manage tasks and the staff accordingly.
- › Social media has become the venue for people to share both positive and negative comments and criticism about the parks system and this puts the staff in a defensive position when complaints are aired openly.
- › The Staff’s routine work frequently gets interrupted by high priority tasks that would be better managed by a rapid response team. Their routine job responsibilities, non-planned tasks, and a full week of park open days are tough on the staff, and often they do not take breaks in attempts to do what is needed. These issues have become very frustrating for the staff, and it is incredibly challenging to be responsive in effective ways. To prevent burnout, the staff needs have the correct number of employees for work in the system. They need to learn to be proactive in the maintenance approach, as well as do more preventative maintenance throughout the system.

**Staffing Organization and Culture**

- › The staff indicated that the Department has been struggling with understaffing and a competitive pay scale. Other businesses are raising pay significantly causing staff to leave the parks system to seek higher pay elsewhere
- › There are no seasonal employees, and with a lack of part time staff and hiring being so difficult, people that are hired do not stay long because of the pay making the problems of hiring an ongoing issue.
- › A salary study was just finished for the Town. The results will assist management to evaluate entry level pay and routine pay raises that will hopefully recruit and retain new employees.
- › Programmers are struggling to get new hires as other departments are with the same issue of pay. Once new hires are on board, training is inconsistent and therefore the new employee is not well informed of department policies and their responsibilities. Training time, although minimal, puts a strain on staff members, and if the employee quits, training time by the staff is completely wasted.
- › Staff mentioned that to address the understaffing and under pay challenges, a business plan is being implemented that will make changes to address the upcoming new demands with the Pleasant Park opening.

**Staff Comments on Staffing Organization + Culture**

- › Park maintenance is consistently hiring new staff.
- › Most of our park maintenance positions are at \$14.00, and everyone (other local businesses) is moving to \$14.00-\$15.00 to be competitive in the marketplace. Some retail operations are above \$20 per hour.
- › Staffing needs to be right sized, or people get burned out.
- › Hire more staff or right size the department to meet expectations.
- › We are learning skills on the fly.
- › It is not a team building culture here.
- › The staff is doing more in other areas of the Town than just in parks which takes time away from regular duties.
- › The culture of the organization is good. We have gone through different staff members over the years.
- › The culture is open, and we have had the resources to do what we think the community needs.
- › We have the same end goal.



- › While the staff stated that the working culture is geared toward keeping a solid team together and moving toward a mutual goal of accomplishing tasks and operating effectively, there is also a need to develop strategic efforts to build the team spirit within the Department.
- › New leadership in the system has discovered there are staff members with talents that are not being utilized. Exposing and utilizing these talents could reduce some responsibilities in several areas and build better employees. By not using these untapped talents, the staff must adjust to a variety of issues and demanding circumstances. Evaluating the staff and their talents should be done much more effectively, as well as providing training for supervisors to manage better within the system. It is difficult to be engaged with the requirements of the facilities without direct access for what is needed in facilities throughout the system. The Department is working on staffing the organization for effective management of indoor facilities.
- › If the size of the department and job responsibilities of staff were adjusted and efforts made to implement the changes, the department would benefit with increased efficiency and completed tasks. Implementing staff training and giving new employees an opportunity to gain experience with their job responsibilities would improve efficiency. Training inexperienced staff members would reduce issues about poorly done tasks and minimize work stress with the staff.

**OPERATIONAL STANDARDS**

**Asset Lifecycle Replacement**

- › Per staff, there is no established replacement schedule for all assets. The equipment is well suited for the projects they have currently, but initial observance indicates that most of the equipment is at or near the end of its useful life and the replacement schedule is five years. The staff feels that the replacement schedule currently in place is not effective. There is a need to evaluate the equipment replacement plan. The life cycle turnover of equipment needs to be reduced by two years, and new equipment should provide more capacity than it is currently capable of doing.



Figure 7.1 - Town of Apex Staff

- › Major equipment maintenance is contracted to the Fleet Department and the staff performs minor maintenance. The maintenance shops are not large enough to perform maintenance work effectively. This is a key problem in the system that must be addressed.
- › Complaints are received as work orders and sports fields complaints are measured for future work on the fields. The department does not have any other metrics they measure at this time.
- › It was mentioned that complete operational standards are not present, and communication within the system is insufficient. If formal standards were established and followed, communication among the staff would improve and expectations would be understood. This would help the park and recreation divisions perform departmental duties and not overlap efforts or neglect tasks that need to be done.
- › The lack of staff members is a problem throughout the system, so many facilities are overused per facility and visitors are noticing that programs and services are not operating as well as they used to. More visitors in the existing parks create a need for additional parks and amenities, but the staff is already overextended with the maintenance tasks and duties they have now. If more facilities are built, the understaffing problem will be even more problematic, and programs would be operated even less effectively.
- › A position should be created for an Assistant Director of Parks with supervisory capacity over Parks Planning and the Project and Operations Manager in the system. This position should also engage with the Director regarding operations and functions of the staff and projects throughout the system. A GIS Data Manger position is needed to maintain the up-to-date GIS database and manage the mapping needs.
- › The program staff tracks participation with park and recreation registration software, so user information of all programs is available. This information can assist supervisors to understand programs that are underperforming or performing well if the data was used in more depth. Typical data reports using Active software are generated about park use and are shared with the town council.

**Staff Comments on Operational Standards**

- › Every asset and all equipment we have has a replacement schedule.
- › Lifecycle replacement schedule on everything is needed.
- › Assets in the park that need to be updated are identified and get put into the next fiscal year budget.
- › We do not have a schedule.
- › Our work order system is working well and is user friendly. It is easy to manage.
- › We have our inventory system included in it.
- › We are in the midst of getting tablets in our vehicles.
- › We are changing over to laptops.
- › None of our maintenance facilities have Wi-fi.
- › We do measure complaints for sports fields.
- › Complaints come in as a work order.
- › Larger shops we work in must be made a priority for us to efficient and effective.
- › I would say park and recreation divisions have their own approach to their work and it is not consistent across the system.
- › A few years ago, there was structure for managing facilities. The facility division takes care of some of the buildings, but it is inconsistent and fractured now.
- › We track the key elements of programs through the software we have and how much they are used.
- › The biggest complaint from supervisors is that we do not have enough facilities to accommodate the number of people who want to use them.
- › Keeping facilities staffed is the biggest issue we face.



- › Correcting many staff issues throughout the system is the most meaningful change wanted. Do to the lack of staff members to manage daily tasks and solve problems, arrangement of staffing to fit departments, and making staff members more efficient, the staff is putting into so many areas beyond their areas of responsibility. The mix of issues that need to be addressed and changed for the system to recover operationally must be made a priority.

#### Staff Comments on Technology and Work Order System

- › We have a good IT department and at times we need more mobile technology.
- › There is a high need for technology training at entry skill levels.
- › People are training on the fly.

#### Technology and Work Order System

- › The existing work order system is easy to operate, has an inventory system included, and it works well. Acquiring laptops is in the plan for next year's budget, and there will also be tablets in the vehicles.
- › Currently there is no Wi-fi at any of the maintenance facilities in the parks, and it will soon be added to benefit the maintenance staff in virtual meetings, email communications and ordering supplies.
- › There is a good IT Department within the Town, yet more mobile technology would be helpful for throughout the system. There is a lack of staff members in all departments of the system, and although the IT Department does well to maintain the computers and networks, they too would benefit from additional staff.
- › Consideration should be made to include a GIS Specialist as part of the staff to monitor and track inventory of park assets, provide system mapping for marketing, produce and utilize town documentation in all formats, support notifications to on-line for project updates and master plan documents. They would create the departments SDE and provide support for the background information needed for Cityworks software.

#### Marketing Division

- › Although the staff has two members with job titles that include marketing, the absence of a formal marketing division limits communication with the community about what programs are offered, program schedules, and events in the parks. More involvement by these staff members, use of marketing resources, and collaboration with the Communications Department to increase relations with the community as well as partners of the system would be a step forward to improving outreach.
- › A marketing department would work to establish valued partnerships and maintain existing relationships so the partners will continue to provide support to the park system.
- › Increasing in-house marketing efforts and collaborating with the Communication Department of the Town will engage more effective communication to the residents in the community.
- › The staff indicated their desire to establish a marketing division so parks will have a better connection with the community in the future and will encourage more visitors to the parks.

#### Business Plans

- › The staff indicated that the parks in the system, facilities, and major attractions currently do not have any business plans in place.
- › A business plan would:
  - Manage and lead the staff with a business context approach.
  - Develop the cost of services. (direct and indirect costs)
  - Outline goals and measure outcomes as they apply to:
    - Market impact, cost recovery, operational efficiency, facility use, impact on
    - Programs, activate spaces, and increase equipment efficiency and effectiveness.
    - Define Staff Costs (full time, part time, and seasonal) as a part of the budget.
    - Nurture partner relationships. (regarding equality and fairness)
    - Incorporate sponsorships. (as a part of earned income)
  - Strategically implement goals.

#### Full Cost Of Services

- › Costs are factored on work orders for labor and supplies, but overhead costs are not included. Individual staff hours have been tracked in the past and should also be calculated with other costs.
- › Knowing the overall cost of each program is important but understanding direct and indirect expenses of programs needs to be addressed in the future. Key Performance Indicators (KPIs) need to be established to show what programs perform the best and which generate the most revenue, as well as those that have low attendance, and their costs exceed revenue generated.



Figure 7.2 - John M. Brown Community Center



### SUMMARY OF FINDINGS

- › A maintenance management plan needs to be developed for the park and recreation system that focuses on maintenance standards, true cost to maintain parks, trails, sports fields, park amenities, and natural areas to adequately forecast the true cost of delivery that a quality park experience is to the users of the system. This plan would include direct and indirect costs.
- › Staffing requirements need to be established for delivering maintenance standards for fulltime, part-time, and seasonal positions in the agency for budgeting purposes. This would include standards for park maintenance, trails, sports fields, park amenities, indoor facilities, and natural areas. Staffing pay needs to reflect what the market is paying to encourage new hires and keep employees within the system.
- › Equipment replacement schedules need to be based on hours of operation not years.
- › A lifecycle assessment needs to be established for each park asset's lifecycle and what the replacement schedule should be. Money should be set aside to update assets each year so they don't lose value or appeal with residents. At least 5% of the total asset value should be designated each year to take care of what the agency already owns.
- › Equipment used to take care of parks needs to be of high quality, experience minimal breakdowns, and be able to withstand the level of use expected from each piece of equipment in the system.
- › Maintenance shops are not adequate to meet the needs of an efficient maintenance operation.
- › Maintenance shops need to be redesigned and updated to provide adequate workspace for the staff and have adequate storage space to protect supplies and equipment and large enough to manage indoor and outdoor requirements for an effective maintenance division.
- › Maintenance outcomes need to be measurable for better lifecycle management, equipment management, staff management, customer satisfaction, and cost per unit to maintain.
- › Maintenance technology needs to be updated to include the use of laptops and field tablets to record work orders, work completed, staff time, equipment used, and lifecycle management of assets.
- › Develop a team culture through proper training, use proper crew sizes to adequately get the work done, and use suitable field supervision to highlight accomplishments for the staff throughout the year.
- › The maintenance staff needs to be involved in park planning and design to clearly articulate maintenance issues that may occur in park design so that they can operate in the most effective manner.
- › Establish methods for environmental care of natural resources for maintenance crews to properly take care of these resources for the community. The Town has 43 percent of the park land in a natural state and this amount of parkland requires a natural areas management plan to be in place.
- › A forestry plan needs to be instituted for the park system that should include an inventory assessment and cataloging of trees in the parks system with the opportunity to coordinate efforts with the Town Forester and possibly include all trees within Town rights-of ways.
- › Consider the benefits of keeping parks maintenance division within the Department
  - Public Works employees typically only work Monday – Friday and expect overtime on weekends.
    - Most park employees work on weekends when the parks are most occupied by visitors and restrooms need cleaned, trash picked up and public use areas need routine upkeep.
  - The staff will be able to manage their tasks more effectively and determine how additional maintenance requirements for the Town will be managed based on the type of program or event.
  - The staff will be involved in the budget process and provide information about equipment, staffing and other needs that require funds.
  - They will be able to track and implement KPI's and measure results that will help them tell their story and

- express their needs to the Town leadership.
  - They will have more control over hiring staff including (starting pay, incremental and incentive pay structure and payroll for work crews)
  - They will adjust the lifecycle replacement schedules for amenities in the parks and also maintenance for equipment.
  - They can review equipment specifications so what is purchased is what they need to operate in the most efficient manner.
  - They can be more involved in meetings to convey what their division is doing and accomplishing to ensure they understand what park visitors' feel is important.
  - Park employees take pride in their work and are able to work independently or in teams as a division.
  - Most public agencies would not have the Public Works staff manage golf course maintenance and the same would apply to them managing sports fields.
- › Recognizing the challenges associated with growing development, the Town is addressing the understaffing challenge by developing a staffing organization plan. This chart is presented below. In addition to positions mentioned in the chart, there is a need to add the following new positions with the Department:
- **Assistant Director of Parks:** Support the Director with operations of the system, project planning, and high-level functions of the staff.
  - **Volunteer Coordinator:** Manage work schedules, tasks, and hours worked for individual volunteers and volunteer groups. (Adopt a Park, Community Service Workers, Scout Groups and Events)
  - **Marketing Supervisor:** Oversee the marketing department staff, development of program guides, registration staff, social media, and customer service training for full time, part-time and seasonal staff.
  - **Business Development Coordinator:** Perform following tasks
    - Track KPI's, develop and manage business plans for the revenue producing facilities in the agency.

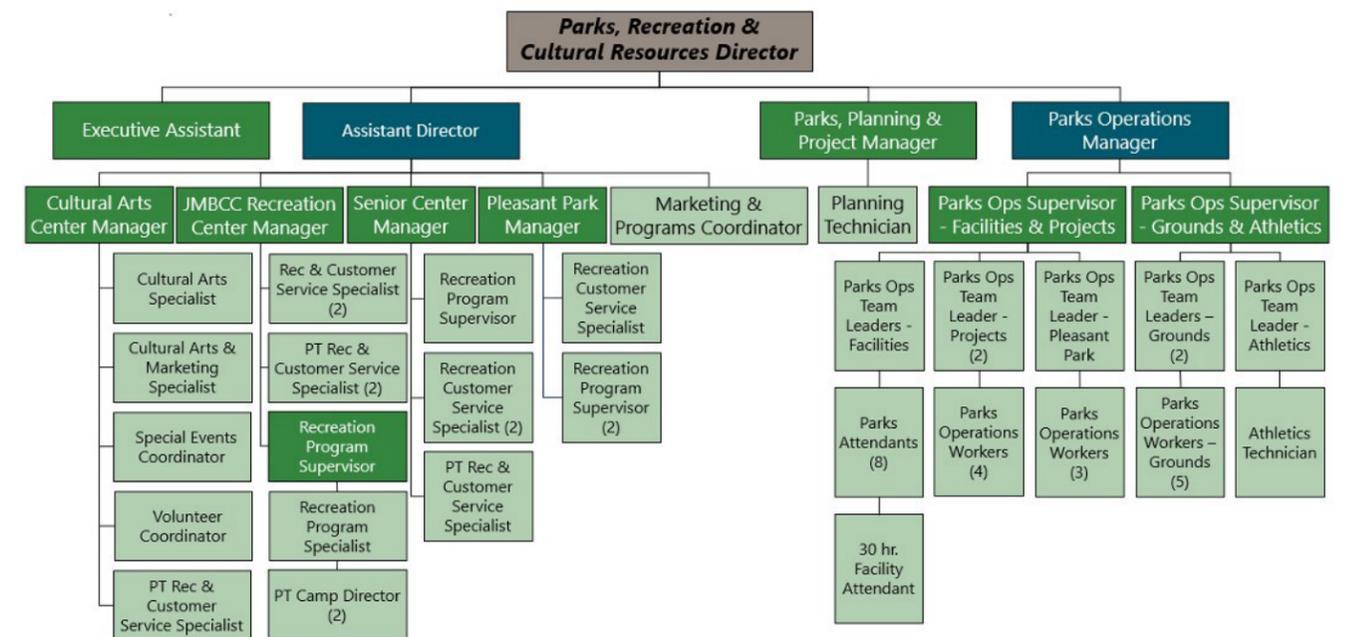


Figure 7.3 - PRCR Department Organization Chart (2022)



- Assist staff in tracking true cost of services both direct and indirect costs, assist in budget development and track user data for staff to make better decisions.
- Create earned income opportunities by focusing on grants, partnership equity and sponsorships.
- **Public Art Coordinator:** Manage public art throughout the Town, coordinate locations with private developers, develop partnerships with local artists, develop public art plan, and manage artist commission process.
- **Pleasant Park Operations Supervisor:** Manage operations at the new Pleasant Park site.
- **GIS Data Manager:** Maintain up-to-date GIS data and maps, collaborate with other departments to ensure consistency of information.

## MAINTENANCE STANDARDS

The division should prioritize and strive to achieve maintenance standards. Three maintenance levels are defined in the following outline. The difference between levels is the frequency of maintenance as determined by the Division's abilities. Maintenance Standards have the following general characteristics.

- › **Level 1 Maintenance** – High profile areas where the entire area is visible to foot traffic; Entrances to community centers, signature facilities and areas where funding permits a higher level of maintenance. Example of maintenance activities include; Mowing and edging twice per week, 95 percent turf coverage at start of season with 5 percent weeds and no bare areas, edging once per week, tree pruning cycle once annually, and litter pickup twice per week.
- › **Level 2 Maintenance** – Moderate to heavy use typical of most parks. Maintenance activities include; Mowing and edging once per week, 88 percent turf coverage at the start of season with 8 percent weeds and 4 percent bare areas, a tree pruning cycle every seven years, and litter pickup once per week.
- › **Level 3 Maintenance** – Typical for low usage parks or when funding is limited. Maintenance activities include; Mowing and edging every 10 days, 80 percent turf coverage at start of season with 20 percent weeds, edging once per week or every 2 weeks in the off-season, tree pruning cycle every 10 years and litter pickup every other week.

In areas where turf does not impact the quality of experience (i.e., dog parks) or non-landscaped open space areas, demand-based maintenance is provided according to funding availability. Level 1 and level 2 standards are described in greater detail below.



Figure 7.4 - Kelly Road Park

## Level 1 Maintenance Standards

Maintenance standards can change by season and month depending on the park and level of use. Standards will be calculated by the time required for maintenance tasks and equipment needed to develop the required operation budgets. The difference between Level 1 and Level 2 standards is the frequency rate.

**Turf Maintenance** – high profile areas (small areas, entire area visible to foot traffic)

- › Mowing will occur two times per week
- › Mowing heights
  - Two ½" during warm season (daytime highs consistently above 75 degrees)
- › Edging of all turf perimeters will occur one time per week
- › Ninety-five percent turf coverage
- › Three percent weed infestation for existing areas (all efforts should be made to keep new areas 100 percent weed free)
- › Two percent bare area
- › Remove grass clippings if visible
- › Aerate one time per year (additionally if needed)
- › Inspect thatch layer regularly and remove as needed
- › Test soil and water annually
  - Additional testing will occur if deemed necessary
- › Soil moisture will be consistent
  - No wet areas
  - No dry areas
  - Firm enough for foot and mower traffic
  - Apply wetting agents to assist in uniform soil moisture
  - Hand water as needed
- › Inspect daily for insects, disease and stress with response to outbreaks within 24 hours
- › Fertilize three times per year
- › Top dress and over seed once a year

## Tree and Shrub Maintenance

- › Prune and trim trees and shrubs as dictated by species twice annually during spring and fall
- › Remove sucker growth annually
- › Test soil annually to ensure application of appropriate nutrients as needed
- › Apply fertilizer to plant species according to their optimum requirements as needed or yearly
- › Inspect regularly for insects and diseases. Respond to outbreaks within 48 hours
- › Place two inches of organic mulch around each tree within a minimum of an 18-inch ring
- › Place two inches of organic mulch around shrub beds to minimize weed growth



- › Remove hazardous limbs and plants immediately
- › Remove dead trees and plant material immediately unless located within an environmental area
- › Remove or treat invasive plants within 5 days of discovery
- › Flower bed maintenance done yearly
- › Fertilize once a year
- › Pond maintenance done yearly and ponds inspected weekly
- › Water features maintained weekly
- › Invasive plant removal annually

**Storm Cleanup**

- › Inspect drain covers at least twice monthly, before rain, and immediately after flooding
- › Remove debris and organic materials from drain covers immediately
- › Maintain water inlet height at 100 percent of design standard

**Irrigation Systems**

- › Inspect irrigation systems at least once per month or computer monitor as necessary
- › Initiate repairs to non-functioning systems within 24 hours of discovery
- › Back flow testing done annually

**Litter Control**

- › Pick up litter and empty containers at least once daily or more often as needed
- › Remove leaves and organic debris once a week or as necessary

**Playground Maintenance**

- › Audit each playground to ensure compliance with the current version of ASTM Performance Standard F1487 and the Consumer Product Safety Commission “Handbook for Public Playground Safety”
- › Complete low-frequency playground inspections at least bi-monthly or as required
- › Inspections are to be completed by a Certified Playground Safety Inspector (CPSI).
- › Related repairs are to be done immediately, and initiate other repairs within 48 hours of discovery
- › Complete high-frequency inspections at least weekly
- › Groom playground surfaces three times weekly, nine months a year

**Hard Surface Maintenance**

- › Remove debris and broken glass immediately upon discovery
- › Remove sand, dirt, and organic debris from walks and hard-court surfaces weekly
- › Remove trip hazards from pedestrian areas immediately upon discovery
- › Paint fading or indistinct instructional and directional signs annually
- › Blow grass clippings after mowing around hard surfaces

- › Remove grass growing in cracks as needed

**Outdoor Court Maintenance**

- › Inspect tennis and basketball courts at least once monthly. Complete all repairs within 48 hours of discovery
- › Repaint lines at least once each year
- › Replace basketball nets when frayed, broken, or missing
- › Maintain basketball goal posts, backboards, rims, tennis net posts, fencing, and hardware to original design specifications

**Trail Maintenance**

- › Inspect hard and soft surface trails at least once monthly
- › Remove dirt, sand, and organic debris from hard surfaces at least once weekly
- › Remove organic debris from soft surfaces at least once weekly
- › Maintain a uniform 3-to-4-inch depth of compacted material on soft surface trails at all times
- › Graffiti should be removed weekly
- › Remove overhanging branches within 7 feet of the trail surface at least twice annually
- › Use lawn equipment or chemicals to control growth twenty-four inches on either side of the trails
- › Inspect signs, benches and other site amenities at least once monthly. Complete repairs within 10 days of discovery
- › Inspect and make necessary repairs to lighting systems at least once monthly
- › Repair or replace bulbs to maintain lighting levels to design specifications

**Site Amenity Maintenance**

- › Inspect benches, trash containers, picnic tables and grills, bicycle racks, flag poles, drinking fountains, and other site amenities at least monthly. Complete repairs within 24 hours of discovery
- › Clean, scrub and power wash amenities twice yearly
- › Inspect sites daily for insects, disease, and stress and respond to outbreaks within 24 hours

Athletic fields grounds maintenance (Baseball, Soccer, Softball and Rugby) Artificial turf and grass turf as below.

- › Standards for artificial turf
  - Keep turf free from pollutants. Airborne: dust, pollen, smoke, ashes – hose down by rinsing with water
  - Stains:
    - Wet stain – use a wet rag and soak the stain then scrub and dry. Repeat multiple times if necessary
    - Dry stain – use a scraper (moderate edge, not knife or razor) then clean with mild detergent. Dry and repeat until clean.
  - Animal Waste: Urine: hose and rinse away as soon as possible. Feces: remove solid waste, use mild detergent, rinse and repeat until clean. Dry feces – scrape, use mild detergent, rinse and dry. Repeat

until clean. Wet feces – remove, use mild detergent, rinse and dry. Repeat if necessary.

- Outside turf: Wet / warm weather conditions can create mold. Visually inspect for signs of mold, use mild detergent, rinse and repeat until clean. Use hydrogen peroxide if mold is extensive.
- Brush: Use a synthetic brush across traffic patterns when matted presence is visual.
- Contact turf manufacturer / installer for any other questions for care of your turf.
- Artificial turf has an approximate 10-year lifecycle (depending on extent of use). Financially plan for replacement enough years ahead to accommodate this capital expenditure.

These standards apply to grass fields that are dedicated to softball, baseball, soccer and rugby only:

- Use mower capable of “striping” the turf
- Mow twice weekly
- Mowing heights
  - 2” during cool season (daytime highs consistently below 75 degrees)
- Edging of field perimeters twice monthly
- Ninety-five percent turf coverage at the start of every season
- Eighty percent turf coverage after seasonal play begins
- Five percent weed infestation
- No bare areas at the start of every season
- Fifteen percent bare and weak areas will be acceptable after seasonal play begins
- Apply pre-germinated seed to heavily worn areas after every tournament Remove grass clippings if visible
- Aerate three times annually
- Aerate spots in high use areas as needed
- Inspect thatch layer regularly and remove as needed
- Test soil and water annually
- Additional testing will occur if deemed necessary
  - Soil moisture will be consistent
    - No wet areas
    - No dry areas
    - Firm enough for foot and mower traffic
    - Apply wetting agents to assist in uniform soil moisture
    - Hand water as needed
  - Inspect daily for insects, disease and stress. Respond to outbreaks within 24 hours
  - Fertilize monthly
  - Aerate and over seed yearly

- Fence and Gate Maintenance
  - Inspect fences, gates and bollards at least twice annually. Complete safety-related repairs immediately. Complete other repairs within 48 hours of discovery
  - Annually clean fences of debris
- Sign Maintenance
  - Inspect sign lettering, surfaces, and posts at least once monthly
  - Repair or replace signs to maintain design and safety standards within 24 hours of repair need
  - Clean signs twice a year
  - Cut back plant material annually or more often if needed
    - Pest Control
  - In accordance with the Division’s Integrated Pest Management Program (IPM), problem areas are inspected monthly and insect issues remedied immediately upon discovery
    - Vandalism and Graffiti Removal
  - Initiate repairs immediately upon discovery. Document and photograph damage as necessary
    - Picnic Shelters
  - Reserved units should be cleaned and litter removed prior to and after each reservation
  - Minor repairs are made immediately upon discovery
  - Non-reserved units are cleaned weekly by power washing, or as necessary
    - Lighting Security/Area
  - Foot-candle levels will be maintained to preserve the original design
  - Inspect once monthly
  - Repair or replace burned out bulbs within 24 hours of discovery

**Concession Standards: Outdoor (when developed in the future)**

- Concession facilities to be thoroughly cleaned, wiped down, and sanitized before opening
- Electrical appliances checked for compliance and repaired if damaged
- Lights checked and repaired as needed
- Concession operating permits secured before opening
- Appliances cleaned thoroughly before opening
- Prices for concessions to be posted
- Cash registers tested to ensure they work properly
- Circuit breakers tested prior to opening
- Cleaning and sanitization supply available before opening
- Pick up debris daily



### **Closing Concession Standards: Outdoor**

- › Equipment cleaned thoroughly
- › Expired and partially used supplies removed and discarded
- › Electricity should be turned off
- › Refrigerators turned off, sealed and cables secured
- › Facility floors, sinks, and counters cleaned thoroughly
- › Hoses cleaned and drained
- › Kitchen cleaned thoroughly
- › Inspections of standards to occur monthly

### **Restrooms**

- › Restrooms cleaned twice per day unless contracted
- › Restrooms inspected hourly
- › Restrooms locked and unlocked daily
- › Replace waterless urinal cartridges monthly
- › Leaks dealt with immediately and repaired within 24 hours of discovery

### **Open Space Standard**

- › Maintain natural appearance to open space areas
- › Remove fallen trees and branches that pose a hazard to users
- › Respond to disease and insect outbreaks within 24 hours of identification
- › Inspect areas monthly
- › Remove and clean dump sites within 48 hours of identification
- › Post and maintain appropriate signage for each individual area
- › Implement strategies to assist in reducing the stand of non-native invasive plants by 5 percent annually
- › No large branches or debris will be allowed in parks and along perimeters



Figure 7.5 - Kelly Road Park

### **Level 2 Maintenance Standards**

Maintenance standards can change by season and month depending on the park and level of use. Standards will be calculated by the time and equipment needed to develop the required operation budgets. The difference between Level 2 and Level 3 standards is the frequency rate.

#### **Turf Maintenance**

- › Mowing to occur once weekly
- › Mowing heights
  - 2½ inches during cool season (daytime highs consistently below 75 degrees)
- › Edging of all turf perimeters to occur weekly during the season and every 2 weeks in off-season
- › Eighty-eight percent turf coverage
- › Eight percent maximum weed infestation
- › Four percent bare area will be acceptable after play begins
- › Remove grass clippings if visible
- › Aerate once annually in low use areas
- › Aerate twice annually in high use areas (additionally if needed)
- › Inspect thatch layer regularly and remove as needed
- › Test soil and water annually
  - Additional testing will occur if deemed necessary
- › Soil moisture should be consistent
  - No wet areas
  - No dry areas
  - Firm enough for foot and mower traffic
  - Apply wetting agents to assist in uniform soil moisture
  - Hand water as needed
- › Inspect weekly for insects, disease, stress and respond to outbreaks within 24 hours
- › Fertilize twice yearly

#### **Tree and Shrub Maintenance**

- › Prune or trim trees and shrubs as dictated by species at least once annually
- › Apply fertilizer to plant species only if plant health dictates
- › Remove sucker growth as needed
- › Inspect regularly for insects and diseases. Respond to outbreaks within 48 hours
- › Place two inches of organic mulch around each tree within a minimum 18-inch ring
- › Place two inches of organic mulch around shrub beds to minimize weed growth
- › Remove hazardous hanging limbs and overgrown plants immediately upon discovery
- › Remove dead trees and plant material within 30 days of discovery
- › Remove or treat invasive plants yearly



### **Storm Cleanup**

- › Inspect drain covers at least once monthly and immediately after flooding occurs
- › Remove debris and organic materials from drain covers every other month
- › Inspect and clean drains before forecasted storms begin
- › Maintain water inlet height at 100 percent of design standard
- › Invasive plant removal once a year or as needed
- › Drain system maintenance done once a year

### **Irrigation Systems**

- › Inspect irrigation systems a minimum of once per month and as necessary
- › Initiate repairs to non-functioning systems within 48 hours of discovery
- › Annual back flow inspection done yearly

### **Litter Control**

- › Pick up litter and empty containers at least every other day when needed
- › Remove leaves and organic debris once a week

### **Playground Maintenance**

- › Audit each playground to ensure compliance with the current version of ASTM Performance Standard F1487 and the Consumer Product Safety Commission “Handbook for Public Playground Safety”
- › Complete low-frequency playground inspections at least bi-monthly or as required. All low-frequency inspections are to be completed by a Certified Playground Safety Inspector (CPSI). Complete safety-related repairs immediately and initiate other repairs within 48 hours of discovery
- › Complete high-frequency inspections at least weekly
- › Groom playground surfaces two times weekly

### **Hard Surface Maintenance**

- › Remove debris and broken glass immediately upon discovery
- › Remove sand, dirt, and organic debris from walks, lots and hard surfaces every 30 days
- › Remove trip hazards from pedestrian areas immediately upon discovery
- › Paint fading or indistinct instructional and directional signs every other year
- › Remove grass in the cracks monthly

### **Outdoor Court Maintenance**

- › Inspect basketball courts at least once monthly. Complete repairs within 10 days of discovery
- › Repaint lines at least once every 2 years
- › Replace basketball nets within 10 days when frayed, broken, or missing
- › Maintain basketball goal posts, backboards, rims, fencing, and hardware to original design specifications. Complete repairs within 10 days of discovery

### **Trail Maintenance**

- › Inspect hard and soft surface trails at least once monthly
- › Remove dirt, sand, and organic debris from hard surfaces at least once monthly
- › Remove organic debris from soft surfaces at least once monthly
- › Maintain a uniform 2-to-4-inch depth of compacted material on soft surface trails
- › Use lawn equipment or chemicals to control growth twenty-four inches on either side of the trails
- › Remove overhanging branches within eighty-four inches of the trail surface at least once annually
- › Inspect signs, benches, site amenities at least once monthly. Complete repairs within 10 days of discovery

### **Site Amenity Maintenance**

- › Inspect benches, trash containers, picnic tables, grills, bicycle racks, drinking fountains, and other site amenities at least monthly. Complete repairs within 5 days of discovery
- › Cleaning and washing annually
- › Inspect daily for insects, disease, or stress and respond to outbreaks within 24 hours

### **Athletic Field Grounds Maintenance (baseball, soccer, softball, and rugby)**

- › Fields that are dedicated to soccer, baseball, softball, and rugby only
- › Mowing will occur twice weekly
- › Mowing heights
  - 2 ½ inches during cool season (daytime highs consistently below 75 degrees)
  - Three inches during warm season (daytime highs consistently above 75 degrees)
- › Edging of all field perimeters will occur once monthly
- › Eighty percent turf coverage at the start of every playing season
- › Sixty-five percent turf coverage after play begins
- › Twenty percent weed infestation
- › Five percent maximum bare areas at the start of every playing season
- › Fifteen percent maximum bare and weak areas will be acceptable after play begins
- › Remove grass clippings if visible
- › Aerate once annually
- › Inspect thatch layer regularly and remove as needed
- › Test soil and water annually
  - Additional testing will occur if deemed necessary
  - Soil moisture should be consistent
- › No wet areas
- › No dry areas
- › Firm enough for foot and mower traffic
- › Inspect weekly for insects, disease, or stress and respond to outbreaks within 24 hours



#### ***Fence and Gate Maintenance***

- › Inspect fences, gates and bollards at least once annually. Complete safety-related repairs immediately, and complete other repairs within 5 days of discovery
- › Clean debris annually

#### ***Sign Maintenance***

- › Inspect sign lettering, surfaces, and posts at least once every 3 months
- › Repair or replace signs to maintain design and safety standards within 5 days of discovery
- › Clean signs once a year

#### ***Pest Control***

- › In accordance with the Division's Integrated Pest Management Program (IPM), inspect problem areas monthly and remedy immediately upon discovery

#### ***Vandalism and Graffiti Removal***

- › Initiate repairs immediately upon discovery. Document and photograph damage as necessary

#### ***Picnic Shelters***

- › Reserved units should be cleaned and litter removed prior to, and after each reservation
- › Minor repairs are made immediately upon discovery
- › Non-reserved units are cleaned bi-weekly, or as necessary

#### ***Lighting Security Areas***

- › Inspect quarterly
- › Repair fixtures or replace bulbs completed within 72 hours of discovery

#### ***Restrooms***

- › Restrooms cleaned daily unless contracted
- › Restrooms inspected every three hours
- › Restrooms locked and unlocked daily
- › Replace waterless urinal cartridges monthly
- › Leaks dealt with immediately and repaired within 24 hours of discovery

