



COUNCIL AGENDA: 3/1/2022

ITEM: 7.1

FILE NO: 22-239

Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Toni J. Taber, CMC
City Clerk

SUBJECT: SEE BELOW

DATE: March 1, 2022

SUBJECT: City-Wide Sustainable Park Maintenance Report

Recommendation

As recommended by the Neighborhood Services and Education Committee on February 10, 2022, accept the report on City-wide sustainable park maintenance, including current service levels and areas of improvement.

CEQA: Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City action. (Parks, Recreation and Neighborhood Services)

[Neighborhood Services and Education Committee referral 2/10/2022 - Item (d)4]



Memorandum

TO: NEIGHBORHOOD SERVICES
AND EDUCATION COMMITTEE

FROM: Jon Cicirelli

SUBJECT: CITY-WIDE SUSTAINABLE PARK
MAINTENANCE REPORT

DATE: January 24, 2022

Approved

Date

1/31/22

RECOMMENDATION

Accept the report on City-wide sustainable park maintenance, including current service levels and areas of improvement.

OUTCOME

This report provides the Neighborhood Services and Education Committee with updates on park maintenance operations, including 2021 Park Condition Assessment results.

BACKGROUND

According to Clyde Arbuckle's History of San Jose, the public park system in San José began taking shape in 1850 when public squares were set aside for future use. In 1872, Alum Rock Park was founded as the State's first municipal park, by an act of the California state legislature. Since then, San José's park system has grown through investment, including with the voter-approved Measure P in 2000, to 209 parks spanning more than 3,500 acres of developed and undeveloped land, as well as 63 miles of trails, dozens of civic grounds, gardens, lakes, sports facilities, a farm, and an accredited amusement park and zoo.

Today more than ever before, San José's public parks provide social, emotional, physical, economic and environmental benefits to the City and its residents. They are a place for residents to come together as a community, reduce isolation and loneliness, and encourage and support childhood development, contemplation and relaxation, and active lifestyles and recreation for a happy, healthy City. The City's neighborhood and regional parks impact the economy by attracting people to the City and increasing property values, among other things, which was estimated by the Trust for Public Land in 2016 to bring economic benefits on the order of many tens of millions of dollars annually.¹ Last, but not least, City's parks are also an ideal place to

¹ <https://www.sanjoseca.gov/home/showpublisheddocument/9833/636656974699330000>

enjoy nature and they make important environmental contributions, from sequestering carbon with trees and shrubs to reducing stormwater runoff and providing flood control capacity. San José parks are a key contributor to the livability of the City, and as such are integral in the success of three major strategies in the City's Envision 2040 General Plan (Major Strategy #7 - Measurable Sustainability / Environmental Stewardship; Major Strategy #10 - Life Amidst Abundant Natural Resources; and Major Strategy #11 - Design for a Healthful Community) and of strategies to unlock the potential of Natural and Working Lands to improve the health of the climate and the community in pursuit of Climate Smart San José.

Over the past two years, with unprecedented world events and a pandemic, parks have been essential for residents. As many places residents frequented for leisure and recreation were closed due to safety concerns, parks filled that void in many people's lives, acting as fitness centers, event venues, recreation destinations, and even places of worship. Staff recognized the importance of these public spaces and worked tirelessly, every day, to ensure parks remained open and a safe refuge for residents to maintain their mental and physical wellbeing.

The stewardship of the City's park system lies with the Department of Parks, Recreation and Neighborhood Services. ActivateSJ, the Department's 20-year strategic plan approved by the City Council in December 2019, defines a vision of Healthy Communities that Inspire Belonging. To achieve this vision, the Department is guided by the principles of Stewardship, Nature, Equity & Access, Identity and Public Life. The Department's Parks Division maintains and operates the City's parks with a 2021-2022 Adopted Operating Budget of about \$30 million for park maintenance. The budget includes 179 full-time equivalent staff in maintenance classifications ranging from Maintenance Assistant to Parks Facility Supervisor, who work 365 days a year towards a goal of safe and clean parks, with support from contractors, partners and volunteers. Park maintenance activities include:

- Grounds maintenance such as turf maintenance, tree maintenance, and landscaping;
- Custodial and janitorial services, including litter and refuse collection;
- Landscape rehabilitation;
- Repairs to equipment, such as irrigation systems and playgrounds; and
- Special event services, including preparation, event set-up, tear-down and clean-up.

In September 2020, the City Council accepted the City Auditor's Office's Audit of Park Maintenance. The audit concluded that the Department could improve the Park Condition Assessment process and its use of business intelligence to achieve efficiencies in service. These findings validated the aspirations and benchmarks in ActivateSJ.

ANALYSIS

The foundation of ActivateSJ is the guiding principle of Stewardship. The very first benchmark under this guiding principle is "Improve the condition of parks and trails." The Department has prioritized making improvements in the management of park maintenance that include:

- Establishing maintenance standards to ensure equity in care of park resources City-wide (ActivateSJ alignment: benchmark S1a);
- Collecting and monitoring useful data to ensure goals are achieved (ActivateSJ alignment: benchmarks S1b, S5a, and S6a);
- Developing and deploying approaches to meet standards using available resources (ActivateSJ alignment: benchmarks S1c, S8a and S13b); and
- Implementing maintenance practices that advance climate resilience (ActivateSJ alignment: Stewardship and Nature).

With these items in mind, staff created a multi-year work plan aligned with the principals of Activate SJ, the Environmental Leadership chapter of Envision 2040, and Climate Smart San José. The items on the work plan allow staff to identify where we are, where we want to get to, and how to get there.

Defining Success with Park Maintenance Standards

To ensure all parks provide beneficial spaces for the communities they serve, they must be maintained to the same high expectation regardless of location. In April 2021, the Department approved Park Maintenance Standards to clearly define the condition at which park amenities are expected to be maintained. The full Park Maintenance Standards, included as [Attachment A](#), define 20 categories of park features and their desired condition. Exhibit 1 provides an example of how one category, natural turf, is evaluated in eight different ways to cover discrete aspects of a feature. It also shows that the standards do not seek perfection, which is unattainable. Having measurable standards allows the Department to train staff for proper care and to better identify deficiencies and make appropriate corrections. Staff intends to annually review Park Maintenance Standards and add standards for additional park features and amenities, such as bioswales and lakes, in coming years.

Exhibit 1: Example of Park Maintenance Standard for Natural Turf

- 6.17 Turf (natural turf only)
 - 6.17.1 Cleanliness: Turf is free of litter. The standard allows for no more than 10 pieces of trash per acre. Turf is free of organic debris that impedes mowing. The standard allows for no more than 10 pieces of debris per acre. Unsafe litter is not acceptable.
 - 6.17.2 Color: 80% of turf area is green.
 - 6.17.3 Weeds: Weed levels are below 20% of total turf area.
 - 6.17.4 Density: 80% of turf area is free of bare spots.
 - 6.17.5 Drainage: 80% of turf area is free of standing water two days after rain or two hours after irrigation.
 - 6.17.6 Edging: 80% of edges are clearly defined and have less than four (4) inches of growth over adjoining landscape.
 - 6.17.7 Mowing: Turf is mowed and kept at a uniform height of less than ankle height or 4.5-5 inches.
 - 6.17.8 Holes and Pests: Noticeable from a ten (10) foot distance, turf is free of visible holes greater than 2-3 inches in diameter and/or depth. Note: Holes greater than 2-3 inches (in diameter and/or depth) that are observed during the inspection process should be reported so they can be filled. The standard is not met if multiple holes and/or mounds caused by any animal (e.g., gophers, moles) impede park users from walking or jogging, even if holes are less than 2-3 inches in diameter and/or depth.

In addition to maintenance standards, the Department has developed Park Design Guidelines to help establish a consistent and coherent identity throughout the San José park system by standardizing design decisions and park furnishing selections and optimizing design to ensure that park maintenance is financially sustainable.

Ensuring Success through Feedback Processes

Each year, the Department conducts Park Condition Assessments (PCAs) to determine the condition of each park. The PCAs are a point-in-time evaluation of various park features, such as turf, benches, and playgrounds. Compiled in the summer/fall, staff's PCA scores reflect the previous fiscal year's level of service (i.e., PCAs record the condition of a park in summer/fall of 2021, which is primarily the result of the service a park received during 2020-2021). Completing PCAs allows staff to systematically observe and document trends in the wear and tear of amenities, and to make course corrections as needed, at individual parks or system wide. In previous years, parks were measured on a 1-5 scale with vague criteria that blended multiple factors together into a composite score for each amenity and park. This method allowed for variation and subjectivity across raters and made the process less repeatable, the results less comparable across parks and over time, and planning for subsequent improvements more challenging as the scores did not define specific areas of concerns.

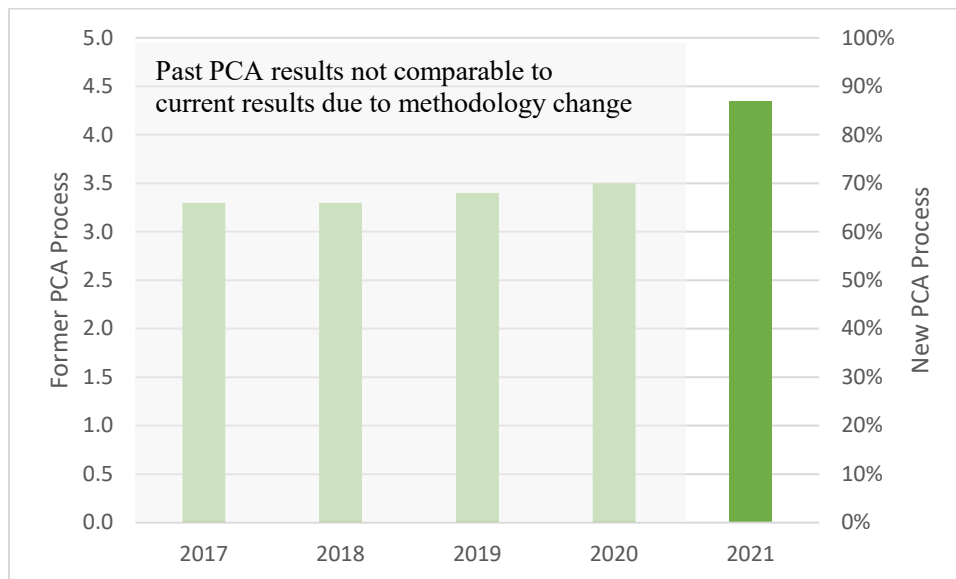
With the implementation of Park Maintenance Standards, the Department recalibrated the PCA process and created a new PCA tool to align to established standards and measure individual

standards for each amenity. The new assessment tool attempts to remove rater subjectivity and replace it with specific and actionable results that identify whether a park amenity passed or failed for each standard. A park that receives a 100 percent score will have met every standard, and all scores less than 100 percent reflect that at least one standard has not been met. The 2021 PCA process also introduced a new GIS-enabled rating tool for use on mobile devices with a defined inventory of parks and amenities to evaluate, bringing the PCA process into the digital era and addressing an audit finding about inconsistent park inventories.

Current (2021) PCA Results

In late summer 2021, the Department assessed the condition of the park system against newly established Park Maintenance Standards for the first time, providing a baseline to track future progress and improvements. Based on the 2021 assessment, the City’s parks received an average score of 87 percent. Exhibit 2 shows PCA results for the past five years.

Exhibit 2: Overall PCA Results for 2017 to 2021



Results from the 2021 PCA process using the revised are not comparable to results from past years, which had different evaluation criteria. In an attempt to translate back and forth between methodologies, staff compared the evaluation criteria for the current and past PCA processes side by side and determined that a park could have scored as low as 3.5 with the past criteria and still receive a 100 percent score under the new approach. However, it would not be fair to simply scale down current results to about 3.0, which is 87 percent of 3.5, because doing so would not reflect that, under the former methodology, a park could score above a “meets standard.”

Attachment B provides the 2021 (current) and 2020 (past year) PCA score for each park and civic ground, and Attachment C includes other disaggregation and analyses of PCA results,

including an overall distribution of PCA results, average results by Council District, average results by amenity type, and more. Notable findings from these analyses include:

- 51 percent of parks and civic grounds received a PCA score between 90-100 percent, including 40 parks and civic grounds with 100 percent PCA scores, and 78 percent received a PCA score of at least 80 percent.
- Among the 56 parks and civic grounds that received a PCA score of less than 80 percent, 11 are in Council District 4 and 10 in Council District 5, which had the lowest average PCA scores at under 81 percent and 82 percent, respectively.
- 35 parks that staff deemed to be highly impacted by homelessness received an average PCA score of 79 percent.
- Parks and civic grounds maintained by the Department's landscape contractor received an average PCA score of 92 percent, compared to 86 percent for parks maintained by City staff, which reflects the smaller size, fewer amenities and relatively simpler maintenance needed by the small parks found in the contract.
- Four types of amenities had an average PCA across the City of 80 percent or less: natural turf, sports fields, drinking fountains and picnic areas. Each has been a recent focus for additional maintenance through one-time resources and specialized teams and will continue to receive that focus if resources allow.
- Staff found no correlation between PCA scores and the California Healthy Place Index scores for the neighborhoods surrounding parks. The California Healthy Place Index is a tool that assists in exploring local factors that predict life expectancy and comparing community conditions across the state. It is the Department's preferred tool for equity analysis for parks maintenance and condition.

Further PCA Process Improvements

The Department is currently developing a capital infrastructure-based assessment process and completed a pilot trial in 2021 assessing playgrounds, sports courts, exercise equipment, and trails. Based on preliminary results, the team will refine the approach in the next year and expand this new process to the remaining park features.

Other Feedback Processes

In addition to the PCA process, the Department continues to conduct regular inspections of each park. These inspections, conducted by park maintenance staff as part of their regular schedule, allow issues to be identified and corrected in a timely manner, especially health and safety issues that require immediate attention. They also allow for specific trainings to happen to correct small issues in maintenance before they become bigger, more costly problems.

Recognizing that staff will not visit every park every day, the Department is thankful for the support of residents who raise concerns through the Park Concerns email and hotline. Park Concerns staff dispatches the collected information directly to the responsible party to address the issue in a timely manner. In 2020-2021, the Department received 1,831 Park Concerns.

Strategies for Meeting Standards

The Department's audacious goal is for every park to meet all Park Maintenance Standards, which means moving the City-wide PCA score up 13 percent across all City parks. To make incremental steps towards that future, every park's PCA result detailing specific unmet standards are informing work plans for the next year. The Department utilizes a strategy that combines everyday scheduled maintenance with strategic use of resources to accomplish these plans. Over the past year, these resources included specialized teams, the Volunteer Management Unit and the Environmental Resilience Corps. Each of these teams filled a unique role in maintaining amenities and infrastructure.

Specialized Teams

Specialized teams provide support to the Department's park districts by tackling projects that would otherwise draw maintenance crews away from their day-to-day scheduled routes. The Parks Rehabilitation Strike Team, which will disband on June 30, 2022 unless continued through the budget process, has focused on replacing park furniture, including drinking fountains and picnic area rehabilitation, and irrigation repairs. Using proceeds from the sale of the Coleman property, staff purchased 50 drinking fountains and 68 benches to be installed at parks that had low 2020 PCA scores and low Healthy Places Index scores. Parks staff will finish installing the last two drinking fountains and six benches by May 2022.

The Integrated Pest Management/Turf Management team, currently approved for 18 months (until December 2023) works to improve turf conditions for safe and playable sports fields. In 2020-2021, The Integrated Pest Management/Turf Management team treated 3,368,197 square feet of turf for burrowing rodent issues and completed renovations on 2,649,687 square feet of turf.

The Department is considering centralizing employees to form two more specialized teams, one to centralize all "mowers" and one to centralize all Park Maintenance Repair Workers. Centralization is expected to improve deployment efficiency and prioritization and the sharing of equipment, and allow employees working on similar projects to support and fill in for one another in the case of absences or vacancies.

Volunteers

The Volunteer Management Unit works closely with each park district to define areas of need and opportunities for volunteers to make a difference with large-scale one-day supplemental work projects. Projects that volunteers can complete include weed abatement, replenishment of Fibar around playgrounds, painting, replacement of landscape, and more. In 2021, the Department began applying an equity lens by selecting parks in neighborhoods with the lowest Healthy Place Index scores for one-day volunteer events, including Rocksprings Park, Children of the Rainbow, McLaughlin Park and Parque de Padre Mateo Sheedy. In 2020-2021, volunteers contributed an amazing 21,310 hours of labor to park maintenance and improvements. For the year ahead, the Volunteer Management Unit intends to increase outreach in disadvantaged communities where the Department's Adopt-A-Park program has not had a significant presence, seeking to identify and support resident stewardship of their parks.

Resilience Corps

A new resource available in the current year is the Environmental Resilience Corps. This innovative program initiated in the Mayor's March Budget Message for 2021-2022, and approved by the City Council, utilizes American Rescue Plan funding to provide valuable training to underserved young adults to prepare them for meaningful and gainful employment in fields like park stewardship while they work on projects to improve the City's climate resilience. With program leadership from the Department and its program operator, the San José Conservation Corps, 106 Corps members have been hired and worked across the City and with other non-profit partners to reduce fire fuels in key locations like Alum Rock Park and along trails, remove invasive species that can outcompete native plants and harm the ecosystem, plant trees and native plants to increase urban greening in parks, support creek clean ups, and rehabilitate green stormwater infrastructure systems in parks to ensure they continue to filter pollutants from stormwater runoff as designed. Funding to continue this program through 2023 has been secured through a State of California CaliforniansForAll Youth Workforce Program grant.

Park Stewardship for Climate Resilience

Through ActivateSJ, the Department affirmed its commitment to protect, preserve and promote nature. As steward of over 3,500 acres of land in San José, the Department takes seriously its role in helping the City strive for its Climate Smart San José goals. While great strides have been made in water management, the Department has more work ahead in other areas that support resilience.

San José parks play a key role in water conservation efforts. When the Santa Clara Valley Water District called for drought water restrictions to save 15 percent compared with 2019, the Department was prepared for the challenge. Over the last three years, and at an approximate cost to date of \$1.25 million, staff has installed, retrofitted or upgraded the following smart irrigation components:

- 198 smart irrigation controllers have been installed or improved in parks, for a total of 279 in the park system, enabling a high degree of control over water usage. Another 18 smart irrigation controllers are planned for installation in 2022.
- 40 flow sensors and master valves have been installed, for a total of 248 in the park system, enabling staff to detect leaks and shut off water systems to prevent unnecessary water loss. Another 120 flow sensor and master valve installations are planned for the remainder of 2022.

From July through December 2021, the Department has reduced water use approximately 20 percent compared with the same months in 2019.

San José parks also play a key role in urban greening, sequestering carbon and reducing urban heat island effects. However, managing the urban canopy within the park system remains a challenge for the Department. According to the recently completed Community Forest Management Plan, the Department cares for an estimated 30,000 trees that need active maintenance. A Park tree inventory was funded in the 2021-2022 budget, under the management of the Department of Transportation, which will reveal the condition and needs of park trees. The San José Community Forest Management Plan reports that a five- to seven-year pruning cycle for all City park trees might cost \$750,000 per year. Accounting for regular inspections, routine tree removals and replacement tree planting, and emergency services, staff estimates the full cost for maintaining City park trees may surpass \$2.25 million per year. By comparison, the Department's annual budget for tree services is \$150,000, which can also go towards tree planting, removal or replacement. Additional tree maintenance costs will be considered for incorporation into the 2022-2023 Proposed Capital Budget.

San José trails can help residents reduce greenhouse gas emissions by promoting active transportation. Trails also encourage physical activity which is important in any healthy lifestyle. Even with a reduced number of bike commuters during the pandemic, the 2021 Trail Count shows that trail use is on the rise among several San José trails, including Los Alamitos Creek Trail at Hamilton, Los Gatos Creek Trail at Hamilton, and Three Creeks Trail at Willow Street. Respondents to the 2021 Trail Survey share that they enjoy being away from vehicle traffic and visiting beautiful surroundings, and many feel safer on a trail than on a bike lane. Maintaining San Jose's 63 miles of trails is an area where the Department strives for continuous improvement. Currently, staff services each trail reach approximately two days per week, with highly utilized trails serviced up to five days per week. Staff have observed in recent years that, with increased unhoused populations living near or on trails, this service level has not been enough to deliver desired results. According to the 2021 Trail Count, use of the Guadalupe River Trail at Coleman has steadily declined since 2016, including a dramatic decrease of 50 percent between 2019 and 2021. According to the 2021 Trail Survey, many trail users avoid certain trails due to encampments occupying the trail as well as the presence of private vehicles on trails. The Department continues to prioritize maintaining clear rights-of-way and has begun installing more impediments to vehicle access on trails while preserving the ability of emergency response vehicles to respond quickly.

Other efforts to adapt more environmentally friendly practices have also revealed potential trade-offs. For example, staff has found that utilizing green chemicals or mechanical methods to abate pests can require three times the amount of labor and chemical as spraying glyphosate. In addition, preliminary data on a pilot to test electric-powered leaf blowers has indicated that the equipment may be less efficient and require 1.5 times more to accomplish the same tasks as gas-powered leaf blowers. The pilot will continue through the remainder of the year to evaluate electric-powered leaf blowers in all seasons and will also include staff feedback. Preliminarily, some employees reported that they liked the electric-powered unit, while others felt it was heavier. The Department is committed to continued experimentation with electric-powered small engines as, under AB 1346, the California Air Resources Board will decide when gas-powered small engines used in landscape maintenance will be prohibited from sale, which could happen as early as 2024. In the cases of both green chemicals and electric-powered small engines, making these transitions may challenge service level expectations regarding pests and leaf litter in parks, or potentially require additional funding to achieve past results.

Challenges Persist

Despite the strides and plans mentioned above, the maintenance of the City's parks continues to face challenges. Unstable budgets for specialized teams, the loss of seasoned staff and their institutional knowledge to retirement, aging infrastructure and a growing overall Department infrastructure backlog estimated to be \$424.4 million in 2020-2021, all contribute to the difficulty in meeting every day maintenance needs. These challenges are compounded by the Department's 19 percent vacancy rate among full-time park maintenance positions.

The impact of unhoused individuals living in parks has continued to grow during the pandemic as the City, following CDC recommendations, has suspended encampment abatement in most situations. The BeautifySJ program's encampment trash clean-up program has mitigated some of these impacts, but park maintenance resources are still diverted away from standard maintenance. Park and trail maintenance through the core of the City is particularly difficult to sustain as there is a constant demand to meet even basic daily needs for trash service and bathroom cleanliness. Standard parks maintenance resources are inadequate in these situations.

During the pandemic, the Department has also observed unprecedented numbers of unpermitted events happening in parks, which can cause damage to park infrastructure and leave behind litter and trash.

CONCLUSION

The Department maintains and operates the City's park system to connect people to healthy lifestyles and nature, offer equitable access to public life, and contribute to San José's identity with unique destinations and events. In 2021, the Department established new Park Maintenance Standards, recalibrated the Park Condition Assessment process to align to the standards,

revolutionized the PCA data collection process with a GIS-enabled tool, and performed a baseline assessment of park conditions against the new standards. In the inaugural PCA process with new standards, the city-wide average Park Condition Assessment was 87 percent. The revised PCA methodology has yielded actionable insights on what specific maintenance improvements are needed for each park and amenity, which feeds into work plans for the year. Some of the needed maintenance improvements will be undertaken with specialized resources like centralized teams, volunteers or other available supports. While working to implement these efforts, the Department continues to prioritize environmental stewardship for a healthier climate and community.

EVALUATION AND FOLLOW-UP

The Department will submit an annual report in the winter of 2023 evaluating 2022 Park Condition Assessment results and park maintenance highlights and challenges.

CLIMATE SMART SAN JOSE

The recommendation in this memorandum aligns with one or more Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the February 10, 2022 Neighborhood Services and Education Committee meeting.

COORDINATION

This memorandum was coordinated with the City Attorney's Office, the City Manager's Budget Office, and the Department of Transportation.

COMMISSION RECOMMENDATION

This memorandum will be heard at the Parks and Recreation Commission meeting on February 2, 2022, and Commission feedback will be provided to the Committee.

January 24, 2022

Subject: City-Wide Sustainable Park Maintenance Report

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CEQA

Not a Project, File No. PP17-009, Staff Reports, Assessments, Annual Reports, and Informational Memos that involve no approvals of any City action.

/s/

JON CICIRELLI

Director of Parks, Recreation
and Neighborhood Services

For questions, please contact Avi Yotam, Deputy Director, at avi.yotam@sanjoseca.gov.

Attachments/Reference:

- A. Park Maintenance Standards can be found online at:
<https://www.sanjoseca.gov/home/showdocument?id=81364&t=637782898833534169>
- B. 2021 Park Condition Assessment Scores by Park and Civic Ground
- C. 2021 Park Condition Assessment Analyses