PROJECT DESCRIPTIONS

Table of Contents

Table of Contents

PROJECT: 72ND STREET PARK, LIBRARY, & AQUATIC CENTER

COST: $53.8 MILLION

Department: Capital Improvement Projects

The City Commission and the Finance and Citywide Projects Committee recommended a feasibility study for the construction of a New Recreational Park, Parking Garage and Community Use Space in the North Shore area. The Commission as well as the Neighborhoods and Community Affairs Committee preferred location was at the 72nd Street Municipal Parking lot (P-92) located between 72nd and 73rd Streets and between Collins and Harding Avenues. The commencement for a feasibility study and preparation of renderings was approved by the City Commission and a consultant was engaged to work on programming options. The project included a parking garage with a maximum of 500 parking spaces, to replace the current 318 spaces and additional spaces as required by project programming, Civic and Commercial space at the ground level, and a new recreational Park. After subsequent meetings and review with the various City Committees and Commissioners the project program was modified to include a roof-top Competition Pool, warm-up pool and support facilities, a new 5,000 -10,000sf Library/Media Center, and a 7,500sf Upscale Fitness Gym with a running track.

Resiliency Strategies that may be implemented in this project include, resilient stormwater retention and re-use system, solar electric power, energy efficient lighting and an activated roof level with green roofing system.

Parking Garage	$22.7 M
Civic / Commercial	$ 7.7 M
Public Library/Media Center	$ 7.0 M
Park Development	$ 1.1 M
Aquatic Complex	$ 7.0 M
Sitework/Utilities/Resiliency	$ 8.3 M
TOTAL	$53.8 Million

PROJECT: ART DECO MUSEUM EXPANSION

COST: $2 MILLION

Organization: Tourism, Culture, and Economic Development

History-based museums are, in their traditional sense and setting, more or less rigid concepts because the concept of history is static or petrified. Ideally the museum space should be an active, vibrant, and dynamic environment whose very architectural and curatorial concepts reflect the ever-changing character of a city in constant adjustment.

This project proposes to build and curate a flexible and dynamic space that it is capable of accommodating different configurations - as requested by the needs and evolution of the permanent collection as well as of temporary exhibits that are needed to make the Museum a new space on the Miami cultural scene.

This will ultimately play an important role in signifying that all parts of the project are a reflection of a city in transformation.

The project would expand the Art Deco Museum on 1001 Ocean Drive to build and curate a flexible and dynamic space capable of accommodating different configurations for the permanent collection and temporary exhibits.

The Art Deco Museum – Master Plan visually shows the proposed transformation exhibit spaces, ancillary spaces, and infrastructure.

Art Deco Weekend draws approximately 150,000 visitors annually and the Art Deco Welcome Center generates 120,000 annual visitors. Attendees to the Art Deco Museum average 18,000 annually. MDPL also hosts guided tours (7,615 participants), educational lectures (15), and school visits (7).

PROJECT: BAYWALK

COST: $15 MILLION

Department: Capital Improvement Projects

This Project will connect the gaps in the existing public Baywalk to provide a continuous pedestrian path along Biscayne Bay from Government Cut to Lincoln Road, including the connection from existing baywalk south of Fifth Street to baywalk north of Fifth Street.

The Baywalk is a system of public pedestrian pathways along the Biscayne Bay shoreline designed to promote alternative transportation. Once completed, it will provide a continuous path running north/south on the rear of the properties along West Avenue from 5th Street to Lincoln Road and the connection from existing Baywalk south of fifth street to Baywalk north of fifth street, linking residential and commercial areas, public street-end parks, and other existing pedestrian and bicycle facilities such as the beachwalk.

The following segments have not yet been constructed and are included in this request - **$5M**

1. South Bay Club Condominium (800 West Avenue) 425 Feet
2. Bayview Terrace Condominium (1228 West Avenue) 130 Feet
3. Bay Garden Manor Condominium (1250 West Avenue) 210 Feet

4. Connection from existing Baywalk south of fifth street to Baywalk north of fifth street - **$10M**

PROJECT: COLLINS PARK

COST: $640,000

Department: Parks and Recreation

Background

Collins Park is located at 2120 Collins Avenue. The park is adjacent to the Bass Museum and hosts several special events, such as Art Basel, FUNKSION, etc. The park consists of passive green spaces surrounded by exotic flora, such as the African baobob trees.

Objectives

Due to the special events held at the park throughout the years, as well as the driving that is involved as part of those activations, the pavers have been damaged. The paver walkways throughout the park and plaza will be replaced with similar pavers containing a more structurally sound foundation (same footprint as the current). Through this project, the park's safety and aesthetics will be enhanced, as broken or shifting pavers detract from both. Savings through reduced maintenance will also be achieved, as the existing pavers require significant staff and vendor repairs.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process as current park aesthetics will be mostly replicated. The work will require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on experience and request from park users for improvements. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: CRESPI PARK

COST: $211,000

Department: Parks and Recreation

Background

Crespi Park is a 2.02 acre park located at 7820 Crespi Boulevard in North Beach. The park consists of a pavilion with restrooms, playground, basketball court, and open green space.

Objectives

Crespi Park is heavily used by the community. Creating a walking/jogging pathway around the park will improve accessibility, as well as provide an additional fitness element to the facility. New paint and flooring of the existing pavilion and restroom, as well as replacing the current fence worn perimeter fence with an aesthetic but more durable material to withstand errant balls or vandalism without necessitating frequent repairs. This will enhance overall aesthetics of the park and improve security. The fence will be replaced with a better quality and more structurally sound material, while the footprint and design would remain similar to the existing fence. Currently, trespassers enter the park after hours due to the ease with which the existing pickets can be removed.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. Some of the work will require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on usage, need and maintenance cost savings. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: FAIRWAY PARK

COST: $260,000

Department: Parks and Recreation

Background

Fairway Park is located at 200 Fairway Drive. The park consists of a playground designed for ages 2-12 years old, with a custom shade canopy, tennis courts, a basketball court, multiuse field and a pavilion. The pavilion, restrooms and office are in high demand for programing and rentals, and have worn from the daily wear and tear.

Objective

To replace the existing worn perimeter fence with an aesthetic but more durable material to withstand errant balls or vandalism without necessitating frequent repairs. The fence will be replaced with a better quality and more structurally sound material, while the footprint and design would remain similar to the existing fence. Currently, trespassers enter the park after hours due to the ease with which the existing pickets can be removed. The aesthetics of the park will be improved by painting the pavilion, park office and restrooms.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. The fence work will require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on experience and resident request for improvements to the park. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: FISHER PARK

COST: $105,000

Department: Parks and Recreation

Background

Fisher Park is located at 50th Street and Alton Road. The park consists of a playground designed for ages 2-12 years old, with a custom shade canopy and a picket fence surrounding the entire playground area. The playground is highly used and has worn down from the daily wear and tear.

Objectives

The playground, which was installed in 2011, will be replaced with similar playground equipment (same footprint as the current). The replacement will enhance user experience at the park.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. The work will require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on experience and resident request for improvements to the park. The project will not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: FLAMINGO PARK AND YOUTH CENTER

COST: $30.55 MILLION

Department: Parks and Recreation/Capital Improvement Projects

Background

Flamingo Park is a 36.5-acre park located in South Beach, located at 1200 Meridian Avenue. The park amenities include an aquatic center, which features an 8 lane lap pool and a water playground; a tennis center with 17 courts which was renovated in 2013; a football stadium; an eight lane running track; a playground designed for children years 2-12; outdoor handball and racquetball courts, available for play during the day or at night; a dog park consisting of two separate areas for large and small dogs; two full court basketball courts; a softball field which hosts games for both intramural teams & Miami Beach Senior High's softball team; a soccer field and a baseball field, which serves both the Adult South Florida Baseball League and Miami Beach Senior High's baseball team.

Objectives

The PAL facility at Flamingo Park currently poses space and use limitations. Based on a recent AECOM analysis, the facility attained a high vulnerability rating, particularly due to its propensity to flood and lack of redundancy. There is currently only one indoor restroom downstairs (two stalls in female, and one urinal and one stall in male) which is inadequate to service all the children. There is no restroom on the second floor, and the constant flow of adults in the building, accessing the weight room and adult programming in the upstairs area from 9 a.m. to 1 p.m., creates security concerns. Room sizes can only hold at most 20 children (5 classrooms).

Additionally, the two main multipurpose areas are not functional. One room is right at the entrance of the building, which also serves as the front desk and welcome area. There is no storage space in the facility, which requires recreation staff to set-up and breakdown rooms every day and store equipment off to the side of the multipurpose rooms, thus taking usable space away from the children. There have also been repeated mold issues throughout the building, and constant leaks upstairs require the ceiling tiles to be frequently changed. The HVAC system is frequently inoperable, making rooms either too cold or too hot.

The one elevator servicing the first and second floor is constantly out of service, rendering it difficult to transition the children through the building, since there is only one stairwell. The lack of a dedicated office space requires staff to take over rooms for a front desk and administrative use, when that area could be used for the children.

The new recreation facility would be about 30,000 square feet and could include some of the following amenities: classrooms, a basketball gymnasium (2 full courts), an indoor running track, a fitness center, an auditorium, a community room, a teaching kitchen, locker rooms, multipurpose room, a rock climbing wall, a dance room and a library. These improvements would provide a facility that would address all of the current issues, as well as better serve the communities' needs.

Flamingo Park's amenities are heavily used at night by the community. Upgrading the sport lighting to LED will enhance our park's aesthetics, improve the illumination of the area, as well as address any spillage of light onto the neighboring residences. Improving to LED will also save the City energy costs. As technology changes and LED becomes more available, the current system in place will become obsolete and a maintaince nuisance.

The Flamingo Park playground is a very popular and heavily used playground. The current playground was designed for children ages 2-12. Due to the age of equipment, heavy use, and demand from the public, the existing equipment has reached its lifespan and requires replacement.

The estate fence encompassing the area of the football field at Flamingo Park, is currently in poor condition and is in a constant state of repair. Vandals continue to damage and break the pickets from the fence to get into the park or create a shortcut. This in turn makes it difficult for Parks Staff to enforce against trespassing. New fencing will add to the overall aesthetics of the park, as well as improve upon the security of the facility.

The Flamingo Pool complex is in use all year round. To keep up with the demands of public use and improve on the maintenance costs of operating the pool pumps and filtration systems, new upgraded equipment will allow for more efficient and cost effective maintenance.

There is a sizable fitness community using the Flamingo Park track and its surrounding areas. Fitness equipment is needed in this heavily used football stadium area. Moreover, the current fitness apparatus by the basketball courts are in poor condition and require replacement.

Security cameras are also needed at the Flamingo Park pool and playground in order to increase safety and provide enhanced security.

Estimated cost for the PAL Facility will be $15.4M

Flamingo Park's master plan has already addressed improvements, such as the new tennis center, the football field and running track, the new restroom facility, the soccer field and the old Property Management site. To complete outstanding improvements in the master plan such as the softball field, baseball field and historic lodge renovation, the shortfall for the masterplan needs to be addressed. The master plan, designed by the firm Wolfberg Alvarez and Partners, incorporates park wide improvements to include a new butterfly garden consisting of the addition of new trees, palms, ground covers native plants and new concrete pathways as well as new concrete curb and gutters, and drainage systems. A historic lodge, used as a former Property Management building, will be fully renovated and converted into a multi-use community center. Park entrances and water features will also be added. Other improvements include a renovated baseball field consisting of a new natural turf playing field, new irrigation system and guy wire relocation. Restrooms and press boxes will be renovated, as well as bleachers, ADA accessible ramps and stairs. The adjacent softball field renovations include installation of a new artificial turf, construction of new bleacher, canopy system and dug-outs.

Improvements to the surrounding areas include new concrete walkways, new fencing, landscape, irrigation, drainage and lighting systems. The additional implementation cost, specifically associated with improvements on the master plan, is $10.2M.

Resilient strategies proposed at the park include stormwater retention and re-use system and solar panels for the pedestrian lighting. Estimated cost for the implementation of these strategies is $4.95M.

Execution

The following components can be started immediately through the City's procurement process: Pool pump room replacement; fence replacement; playground replacement; upgraded security cameras.

The following components will need additional design, permitting and approvals: New community center (PAL); Sports LED lighting upgrades; Masterplan improvements; Outdoor fitness equipment.

Recommendations

The preceding upgrades and improvements have been recommended by staff based on usage, need and maintenance cost savings. The new PAL facility and fitness equipment would be subject to approval by regulatory boards, particularly HPB, as the park is in a historic district.

PROJECT: LA GORCE PARK

COST: $150,000

Department: Parks and Recreation

Background

La Gorce Park is located at 6421 Alton Road. The park consists of a playground tot-lot designed for children years 2-5, with a custom shade canopy.

Objectives

The playground is highly used by the neighborhood and has aged from the daily wear and tear. The playground, which was installed in 2011, will be replaced with similar playground equipment, on the same footprint as the current. The replacement will enhance user experience at the park.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. The work will require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on experience and resident request for improvements to the park. The project will not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: LOG CABIN RECONSTRUCTION

COST: $1.076 MILLION

Department: Property Management

On Wednesday, 10/18/17, City Commission approved $274,000 for the dismantling, removal and offsite storage of the salvageable components of the North Beach Log Cabin located at 8128 Collins Ave. Under the direction of the Property Management Department, a Contractor with vast experience in historic preservation was hired to carefully dismantle, catalog and store the salvageable components of the Log Cabin. The deconstruction and salvage efforts were completed on 03/06/18 with the removal of the coral rock fireplace.

At current, the Capital Improvement Projects Dept. is collaborating with Dover Kohl & Partners on determining the best use and location for a restored Log Cabin inside of the North Beach Oceanside Park. They determined the North Beach Oceanside Park was a logical location for the Log Cabin because it provides a beautiful natural setting while preserving the legacy of the Log Cabin in North Beach, in very close proximity to its original location.

The following options are currently under consideration:

Option 1: Position the Log Cabin at the North end of the park. The structure could be repurposed to accommodate a cafe, equipment rental or education center. The restored Log Cabin would become a landmark structure along the park trail.

Option 2: Position the Log Cabin at the Collins Avenue and 81st Street park entry. The Log Cabin could act as a community hub providing drinks and snacks along with seating and information regarding park activities, events, and services.

Option 3: Position the Log Cabin next to the parking area at the South side of the park. The Log Cabin could act as a meeting space for groups, clubs and to host events.

PROJECT: LUMMUS PARK

COST: $4.737 MILLION

Department: Parks and Recreation

Background

Nestled between the Atlantic Ocean and Ocean Drive, between 5th Street and 14th Place, Lummus Park has been the backdrop for many television and film scenes. This beachfront park is one of the most popular destinations in Miami Beach and a must-see for any tourist. There are public restrooms and paved paths for walking or biking, but the main amenity is the beach itself. The park also serves as a host to various special events every year, ranging from concerts to marathons.

Objectives

Due to the high volume of visitors, landscaping at the park is in need of revitalization. Through the implementation of modern and more sustainable landscaping designs, green aesthetics will improve the park. The irrigation system is also in need of the replacement for a larger, more potent system to allow watering of more zones simultaneously, thereby reducing running times. The system would also include wireless connectivity, rain sensors and flow meters.

The landscaping enhancements would also include additions to the urban forest, which has been affected over the years by acts of nature, including storms and exposure to a salt water environment.

Additionally, the existing walkway at the park is also heavily used by visitors, public safety and service vehicles alike. Maintenance of the path is difficult, as it requires frequent pressure washing. The addition of a new pathway containing light pigment and crushed shell, like that of South Pointe Park, would improve the appearance of the park while also reducing the frequency of maintenance. Due to the texture and color of the new path, stains would be less visible, thereby providing a cleaner environment for park patrons. Moreover, the addition of way-finding signage at the park would be a benefit for visitors. Due to the high volume of visitors, park restrooms require renovations in order to meet demand.

Execution

Design does not currently exist for the above enhancements. The landscaping and restroom renovation portions of the project would not experience delays, as permitting would be non-existent or limited. The pathway improvements would require design and permitting prior to execution.

Recommendations

This project is recommended by staff based on the heavy number of visitors at the park. Lummus Park is a focal point of the City, and would benefit from the enhancements from an aesthetic and maintenance standpoint. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: MARJORY STONEMAN DOUGLAS PARK

COST: $682,000

Department: Parks and Recreation

Background

Marjory Stoneman Douglas Park is on 2nd street and Ocean Drive. The park consists of beachfront restrooms, a playground designed for ages 2-12, a custom five sail shade canopy and a picket fence surrounding the entire playground area. There are tree shaded walkways throughout the park leading to the beach. The playground is highly used and is in need of replacement. Its proximity to saltwater also affects the lifespan of the equipment.

Objective

The playground, which was installed in 2009, will be replaced with similar playground equipment. The shade structure will be upgraded to a new quick release system to efficiently remove it for maintenance or forthcoming acts of nature with less manpower. Renovations will be made to the sidewalks throughout the park, as they are in poor condition. In furtherance of the City's environmental policies, turtle friendly lighting will be added, which will also serve the park well from a public safety standpoint.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. The work will require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on experience and resident request for improvements to the park. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: MAURICE GIBB PARK

COST: $3.3 MILLION

Department: Capital Improvement Projects

The project includes the soil remediation to rid the site of contaminated soil, and the resulting renovation of the park, to include the following basic park elements: a new playground with shade canopy, pavilion(s), a dog park, walkways, minor restroom renovations, landscaping with open sodded areas, irrigation, signage and park furnishings. Required additional funding is $1.6 Million.

Resilient strategies proposed at the park include stormwater retention and re-use system, pervious pavement for walkways in lieu of the asphalt paving which currently exists, the use of solar panels for pedestrian lighting. Installation of Solar Panels on the shade canopy at the playground, to provide power for the irrigation pumps or any concession areas. Estimated cost for the implementation of these strategies $1.7 Million.

PROJECT: MIDDLE BEACH BEACHWALK

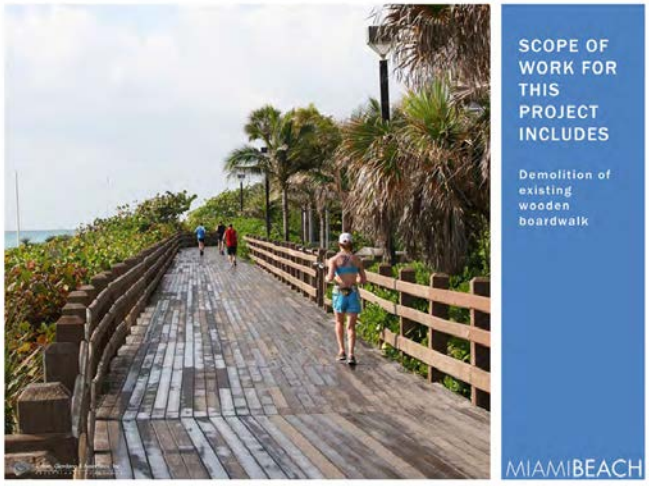
COST: $4.5 MILLION

Department: Capital Improvement Projects

The Middle Beach Recreational Corridor Phase III consists of the demolition of the existing wooden boardwalk and its replacement with an on-grade paver pedestrian walkway. The path will run north from 23th street to 46th street and will serve as a portion of the north/south connector in the larger Atlantic Greenway Network (AGN), which supports the development of alternative means of transportation throughout the City. The path will be constructed along the west side of the coastal dunes behind oceanfront properties. The path will be permitted in accordance with the Florida Department of Environmental Protection (FDEP) coastal construction regulations. Exotic dune vegetation will be removed and replaced with dune enhancements such as native dune vegetation species and beach compatible dune fill. Path lighting will meet Florida Fish and Wildlife Commission's marine turtle nesting requirements.

This project will be partially funded with FDOT Grants. The current estimated cost required to complete the project is $4.5 Million.

The City is working with Calvin Giordano & Associates on the design and permitting and the plans are currently at 90% design phase.



PROJECT: MUSS PARK

COST: $250,000

Department: Parks and Recreation

Background

Muss Park is located at 4300 Chase Avenue. Previously 2,000 square feet, the Muss Park pavilion was constructed to attain LEED gold-certification and is now double its original size. The communal complex features a brand-new office, warming kitchen, storage space, bathrooms and drinking fountains. Equipping park users with a practical activity space, rain or shine, the facility's large four-fold doors allow the pavilion to operate as both an open-air or air-conditioned space. The handicap-accessible picnic table area and playground further complement the space, providing people of all abilities an opportunity to enjoy the park. Circling the large playing field, the new concrete walkways, updated fencing, fresh swing sets, landscaping and irrigation upgrades add to the park's functionality and aesthetic. Additionally, the new handicap-accessible playgrounds are separated based on age level, serving as a dedicated space for children ages two through five and five to twelve.

Objectives

The City faces a shortage of play and sport space. Natural turf suffers significant wear and therefore requires resting and shutdown periods. Unlike cities with sports complexes, Miami Beach does not have the capacity to rotate to other fields, nor does our community have the tolerance to pause play for weeks while the field is recuperating. The field at Muss Park is in constant use, thereby requiring frequent maintenance. The conversion of the playing field into artificial turf will assist with the wear and tear, as well as save on maintenance time and costs, which include but are not limited to: mowing, aerating, top dressing, "verticutting", spiking, irrigating, fertilizing, grooming, chalking and painting. These improvements will address the overall aesthetics of the park and help meet demands.

Execution

The field conversion to artificial turf will require design and permitting for the installation of the underground drainage system. This project is not complex in nature and would therefore not take long to complete.

Recommendations

This project is recommended by both residents and staff based on usage, need and maintenance cost savings. This project would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: NORTH BEACH OCEANSIDE PARK BEACHWALK

COST: $2 MILLION

Department: Capital Improvement Projects

The City of Miami Beach is currently in the design phase for the redevelopment of the North Beach Oceanside Park, which will be constructed simultaneously but independently of the beachwalk. Improvements will include expanded path networks, revitalized landscaping, new signage, cosmetic refurbishment of the existing restrooms, ornamental entrance gates, lighting and security camera infrastructure, new playground equipment and refurbished picnic shelters.

North Beach Oceanside Park Beachwalk, proposed to run along the east side of the park and extend from 79th to 87th street, consists of an on-grade, accessible, paver pathway. Part of the Atlantic Greenway Network, this is the final link in the City's beachwalk system, which provides a continuous path from South Pointe to the City's northern boundary. The path is designed to meander slightly, allowing users to follow the contours of the existing landscaping, and take advantage of the shade provided by the existing Seagrape trees. Additionally, the project will incorporate environmentally sensitive, turtle friendly lighting. Addressing resiliency concerns, the beachwalk project will strengthen and improve the coastal dune system by replacing invasive/non-native plants with native, dune compatible species and, where possible, expand the dune system.

PROJECT: NORTH SHORE PARK AND YOUTH CENTER

COST: $5.725 MILLION

Department: Parks and Recreation

Background

North Shore Park and Youth Center is located in north beach at 501 72nd Street. North Shore Park is comprised of a community center, tennis center, playground, sports fields with two youth baseball fields and batting cages. The 17.2-acre complex was renovated and dedicated in June of 2004. Some features of the community center include class rooms, an auditorium, an indoor basketball gym, and a fitness center. Programming at the center include heavily attended afterschool, summer camp and play time programs, as well as fitness activities for adults and seniors. The North Shore Park baseball fields serve a very popular year-round youth baseball program, with over 200 participating children. The park also provides an open space area for the City's youth programming and the community to enjoy.

Objectives

The fields at North Shore Park are in constant use and under constant maintenance. Whether it is from the year round baseball program, children from the community center or the community, activities are always taking place. The conversion of the baseball fields into artificial turf will assist with the wear and tear of the sports fields and save on maintenance time and costs which include but are not limited to: mowing, seeding, slicing, watering, grooming, chalking and painting. These improvements will improve the overall aesthetics of the park, and help meet the demands.

In order to meet the existing need for additional baseball fields, the parking area on the Southwest quadrant of the park will be converted into playing areas. As a result, the two existing baseball fields would be reconfigured in order to accommodate two additional baseball fields, for a total of four. The courtyard in front of the Youth Center would also be redesigned in order to accommodate a new drop-off area.

North Shore Park and Youth Center is a designated Emergency Operations Activation Center by the City's Department of Emergency Management. In times of an emergency crisis, such as a hurricane, the center can be activated as an emergency operations area. Currently, North Shore Park and Youth Center does not have a generator to provide emergency power during situations of power outages.

The playground at North Shore Park is a very popular playground used by the community, the programs from the community center, and the families from tennis, baseball and special event patrons. The playground was built in 2009, designed for children ages 5-12, and includes two shade structures. Due to the age of equipment, heavy use, demand from the public and current community center programming, it is time to replace the existing equipment and add elements for ages 2-5.

Since North Shore Youth Center's dedication in 2004, there have been several roof leaks and repairs that have taken place. The roof replacement is required in order to keep the structure of the building intact as well as provide a safe environment for the users.

Additional items for the North Shore Park and Youth Center due to the high volume of use including hundreds of children and adults daily include: Youth Center interior painting and lighting upgrades, additional security features, new fencing around the complex and reforestation improvements.

Execution

A design does not currently exist for the above enhancements. The playground replacement, security cameras, flooring replacement, fence replacement, reforestation and interior painting would not experience delays, as permitting would be non-existent or limited. The conversion to artificial turf, installation of a generator, roof replacement, and new paths would require design and permitting prior to execution.

Recommendations

This project is recommended by both the baseball community and staff based on the heavy usage of the facility and volume of park visitors. The North Shore Park and Youth Center would benefit from the enhancements from a functional, safety, aesthetic and maintenance standpoint. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

** Note there is an active conversation of creating four baseball fields at North Shore Park by eliminating the parking lot and other reconfigurations. This ongoing discussion is at the Commission Committee level.

PROJECT: PALM ISLAND PARK

COST: $231,000

Department: Parks and Recreation

Background

Palm Island Park is located at 165 Palm Avenue. The park consists of a playground designed for ages 2-12, with a custom shade canopy, tennis courts, a racquetball and basketball court, a multiuse field and a pavilion. The playground is highly used and is worn from the daily wear and tear. Its proximity to saltwater also affects the lifespan of the equipment.

Objectives

The playground, which was installed in 2007, will be replaced with similar playground equipment of the same footprint. The shade structure will be upgraded to a new quick release system which improves maintenance as well as reduces manpower needed to efficiently remove shades in times of potential or real hurricane threats.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. Some of the work will require plans and permitting.

Recommendations

These upgrades have been recommended by both the community and staff based on experience and the public's requests for park improvements. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: PAR 3/COMMUNITY PARK

COST: $15.7 MILLION

Department: Capital Improvement Projects

The Mid-Beach Community Park (formerly known as Par 3) was previously a golf course and is being developed as a passive community park. The design is 60% complete and has been presented to the community, Park Advisory Board and has received approval from the Design Review Board (DRB). The design and permitting is anticipated to be completed by December of 2018. Environmental Reports show that due to its previous use as a golf course, the site is contaminated. Environmental remediation will be the first element to be addressed. The proposed elements include a central lake; open meadows and informal open play field areas; landforms; pavilion; tennis courts (6) with restroom facilities; children's playground; dog park; boardwalk and pathways; security lighting; vita course and fitness cluster; butterfly garden; linear water feature and parking lot. The passive park will preserve landmark specimen trees and pastoral spaces. Total current deficit is $13.2 Million.

Resilient strategies proposed at the park include stormwater retention system, pervious pavement, solar panels for pedestrian lighting, energy efficient lighting and roof mounted solar panels. Estimated cost for the implementation of these strategies $2.5 Million.

PROJECT: PINE TREE PARK

COST: $700,000

Department: Parks and Recreation

Background

Pine Tree Park is a 6.5 acre park located at 45th Street & Pine Tree Drive. Pine Tree Park features leisure areas, an asphalt walking path, a kayak launch, a dog park with small and large dog areas with dog play features and a Community Garden.

Objectives

The kayak launch at Pine Tree Park provides an access point for kayaks and other non-motorized watercraft vessels to the Indian Creek Waterway. The increase in sea-level rise has made the existing kayak launch unusable during high tide. The existing kayak launch is fixed instead of floating. Because it is often underwater, the Parks and Recreation Department must often perform repairs to keep it safe and functional. A floating launch is required in order to meet the needs of the users.

The existing path at Pine Tree Park is worn down, uneven and is damaged due to tree roots. The walking path would be upgraded from asphalt to concrete, to enhance the park's aesthetics and provide a longer life span for the path.

Reforestation improvements would include additions to the urban forest, which has been affected over the years by acts of nature, including storms and exposure to a salt water environment.

The current fencing adjacent to the waterway at Pine Tree Park requires replacement. New fencing will improve the safety and overall aesthetics of the park.

Execution

A design does not currently exist for the above enhancements. The landscaping and fencing renovation portions of the project would not experience delays, as permitting would be non-existent or limited. The kayak launch and pathway improvements would require design and permitting prior to execution.

Recommendations

These upgrades have been recommended by staff based on experience and the public's requests for park improvements. The kayak launch may be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: POLO PARK

COST: $500,000

Department: Parks and Recreation

Background

Polo Park is located at 4301 N Meridian Avenue. The park consists of a playground designed for ages 2-10 years old, with a custom shade canopy, tennis and basketball courts, and a multiuse baseball field. The park is utilized by the residents as well as by Nautilus Middle School.

Objectives

In order to provide better use of the facility and expand its value from a programming standpoint, baseball field renovations will take place. The work shall include improvements to the current dugout, as well as the addition of a new dugout along the first base line. Fencing, irrigation, sod and clay work will also be part of the scope. Updating the baseball field and facilities will open up the field for more usage by the Middle School, surrounding community and allow for more youth programing.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. Some of the work may require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on experience and resident request for improvements to the park. The project will not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: ROOF REPLACEMENTS AT CULTURAL FACILITIES

COST: $2.98 MILLION

Department: Property Management

In the year 2017-2018 over 150,000 square feet of roofs were inspected throughout the cultural facilities of the City of Miami Beach. These facilities include the Bass Museum, Colony Theater, Miami City Ballet and others. Consultant generated reports were requested in order to properly identify repairs and replacements needed. The reports included thorough visual inspections, the gathering of warranty documents, maintenance records and a narrative with recommendations regarding restoration, repairs or replacements of the observed roof systems.

Multiple experiences with roof leaks identified by Property Management staff in tandem with these reports have led to the conclusion that these facilities are in critical need of roof system replacements. Every time there is water intrusion in these facilities there are a series of expenses and quality of life impact that goes beyond the roof membrane itself. The costs incurred are, but not limited to, the cleanup of the water intrusion, loss of use of the impacted space, damage to interior finishes (at times to historically designated structures), exposure to the possibility of mold and mildew as well as a premium price for the roof repair in an “emergency” condition.

Replacement of these roofs will serve to protect the buildings that play such a significant role in our City’s cultural community. Furthermore, in keeping with the City’s commitment to sustainability, these roofs will be replaced with “white” roofs. These new roofs will significantly reduce the amount of solar radiation absorbed by the building, reduce the energy demand needed to cool the spaces as well as reduce the contribution to the urban heat island effect.

PROJECT: SCOTT RAKOW YOUTH CENTER

COST: $5.088 MILLION

Department: Parks and Recreation

Background

The Scott Rakow Youth Center was built in 1976 to serve the teens of Miami Beach. It has now grown to serve children and adults of all ages, and provides a variety of recreational activities. The Youth Center is a multi-faceted facility which houses an ice skating rink, outdoor swimming pool, six bowling lanes, gymnasium, arts and crafts center, game room, media room, fitness center, multi-purpose room, music room and computer lab. It also offers a variety of classes for children of all ages, adults and seniors which include: swimming, ice skating, hockey and sports leagues.

Objectives

The Scott Rakow Youth Center Pool is in operation year-round. To keep up with the demands of public use and improve upon maintenance costs to operate the pool pumps and filtration systems, new upgraded equipment will allow for more efficient and cost-effective maintenance. A complete renovation to the pool's restroom and locker rooms will also be completed.

The basketball courts' flooring is in need of replacement due to heavy use, demand from the public and the center's programming. Replacement must be addressed in order to avoid safety issues.

Security cameras are needed at the Scott Rakow Youth Center in order to provide enhanced security measures, increase safety and integrate into the Miami Beach Police Department's system.

The gymnastics hall at the Scott Rakow Youth Center houses a gymnastics program, which serves all ages as well as children with special needs. Replacement of the flooring and repair of the sub-floor at the gymnastics hall is required.

The cooling tower use for refrigerating the ice rink needs replacement. The equipment is approaching its end of life, and if it is not addressed serious damage may be caused to the ammonia plant should it fail.

The Mondo rubber flooring at the ice rink requires replacement due to heavy use, demand from the public and the center's programming. Replacement of the old and worn out flooring must be addressed.

Scott Rakow Youth Center is designated an Emergency Operations Activation (EOA) Center by the City's Department of Emergency Management. In times of an emergency crisis, such as a hurricane, the center can be activated as an emergency operations area. Currently the Scott Rakow Youth Center does not have a generator to provide emergency power during situations of power outages. Additionally, replacing existing windows, which are not impact resistant, would provide the facility with the fortitude required of an EOA.

The HVAC system at the Scott Rakow Youth center is more than 10-years old and requires frequent repairs. Replacing the HVAC system with a new, energy efficient unit will save the City on energy and maintenance costs.

Execution

A design does not currently exist for the above enhancements. The following components can be started immediately through the City's procurement process: Basketball floor renovation; Upgraded security cameras; Gymnastics floor replacement; Ice rink rubber flooring replacement; Interior/exterior painting.

The following components will need additional design, permitting and approvals: Renovations to pool; Restrooms and locker rooms; Ice rink cooling towers; Window replacements; Fire alarm renewal; Emergency generator; HVAC replacement; Roof replacement.

Recommendations

The preceding upgrades and improvements have been recommended by staff based on usage, need and maintenance cost savings. The work would not be subject to approval by regulatory boards (DRB, Planning, HPB, etc.).

PROJECT: SKATE PARK

COST: $750,000

Department: Parks and Recreation

Background

The City recently built a temporary skate park at the west lot located on Collins Avenue between 82nd and 83rd Street. Since its opening, the park has been successful in attracting many patrons. However, there are space limitations with the existing layout of the park that does not fulfil the demand for use.

Objectives

Building a permanent skate park by adding elements to the current park which will include an All Wheels Track will provide many long-term benefits for wheeled sport participants and the community. Some of the benefits provided by skate parks include physical activity for kids and a safe and challenging place for skaters.

Through this project, additional elements will be added to the existing site. New features will be incorporated to address missing components. There will also be passive areas that will provide better accommodation for families enjoying the park.

Execution

A design does not currently exist for this project. The project will require plans and permitting.

Recommendations

The following upgrades have been recommended by members of the community. Depending on design, the project may be subject to approval by regulatory boards (Planning, DRB, etc.).

PROJECT: SOUNDSCAPE PARK

COST: $4.5 MILLION

Department: Parks and Recreation

Improvement package to include:

- Replacement of existing restroom trailer with permanent restroom facilities and augmented storage area - $700,000
  The storage area would be used for two video screens NWS is purchasing to expand viewing areas and additional restrooms are needed to accommodate the amount of visitors.
- Upgrade of projectors, cameras, and servers to 4K - $3,800,000
  This allows for "ultra high definition" resolution and will be used for visual components at SoundScape

Since its debut in January 2011, the City of Miami Beach and New World Symphony have worked collaboratively to make SoundScape Park a world-class cultural destination attended by tens of thousands of visitors each season.

The SoundScape Park project presents recommendations for improved amenities that would create a higher level of user experience at SoundScape Park. These recommendations include building a permanent restroom facility that would replace the existing restroom trailer; constructing a storage area for two video screens NWS is purchasing to expand viewing areas throughout the Park; upgrading projectors, cameras and servers to 4K, which would optimize the visual experience with "ultra-high definition resolution";

Separately from these proposed enhancements, Miami Beach provided funding in FY 17/18 for the purchase of an audio system that will expand the listening areas in SoundScape Park. The existing event lawn currently provides a high quality sound experience for 2,000 visitors. The audio expansion will increase this capacity by an additional 1,200 visitors.

The funding plan for the projects is as follows:
1. Restrooms and storage area – within the next 1-2 years
2. Upgrade to 4K- Spring 2019

PROJECT: SOUTH POINTE PARK

COST: $480,000

Department: Parks and Recreation

Background

South Pointe Park is on 1st Street and Washington Avenue. The park consists of restrooms, a playground designed for ages 2-12, a custom sail shade canopy, a splash spray zone area, an off-leash dog area and a pier. The park consists of passive green areas, which are often filled with park visitors who enjoy the picturesque and serene views of Government Cut and the Atlantic Ocean. The park is one of the most visited destinations in Miami Beach.

Objective

The playground is highly used and has deteriorated from daily wear and tear. Its proximity to the saltwater also affects the lifespan of the equipment. The playground, which was installed in 2008, will be replaced with similar playground equipment, with the same footprint. Restrooms will be renovated to improve aesthetics and provide for more practical maintenance. Enhancements at the park would also include additions to the urban forest, which has been affected over the years by acts of nature, including storms and exposure to the saltwater environment.

Execution

A design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. The work will require plans and permitting.

Recommendations

This project is recommended by staff based on the high volume of visitors and heavy use of the park. South Pointe Park is a focal point of the City, and would benefit from the enhancements from an aesthetic and maintenance standpoint. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: STILLWATER PARK

COST: $145,000

Department: Parks and Recreation

Background

Stillwater Park is a 1.68 acre park located at 8440 Hawthorne Avenue, in North Beach. The park consists of a pavilion with restrooms, a playground, a basketball court, and an open green space area.

Objectives

Stillwater Park is heavily used by the community. New paint and flooring of the existing pavilion and restroom, as well as replacing the current fence worn perimeter fence with an aesthetic but more durable material to withstand errant balls or vandalism without necessitating frequent repairs. This will enhance overall aesthetics of the park and improve security. The fence will be replaced with a better quality and more structurally sound material, while the footprint and design would remain similar to the existing fence. Currently, trespassers enter the park after hours due to the ease with which the existing pickets can be removed.

Execution

A design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. Some of the work will require plans and permitting.

Recommendations

The following upgrades have been recommended by staff based on usage, need and maintenance cost savings. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: TATUM PARK

COST: $840,000

Department: Parks and Recreation

Background

Tatum Park is a .78 acre park located at 8050 Byron Avenue, in North Beach. The park consists of a pavilion with restrooms, a playground, a basketball court, a volleyball court and an open green space area. The park is a focal point of the neighborhood, and is often enjoyed by residents.

Objectives

The playground at Tatum Park is a small, single unit, component which is heavily used by the public. This densely populated area needs a bigger playground, and the addition of a water playground structure would fit perfectly in this centrally located area as well as meet the community's needs. Replacement of the existing restrooms would be beneficial, as their current condition is not acceptable for the high level of use experienced within the facility.

Additionally the project will replacing the current fence worn perimeter fence with an aesthetic but more durable material to withstand errant balls or vandalism without necessitating frequent repairs. This will enhance overall aesthetics of the park and improve security. The fence will be replaced with a better quality and more structurally sound material, while the footprint and design would remain similar to the existing fence. Currently, trespassers enter the park after hours due to the ease with which the existing pickets can be removed.

Execution

A design does not currently exist for this project. Some of the work will require plans and permitting. This project would require more time to complete than other traditional playground replacements, as a result of the water feature and redesign of the facility as a whole.

Recommendations

These upgrades have been recommended by staff based on usage, need and maintenance cost savings, as well as requests from residents. The work may be subject to approval by regulatory boards (Planning, DRB, HPB, etc.), depending on scope, setbacks, and other related factors.

PROJECT: WATERWAY RESTORATION

COST: $6 MILLION

Department: Environment & Sustainability

The city is surrounded by more than 60 miles of waterways that provide access for public safety response from the water, allow residents to access their private docks, and provide recreational boating opportunities. Maintaining their navigability requires on-going maintenance which has not occurred historically.

In 2002, following reports of boaters running aground, the city conducted a waterway survey to determine bathymetric conditions, such as waterway depth. The results of the survey were published in 2003 as a waterway dredging analysis with recommendations of areas that needed dredging and the volumes anticipated should be dredged from these areas. However, the dredging work did not occur at the time. In 2016, the city began receiving regular requests from residents, as well as the city's waterway contractor and other water-dependent city services to address accumulated sediment, trim vegetation and conduct other activities to restore navigation throughout the city's waterways. Hurricane Irma in September 2017 exacerbated existing conditions and increased the frequency of the dredging requests. The two waterways that are in greatest need of dredging are Biscayne Pointe Water and Collins Canal, where sedimentation has caused areas to be unnavigable.

The scope of work for this project includes conducting an updated waterway survey, updating the 2003 dredging analysis, obtaining the permits necessary to dredge, paying for any mitigation for impacted resources (i.e., seagrass critical habitat), and restoring navigability to Biscayne Pointe Waterway and Collins Canal. The project is being recommended for inclusion in the G.O. Bond because this initial restoration requires a citywide evaluation, an extensive permitting effort, and removal of substantial volumes of material. At the completion of the project, the two restored waterways will be placed on an on-going maintenance contract using the previously obtained permits, the costs of which can be covered under the city's annual operating budget. In addition, the study will determine future areas to be addressed by other funding sources.

Scope of Work	Cost	Comments
Task 1 – Updated Waterway Survey & Report		
Consultant Fees	$250,000	Based on cost of recently completed bathymetric surveys for seawall projects.
Task 2 – Design/Permitting		
Consultant Fees	$200,000	
Permit Fees	$1,000,000	Based on current County, State & Federal Permit fee schedules, including reimbursable mitigation bond.
Task 3 – Construction		
CEI	$50,000	$16,700 per month at 3 months
Construction	$4,000,000	Inclusive of Dredging, Vegetation Restoration & Trimming, and Mitigation.
Contingency	$500,000	13% of Total Construction Cost ($4,000,000)
TOTAL	$6,000,000	

PROJECT: WEST LOTS REDEVELOPMENT

COST: $5 MILLION

Department: Tourism, Culture, & Economic Development

The City-owned property known as the "West Lots" consists of 8 city blocks of land located on the West side of Collins Avenue, directly across the street from the North Shore Open Space Park. Currently, four of the blocks are developed as off-street parking, two blocks are vacant, and one block is being temporarily used by Ocean Rescue for their headquarters, and one block is being utilized by the Parking Department. The North Beach Master plan identified the West Lots as highly potential spaces for future mixed-use development. It is believed that the development of these lots have the opportunity to add additional recreational/civic spaces as well as retail and dining options to the neighboring community.

A resolution was passed at the December 13, 2017 City Commission meeting authorizing the City to hire and retain Dover, Kohl, & Partners, the principle designers for the North Beach Master Plan, to develop a conceptual design plan for the future development of the West Lots. The City entered into an agreement with the agency in April 2018.

The final recommendations made by Dover, Kohl were presented at the June 27, 2018 City Commission meeting. There were several recommendations made regarding future development on the West Lots. The G.O. Bond allocation will be used to spur investments in green space and open park areas on the West Lots. This could include an eco-park, water square, community garden and playground.

PROJECT: 41ST STREET CORRIDOR

COST: $15 MILLION

Department: Tourism, Culture, and Economic Development

In spring 2018, the Mayor created the *41st Street Blue Ribbon Committee* to explore creative and innovative ways to revitalize 41st Street to become the true gateway corridor between Miami Beach and mainland Miami. The goal is discover whether an investment in landscape and infrastructure improvements, along the 41st street corridor could decrease traffic congestion, and increase vibrancy that could lead to increased economic opportunity. The Committee is looking at investments in lighting, streetscaping, traffic and parking to help create a true gateway entry and leverage future commercial enhancements such as 41st Street being identified, by the Miami-Dade County SMART plan, as the key connecting corridor for the bus transit rapid line which will eventually go from the mainland to Miami Beach.

In May, the City retained the urban design firm, Alta Planning and Gehl Studios, to analyze the 41st Street design and activity, to create a comprehensive vision that could increase vibrancy, pedestrian activity, and better support local business activity and recommend short and long term capital infrastructure opportunities. These improvements will help create a true gateway entry from the mainland into Miami Beach and create a Main Street that is welcoming and accessible for residents, tourists and business development in Mid-Beach. This vision plan was completed in July 2018 and was approved by the 41st Street Committee on August 1, 2018.

PROJECT: ABOVE GROUND IMPROVEMENTS

COST: $43 MILLION

Department: Public Works

Above ground funding to beautify and upgrade functional elements associated with neighborhood improvements such as green and blue infrastructure, lighting, landscaping, and tree canopy as part of the planned Stormwater/Water & Sewer projects. The neighborhoods and approximate values for above ground improvements based upon the current Neighborhood Improvement schedule is provided below:

- Town Center $4M
- La Gorce Island $2M
- City Center $8M
- Indian Creek Parkway $2M
- Nautilus & Middle North Bay $7.5M
- Orchard Park $3M
- Normandy Isle South $8M
- South Pointe $5M
- Sunset Island #1& #2 $2.5M
- Belle Isle $1M

PROJECT: FLAMINGO PARK NEIGHBORHOOD IMPROVEMENTS

COST: $20 MILLION

Department: Public Works

This project will focus on the above ground enhancements, not funded by utilities, to make the area walkable, beautiful, livable, and upgrade the functional elements associated with the project in the Flamingo Park Neighborhood. The proposed improvements include lighting, landscaping, sidewalks, and tree canopy requested by the communities to be included as part of the planned Stormwater/Water & Sewer improvement projects. The area includes from the centerline of 16th Street and the South edge of the Lowe's Garage to the East edge of Lummus Park to the North edge of the 5th Street right of way to the east edge of the Alton Road right of way. Exhibit 1 below provides a visual representation of the area and Exhibit 2 is an illustration of possible neighborhood improvements.

This project was included as part of the 1999 G.O. Bond but only a small portion of these proposed improvements were included. All underground infrastructure funding is from the water, sewer and stormwater utility proceeds.

Exhibit 1

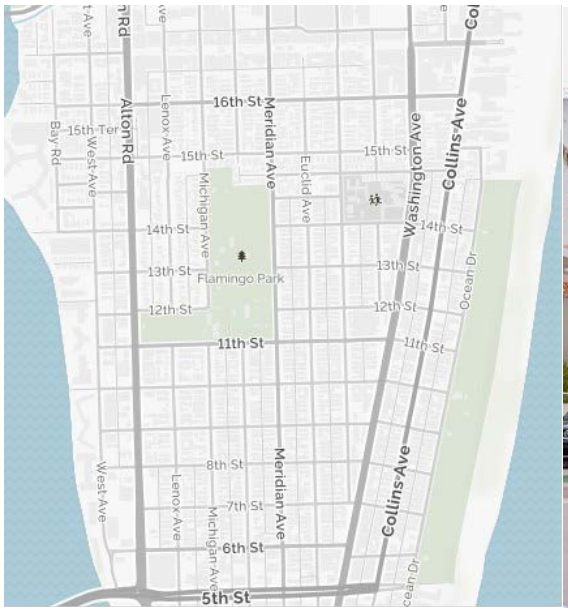


Exhibit 2

PROJECT: LA GORCE NEIGHBORHOOD IMPROVEMENTS

COST: $14 MILLION

Department: Public Works

This project will focus on the above ground enhancements, not funded by utilities, to make the area walkable, beautiful, livable, and upgrade the functional elements associated with the project in the La Gorce Neighborhood. The proposed improvements include lighting, landscaping, sidewalks, and tree canopy requested by the communities to be included as part of the planned Stormwater/Water & Sewer improvement projects. The area includes North Bay Road from 51st Street to Pine Tree Drive, the area north of 63rd Street to La Gorce Island and the area to the east of Alton Road bounded on the north by the La Gorce Golf Course, on the east by Surprise Waterway and Pine Tree Drive and on the south by Surprise Waterway. Exhibit 1 below provides a visual representation of the area and Exhibit 2 is an illustration of possible neighborhood improvements.

This project was included as part of the 1999 G.O. Bond but only a small portion of these proposed improvements were included. All underground infrastructure funding is from the water, sewer and stormwater utility proceeds.

Exhibit 1

Exhibit 2

PROJECT: NEIGHBORHOOD TRAFFIC CALMING AND PEDESTRIAN-FRIENDLY STREETS

COST: $2 MILLION

Department: Transportation

In 2015, the City of Miami Beach Commission adopted a new modal hierarchy prioritizing Pedestrians and Bicycles over private vehicles. In promoting safe walking and bicycling for residential neighborhoods, City Staff identified four (4) primary neighborhoods to implement traffic calming features. The City has collected data and conducted site visits to these neighborhoods and observed cut-through traffic, speeding, and low compliance with traffic control at intersections. While many of the residents have shown a desire to walking and bicycling as a viable alternative of transportation for short trips, safety has been the main concern and detractor of these methods. The implementation of these projects would enhance the ability of residential neighborhoods to safely accommodate alternate modes of transportation while supporting the City's vision of becoming less car dependent. The proposed devices include traffic circles, raised intersections, chicanes, and lowering of speed limits.

Traffic Calming

A. Nautilus Neighborhood Traffic Calming and Green Bike Lanes
B. Bayshore Neighborhood Traffic Calming
C. Normandy Isle Neighborhood Traffic Calming
D. Palm View Neighborhood Traffic Calming

Examples

PROJECT: NORTH SHORE NEIGHBORHOOD IMPROVEMENTS

COST: $8 MILLION

Department: Public Works

This project will focus on the above ground enhancements, not funded by utilities, to make the area walkable, beautiful, livable, and upgrade the functional elements associated with the project in the North Shore Neighborhood. The proposed improvements include lighting, landscaping, sidewalks, and tree canopy requested by the communities to be included as part of the planned Stormwater/Water & Sewer improvement projects. The area boundaries include 87th Terrace to the north, east to the ocean, south to 63rd Terrace and west to the waterways. Below provided below is a map of a visual representation of the area.

This project was included as part of the 1999 G.O. Bond but only a small portion of these proposed improvements were included. All underground infrastructure funding is from the water, sewer and stormwater utility proceeds.

PROJECT: OCEAN DRIVE IMPROVEMENT PROJECT

COST: $20 MILLION

Department: Capital Improvement Projects

The project includes the reconstruction of Ocean Drive from 5th to 15th Street utilizing the December 2014 Shulman & Associates concepts as a basis of design. In essence, the road would be reconstructed and raised to create an "at grade" profile that could be closed to vehicular traffic for exclusive pedestrian use similar to Española Way. The proposed conversion will eliminate the existing sidewalks and curbs and will convert the existing asphalt street to a paver brick or stone walkway from the buildings on the west side to Lummus Park, providing ADA accessibility throughout. The street elevation would be consistent from the sidewalk on the west side to the sidewalk on the east side adjacent to the park. Decorative security bollards (static and retractable), outlining the traffic lanes, would allow for normal vehicular traffic. The bollards would be placed to maximize the pedestrian area on the west side adjacent to the buildings.

In addition, the project would include new drainage structures, miscellaneous drainage piping, connection of existing roof drains to drainage system, reconstructing tree pits for ADA compliance, modification of traffic signals at several intersections, and other miscellaneous elements.

PROJECT: PALM & HIBISCUS ENHANCEMENTS

COST: $1 MILLION

Department: Capital Improvement Projects

Landscaping was not part of the Palm and Hibiscus Island Neighborhood Improvement Project. At the request from residents, a consultant was retained and has prepared a landscaping master plan for this neighborhood. Improvements may include landscaping along Palm Avenue, portions of Fountain Street (not water front), Palm Avenue Median and City Easements.

PROJECT: PROTECTED BICYCLE LANES AND SHARED BIKE/PEDESTRIAN PATHS

COST: $5 MILLION

Department: Transportation

The City of Miami Beach is one of the Cities with the highest bicycle usage in the state. Based on a study published by the Miami-Dade Transportation Planning Organization, certain parts of the Miami Beach have a high crash rate for bicycles and pedestrians. Through the master plan process, it was recognized that gaps in the system and poor design of existing bicycle lanes contributed to the high crash rate. In addition, surveys taken during the G.O. Bond Public Workshops showed that residents overwhelmingly support bicycle projects. Given the limited capacity of City roadways to support traffic demand and the safety concerns with bicycle transportation, creating a robust bicycle network in the City has been prioritized. Protected bicycle lanes can include striped buffers, physical separation from parked vehicles, and four to five foot bicycle lanes. The projects below are centered addressing some of the existing gaps with facilities that are comfortable and safe to ride or walk.

Shared Use Paths

A. Chase Avenue from Alton Road to 34th Street

Protected Bicycle Lanes

B. 23rd Street Complete Street
C. 63rd Street Complete Street

- Other Bicycle Improvements

The total estimated cost for all these projects is $5 million and the projects would be implemented as part of the Neighborhood Improvement Program.

PROJECT: RESILIENT SEAWALLS AND LIVING SHORELINES

COST: $10 MILLION

Department: Environment & Sustainability/Public Works

Seawalls are built to protect areas of human habitation along the coast against erosion, tides and waves. There are more than 60 miles of seawalls surrounding Miami Beach, five miles or 25,000 linear feet of which are publicly owned. Many of these seawalls are in structural disrepair or are too low and overtopped during high tides. They are therefore in need of rehabilitation.

In 2015, the city changed its minimum height standard from 3.2' NAVD to 5.7' NAVD (North American Vertical Datum 1988) to account for rising sea levels. This project provides funding for rehabilitating failing or low seawalls to meet the city's new minimum height standard. It also provides funding for living shoreline techniques, as well as hybrid stabilization shoreline systems in areas where site specific conditions allow existing environmental features to be preserved and enhanced. Living shorelines are a green infrastructure technique with co-benefits beyond shoreline stabilization such as wave reduction, improved water quality, habitat creation, and other ecosystem benefits.

The cost to rehabilitate a seawall varies depending on whether it is proposed as a traditional seawall or living shoreline. A cost breakdown per linear foot, which includes design and permit fees, mitigation and construction costs, is provided below for both types. The total cost of rehabbing the most vulnerable remaining segments of seawall is $10 million. This money will be further leveraged through the Florida Inland Navigation District (FIND) grants and federal and state funding. The project is being recommended for inclusion in the G.O. Bond because there is currently no dedicated source of funding for seawall rehabilitation or living shoreline creation.

Cost per Seawall Type		
Traditional Seawall	$2,000 per lf	Estimated from Maurice Gibb Park seawall project which cost $400,000.
Living Shoreline	$3,000 per lf	Estimated from Brittany Bay hybrid seawall project, which has an estimated cost of $2.5 million.

PROJECT: SIDEWALK REPAIR PROGRAM

COST: $13 MILLION

Department: Public Works

A Sidewalk Survey Summary Report was prepared by a consultant on September 6, 2017. The consultant conducted extensive field surveys and condition data was assembled to create a single score representing the overall condition of the sidewalk, called a Sidewalk Condition Index.

The distribution of the Sidewalk Condition Index is on a 0 to 100 scale, 0 being worst and 100 being best condition. The surveyed sidewalk network consists of approximately 283 miles of sidewalk. The average sidewalk condition index of the City of Miami Beach at the time of the survey was 72, with the majority of sidewalks between 60 and 80. While the overall condition of 72 would appear to be acceptable, this is only the case due to the majority of sidewalks falling into the "Fair" category. With over a quarter of sidewalks rated as "Marginal" or worse an extensive rehabilitation plan should be considered. The amount of slabs with severe distress recorded account for nearly 10% of the network and slabs with moderate distress recorded account for 20%.

Addressing just these distresses would require maintenance on approximately 260,000 square yards of sidewalk. The estimated cost to complete the work to address the "Marginal" sidewalks is $13 million ($50 per square yard). A summary by Neighborhood is shown in the chart below.

City of Miami Beach, FL
Sidewalk Rehab Cost Summary

Neighborhood	Moderate Panal Count	Severe Panal Count	Moderate Panal Area (Sq Yds)	Severe Panal Area (Sq yds)	Average Cost ($/Sq yd)	Moderate Rehab Cost	Severe Rehab Cost	Total Rehab Cost
Bayshore	6,019	1,588	18,210	5,184	$50.12	$911,784	$260,766	$1,172,551
Biscayne Point	1,403	1,468	4,012	4,212	$50.00	$200,617	$210,606	$411,222
City Center Neighborhood	3,576	1,534	21,290	10,898	$50.25	$1,067,573	$550,024	$1,617,597
Flamingo/Lummus	11,203	6,022	56,360	23,067	$50.07	$2,819,388	$1,157,135	$3,976,523
La Gorce	2,706	372	7,588	1,051	$50.00	$379,396	$52,579	$431,975
Nautilus Neighborhood	5,171	1,785	13,677	4,838	$50.05	$684,209	$242,460	$926,669
Normandy Isles	3,499	1,256	11,260	3,930	$50.06	$563,467	$196,945	$760,411
Normandy Shores	1,286	537	3,669	1,488	$50.00	$183,445	$74,418	$257,863
North Shore	5,778	4,016	22,576	13,211	$50.09	$1,129,651	$662,933	$1,792,585
Oceanfront	2,248	2,187	8,357	8,883	$50.42	$418,796	$450,485	$869,281
South and Venetian Islands	1,451	601	4,374	1,755	$50.03	$218,726	$87,920	$306,645
South Pointe	1,500	395	10,014	3,923	$50.10	$501,537	$196,740	$698,277
Star/Palm/Hibiscus	575	203	1,820	671	$50.02	$91,011	$33,567	$124,578
West Avenue and Bay Road	887	760	3,570	2,292	$50.21	$178,799	$115,583	$294,382
Total:	**47,302**	**22,724**	**186,777**	**85,403**	**$50.12**	**$9,348,401**	**$4,292,160**	**$13,640,561**

PROJECT: STREET PAVEMENT PROGRAM

COST: $30 MILLION

Department: Public Works

In 2016 the City authorized a consultant to develop a Pavement Management System (PMS) for City-maintained roads and to perform the initial pavement inspections, analysis and reporting of the PMS.

The goal of the PMS is to collect pavement distress information and then use these data to prioritize maintenance, repair and construction activities to maximize the effective life of pavement surfaces at the lowest cost. The City maintains approximately 230.5 lane miles of roadways made up of 481 roadway segments.

The PAVER analysis is used to provide a consistent tool for pavement management and assigns a Pavement Condition Index (PCI). PAVER displays a static score from 0-100 for each roadway section based on the most recent inspection. The distribution of the Pavement Condition Index is on a 0 to 100 scale, 0 being worst and 100 being best condition. The average street condition index of the City of Miami Beach at the time of the survey was 72. To maintain the FY 17 PCI the City will need to increase the funding to approximately $6.8M per year.

Below is a table that shows the condition of a roadway based on its PCI value and the different neighborhoods and the weighted average PCI for each neighborhood:

Good	100	85
Satisfactory	<85	70
Fair	<70	55
Poor	<55	40
Very Poor	<40	25
Serious	<25	10
Failed	<10	0

PROJECT: STREET TREE MASTER PLAN IMPLEMENTATION

COST: $5 MILLION

Department: Environment & Sustainability

The Environment and Sustainability Department is in the process of developing the city's first Street Tree Master Plan. This plan will include input from various city departments, as well as a number of our city's neighborhoods. Thus creating a vision of what our city's tree canopy would look like going into the future. The implementation of this plan will include the development of new strategies for future tree plantings throughout the city, which would consider the overall benefit to the city's green infrastructure as well as strategic planting of trees to improve our stormwater management capacities. A properly planted large species tree can contribute an added 4,000 gallons of stormwater management once matured. In addition property planned streetscapes will promote a more livable, resilient city for the future.

The funding of this project would assist in the implementation and vision of the Street Tree Master Plan utilizing the recommendations and outcomes of the plan. This would include the reforestation of neighborhoods that have poor or no proper tree canopy and strategic planting of trees as part of our green infrastructure initiative; integrating green infrastructure to develop a more comprehensive approach to combating sea level rise and seasonal flooding due to heavy rains.

Funding Breakdown:

G.O. Bond Funding	Description of Work	Species Category	Estimated Cost.	Estimated Quantity
$5M	• Tree species selection • Installation • Staking • Mulching • Watering to establishment	• Small Species Type (ex. Simpson Stopper) • Medium Species Type (ex. Pigeon Plum) • Large Species Type (ex. Live Oak)	$800.00 - $1,000.00 per tree.	3,500 – 5,000 trees to be planted.

PROJECT: WASHINGTON AVENUE CORRIDOR

COST: $10 MILLION

Department: Tourism, Culture, and Economic Development

Washington Avenue is a critical commercial corridor in South Beach; recently, a Business Improvement District was formed for Washington Avenue, with the goal to better improve the district through infrastructure and programming initiatives that will help revitalize and increase the economic vitality and vibrancy along the corridor. The City is working collectively with the Washington Avenue BID to find creative interventions that allow for residents and tourists to gather and activate the corridor throughout the day and evening hours.

The City will be issuing an RFQ to retain an urban design firm to create a comprehensive vision and identity for Washington Avenue that promotes pedestrian activity and supports the principles of creative place making, with a focus on resident, business and tourist uses and spaces that stimulate public/private partnerships that contribute to the maintenance, development and promotion of and in the corridor. This RFQ was issued in August 2018.

This funding allocation would be used to invest in capital improvements, lighting and landscaping along Washington Avenue to increase vibrancy and business retention through construction of pedestrian and streetscape enhancement, community programming and marketing the area.

PROJECT: FIRE STATION #1

COST: $10 MILLION

Department: Fire

Fire Station 1 was built in 1967 and serves the areas south of 15th Street including Star Island, Hibiscus Island, Palm Island, MacArthur Causeway up to Watson Island and Terminal Island. In 1992, it underwent a major renovation that included upgrades to the existing interior spaces, mechanical, plumbing and electrical systems.

In 2014, the City identified the types of repairs and upgrades that would be required to bring the facility up to current code and address structural and maintenance concerns. It was concluded that the repairs and upgrades would only provide a temporary aesthetic solution without addressing any of the major structural, electrical and mechanical deficiencies at a significant cost.

The City Administration sought the professional evaluation of Borrelli and Partners and a report was finalized on May 6, 2015, where it was recommended that the current site conditions and minimum code requirements recommended full site reconstruction and demolition of existing Fire Station 1. Intensive maintenance is required to continue operation of the Fire Stations as it exists today. This maintenance includes costs that over time would exceed the cost of full demolition and reconstruction of all facilities on site.

Moreover, existing parking conditions at Fire Station 1 negatively impact the demands of the neighborhood and personnel reporting to work. The existing FEMA Flood elevations indicate that under severe storm events Fire Station 1 would become inaccessible and would prevent emergency assistance to the surrounding Miami Beach community.

In March 2015, The Center for Public Safety Management (CPSM) and International City/County Management Association (ICMA) completed a comprehensive analysis of the fire department. The report provided a benchmark of the MBFD's service delivery performance, which was performed utilizing information provided by the MBFD. Both the ICMA study and Commission on Fire Accreditation International (CFAI) (accreditation report of December 2014), recommended the City consider the most efficient and effective option (complete renovation or replacement) as determined through internal and external engineering and architectural analysis, and as funding may allow.

Further, Station 1 should be replaced to current NFPA standards. The new building should be able to withstand a Category 5 hurricane, other natural disasters, and challenges such as security threats/risks. In addition, the department is looking forward to being able to meet the anticipated demands due to growth of the areas.

Last, a new Fire Station 1, would house the 911 Call Center Dispatch also known as PSCD. This would bring a state of the art Category 5 hurricane hardened building and the current facility would remain as the City's required back-up center.

PROJECT: FIRE STATION #3

COST: $10 MILLION

Department: Fire

Fire Station 3 was built in 1977, with several renovations throughout the years. It serves the areas of mid-beach from 41st street to 67th Street and houses several of our special operations teams (TRT, FLUSAR, Hazmat and Drone).

In March 2015, The Center for Public Safety Management (CPSM) and International City/County Management Association (ICMA) completed a comprehensive analysis of the fire department. The report provided a benchmark of the MBFD's service delivery performance, which was performed utilizing information provided by the MBFD. Both the ICMA study and Commission on Fire Accreditation International (CFAI) (accreditation report of December 2014), recommended the City consider the most efficient and effective option (complete renovation) as determined through internal and external engineering and architectural analysis, and as funding may allow.

Further, the ICMA study found that the facility showed extreme wear and tear. Since the study in 2015, the conditions have worsened due to its proximity to the ocean and its debilitating effects on the exterior structure of the facility.

In December 2016, Station 3 underwent a limited Mold Survey conducted by Dynatech Engineering Corporation. The survey concluded that there was the presence of mold identified at the site. These conditions were remedied by the City immediately.

In 2018, there seems to be a high level of humidity in portions of the building, which are served by the A/C system. The City's Property Management staff is closely monitoring the issue. However, it appears that due to the continued debilitating conditions of the structure, mainly due to its proximity to the ocean, it be best to replace the fire station and build it to current NFPA standards. The new building should be able to withstand a Category 5 hurricane, other natural disasters, and challenges such as security threats/risks. In addition, the department is looking forward to being able to meet the anticipated demands due to growth of the areas.

This new building will be part of the master plan for the site that includes the Sabrina Cohen Adaptive Park Facility.

PROJECT: LED LIGHTING IN PARKS

COST: $4.5 MILLION

Department: Parks & Recreation

Background

Currently, some City parks contain aging lighting infrastructure that, if improved, would benefit the community from sporting and public safety standpoints.

Objectives

Citywide park amenities are heavily used at night by the community. Upgrading sports and pathway lighting to LED technology will enhance our park's aesthetics, improve the illumination of areas, as well as address any spillage of light onto the neighboring residences. Upgrading to LED technology will also save the City on energy costs. As technology changes and LED becomes more available, the current systems in place will become obsolete and a maintenance nuisance.

From a public safety standpoint, enhanced lighting within parks, deters unwanted activities and provides law enforcement officers improved visibility.

The following parks will be receiving sports lighting upgrades to LED technology: Flamingo Park, North Shore Park & Youth Center, Normandy Isle Park, Tatum Park, Stillwater Park and Crespi Park.

Execution

Design does not currently exist for this project; however, it will not represent a lengthy process due to the non-complex nature of the enhancements. Some of the work will require plans and permitting.

Recommendations

These upgrades have been recommended by staff based on experience and the public's requests for park improvements. The work would not be subject to approval by regulatory boards (Planning, DRB, HPB, etc.).

PROJECT: LICENSE PLATE READERS

COST: $1.95 MILLION

Department: Police

License Plate Readers (LPRs) have been deployed via stationary and mobile applications throughout the City of Miami Beach for about six years. They have proven to be tremendously efficient, effective and vital crime-fighting and crime-prevention tools. The Venetian Islands community was among the first to establish a permanent LPR. Since then additional neighborhoods have pressed to install the technology as well. Citywide, 7 fixed LPRs are strategically located in a number of high-volume locations.

An example of how LPRs provide an additional layer of security to the community may be best illustrated by reviewing their use during Memorial Day Weekend 2018. The City utilized two stationary LPRs on the MacArthur and Juliet Tuttle Causeways during evening hours, on May 24-May 28th (Thursday-Monday). As a result, the following was documented:

- 45,262 license plates scanned
- 8 guns seized
- 11 Felony arrests
- 44 Misdemeanor citations/arrests

In addition, the Police Department has documented the use of LPRs to resolve numerous significant criminal events, spanning from 2012 to the present, during which there has been a significant reduction in crime on Miami Beach. This proposed project would further enhance the deployment of LPRs widely throughout the city. The estimated cost would cover the deployment of LPRs at 26 strategic locations, consisting of 108 lanes of traffic.

PROJECT: MARINE PATROL FIRE/POLICE FACILITY

COST: $2.7 MILLION

Department: Capital Improvement Projects/Fire/Police

The project includes new construction to replace the existing marine patrol facility with a building to provide accommodations for both the police and fire patrol stations, within the park, to provide efficient public safety services in South Beach. The current fire patrol boat is in North Beach, which can cause response times to emergency calls in the south end of the City to be longer than desired.

PROJECT: OCEAN RESCUE NORTH BEACH FACILITY

COST: $5 MILLION

Department: Fire / Parks & Recreation

This project will replace the existing double-wide trailers and provide a permanent, facility within North Beach Oceanside Park to serve as the Ocean Rescue sub-station in North Beach. Due to the shortcomings of the current facility, Ocean Rescue current faces challenges during high impact events/weekends. This project would also greatly improve safety as it would eliminate the need to cross Collins Avenue in order to access the beach. The new facility will be co-located with Beach Maintenance and Parks & Recreation. Preliminary meetings with the County indicated that there is a possibility that the county would share in the expenses for the Beach Maintenance facility.

PROJECT: POLICE HEADQUARTERS IMPROVEMENTS

COST: $10 MILLION

Department: Police

The Police Department's Headquarters building was built over 30 years ago. Over time, the facility has undergone a variety of upgrades but not had any major renovations. Consequently, much of the infrastructure as well as the building systems have deteriorated considerably. Of particular, immediate concern is the inefficient space for staff and the regular flooding in the garage and interior areas even during routine storms. Of pressing concern are the following:

Deterioration of Structure and Systems

- Indoor Firearms Range - Air Filtration System needs replacement
- Indoor Firearms Range – Shooting lanes need comprehensive overhaul/replacement
- Roof/Windows – water intrusion in multiple locations even during light rain, with Hurricane Irma highlighting critical vulnerabilities during extreme weather
- Garage flooding during high tides or during heavy rain
- Fire Alarm / Sprinkler Systems - need replacement
- Generators need replacement
- Underground Fuel Storage for generators need maintenance
- Building Intercom System not working – needs replacement
- HVAC – many fixes, changes, and remodels over the years have resulted in a patchwork of ducts and controls inconsistent with current layout
- Electrical System demands
    - Outlets and power – not enough electrical outlets for current demand, requiring many extension cords and power strips everywhere
    - Network and telephone – Remodels and office layout changes require significant expenditure to have network cables run to new locations
    - Building CCTV Cameras/BWC Docks/KeyTracer System – Installations require significant expense to run network cabling for each new camera or as changes/remodels take place
    - Televisions and video displays – This building does not have cable TV infrastructure; so each new television requires cable installation.
    - UPS systems – There is no building uninterruptable power supply; so anyone working at the time of a blackout has their computer shut off until the generators turn on.
- Mismatched furniture and desk systems – no coherent office design anywhere in the building. Almost every desk, chair, table, filing cabinet, cubicle system is different.

- Keycard system and physical locks – Need entire building rekeyed to a consistent and scalable master lock system. Keycard system and software needs long-overdue upgrade.
- Plumbing
    - Showers – Locker rooms need remodel/update.
    - Water fountains – Need to be replaced/upgraded.
    - Bathroom fixtures – faucets mismatched from floor to floor with some automatic and many still manually operated, random leaks in women's locker room sinks, etc.
    - Random leaks – Some plumbing leaks are never tracked down to the source and happen at random times.

PROJECT: REPLACE PUBLIC SAFETY RADIO SYSTEM

COST: $10 MILLION

Department: Police and Fire

The City of Miami Beach is under contract with Harris Corporation to replace the Public Safety Radio System with a state-of-the-art Project-25 Compliant (P25) land mobile radio system. The total cost of the system is $15.8 million over 15 years (including ongoing maintenance), with $10 million proposed to be funded through the G.O. Bond, paying for the initial capital purchase and implementation. This is the single most critical public safety need in the entire G.O. Bond proposal. This new radio system will replace the existing 20-year-old Motorola system that will be deemed end of life on December 31, 2018.

The new system will have all the necessary features required by modern, sophisticated police and fire departments, including: over-the-air-reprogramming; over-the-air rekeying; AES 256 encryption; and most important, seamless roaming connectivity for personnel once they leave the FCC-authorized radio frequency geographical footprint for the City of Miami Beach. This roaming will be accomplished by leveraging the infrastructure of other area governmental entities (City of Miami, Miami Dade County, Coral Gables, etc.), who are also on the Harris System. This county-wide capacity to interoperate radio systems is considered a vital additional advantage of the new system and essential to public safety of the community, as well as our police officers and firefighters.

PROJECT: SECURITY CAMERAS ON BEACHWALK

COST: $400,000

Department: Police

In 2017 the Miami Beach Police Department was directed by the City Commission to explore the cost of placing video cameras throughout the entire Entertainment District (MXE) and the Beachwalk. A cost analysis was presented to both the Neighborhoods and Finance Committees. During this discussion, commissioners also expressed interest in having the camera project extend northbound along the Beachwalk. This portion of the project would continue the laying of fiber along the Beachwalk as well as provide constant power and elevated infrastructure for camera placement up to the 2300 Block. A total of 15 cameras would be included in this portion of the project, with the corresponding increase of network storage that would allow for the 30-day retention of video. Cost estimates were derived from consulting existing city contracts as well as collaboration with the Public Works staff.

PROJECT: SECURITY CAMERAS IN BUSINESS DISTRICTS

COST: $825,000

Department: Police

The Miami Beach Police Department is seeking to expand use of video cameras in its high-volume vehicle and pedestrian areas. Like most modern cities, video systems have become an integral asset in ensuring public safety. The City of Miami Beach faces unique challenges in implementing such a system because of the lack of data connectivity. As such, the most cost efficient way of implementing these systems is through the use of wireless data infrastructure.

This portion of the City's overall public safety video camera plan identifies 80 locations along the primary business corridors of the city. The locations have been chosen to provide the most efficient coverage. An additional benefit to this project is that the locations chosen serve as main arterial roadways throughout the city where a large number of vehicles travel. The areas identified are:

- Alton Road from 5th Street to North Michigan Ave, as well as Dade Boulevard to Washington Ave to provide coverage for the newly renovated Miami Beach Convention Center.
- Arthur Godfrey Road (41 Street) from Alton Road to Collins Ave.
- 71st Street and Normandy Drive from Bay Drive to Collins Ave.

The cost estimates were derived from the average cost of enterprise-grade high megapixel cameras, the necessary wireless connectivity hardware, and the cost of additional network storage to provide for the established policy of 30-day retention of recorded video.

PROJECT: SECURITY CAMERAS IN ENTERTAINMENT DISTRICT

COST: $1.49 MILLION

Department: Police

In 2017 the Miami Beach Police Department was directed by the City Commission to explore the cost of placing video cameras throughout the entire Entertainment District (MXE). A cost analysis was presented to both the Neighborhoods and Finance Committees. The project was then separated into three pieces, Ocean Drive, Collins Ave, and Washington Ave. The installation of a fiber optic data transmission medium is absolutely essential to a robust and comprehensive build out of video camera capability in the MXE. In the current budget year, there is only a modest amount set aside to cover a small portion of the cost for Ocean Drive but excluding any money to install the fiber optic connectivity more broadly throughout the area. Absent this comprehensive funding, the City will continue to piecemeal video camera expansion in the MXE over many years.

This portion of the overall camera project would provide funding needed to complete the originally intended scope of both Collins Ave and Washington Ave, including not only the comprehensive laying of fiber optic lines but all the needed cameras.

The project calls for an additional 72 cameras strategically placed through the MXE to give the best coverage of activity in the area to include 2 cameras at every intersection of both Collins and Washington Avenues from 5th Street to 17th Street. Wireless connectivity hardware will be used where fiber is cost prohibitive. The proposal also includes additional enterprise storage to allow for the current 30-day retention policy.

PROJECT: SECURITY FOR PUBLIC SPACES

COST: $4.35 MILLION

Department: Police

After recent terrorist attacks around the world where vehicles were used to attack crowds of innocent bystanders, the City Commission directed the City Manager to resolve how best to protect high-volume pedestrian areas of the City. “Bollards” are a fancy word for the sturdy posts deployed in and around cities, generally intended to nudge entitled drivers not to park on the sidewalk, drive in bike paths, or turn into pedestrian plazas. Bollards are now seen as the most inexpensive way to prevent terrorists from using vehicles as lethal weapons, and this project would place them around our most vulnerable areas a vehicle could potentially plow into a crowd.

The City’s team of police, fire and property management experts has surveyed the below areas and determined that they require the installation of bollard systems to safeguard pedestrians and special event venues within our city:

- Miami Beach Convention Center (380 decorative concrete bollards – Estimated Cost $700,000)
- Lincoln Road (250 steel reinforced / decorative concrete barriers – Estimated Cost $2,425,000)
- Ocean Drive (Portable barrier systems for road closures – $600,000)
- SoundScape Park (200 decorative concrete bollards – Estimated Cost $375,000)
- South Pointe Park (125 decorative concrete bollards – Estimated Cost $250,000)

PROJECT: STREET LIGHTING IMPROVEMENTS

COST: $10 MILLION

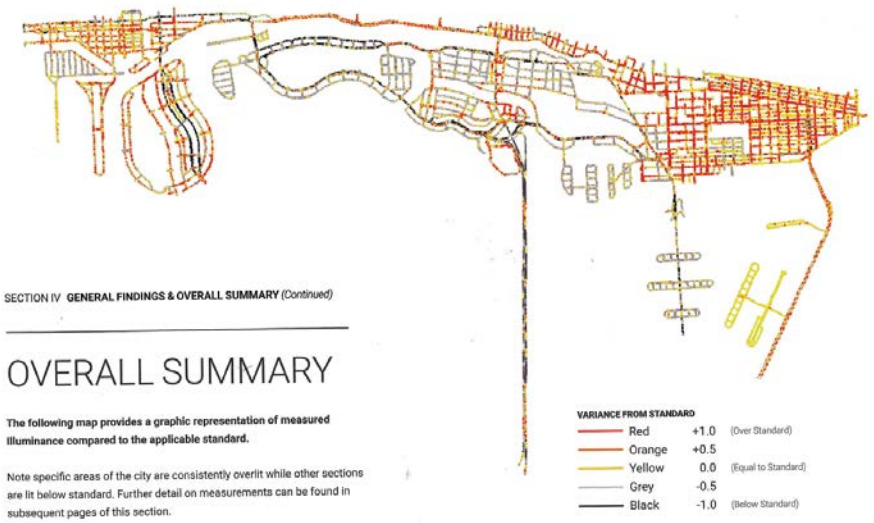
Department: Public Works

A Photometric Analysis was prepared by a consultant in mid-2015 to conduct a comprehensive inventory and analysis of lighting levels for the City of Miami Beach to analyze the current lighting in the City and address its adequacy. The goal of such a plan is to ensure that the City has appropriate and desired lighting levels and lighting uniformity in accordance with its goals for tourism and public safety, among other things.

After a thorough review of the lighting conditions in Miami Beach, the consultant came to the following conclusions:

- Only approximately 18.2% of the roadways (by mileage) fall within the assumed acceptable range for illuminance and uniformity when compared to standards
- Expressways are either underlit or overlit, but in most cases the uniformity is low
- Major roadways can be underlit, compliant or overlit but in most cases the uniformity is low
- The majority of surveyed collectors are underlit, however uniformity is acceptable
- A variety of issues can be observed on local roadways, with entire sections of the City that are overlit as well as specific underlit streets

A summary of the City's lighting needs are shown below:



$50 million would be necessary to bring the entire City to the recommended lighting standards from the information provided in the photometric analysis. The first phase of the City-wide lighting program is estimated at $10 million.