



CITY OF FORT LAUDERDALE

**DRAFT**  
**MEETING MINUTES**  
**CITY OF FORT LAUDERDALE**  
**INFRASTRUCTURE TASK FORCE COMMITTEE**  
**FORT LAUDERDALE CITY HALL**  
**100 NORTH ANDREWS AVENUE**  
**FORT LAUDERDALE, FLORIDA**  
**MONDAY, MARCH 2, 2020 – 2:00 P.M. TO 5:00 P.M.**

**January-December 2020**

**Attendance**

Marilyn Mammano, Chair	P	3	0
Gerald Angeli	P	3	0
Michael Marshall (arr. 2:05)	P	3	0
Norm Ostrau	P	3	0
Peter Partington	P	2	1
Jacquelyn Scott	P	3	0
Fred Stresau	P	3	0
Roosevelt Walters	P	3	0
Ralph Zeltman	P	3	0

As of this date, there are 9 appointed members to the Board, which means 5 would constitute a quorum.

**Staff**

- Rob Hernandez, Deputy City Manager
- Raj Verma, Director of Public Works
- Aneisha Daniel, Deputy Director of Public Works
- Raymond Nazaire, Public Works
- Rares Petrica, Senior Public Works Project Manager
- Viviana Torres Ortiz, Public Works
- Jill Prizlee, Chief Engineer
- Jodi Hart, Chief Procurement Officer
- Pauline Ricketts, Administrative Assistant
- Jamie Opperlee, Recording Secretary, Prototype Inc.

**Communication to the City Commission**

None.

**1. Call to Order**

- **Roll Call**

Chair Mammano called the meeting to order at 2:00 p.m. Roll was called and it was noted a quorum was present.

## **2. Approval of Agenda**

**Motion** made by Mr. Walters, seconded by Mr. Partington, to approve. In a voice vote, the **motion** passed unanimously.

## **3. Approval of Previous Meeting Minutes**

### **A. February 3, 2020**

**Motion** made by Ms. Scott, seconded by Mr. Zeltman, to approve.

Mr. Zeltman and Mr. Partington requested the following corrections:

- P.7, paragraph 6: change “north” to “south”
- Change “Reese report” to “Reiss report” throughout
- P.13, paragraph 1: add “...at the George T. Lohmeyer Wastewater Treatment Plant” after “one additional injection well”

In a voice vote, the **motion** passed unanimously [as corrected].

Mr. Marshall arrived at 2:05 p.m.

## **4. General Discussion and Comments by Committee Members**

Mr. Partington requested information regarding a recent incident at George English Park. Raj Verma, Director of Public Works, explained that a second break occurred at this location in a 14 in. force main, which had rusted and was leaking. When the area around the pipe was excavated, the pipe fell apart. In response, Staff has bypassed this pipe. The system will be shut down overnight and repairs are expected to be completed on Tuesday, March 3, 2020. A previous bypass also located in George English Park has already been completed.

Mr. Zeltman asked if Staff photographs these pipe failures and other issues as they are addressed. Mr. Verma confirmed this, adding that this failure mechanism was different from previous breaks in the area: the incident involved a 14 in. stormwater pipe with a force main located on top of it with insufficient separation.

Chair Mammano requested that the Task Force receive a comprehensive list of all breaks, and the reasons behind them, from the past six months. Mr. Verma cautioned, however, that he would not be comfortable attempting to clarify the reasons for breaks until a complete forensic investigation has been conducted by material engineers. He stated that the breaks should be fully analyzed before public consumption. Chair Mammano felt, however, that it would be better to share some information with the public even if that information must be qualified or testing is incomplete.

Mr. Partington requested an update on the replacement of former Staff members. Mr. Verma replied that he is currently evaluating how to best set up his organization of Staff to suit the City's needs. This is likely to include reexamining and changing some job requirements. Certain projects will also be brought under his direct control.

Mr. Partington continued that at the February 2020 meeting, he had provided pages from the Reiss report which listed a number of deficiencies, including force mains that operate at greater than desirable pressures and velocities. He requested an update on these deficiencies. Another handout he had provided from the Reiss report combined a number of high-risk projects into six capital improvement projects. He requested information on the status of these projects as well.

Mr. Verma replied that he has had extensive discussions with Staff and consultants regarding force mains. While the recommended velocity for force mains is roughly 3 ft./second, some mains have a velocity of between 5 ft. and 8 ft./second. Problems related to velocity typically occur at pump stations and/or the treatment plant. The Staff and consultants to whom he has spoken have indicated this velocity does not exceed its recommended threshold sufficiently to cause the material failures which resulted in a cascading effect. Mr. Verma has reached out to Staff members who have maintained the system as well as other parties to independently confirm these judgments. Deficiencies have not manifested at the pump stations or the treatment plant.

Chair Mammano requested clarification of the Reiss report's statement that the facilities are operating at a higher pressure than they were intended to accommodate. Mr. Verma advised that the Reiss report is intended to be used as a planning document rather than a design document that could provide definitive answers.

Mr. Partington requested additional information on remaining high-risk locations mentioned in the Reiss report. Mr. Verma replied that Staff has recently completed an assessment report, required by consent order, which will identify risk areas to be addressed. He estimated that the assessment report will be available in two to three weeks, after which time Staff will begin work on these high-risk locations. The report is expected to identify problems within force mains in key areas, which will help Staff pinpoint potential risks.

Mr. Ostrau asked if the City has entered into negotiations with environmental agencies. Deputy City Manager Rob Hernandez emphasized that the City is not in breach of the current consent order, and is in fact ahead of its established milestones. Instead, a series of breaks has occurred since the consent order was handed down, which is likely to result in either a new consent order or a modification to the existing consent order. While a \$1.8 million fine has been imposed upon the City, Fort Lauderdale has reached out to the appropriate state agencies to request that they instead use these dollars toward mitigation projects. This request is currently under consideration.

Mr. Verma stated that the creation of an “as-built” atlas, which would reflect the age, condition, and estimated service life of the City’s infrastructure, is part of the asset management component required by the consent order. He added that he is guiding Staff through this process to ensure that critical changes are implemented in an expedited manner and information is extracted to keep the City’s infrastructure sound.

Deputy Director of Public Works Aneisha Daniel added that the City is continuing the process of addressing the sewer inventory component. This data will be loaded into the system along with information provided by the Reiss report. The second component to be addressed will be stormwater.

Mr. Angeli stated that the public wants information about the progress of replacing infrastructure, particularly force mains, rather than about the progress of emergency repairs. Mr. Hernandez advised that twice weekly, the City’s strategic communications staff publishes status reports on a variety of issues, distributing this information electronically to residents. The City attempts to use every available mechanism to share information on their progress with the public. Contractors have been on-site working to provide redundant line for at least 30 days, and construction activity is ongoing in multiple neighborhoods. Staff also reaches out to the public by attending community meetings throughout the City.

Mr. Zeltman noted that the consent order schedule provides an outline of target dates for different activities. Chair Mammano suggested that the City create a web page including various forms of documentation and information on the infrastructure project.

Mr. Stresau requested additional information on how this necessary work is being funded. Mr. Hernandez replied that the installation of redundant pipe was already allocated within the City’s Capital Improvement Program (CIP). Over \$620 million is earmarked for this project over the next five years, funded through a combination of bonds and remaining balances from closed projects. He emphasized that there is no issue with funding through the next five years.

Mr. Walters recalled that he had requested a list of delayed or cancelled projects from which funding was diverted to redundancy/relining infrastructure projects. Ms. Daniel stated that while the redundant line project was already included in the CIP, the City also abandoned a rehabilitative project and diverted its funds to the redundant line as well.

Mr. Hernandez stated that approximately \$19.4 million has been diverted from other projects to emergency repairs since December 2019. Some of these costs were covered through continuing services contracts that cover unplanned work. Additional costs required use of the fund balance. He concluded that the Staff Liaison will provide the Committee with a full report identifying expenses incurred since December 10, 2019.

Mr. Verma advised that the Stormwater Fund may not be used toward these repairs. Once the condition assessment report is complete, it may be necessary to rearrange some CIP projects. When these changes are made, an amendment must be brought before the City Commission. Chair Mammano stated that the Committee would like to see this in chart form if possible. Ms. Daniel pointed out that no projects have been deferred thus far: the City is moving forward with all projects in its existing CIP budget, although this may change in the future.

## **5. Old Business**

### **A. Concluding Existing Task Force**

Chair Mammano asserted that the work of the Committee will continue, and there will be both new and continuing members on the new advisory body. New appointments will be formally adopted by the City Commission at their March 3, 2020 meeting.

## **6. New Business**

### **A. Seawall and Bridges Presentation – City Staff**

Raymond Nazaire of the Public Works Department showed a PowerPoint presentation on the City's seawalls and bridges. The Department's goal is to ensure Fort Lauderdale is a sustainable and resilient community by proactively maintaining water, wastewater, road, and bridge infrastructure.

The City owns 53 bridges and commissioned a Bridge Master Plan in 2014. This plan identifies all deficiencies and allows Staff to review the functionality and structural rating of the bridges. Structural reports include bridge history, repair options, cost estimates, constructability issues, and long- and short-term recommendations. The Florida Department of Transportation (FDOT) inspects the City's bridges and provides the City with the necessary reports.

Issues and challenges include the caustic environment created by salt and brackish water, as well as tides, sea level rise, and aging infrastructure. The conditions of the water result in corrosion: once water finds its way inside concrete structures, it corrodes the rebar within, which has a detrimental effect on the structure. If this corrosion is not repaired, it can spread to the rebar throughout the entire structure.

At present, the City has scheduled an estimated \$11.5 million in expenditures for bridges, with an additional \$1 million toward their maintenance and repair. Repairs may include painting and reinforcement of corroded material. There is currently a bridge under construction on Las Olas Boulevard at a cost of approximately \$1.4 million. Its estimated completion date is January 2021. Another bridge on Ocean Drive is scheduled for replacement at a cost of \$3.6 million.

Mr. Nazaire noted that the following bridges are scheduled for maintenance:

- NE 1 Street Bridge (recently completed), submitted to and approved by FDOT
- Bayview Drive Bridge
- NE 18 Street Avenue over Cypress Creek Canal
- NE 55 Street over Atlantic Inlet
- NE 15 Street South Fork Middle River
- Old Dixie Highway over South Fork Middle River
- SE 9 Street over Tarpon River

Ms. Scott asked how the City determines whether to make spalling repairs on a bridge rather than larger-scale repairs. Mr. Nazaire reiterated that bridges are inspected by FDOT: if a bridge is determined to be structurally deficient during these inspections, it is scheduled for replacement. The City has an annual contract for repairs.

Mr. Nazaire continued that of the City's 53 bridges, FDOT has determined 12 to be structurally deficient. Options include rehabilitation to address the spalling, depending upon its condition and the degree to which it is load-bearing. Regarding structural deficiency, he emphasized that not all such deficiencies require replacement. It may be possible to rehabilitate individual structural elements, such as the beams, slab, columns, and other elements, if it is determined that they would not result in collapse.

Mr. Partington recalled that prior to his joining the Committee, they had made four recommendations to the City Commission, including that the Commission dedicate roughly 7% to 10% of its current CIP to bridges, seawalls, roads, and sidewalks. He felt this recommendation could still be valuable to the City.

Chair Mammano asked if FDOT has performed analyses of the City's bridges since 2014. Mr. Verma clarified that bridges are inspected every two years. He will correlate FDOT's recommendation with what he sees in the field before making a determination on replacement or rehabilitation.

Senior Public Works Project Manager Rares Petrica advised that he oversees the City's engineering team responsible for seawalls, stormwater, and drainage canal dredging. He showed a PowerPoint presentation on the City's seawalls, recalling that an assessment of roughly 35 seawalls was finalized in 2018. This assessment prioritized City-owned seawalls according to structural deficiency and tendency for being overtopped during king tide events.

Based on this prioritization, the City has decided to first address two seawall areas: Cordova Road and Isle of Palms. Once these improvements are complete, four additional seawalls have been prioritized to follow: Del Mar, 10 Street, and two seawalls on Las Olas. Funds for these improvements came from the sale of properties.

Mr. Petrica continued that the Cordova Road seawall is roughly 2200 linear ft. in length. In addition to replacing the seawall structure itself, the City must also improve drainage

on its back side. Construction began in October 2019 and is expected to last approximately 12 months. The total construction cost, including design fees, landscaping, and dock removal, is estimated at \$6.6 million.

Mr. Petrica reviewed the drainage issues at this location, noting that the seawall will be raised to an elevation of 5.0, which is higher than expected king tides. The City will install one-way check valves to the structure and will construct a new seawall within 18 in. of the face of the existing wall. All drainage structures must be extended so they can penetrate the new seawall.

Mr. Zeltman expressed concern with the planned outfall valves, which are prone to corrosion and may not be located above low tide as sea level rises. Mr. Petrica explained that these valves will be constructed of stainless steel. He added that the elevation of the valves is related to the rim elevation of the catch basin: if this elevation is higher than low tide it is expected to be sufficient. It will, however, become wet during combined rain events and high tides.

Chair Mammano asked why the City is not planning to deal with rain events as well as the overtopping of seawalls. Mr. Stresau observed that when he had addressed this issue with representatives of the Public Works Department, he was informed that this would force stormwater onto private properties. He asserted that raising the seawall to 5.0 would result in flooding of the roadway, swale, and properties on Cordova Road.

Chair Mammano asked why there are no pumps planned to deal with rainwater on this roadway. Mr. Petrica advised that while new pump stations are proposed, none would be located on Cordova Road. Mr. Stresau characterized the plans for Cordova Road as improving the seawall against being overtopped by the ocean rather than improving drainage.

It was noted that the seawall is sufficiently continuous that water cannot intrude around its sides. Mr. Petrica stated that adjoining property owners are responsible for raising the height of their seawalls. Mr. Walters recommended that the City work with homeowners who cannot afford to raise their seawalls by providing them with a loan at low or no interest in order to implement these improvements.

Mr. Partington commented that many neighborhoods seem to be content with interim measures implemented by the City to address seawalls and flooding. He also noted that funds will need to be budgeted for annual maintenance of the planned improvements. Chair Mammano added that another consideration is whether or not the City has sufficient in-house capacity to undertake and maintain multimillion-dollar projects of this nature. Mr. Stresau stated that it was insufficient to address seawalls without also improving drainage to deal with king tides, storm surges, or rain events.

Mr. Petrica advised that because rain does not overtop the seawall, providing relief from rainwater is not part of the project's intent: rain goes into catch basins and from there to

the seawall. In addition to raising the seawall, the City is also adding new catch basins and improving outflow infrastructure.

Mr. Petrica also reviewed planned seawall improvements on Isle of Palms, where approximately 900 linear ft. of seawall requires an estimated \$1.9 million in costs. This seawall was badly damaged and at a low height. Roughly 300 of the 900 ft. have been installed and the project is progressing quickly.

Mr. Partington estimated that the seawall along Cordova Road represents approximately 10% of the total length of City seawalls. Extrapolating from the \$6.6 million estimated cost at this location, he noted that this would mean repairing all City seawalls would have a cost of over \$60 million. Mr. Petrica pointed out that not all City seawalls will require as much work as the one on Cordova Road. Additional infrastructure is also planned for Isle of Palms, including new seawalls with an elevation of 5.0 and a concrete cap, as well as a new roadway surface. Chair Mammano asked if FDOT and the County own some of the seawalls within Fort Lauderdale, and if a map could be provided showing the ownership of public seawalls.

Chair Mammano asked if subsequent seawall projects would be funded using enterprise funds or CIP dollars. Mr. Hernandez replied that while seawalls are typically paid for from the City's general fund, the City is considering funding portions of seawall work through stormwater fees. This would apply to projects where seawalls are included in the City's stormwater systems. "Stand-alone" seawall projects, however, will continue to be funded with general fund dollars. Seawall projects intended only to keep seawater out are not eligible for stormwater fee dollars.

## **7. Informational Items**

Chair Mammano stated that the Committee has received several "key pieces of information" over its 36-month life, and asked if any missing key information could be provided by Staff to the incoming new members. She offered to provide a list of the informational materials she felt were necessary in this respect. Mr. Verma agreed to look into the possibility of an informational packet that could be distributed to new members.

The members also discussed the ongoing issue of repairing older infrastructure that is breaking down rather than implementing new infrastructure. Mr. Stresau observed that another key issue is the possibility of declaring a moratorium on continued development until the City's infrastructure is deemed to have sufficient capacity to accommodate it.

Mr. Verma expressed concern that the City's recent infrastructure crises have taken priority over regular maintenance, and emphasized that Staff is working to address multiple fronts at the same time as a result. All these conditions must be taken into account when considering the work that is being prioritized at the moment.

Chair Mammano suggested that new members of the Committee may require an orientation meeting to bring them up to date on what has been accomplished and what is underway. Mr. Verma replied that he would be willing to review previous Committee business with new members or provide materials that could inform them of what has been discussed in the past.

Ms. Daniels noted that during today's meeting, the Committee requested the following information:

- Identification of where each break is located
- Possibility of low-interest loans to assist residents with the expense of raising their seawalls
- Preparation of a "welcome package" for new members
- Identification of the source of funds for prioritized projects

Mr. Stresau emphasized the need to focus not only on pipes, but on how the Department of Sustainable Development determines capacity. He pointed out that this information could be key in the event a moratorium is considered or declared. Mr. Ostrau asked that information on the framework necessary to declare a moratorium be requested from the City's Legal Department.

Mr. Zeltman commented that most moratoriums are preceded by action from regulatory or health departments, which determine that treatment facilities are insufficient. He felt the City should consider imposing a moratorium on areas in which a large amount of development is anticipated but the surrounding infrastructure is insufficient to accommodate it. Mr. Verma noted that this adequacy includes wastewater capacity during the construction process. He added that the City now uses software to help determine adequacy of various elements. The software is currently being updated to consider additional elements.

Mr. Partington asked what action the Committee would take regarding the reasons behind recent breaks. Chair Mammano reiterated that creating a City web page with this information could address some of the questions and concerns raised by the public. Mr. Partington emphasized the need to share information that led to corrective or preventative action being taken to improve the City's infrastructure, rather than providing information only for its own sake. Mr. Zeltman noted that other municipalities with similar conditions could learn from the action taken by Fort Lauderdale.

Mr. Verma concluded that Staff would compile introductory materials for incoming Committee members as well as providing brief responses to the questions raised at today's meeting.

## **8. Public Comments**

None.

**9. Adjournment – Next Regular Meeting Date Monday, April 6, 2020**

There being no further business to come before the Committee at this time, the meeting was adjourned at 4:02 p.m.

Any written public comments made 48 hours prior to the meeting regarding items discussed during the proceedings have been attached hereto.

[Minutes prepared by K. McGuire, Prototype, Inc.]

Draft