



CITY OF FORT LAUDERDALE

**MEETING MINUTES
CITY OF FORT LAUDERDALE
INFRASTRUCTURE TASK FORCE ADVISORY COMMITTEE
FORT LAUDERDALE EXECUTIVE AIRPORT
RED TAILS CONFERENCE ROOM
6000 NW 21 AVENUE, FORT LAUDERDALE, FLORIDA
MONDAY, AUGUST 5, 2024 – 2:00 P.M. TO 4:00 P.M.**

January-December 2024

Attendance

Marilyn Mammano, Chair	P	7	0
Peter Partington, Vice Chair	P	4	3
Gerald Angeli	P	7	0
Gregory Barnett	P	4	0
Shane Grabski (arr. 2:10)	P	5	2
James LaBrie	P	7	0
Michael Lambrechts (arr. 2:07)	P	6	1
Marta Reczko	P	6	1
Roosevelt Walters	P	7	0
Ralph Zeltman	P	7	0

As of this date, there are 10 appointed members to the Committee, which means 6 would constitute a quorum.

Staff

- Alan Dodd, Public Works Director
- Chris Bennett, Assistant Public Works Director – Strategic Support
- Omar Castellon, Assistant Public Works Director – Engineering
- Semele Williams, Senior Administrative Assistant
- Daniel Fisher, Senior Project Manager
- Brandy Leighton, Senior Project Manager/Special Engineer
- Franklin Torrealba, Principal in Charge of I&I Program
- J. Opperlee, Recording Secretary, Prototype, Inc.

Communication to the City Commission

Motion made by Vice Chair Partington, seconded by Mr. Walters, that the ITF supports and recommends funding for updating the Utility Strategic Master Plan in the 2025 budget. In a voice vote, the **motion** passed unanimously.

1. Call to Order

i. Roll Call

Chair Mammano called the meeting to order at 2:01 p.m. Roll was called and it was noted a quorum was present.

ii. Approval of Agenda

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

iii. Approval of Previous Meeting Minutes – June 3, 2024

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

2. Old Business

i. Cityworks Update

Mr. Barnett requested an overview of the Cityworks program, including its scope, who will use it, when initial data will be made available, and how that data will be used toward long-term planning in the future. Chris Bennett, Assistant Public Works Director (Strategic Support), explained that the program's goal is to have an asset management program, assisted by the CityWorks software, which will ultimately help with both the City's Capital Improvement Program (CIP) as well as maintenance.

Mr. Barnett asked which systems will be included in Cityworks. Mr. Bennett replied that the City's Stormwater Division has used Cityworks for almost two years, which means all its assets are in the geographic information systems (GIS) map. When the operating team is in the field, they update data for these assets as they perform the work. Due to software integration issues and delays, the Water Distribution team has not started working in the Cityworks system, however, they will begin using Cityworks by the end of this year, with similar responsibilities. The Sewer Operations team has been using Cityworks for over a year. There has also been a difficulty related to integration of water information with the City's billing software.

Mr. Lambrechts arrived at 2:07 p.m.

In addition to maintenance, the Cityworks system is also kept up-to-date on capital improvements. When developers make changes to water/sewer/stormwater infrastructure, and when the City works on CIP projects, updates are made to the GIS map. The goal is for as-built information to eventually be submitted electronically from consultants and contractors; however, at present these are converted to GIS format and entered into the Cityworks database by Public Works staff.

Mr. Barnett asked if seawall repairs will be part of the Cityworks system. Mr. Bennett confirmed this, adding that the goal is for all Public Works assets, including seawalls, roads, sidewalks, curbs, and gutters, to be included in the system. Other City

Departments, such as Parks and Recreation and Transportation and Mobility, also want their assets to be added to the system once it is fully functional.

Mr. Grabski arrived at 2:10 p.m.

Public Works Director Alan Dodd advised that work must be funded in order to be added to Cityworks. The City is able to fund the input of water, sewer, and stormwater into the system, but this has not been done for projects funded through the General Fund at this time.

Mr. Barnett asked if seawalls will be added to Cityworks as the next step. Mr. Bennett replied that a seawall assessment is currently underway to update the City's Seawall Master Plan. This includes the reassessment of the conditions and cap elevations of all City-owned seawalls. Although not all City seawalls are managed by Public Works, they will be added to the Cityworks database.

Mr. Bennett continued that all information currently in the GIS database has been entered into Cityworks. There is currently an ongoing effort in which a consultant is updating GIS information with as-built drawings. The consultant may edit, add, or delete assets as they work.

Mr. Barnett requested clarification of whether Cityworks data matches what Public Works Staff sees in the field. Mr. Bennett explained that in the field, Staff has encountered pipe sizes or locations that do not match what is on record. This is due in part to the backlog of as-built drawings that have not yet been uploaded to the system. He further clarified that most of the work done by Stormwater operations employees is cleaning and minor repairs. They are updating the system with new information when discrepancies are identified.

Mr. Barnett asked if the data gathered by Public Works employees could be used to identify areas of the City in which existing drainage is insufficient, such as places where the pipes are not large enough to handle the flow. Mr. Bennett stated that the Stormwater Master Plan includes a detailed model which is now being updated in advance of the next round of Stormwater Master Plan projects. This model assists in showing where there is or isn't existing infrastructure, as well as whether or not that infrastructure is undersized. The model shows many of the same issues, such as flooding in specific areas, that are reported by customers.

Mr. Dodd advised that the City is updating its model of the entire stormwater system as well as designs of vulnerable neighborhoods. This will allow the next wave of stormwater improvement projects to move forward.

Mr. Bennett stated that the Stormwater Master Plan helps Public Works determine which projects should be prioritized. Areas that experience major and/or recurring flooding are also included in prioritization planning. The projects dictated by the Master Plan are

determined by modeling as well as by historical flooding and resident complaints. The City has to prioritize which areas are addressed first.

Mr. Walters asked if there will be further in-depth discussion of seawalls, including how to encourage private property owners to improve or raise their seawalls. He pointed out that if only some of the City's seawalls are raised or improved, this will not be effective unless all structures are raised. Chair Mammano recalled that a City proposal which would have required private seawalls to be raised was unsuccessful in the past, as the City had not offered any assistance to private owners.

Mr. Grabski commented that the City has enacted an Ordinance addressing seawalls which is consistent with a Broward County Ordinance. Mr. Dodd noted that Fort Lauderdale's Ordinance acts as a model for other cities which wish to require a minimum elevation for seawalls. The County's Tidal Barrier Ordinance follows a similar format, but used an updated elevation based on the most recent projections by climate compacts.

Mr. Dodd continued that once water has overflowed a seawall and affects neighboring properties or the public right-of-way, this triggers Code Enforcement action. It was further clarified that seawall height must be raised to 4 ft. by the year 2030 and to 5 ft. by 2060. This is also consistent with the County's Ordinance.

Chair Mammano requested that a copy of the City's Seawall Ordinance be emailed to the Committee members for informational purposes. It was determined by consensus that more information on seawalls would be part of the next month's Agenda.

Mr. Barnett expressed concern that Cityworks is not yet tracking seawalls. Mr. Dodd advised that the City has seawall cap or height information; however, the City only manages or improves its own seawalls. Mr. Barnett asserted that this information is not the same as a full survey to determine seawall elevations, as the City does not have the right to enter private property and survey those structures. Chair Mammano reiterated that a seawall update would be placed on the next Agenda.

Vice Chair Partington asked if GIS information is accessible to the public. Mr. Bennett replied that it is not, although some of the information can be accessed through public records requests. This is because the City cannot guarantee the accuracy of the information, which creates liability. There are also security issues related to some aspects of the information.

Vice Chair Partington asked if GIS information is used when excavations are made. Mr. Bennett stated that the City's Utilities Operations Department includes locator teams: when a project enters the construction phase, they are required to follow state rules for locating the City's three underground utilities maintained in rights-of-way, which are water, sewer, and stormwater. Utilities are marked for both public and private projects, and Cityworks is used to generally or accurately identify their location.

Mr. Dodd advised that Cityworks is not an answer to all the City's mapping problems: it meets certain needs of the Department, such as knowing where infrastructure is located and tracking its size, materials, and condition. Cityworks is only one part of the information used in the field.

Mr. Barnett stated that in his experience, large data sets are no longer used when the user has no confidence in the quality of the data. He emphasized the importance of ensuring that data users can provide feedback that can improve its quality. Mr. Bennett explained that the users keep data up-to-date as they work on the system. This is part of the City's developing asset management program. He acknowledged that staffing must still be built up to meet this need.

Ms. Reczko asked if large infrastructure such as the new water treatment plant was included among the mapping of City assets. Mr. Bennett confirmed that City plants are in the process of being collected into Cityworks. The consultant responsible for addressing the backlog of as-built information has also surveyed major aspects of assets at the George T. Lohmeyer Wastewater Regional Treatment Plant. This information is also being added to Cityworks.

Ms. Reczko asked if the contractor of the new water treatment plant will provide a list of the assets that will be installed in the plant, as this could save the City a great deal of future work. Mr. Dodd replied that the project company will oversee the maintenance of the new plant using City employees and will hand their records over to the City. The City will have total access to this information at all times.

Mr. LaBrie stated that when Public Works employees provide information on seawalls at a later meeting, a representative of Code Enforcement should also be present.

Chair Mammano asked if Public Works has sufficient staff to gather information and enter it into the asset management system. Mr. Bennett replied that while there are several staff vacancies at present, funding is sufficient to proceed through at least the next five years. The City is actively seeking to fill the vacant positions, although the process is taking longer than expected. It can also be difficult to fill the positions with the salaries the City is able to pay.

Mr. Dodd noted that while there are existing vacancies, there are also contractors who are working to help the City fill these gaps. Both in-house and contract personnel are needed to fulfill the asset management system.

Chair Mammano requested that Dr. Nancy Gassman, Assistant Director of Public Works (Sustainability), as well as a representative of Code Enforcement, attend the next Committee meeting to provide an update on seawalls. She again requested that the Committee members be provided with copies of the City's seawall Ordinance.

ii. Water Treatment Plant Update

Senior Project Manager Daniel Fisher gave a PowerPoint presentation on the new water treatment plant, on which work began in March 2023. At present, the project is roughly 40% complete. The site has been excavated to an elevation of zero, and the first foundation for the nanofiltration building has been poured.

Mr. Zeltman requested information on a change order addressing the new plant's ability to meet Category 5 hurricane standards. Mr. Fisher stated that a change order was issued in December 2023 to implement a concrete rather than a prefabricated metal building. This was done at the City's request and the City paid for the change. This also required the building to be enlarged slightly in order to bring other City assets into the facility.

Mr. Fisher continued that the project company recommended that the City enlarge some of its piping, pumps, and equipment to house more chemicals in order to meet water quality standards that minimize corrosion. Another recommendation was a pipe study. The concern was that the existing distribution system is suited to carrying water from the Fiveash Water Treatment Plant, but could result in lead corrosion when cleaner water is sent through the pipes.

Mr. Lambrechts requested additional information on the change order, asking if the City had previously approved a prefabricated building. This was confirmed, and it was noted that the proposed steel building was hurricane-rated would have met Code. As the project moved forward, and there was discussion of storing additional City assets, there were complaints from neighboring residents regarding the appearance of a steel building. These concerns were taken into consideration as part of the change order. The total cost of the change was \$3 million.

Mr. Fisher further clarified that the comprehensive agreement approved in February 2023 had specifically called for a facility able to withstand a Category 5 hurricane. This referred to the metal building proposed at that time.

Mr. Walters requested additional information on how cleaner water running through older pipes can create corrosion. Mr. Fisher explained that the primary concern is for lead corrosion: the City is responsible if lead leaches into water from homes, including older homes that may have lead service lines.

Chair Mammano recalled that residents were recently informed that the City is undertaking a City-wide pipe study, and requested more information on this study. Mr. Dodd stated that the original comprehensive agreement included studying the impacts of water from the new plant on the distribution system so the plant can ensure it is using the correct balance of chemicals. The City is aware that some adjustments will be needed to optimize the system. They have also recognized that the chemical balance of the water coming from the new plant could have negative effects on the existing water system if that system is not adjusted properly.

Vice Chair Partington asked if the City inspection would also include the materials used in pipes that extend into homes. Mr. Dodd replied that the inspection extends only as far as the meter box. Vice Chair Partington concluded that the email is unrelated to the new water treatment plant but is a separate requirement that can reveal information useful to the City.

Ms. Reczko asked if there is a target date for the results of the City's pipe study. Mr. Fisher replied that the City has initial results from the desktop study, although the actual pipe study has not yet been completed. The cost of the study is roughly \$6 million. Mr. Dodd advised that the study was part of the City's comprehensive agreement with the private partner.

Ms. Reczko asked if the City will also be required to pay for PFAS testing. Mr. Dodd replied that the proposal for this testing is estimated at \$4 million. He recalled that when the comprehensive agreement was negotiated, no interim rule on PFAS had been published, which meant the City did not know the required standard at that time. The study is required in order for the City to be certified as meeting PFAS regulations and must be incorporated into the agreement.

Ms. Reczko asked what other water treatments are recommended to meet PFAS standards. Mr. Dodd replied that in addition to nanofiltration, ion exchange can also be used to address PFAS. The new water treatment plant system the City will use combines 70% nanofiltration and 30% ion exchange. The comprehensive agreement was modified to ensure that the plant meets PFAS requirements.

Chair Mammano asked if the City can expect to recoup some funds through its participation in a lawsuit related to PFAS. Mr. Dodd replied that the City will recoup some of these dollars, although he could not estimate the overall amount, as the settlement will be apportioned based on PFAS levels and other considerations. The recovered funds will go into the project to offset some of its costs.

Mr. Fisher advised that the engineer's design estimate was \$3 million, and the project company's estimate was \$3.1 million.

Mr. Fisher continued that the project company is currently drilling one of the deep injection wells to a depth of approximately 3500 ft. The City's infrastructure obligations include electricity as well as the raw water line.

In January 2024, the City awarded an unsolicited proposal for the construction of a 48 in. water main from the new plant to Fiveash. The first phase of this construction process is complete and the next step will involve the pulling of pipe.

Mr. Zeltman asked if there has been consideration of installing a second pipe between the new plant and Fiveash as a redundancy. Mr. Fisher stated that the project company

plans to install a valve with two outlets and one of the raw water lines going to the Fiveash plant will be rehabilitated.

Ms. Reczko asked if the Fiveash plant will be decommissioned for water treatment and will serve only to send water to the new plant from ground storage tanks. Mr. Fisher confirmed that enabling Fiveash to pump water was another of the City's infrastructure obligations under enabling works. High-service pumps at Fiveash will need to be rehabilitated or replaced to push water into the distribution system.

Ms. Reczko requested information on plans for the Peele-Dixie Water Treatment Plant. Mr. Fisher replied that this plant will continue to operate, as it already uses nanofiltration.

Chair Mammano requested that the Committee be updated on the new water treatment plant on a quarterly basis. There was also brief discussion of how the Committee members may arrange for a "field trip" to view the new facility under construction. Mr. Dodd recommended that the Committee reach out to his office to schedule a visit.

iii. I&I Contract Update

Brandy Leighton, Senior Project Manager/Special Engineer, and Franklin Torrealba, Principal in charge of the Inflow and Infiltration (I&I) program, provided the Committee with an update on this ongoing effort.

Mr. Torrealba stated that the program operates on the following four fronts:

- Manhole inspections: there have been inspections of roughly 9.5% of all manholes
- Smoke testing: this has been conducted on 14% of manholes in the sewer system and 217 defects have been identified
- Nitro isolation: identification of the sewer pipes into which water is flowing
- Testing to determine how much flow is coming into each pump station through I&I

Mr. Walters asked what types of defects have been identified thus far. Mr. Torrealba replied that these can include ground leaking, breaks, or age.

Vice Chair Partington requested more information on how smoke testing is done and what the City is looking for. Mr. Torrealba advised that this is done during the dry season so the water table does not affect results. Liquid smoke is blown into the system to identify leaks, illegal connections, or defects in pipes. The Police and the public are notified of the testing.

Chair Mammano asked if the number of linear feet that display problems requiring further investigation is typical. Mr. Torrealba replied that Fort Lauderdale's numbers are roughly average. Ms. Leighton explained that Public Works begins by examining basins that are projected to have the most I&I, which means they will see higher numbers at the beginning of the program than later.

Ms. Reczko commented that the lining of pipes not only addresses I&I but extends the useful life of pipes as well, which is a cost benefit. Mr. Torrealba stated that the City follows a cost-effective I&I protocol, which determines the most economical and best way to address the problem. This often includes cutting down on open construction which can disrupt traffic.

Chair Mammano requested more information on the financial overview through the next several fiscal years, including how much money is budgeted for I&I in each year. Mr. Torrealba replied that the first year of the program included activities such as smoke testing, public notification, and creation of a website.

Mr. Torrealba continued that the project is reflected in the proposed CIP for fiscal years (FY) 2025 through 2029 at an estimated total of \$66 million. Depending upon the amount of I&I reduced and the pipe conditions, more funds may be required to perform the actual work.

Chair Mammano observed that 25% of the work will have been completed by the end of 2025, funded in part through the Consent Order and partly through the CIP. Mr. Lambrechts recalled that the typical lifespan of a repaired basin is roughly 10 years. Ms. Leighton clarified that this depends upon the nature of the repair: lining can last for up to 50 years, although its warranty is only for 10 years.

Mr. Lambrechts asked what the City is doing to track the lifespan of the repairs it makes. Mr. Dodd replied that as part of the City's asset management program, Staff monitors the run times for all lift stations each month. When the stations begin averaging close to 10 hours of run time, this shows that there are either capacity or I&I issues. There will also be inspection and evaluation of the system feeding into the station to determine if additional relining or replacement is necessary.

Chair Mammano recalled that the Committee previously saw Staff's analysis of pump station run times in areas where these stations were repaired under the bond program. She asked if these facilities will be revisited for testing to ensure they continue working properly. Mr. Torrealba explained that progress is tracked using key performance indicators (KPIs) for each station as well as for the system as a whole.

Chair Mammano also noted that some I&I may be coming from pipes on private property rather than City pipes. Mr. Torrealba stated that the City hopes to determine what can be done to encourage homeowners to make repairs of their own lines.

Vice Chair Partington requested clarification of where the money for this project is coming from. Mr. Castellon replied that there is a remaining balance that has been budgeted in the CIP to address I&I.

Mr. Lambrechts commented that the program overview anticipates between six and nine million gallons per day (MGD), and asked how much removing this amount of flow would

affect the overall system. Mr. Dodd advised that roughly one MGD of additional development is added to the system each year, and up to 20 MGD going into the plant can be attributed to I&I.

Chair Mammano observed that the City will continue to approach its permit limit for MGD treated at the Lohmeyer plant, even with reductions in I&I. She asked what would happen when the City reaches that limit. Mr. Dodd replied that at present, the injection wells are a limiting factor. He acknowledged that if the City continues to grow, they will eventually reach a physical maximum and will have to consider ways to either increase the capacity of the plant itself or build a new plant.

Mr. Dodd continued that the injection wells are designed by capacity to hold 92 MGD, although the City is currently not physically able to inject that much water. Mr. Castellon also noted that the injection wells are being cleaned more often than they were in the past, which also helps with capacity.

Mr. Dodd stated that Public Works has requested \$3 million to update the Strategic Master Plan in the FY 2025 CIP. This will include a review of the entire system and help determine which improvements the City should plan for over the next 20 years. This will include a closer look at the Lohmeyer plant, the entire collection system, injection wells, and other factors.

Chair Mammano recommended that the Committee send a communication to the City Commission in support of Public Works' request for an updated Strategic Master Plan.

Motion made by Vice Chair Partington, seconded by Mr. Walters, that the ITF supports and recommends funding for updating the Utility Strategic Master Plan in the 2025 budget. In a voice vote, the **motion** passed unanimously.

It was determined that this **motion** would be sent as a communication to the City Commission.

A question was asked regarding whether the City or its consultant will establish the priority list for addressing I&I. Ms. Leighton replied that the consultant will make recommendations on prioritization.

Mr. Barnett requested an example of an inflow problem that would receive high prioritization. Ms. Leighton advised that the damage to some pipes is visible. Mr. Torrealba added that storms, heavy rainfall, flooding, and high tides result in a rising groundwater level, which contributes to damage. Mr. Dodd recalled that during a recent heavy rainfall event in June 2024, there was a noticeable difference of 30 to 40 MGD in the flows coming into the treatment plant.

Chair Mammano requested that copies of the I&I presentation be sent to the Committee members.

3. New Business

i. Vote on next ITF Meeting date Since September 2, 2024 is Labor Day

Motion made by Vice Chair Partington, seconded by Mr. Walters, that the September meeting of the ITF be held on Monday, September 9. In a voice vote, the **motion** passed unanimously.

4. Public Works Update

ii. CIP Financial Report

iii. Water & Sewer Breaks Report w/Mapping

5. General Discussion and Comments

i. Committee Members

Mr. LaBrie stated that the City Commission has identified its FY 2025 priorities, which include:

- Infrastructure and resilience, specifically referring to planning for the future capacity of the Lohmeyer plant
- Enhancement of waterway quality
- Stormwater drain cleaning
- Expanding the utility undergrounding program
- Encouragement of commercial recycling, including passage of the “Green Your Routine” program
- Exploration of funding opportunities for dredging City canals
- Expedition of Ordinance creation for the tree canopy
- Passage of a trash Ordinance

Mr. LaBrie continued that while the Chair had presented the Committee’s recommendations regarding a new City Hall to the Commission, he did not see a copy of the final document. Chair Mammano requested that Staff send copies of the final recommendations to the Committee members.

Mr. LaBrie also recalled that at the July 7, 2024 City Commission meeting, the Urban Land Institute (ULI) gave a presentation on a new City Hall. He encouraged the Committee members to watch this presentation online.

Mr. LaBrie concluded that there had also been a presentation at the July 7 Commission meeting on the new Police Department building. A number of human errors were identified in the design of the building which have caused significant problems. Mr. Walters added that one outcome of the Police Department building presentation was that

cost overruns will be borne by the construction company and the party responsible for designing the building. It was emphasized that no City Department was responsible for the errors.

Mr. Walters also recalled that some time ago, the Committee had requested that whenever a project was not implemented or was delayed, any monies reserved for that project would be moved to another project of the same kind. He stated that the Committee had requested a printout of where these funds would be moved to, but have not seen these reports.

Mr. Dodd observed that the document the Committee is requesting is a budget amendment document. Twelve of these are issued each year, once per month, and the documentation includes a breakdown of how money is moved from one project to another. He confirmed that these can be provided to the Committee.

Mr. Walters also asked if minutes were taken at the June 4, 2024 joint workshop between the Committee and the City Commission. It was explained that the minutes of that workshop were part of the City Commission's minutes rather than the Board's. Mr. Walters stated that he would like to review these Commission minutes to ensure their accuracy. Senior Administrative Assistant Semele Williams advised that the minutes of the workshop were taken by a member of the City Clerk's Office.

Mr. Walters also requested that the Committee see the projected costs of a new City Hall as well as the current ongoing rent being paid by City Departments which were displaced by the 2023 flood event. Mr. Dodd replied that this request can be passed on to Assistant City Manager Laura Reese, who oversees the City's budget. Chair Mammano requested that Ms. Reese be invited to update the Committee at their next meeting.

Mr. Castellon concluded that Staff will look into the availability of the Committee's regular meeting space for the September 9, 2024 meeting.

ii. Public Comments

None.

6. Adjournment – NEXT SCHEDULED MEETING DATE: To be announced

There being no further business to come before the Committee at this time, the meeting was adjourned at 4:32 p.m.

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