RESOLUTION NO. 2020-31211

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, ACCEPTING THE RECOMMENDATION OF THE FINANCE AND ECONOMIC RESILIENCY COMMITTEE AT ITS FEBRUARY 28, 2020 MEETING, TO ACCEPT THE FIVE-YEAR CRITICAL NEEDS CAPITAL PLAN FOR THE CITY'S WATER AND WASTEWATER SYSTEM, TO APPROVE THE USE OF THE $24 MILLION AVAILABLE FROM BOND PROCEEDS, AND TO COMMENCE A RATE STUDY OF THE WATER AND WASTEWATER UTILITY TO DETERMINE FINANCIAL CAPACITY FOR THE WATER AND WASTEWATER WORK ASSOCIATED WITH THE JACOBS ENGINEERING NEIGHBORHOOD PRIORITIZATION AND THE REMAINING $61 MILLION DOLLARS OF CRITICAL NEEDS.

WHEREAS, public infrastructure serves as the backbone of a well-run municipality, and typically, as infrastructure ages and the needs of a growing city expand, existing infrastructure requires rehabilitation and upgrades; and

WHEREAS, the failure to reinvest in utility infrastructure has resulted in neighboring communities having had numerous water main breaks and sewerage spills resulting in one community being fined $1.8 million by state regulators; and

WHEREAS, recognizing the increasing need to strategically invest in the water and sewer utility, the Public Works Department tasked Hazen and Sawyer with developing a Water and Sewer Master Plan that prioritizes projects over 25 years; and

WHEREAS, at its October 23, 2019 Sustainability and Resiliency Committee ("SRC") meeting, Public Works staff presented to the Committee a progress update on the Water and Sewer Master Plan (the "Master Plan"); and

WHEREAS, the staff stated it has reviewed the Master Plan and was ready for the Finance and Economic Resiliency Committee ("FERC") (formerly the Finance and Citywide Projects Committee) to review and to further discuss a financing plan; and

WHEREAS, the SRC Committee made a motion to refer the Master Plan to the FERC to identify funding sources; and

WHEREAS, the Master Plan reflects the utility's needs as defined by the Water and Sewer Master Plans and internal renewal and replacement plans; and

WHEREAS, the plan accounts for an investment of $122.3 million, of which approximately $37.5 million is already funded; and

WHEREAS, an additional $24 million of unencumbered water and sewer bond funds have been identified – if these funds were appropriated toward the proposed five-year critical needs capital plan, there would remain a funding gap of approximately $61 million; and

WHEREAS, when planning the sequencing of projects, staff often takes into account work within the projects' proximity and, when beneficial, projects are grouped into larger neighborhood jobs; and

WHEREAS, approximately $37 million of the overall $122.3 million plan have been identified as independent projects -- independent projects generally include aerial pipe crossings, subaqueous pipelines, or other work that lies outside neighborhood boundaries; and

WHEREAS, thus, some projects within the Water and Sewer Critical Needs Five Year Capital Plan may fall within the boundaries of possible neighborhood jobs; and

WHEREAS, however, due to the criticality of these projects, the Administration may proceed with their design and/or construction prior to the start of a neighborhood job; and

WHEREAS, it is important to note that this plan only includes the critical needs defined in the Master Plan and does not encompass general water and sewer work, which may occur as part of the City's neighborhood jobs; and

WHEREAS, the cost and scope of water and sewer work within neighborhood jobs will be quantified upon completion of the Jacobs Engineering Neighborhood Priority List; and

WHEREAS, in order to facilitate further discussion, the Water and Sewer Five Year Priority Lists were presented to the FERC at its February 28, 2020 meeting, and within the lists, a column identified which projects are independent from larger neighborhood jobs; and

WHEREAS, the estimates presented were for planning and budgeting purposes; the actual costs will be determined when the projects are fully designed and bid; and

WHEREAS, FERC made a motion to proceed to the City Commission to seek acceptance of the five-year critical needs capital plan for the City's water and wastewater system, and approval of the $24 million available from bond proceeds subject to a future appropriation; and

WHEREAS, additionally, FERC recommended commencing a rate study of the water and wastewater utility to determine financial capacity for the water and wastewater

work associated with the Jacobs Engineering neighborhood prioritization and the remaining $61 million dollars of critical needs.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, that the Mayor and City Commission hereby accept the recommendation of the Finance and Economic Resiliency Committee at its February 28, 2020 meeting, to accept the five-year critical needs capital plan for the City's water and wastewater system, to approve the use of the $24 million available from bond proceeds, and to commence a rate study of the water and wastewater utility to determine financial capacity for the water and wastewater work associated with the Jacobs Engineering Neighborhood Prioritization and the remaining $61 million dollars of critical needs.

PASSED and ADOPTED this 18 day of March, 2020.

DAN GELBER, MAYOR

ATTEST:

3/19/2020

RAFAEL E. GRANADO, CITY CLERK

MIAMI BEACH INCORPORATED MARCH 26 1915

APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION

City Attorney

3-12-20
Date

MIAMIBEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission
FROM: Jimmy L. Morales, City Manager
DATE: March 18, 2020

SUBJECT: A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, ACCEPTING THE RECOMMENDATION OF THE FINANCE AND ECONOMIC RESILIENCY COMMITTEE AT ITS FEBRUARY 28, 2020 MEETING, TO ACCEPT THE FIVE-YEAR CRITICAL NEEDS CAPITAL PLAN FOR THE CITY'S WATER AND WASTEWATER SYSTEM, APPROVE THE USE OF THE $24 MILLION AVAILABLE FROM BOND PROCEEDS; AND TO COMMENCE A RATE STUDY OF THE WATER AND WASTEWATER UTILITY TO DETERMINE FINANCIAL CAPACITY FOR THE WATER AND WASTEWATER WORK ASSOCIATED WITH THE JACOBS ENGINEERING NEIGHBORHOOD PRIORITIZATION AND THE REMAINING $61 MILLION DOLLARS OF CRITICAL NEEDS.

RECOMMENDATION

The Administration recommends acceptance of the five-year critical needs capital plan for the City's water and wastewater system, and approval of the $24 Million available from bond proceeds, subject to a future appropriation. Additionally, the Administration recommends commencing a rate study of the water and wastewater utility to determine financial capacity for the water and wastewater work associated with the Jacobs Engineering neighborhood prioritization and the remaining $61 Million dollars of critical needs.

BACKGROUND/HISTORY

Public infrastructure serves as the backbone of a well-run municipality. Typically, as infrastructure ages and the needs of a growing city expand, existing infrastructure requires rehabilitation and upgrades. Such is the case with the City's water and sewer utility.

Recognizing the increasing need to strategically invest in the water and sewer utility, the Public Works Department tasked Hazen and Sawyer with developing a Water and Sewer Master Plan that prioritizes projects over 25 years.

At its October 23, 2019 Sustainability and Resiliency Committee (SRC) meeting, Public Works staff provided the members of the Committee a progress update on the Water and Sewer Master Plan. The Administration stated it has reviewed the plan and was ready for the Finance and Economic Resiliency Committee (FERC) (formerly the Finance and Citywide Projects

Committee) for review and to further discuss a financing plan.

The SRC Committee made a motion to refer the Water and Sewer System Master Plan to the FERC to identify funding sources.

ANALYSIS

The proposed five year critical needs capital plan for the City's water and wastewater system is summarized below:

Capital Project PROJECT TITLE	FY20 Est. Cost	FY21 Est. Cost	FY22 Est. Cost	FY23 Est. Cost	FY24 Est. Cost	Total
Water & Wastewater Mains and Rehab	$ 16,093,000	$ 10,277,855	$ 14,214,469	$ 15,441,872	$ 15,268,653	$ 71,295,848
Water Pump Station Improvements		$ 5,592,900	$ 4,710,396			$ 10,303,296
Wastewater Stations Rehab.		$ 11,103,400	$ 5,209,019			$ 16,312,419
Valve Assessment & Replacement Program	$ 900,000	$ 927,000	$ 954,810			$ 2,781,810
Sewer Pump Station Odor Control	$ 850,600					$ 850,600
SCADA & PLC (W&S only)	$ 1,625,250					$ 1,625,250
Wastewater Manhole Rehab.	$ 1,500,000	$ 1,545,000	$ 1,591,350	$ 1,639,091	$ 1,688,263	$ 7,963,704
Water Meter Replacement	$ 11,104,893					$ 11,104,893
					TOTAL	$ 122,237,819

This plan reflects the utility's needs as defined by the Water and Sewer Master Plans and internal renewal and replacement plans. As seen above, the plan accounts for an investment of $122.3 Million, of which approximately $37.5 Million is funded. An additional $24 Million of unencumbered water and sewer bond funds have been identified. If these funds were appropriated toward the proposed five year critical needs capital plan, there would remain a funding gap of approximately $61 Million.

When planning the sequencing of projects, staff often takes into account work within the projects' proximity and, when beneficial, projects are grouped into larger neighborhood jobs. Approximately $37 Million of the overall $122.3 Million plan have been identified as independent projects. Independent projects generally include aerial pipe crossings, subaqueous pipelines, or other work that lies outside neighborhood boundaries. Thus, some projects within the Water and Sewer Critical Needs Five Year Capital Plan may fall within the boundaries of possible neighborhood jobs. However, due to the criticality of these projects, the Administration may proceed with their design and/or construction prior to the start of a neighborhood job.

It is important to note that this plan only includes the critical needs defined in the Water and Sewer Master Plans and does not encompass general water and sewer work, which may occur as part of the City's neighborhood jobs. The cost and scope of water and sewer work within neighborhood jobs will be quantified upon completion of the Jacobs Engineering Neighborhood Priority List.

In order to facilitate further discussion, the Water and Sewer Five Year Priority Lists are attached herein. Within the lists, a column identifies which projects are independent from larger neighborhood jobs.

The estimates presented herein are for planning and budgeting purposes; the actual costs will be determined when the projects are fully designed and bid.

Regionally there is a growing need to reinvest in utility infrastructure. The failure to reinvest in utility infrastructure has resulted in neighboring communities having had numerous water main breaks and sewerage spills resulting in one community being fined $1.8 million by state regulators. These projects are needed to reduce the risk of similar events happening in the City of Miami Beach.

At its February 28, 2020 meeting, the Finance and Economic Resiliency Committee made a motion to proceed to the full Commission to seek acceptance of the five-year critical needs capital plan for the City's water and wastewater system, and approval of the $24 Million available from bond proceeds subject to a future appropriation. Additionally, the Committee recommended commencing a rate study of the water and wastewater utility to determine financial capacity for the water and wastewater work associated with the Jacobs Engineering neighborhood prioritization and the remaining $61 Million dollars of critical needs.

CONCLUSION

The Administration recommends accepting the recommendation and adoption of the Resolution.

Applicable Area

Citywide

Is this a "Residents Right to Know" item, pursuant to City Code Section 2-14?	**Does this item utilize G.O. Bond Funds?**
Yes	No

Legislative Tracking

Public Works

ATTACHMENTS:

Description

- Water and Sewer System priority lists

Water System Critical Needs Priority List

Project Name	Independent Project	Location	Begin Date	Total
W-2 Booster Station Piping Rehabilitation	✓	75th Street and Dickens Ave	2020	$ 1,200,000.00
Replacement of WM aerial crossings Venetian Isles	✓	Venetian Isles	2020	$ 4,420,000.00
Rehabilitation of WM aerial crossings on MacArthur	✓	MacArthur Bridge	2020	$ 2,271,478.00
Water Main PoF/CoF Priority 1		30-inch FM Alton Rd and 41st St., others TBD	2020	$ 25,127,797.70
Fire Flow Project 1		10th Street between Lenox Ave and Washington Ave.	2020	$ 520,000.00
Fire Flow Project 3		Meridian Ave and 13th Street	2020	$ 250,000.00
Fire Flow Project 5		Locations vary	2020	$ 150,000.00
Meter Replacement	✓	City Wide	2020	$ 11,104,893.40
Valve Assessment and Replacement Program		City Wide	2020	$ 1,081,815.00
Water SCADA	✓	City Wide	2020	$ 406,312.50
Fire Flow Project 7		Locations vary.	2021	$ 72,100.00
Fire Flow Project 13		Michigan and 7th Ave	2021	$ 484,100.00
Fire Flow Project 16		Alton Rd. and Michigan Ave	2021	$ 638,600.00
Fire Flow Project 17	✓	Terminal Island	2021	$ 175,100.00
Construction of New Booster Station		North Beach	2021	$ 5,592,900.00
Aerial Crossing Water Main Replacement	✓	41st Street between Meridian Ave and Chase Ave	2021	$ 72,100.00
Aerial Crossing Water Main Replacement	✓	41st Street between Pine Tree Dr and Indian Creek	2021	$ 206,000.00
Aerial Crossing Water Main Replacement	✓	71st Street and Bonita Dr.	2021	$ 185,400.00
Water Main on MacArthur Causeway	✓	MacArthur Causeway	2022	$ 4,105,683.00
Belle Isle Booster Station Rehabilitation	✓	Belle Isle	2022	$ 4,710,396.00
Fire Flow Project 2		West Ave and Flamingo	2022	$ 456,187.00
Fire Flow Project 4		Euclid and 14th Pl	2022	$ 169,744.00
Fire Flow Project 15		Euclid and 14th Street	2022	$ 307,661.00
Fire Flow Project 6		Collins Park	2023	$ 98,345.43
Fire Flow Project 8		Meridian and 15th Street	2023	$ 131,127.24
Fire Flow Project 10		20th Street and Collins Ave	2023	$ 87,418.16
Fire Flow Project 11		18th Street and Collins Ave	2023	$ 109,272.70
Fire Flow Project 12		Collins and 17th Street	2024	$ 87,418.16
Fire Flow Project 9		N. Bay Rd between 41st and 43rd St	2024	$ 821,621.43
Fire Flow Project 14		North Beach, Varies	2024	$ 855,386.70
Total Water				**$ 65,898,857.41**

Sewer System Critical Needs Priority List

Project Name	Independent Project	Location	Begin Date	Total
Gravity Main Replacement - Priority 1		Basin 18 (La Gorce Island), others TBD	2020	$ 4,916,259.76
Gravity Mains I/I Reduction - Priority 1 (a)		04 (Hibiscus), 05 (Palm), 02 (Star), others TBD	2020	$ 2,256,357.00
Venetian Way aerial crossing replacement in kind	✓	Venetian Causeway	2020	$ 770,000.00
Valve assessment and replacement		City Wide	2020	$ 1,699,995.00
Pump Station No. 2 force main replacement	✓	Star Island to 10th Street and West Ave.	2020	$ 2,550,000.00
Force Mains PoF/CoF Priority 1		Terminal to Star Island, Normandy Isles, other TBD	2020	$ 9,813,027.17
Pump Station No. 18 force main replacement		La Gorce Island	2020	$ 550,000.00
Odor Control System	✓	Varies	2020	$ 850,600.00
Sewer SCADA	✓	City Wide	2020	$ 1,218,937.50
Manhole inspection and rehabilitation		City Wide	2020	$ 7,963,703.72
Pump Station 6, 7 and 8 rerouting		Belle Isle	2021	$ 1,194,800.00
Aerial crossing Pine Tree Drive 51st Street to 47th St.	✓	Pine Tree Drive	2021	$ 700,400.00
Pump Station No. 28 Rehabilitation		28th Street and Pine Tree	2021	$ 11,103,400.00
Pump Station No. 1 Rehabilitation		11th Street	2022	$ 3,140,264.00
Pump Station No. 30, well lining, and electrical upgrades	✓	Terminal Island	2022	$ 2,068,755.00
Pump Station No. 4 force main replacement		Between Palm and Hibiscus Island	2022	$ 477,405.00
Pump Stations No. 5 force main replacement		Palm Island	2022	$ 413,751.00
Pump Station No. 14 force main replacement		Sunset Island 3	2022	$ 901,765.00
Pump Station No. 23 force main replacement		75th Street and Dickens Ave	2022	$ 53,045.00
Pump Station No. 27 force main replacement		Collins Ave and 52nd Street	2022	$ 53,045.00
Gravity Mains I/I Reduction - Priority 1 (b)		Basin 23, other TBD	2023	$ 3,643,452.32
Total Sewer				**$ 56,338,962.47**