

MIAMIBEACH

OFFICE OF THE CITY MANAGER

NO. LTC #

LETTER TO COMMISSION

TO: Honorable Mayor Meiner and Members of the City Commission

FROM: Alina T. Hudak, City Manager

DATE: December 6, 2023

SUBJECT: **Progress Report on the City's Local Mitigation Strategy (LMS) Projects relative to Property Owner Discounts on Flood Insurance Premiums**

Introduction and Background

The purpose of this Letter to Commission is to provide the Mayor and Commission with a progress report on the City's Local Mitigation Strategy (LMS) projects. The LMS is one of the activities that will result in a discount of up to 20% on flood insurance premiums for residents in our city.

The primary goal of the LMS is to reduce vulnerability to natural, technological, and societal hazards from all sources, but especially from floods, hurricanes, tornadoes, and other severe weather events. The City's participation in the LMS Program improves its standing and classification in the Community Rating System (CRS), making flood insurance under the National Flood Insurance Program more affordable.

Program Continuity and Strategy to Inform the Public

City staff members attend the Miami-Dade County Local Mitigation Strategy meetings once each calendar quarter and review the latest published version on the LMS. Meeting times, dates, and locations are posted on the Miami-Dade County LMS website at www.miamidade.gov/lms.asp.

This Letter to Commission will be made available to the public on the City's website and via the City's Clerk's Office.

The progress report on the projects listed below have either been completed since 2022, are active projects, or are projects that will begin in 2024.

ATH/MM

Flood Hazard Projects

Private Property Adaptation (PPA) Program

The Private Property Adaptation (PPA) program is a competitive grant program to incentivize flood mitigation and resilient action for private properties. The program provides funding for flood risk assessment and flood mitigation project.

Status: Ongoing. The program is funded through 2025.

Citywide Home Elevations

Citywide home elevations are an effective tool for property-level flood mitigation. We provide information and opportunities for home elevation through the PPA program. We have 2 properties that were accepted for further consideration for the FEMA FMA program for home elevation, and they would qualify to have 90-100% of costs covered.

Status: Ongoing.

Sea Level Rise (SLR) Vulnerability Assessment and Adaptation Plan

This study will analyze the impact of sea level rise and compound flooding on city assets. Funded by the Resilient FL grant program, the study qualifies included projects for future grant funding.

Status: Planning.

Dunes

In addition to providing ecosystem benefits, the restoration and maintenance of our dune system provides critical robust storm surge protection for the island.

Status: Ongoing

West Avenue Neighborhood Drainage Improvements Ph II

Drainage improvements for West Avenue and Bay road from 14th to Collins Canal consist of a new pump station, additional drainage collection, conveyance, treatment, and disposal facilities. This drainage project will mitigate street-level flooding and reduce residential/commercial flooding concerns.

Status: Design

West Avenue Neighborhood Drainage Improvements Ph III

Drainage improvements for West Avenue from 5th to 8th Street (Alton Road to West Avenue) consisting of replacement of the stormwater collection system and addition of injection wells for additional water quality treatment, to meet 10-year storm criteria. This drainage project will mitigate street-level flooding and reduce residential/commercial flooding concerns.

Status: Design

72nd Street Community Complex

The on-site stormwater management system shall be designed for the 10-year 24-hour storm event (per South Florida Water Management District, SFWMD) with a safety factor of 1.25, for a total of 8.75-inches of rainfall to be retained on-site. The system will be required to meet SFWMD water quality requirements. The proposed stormwater management system shall also include an underground stormwater retention system. This type of system allows the reuse of runoff collected.

Status: Design

Maurice Gibb Park

Construct new walking paths, additional fishing piers, a dog park and a large bay overlook; replace the current playground with a custom-made music-themed play structure; increase park resiliency with soil remediation, irrigation and natural landscaping. The existing seawall will be raised to elevation 5.7' NAVD, and the existing living shoreline shall be expanded towards the south property line, with the planting of additional mangroves and native plantings.

Status: Construction. Estimated completion in 2024.

Par 3/Bayshore Park

Construction of a new park with children's playground for different ages, exercise station, sports courts with tennis and pickleball markings, bathroom/office building, site furnishings, lake with circulation and ozone system water treatment, drainage system, installation, and adjustments, The project also includes abandoning the existing water and sanitary sewer force mains and the installation of a new 20-inch water main and a 30-inch force main through the park. The pipeline replacement work consists of installing a 30-inch DIP force main and a 20-inch DIP water main (to replace the existing mains within the project area).

Status: Complete. Completed in 2022.

Indian Creek Drive Drainage Improvements

Construction consists of drainage improvements, seawall construction, a pump station as well as road raising on Indian Creek, from 25th to 41st Street. The project includes construction of new catch basins and outfalls with associated piping. The stormwater will be treated using vortex structures and stormwater pump stations.

Status: Drainage system and roadway improvements are complete - completed in 2022. Seawall is complete, pending final review and close-out in early 2023.

Brittany Bay Park

This project included the creation of a living shoreline between the existing remaining seawall and the concrete retaining seawall. The living shoreline will be hydraulically connected to Indian Creek and will have an ADA-Accessible overlook that will allow park patrons to walk from the park to the existing seawall's edge. The project enhances the surrounding riparian and inter-tidal environment by creating a new habitat for aquatic and terrestrial species and improving water quality via filtration of upland runoff.

Status: Complete. Completed in 2023.

Beachwalk Drainage – 24th Street to 46th Street

Improve drainage throughout the Beachwalk, on the noted blocks.

Status: Construction. Estimated completion in 2024.

Beachwalk Drainage – S. Pointe to 23rd Street

Improve drainage throughout the Beachwalk, on the noted blocks.

Status: Construction. Estimated completion in 2024.

7th Street Garage – Interior Drainage

Improve drainage in facility.

Status: Bidding.

7th Street Parking Garage Flood Panels

Improve drainage in facility.

Status: Design.

42nd Street Garage – Interior Drainage

Improve drainage in facility.

Status: Complete, pending final review and close-out in early 2024.

Anchor – Interior Floor Drainage

Improve drainage in facility.

Status: Complete. Completed in 2022.

17th Street Parking Garage Bathroom Drainage

Improve drainage in facility.

Status: Design

1755 Meridian Garage Flood Drainage

Improve drainage in facility.

Status: Construction. Estimated completion in 2024.

12th Street Garage – Interior Floor Drainage

Improve drainage in facility.

Status: Complete. Completed in 2022.

12th Street Parking Garage Drain

Improve drainage in facility.

Status: Bidding

17th Street Garage – Interior Floor Drainage

Improve drainage in facility.

Status: Complete. Completed in 2022.

Fleet/Sanitation Roof Drain

Improve drainage in facility.

Status: Construction. Estimated completion in 2024.

10th Street Audit Entrance Drainage

Improve drainage in facility.

Status: Planning

Police Headquarters Parking Garage Flood Mitigation Improvements

Improve drainage in facility.

Status: Planning.

FDOT Alton Rd Drainage Improvements

Comprehensive neighborhood project along Alton Road (Lower from Michigan to 43 St, Mid from 43 St to 48 St, and Upper from 48 St to 63 St.) to enhance quality of life and provide tidal and rainfall flood mitigation. This project includes significant stormwater drainage improvements, including installation of large conveyance and pumping systems. It also includes reconstruction of the water and sewer systems, some road raising and reconstruction, sidewalk, and streetlighting improvements.

Status: Design

1st Street Neighborhood Improvement Project

Comprehensive neighborhood project in South of Fifth Neighborhood, from Alton Road to Washington Avenue, to enhance quality of life and provide long-term tidal and rainfall flood mitigation. This project includes significant stormwater drainage improvements, including installation of large conveyance and pumping systems. It also included reconstruction of the water and sewer systems, and for First Street it includes road raising and reconstruction, sidewalk, streetlighting and landscaping improvements.

Status: Design

Town Center (North Shore D)

Comprehensive neighborhood project in North Shore D - North Beach Town Center to enhance quality of life and provide long-term tidal and rainfall flood mitigation. This project includes significant stormwater drainage improvements, including installation of large conveyance and pumping systems. It also included complete reconstruction of the water and sewer systems, road raising and reconstruction, sidewalk, streetlighting and landscaping improvements.

Status: Design

17th St Improvements Phase 1

Comprehensive neighborhood project along 17th St. from Alton Rd to Washington Ave, to enhance quality of life and provide long-term tidal and rainfall flood mitigation. This project includes significant stormwater drainage improvements, including installation of large conveyance systems. It also includes reconstruction of the water and sewer systems, road raising and reconstruction, sidewalk, streetlighting and landscaping improvements.

Status: Design

Normandy Isles A

Comprehensive neighborhood project in Normandy Isles to enhance quality of life and provide long-term tidal and rainfall flood mitigation. This project includes significant stormwater drainage improvements, including installation of large conveyance and pumping systems. It also included complete reconstruction of the water and sewer systems, road raising and reconstruction, sidewalk, streetlighting and landscaping improvements.

Status: Planning

CN# 1 Nautilus F (North)

Drainage improvement project at North Nautilus F to provide flood mitigation solutions to localized areas that currently experience recurring flooding. This project will be complimentary and adaptable to the future neighborhood improvement project.

Status: Design

CN# 2 Nautilus B - Muss Park

Drainage improvement project at Nautilus B (Muss Park and 44 St) to provide flood mitigation solutions to localized areas that currently experience recurring flooding. This project will be complimentary and adaptable to the future neighborhood improvement project.

Status: Design

CN# 3 La Gorce C - North Bay Road 1

Drainage improvement project at La Gorce C (North Bay Rd. 1) to provide flood mitigation solutions to localized areas that currently experience recurring flooding. This project will be complimentary and adaptable to the future neighborhood improvement project.

Status: Planning

CN# 4 La Gorce A

Drainage improvement project at La Gorce A to provide flood mitigation solutions to localized areas that currently experience recurring flooding. This project will be complimentary and adaptable to the future neighborhood improvement project.

Status: Planning

Nuisance Flooding Mitigation

Yearly blue-green-gray improvements to assist in alleviating nuisance flooding impacting the livelihood of residents. Improvements may include swale construction, sidewalk reconstruction and rehabilitation, installation of curb and gutter, asphalt and roadway regrading, sodding, and other improvements depending on engineering analysis of the area.

Status: Planning

Pump Station #10 Improvements

Water quality and flood mitigation improvements at stormwater pump station No. 10, to reduce recirculation of groundwater within the wet well.

Status: Construction. Estimated completion in 2024.

Temp. Stormwater Pump Water Quality

Addition of water quality treatment devices to allow permitted deployment of temporary stormwater pumps throughout the City during high tide and rainy season.

Status: Construction. Estimated completion in 2025.

Stormwater Pump Station Calvert

Rehabilitation of stormwater pump station 32 culvert to minimize infiltration and optimize pump station performance.

Status: Planning

PS 32 Water Quality Improvements

Connection of injection wells, constructed at Canopy park, to stormwater pump station No. 32 effluent.

Status: Construction. Estimated completion in 2024.

EPA - Sewer Pump Station No. 31 Repairs

Replacement of Sanitary Pump Station No. 31 wet well hatches with waterproof hatches.

Status: Complete. Completed in 2023.

Pump Station No. 28 Rehabilitation

Rehabilitation and hardening of Regional Sanitary Pump Station No. 28.

Status: Permitting.

Shane Watersport Seawall

Stantec staff has previously provided preliminary design drawings for the proposed improvements at the Shane Rowing Club. The original design called for a continuous seawall with cap raised to elevation 5.70' across the entire waterfront of the property.

Status: Design

Seawall on Lenox Court

Reconstruction of approximately 23 ft of seawall on Lenox Court.

Status: Construction Procurement. Estimated completion in 2025.

Seawall on Jefferson Avenue

Reconstruction of approximately 80 ft of seawall on Jefferson Avenue.

Status: Construction. Estimated completion in 2023.

Seawall on Trouville Esplanade

Reconstruction of approximately 80 ft of seawall on Trouville Esplanade.

Status: Construction Procurement. Estimated completion in 2024.

Seawall on 7150 Indian Creek Drive

Reconstruction of approximately 70 ft of seawall on Indian Creek Drive.

Status: Construction Procurement. Estimated completion in 2024.

Seawall on Garden Avenue

Reconstruction of approximately 65 ft of seawall on Garden Avenue.

Status: Construction. Estimated completion in Dec. 2023.

Seawall on Bonita Drive

Status: Reconstruction of approximately 60 ft of seawall on Bonita Drive.

Status: Construction procurement. Estimated completion in 2024.

Seawall on Rue Notre Dame

Reconstruction of approximately 70 ft of seawall on Rue Notre Dame.

Status: Construction procurement. Estimated completion in 2024.

Seawall on 48th and Bay Road

Reconstruction of approximately 60 ft of seawall on 48th and Bay Road.

Status: Construction. Estimated completion in 2024.

Seawall on Flamingo Drive Pedestrian Bridge

Reconstruction of approximately 40 ft of seawall on 29th Street.

Status: Design

Seawall on Dade Boulevard - Washington Avenue To 23rd Street

Reconstruction of approximately 689 ft of seawall on Washington Ave to 23rd Street.

Status: Design

Seawall on Dade Boulevard - N Meridian Avenue To Washington Ave

Reconstruction of approximately 993 ft of seawall on N Meridian Avenue to Washington Avenue.

Status: Design

Seawall on Collins Avenue (Indian Beach Park Living Shoreline)

Reconstruction of approximately 607 ft of seawall on Indian Beach Park.

Status: Design

Seawall on Flamingo Drive Pedestrian Bridge

Reconstruction of approximately 45 ft of seawall on Flamingo Drive Pedestrian Bridge.

Status: Design

Seawall on Collins Avenue

Reconstruction of approximately 280 ft of seawall on 2380 Collins Avenue.

Status: Design

Seawall on Collins Avenue

Reconstruction of approximately 144 ft of seawall on 2457 Collins Avenue.

Status: Design

Seawall on Collins Avenue

Reconstruction of approximately 60 ft of seawall on 44th street End.

Status: Planning

Seawall on Chase Avenue (Living Shoreline)

Reconstruction of approximately 240 ft of seawall on 4016 Chase Avenue.

Seawall on Collins Avenue (Living Shoreline)

Reconstruction of approximately 297 ft of seawall on 5301 Collins Avenue South.

Status: Design

Seawall on Pine Tree Drive North (3D Pilot)

Reconstruction of approximately 46 ft of seawall on W 60th Street End.

Status: Design

Seawall on Tatum Waterway Pedestrian Bridge

Reconstruction of approximately 18 ft of seawall on Tatum Waterway Pedestrian Bridge.

Status: Planning

Seawall on Palm Island

Reconstruction of approximately 299 ft of seawall on Palm Island Park.

Status: Planning

Seawall on Indian Creek Drive

Reconstruction of approximately 53 ft of seawall on 43rd St Street End.

Status: Planning

Seawall on Indian Creek Drive

Reconstruction of approximately 49 ft of seawall on W 42nd St Street End

Status: Planning

Seawall on Tatum Waterway

Reconstruction of approximately 440 ft of seawall on Bayside Ln.

Status: Planning

Seawall on Tatum Waterway

Reconstruction of approximately 78 ft of seawall on Bayside Ln Street End

Status: Planning

Seawall on Normandy Shores South

Reconstruction of approximately 49 ft of seawall on Ray St Street End

Status: Planning

Seawall on Dickens Avenue South

Reconstruction of approximately 535 ft of seawall on 7251 Collins Avenue.

Status: Planning

Seawall on Bonita Drive Street End South

Reconstruction of approximately 61 ft of seawall on Bonita Dr Street End South.

Status: Planning

Wind Hazard Projects

Miami City Ballet Windows

Replace windows, installing impact windows for wind mitigation.

Status: Complete, pending final review and close-out in early 2024.

Bass Museum Windows

Replace windows, installing impact windows for wind mitigation.

Status: Construction. Estimated completion in 2024.

North Shore Community Center Windows

Replace windows, installing impact windows for wind mitigation.

Status: Permitting.

Normandy Isle Park and Pool Windows and Doors

Replace windows and doors, installing impact windows and doors for wind mitigation.

Status: Planning

77th Street Bridge (876719) over Tatum Waterway

Bridge structural rehabilitation at 77th Street Bridge (876719) over Tatum Waterway.

Status: Construction. Estimated completion in 2024.

Henedon Avenue Bridge (876721) over Biscayne Point Canal

Bridge structural rehabilitation at Henedon Avenue Bridge (876721) over Biscayne Point Canal.

Status: Construction. Estimated completion in 2024.

73rd Street Bridge (876732) over Tatum Waterway

Bridge structural rehabilitation at 73rd Street Bridge (876732) over Tatum Waterway

Status: Construction. Estimated completion in 2024.

Liberty Avenue Pedestrian Bridge (Ped. Bridge No. 1)

Pedestrian bridge structural rehabilitation at Liberty Avenue Pedestrian Bridge (Ped. Bridge No. 1).

Status: Complete. Completed in 2023.

Lincoln Court Pedestrian Bridge (No. 6) over Collins Canal

Pedestrian bridge structural rehabilitation at Lincoln Court Pedestrian Bridge (No. 6) over Collins Canal.

Status: Design

81st Street Pedestrian Bridge (No. 4) over Tatum Waterway

Pedestrian bridge structural rehabilitation at 81st Street Pedestrian Bridge (No. 4) over Tatum Waterway.

Status: Permitting

24th Street Pedestrian Bridge (No. 2) over Collins Canal

Pedestrian C63bridge structural rehabilitation at 24th Street Pedestrian Bridge (No. 2) over Collins Canal.

Status: Design

28th Street Pedestrian Bridge (No. 3) over Collins Canal

Pedestrian bridge structural rehabilitation at 28th Street Pedestrian Bridge (No. 3) over Collins Canal

Status: Design

Wayne Avenue Pedestrian Bridge (No. 5) over Tatum Waterway

Pedestrian bridge structural rehabilitation at Wayne Avenue Pedestrian Bridge (No. 5) over Tatum Waterway.

Status: Design

Pine Tree Drive Bridge (876736) over La Gorce Canal

Bridge structural rehabilitation at Pine Tree Drive Bridge (876736) over La Gorce Canal

Status: Design

17th Street (876727) over Collins Canal

Bridge structural rehabilitation at 17th Street (876727) over Collins Canal.

Status: Design

Fountain Street Bridge (876733) over Biscayne Bay

Bridge structural rehabilitation at Fountain Street Bridge (876733) over Biscayne Bay.

Status: Design

Palm Way (Fountain Street) Bridge (876734) over Biscayne Bay

Bridge structural rehabilitation at Palm Way (Fountain Street) Bridge (876734) over Biscayne Bay.

Status: Planning

Holocaust Memorial Bridge (876740)

Bridge structural rehabilitation at Holocaust Memorial Bridge (876740)

Status: Planning

Convention Center Drive (876726) over Collins Canal

Bridge structural rehabilitation at Convention Center Drive (876726) over Collins Canal.

Status: Planning

Flood & Wind Hazard Projects

Fire Station #1

The project provides for the design and construction of a new Category 5 storm resilient Fire Station Number 1, inclusive of a 911 emergency call dispatch center and ancillary uses, in a 17,000 to 20,000 square feet facility. The existing FEMA flood elevations also indicate that under severe storm events, the Fire Station would become inaccessible and would prevent emergency assistance to the surrounding Miami Beach community. The designed structure will be significantly elevated and it includes 5 drainage wells and 9 drainage structures.

Status: Design

Pump Station No. 1 Rehabilitation

Rehabilitation and hardening of Sanitary Pump Station No. 1.

Status: Permitting

Hardening San. Sewer PS No. 29

Rehabilitation and hardening of Regional Sanitary Pump Station No. 29.

Status: Design

Belle Isle Booster Station Rehabilitation

Rehabilitation and hardening of potable distribution system Belle Isle Booster Pump Station.

Status: Design

Normandy Isle Booster Hardening

Rehabilitation and hardening of potable distribution system Normandy Isle Booster Pump Station.

Status: Design

25th Street / Public Works Yard - Booster Pump Station Hardening

Rehabilitation and hardening of potable distribution system 25th St. Booster Pump Station.

Status: Design

41st Street Booster Hardening

Rehabilitation and hardening of potable distribution system 41st St. Booster Pump Station.

Status: Design

Terminal Isle Booster PS/PS 30 Generator

Rehabilitation and hardening of potable distribution system Terminal Isle Booster Pump Station.

Status: Design

W-2 75th Street Booster Station Rehabilitation

Rehabilitation and hardening of potable distribution system 75th St. Booster Pump Station.

Status: Permitting

Other Hazard Projects

Reforestation

G.O. Bond funded reforestation efforts benefit the city in numerous ways, protecting the City from urban heat impacts. One way is by providing shade - the shade provided lowers heat absorption by hard surfaces. These lower temperatures help mitigate the effects of the Urban Heat Island Effect and mitigates flooding. This effect, mainly felt in dense urban environments, will only become worse as the climate continues to change.

Status: Ongoing.

Police Station Generator

Install a generator to ensure continued operation of facility during storms.

Status: Completed, pending final review in early 2024.

City Hall Generator

Install a generator to ensure continued operation of facility during storms.

Status: Planning

42nd Street Garage Generator

Install a generator to ensure continued operation of facility during storms.

Status: Construction. Estimated completion in 2024.

17th Street Garage Generator

Install a generator to ensure continued operation of facility during storms.

Status: Completed, pending final review and close-out in early 2024.

Fleet Management Generator Transfer Switch

Install a generator switch to ensure continued operation of facility during storms.

Status: Construction. Estimated completion in 2024.

Pennsylvania Avenue Garage Generator Renewal

Renew a generator switch to ensure continued operation of facility during storms.

Status: Planning