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INFRASTRUCTURE UPDATE

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The series of sewer main breaks that transpired over the last couple weeks in Rio Vista, Victoria Park and Coral Ridge has truly been an unfortunate event for the Fort Lauderdale community. The impact on people's lives and our precious environment is distressing.

I'd like to thank city staff and our contractors for the many hours they worked to make emergency repairs and begin the environmental cleanup. This was additional time that I'm sure many of them wished could have been spent with family and friends over the holidays. Their quick and efficient work is worthy of our strong praise.

Most of all, I want to extend my gratitude to the residents of the impacted neighborhoods for their patience and understanding.

I asked the city manager, staff and my fellow city commissioners to join me here this evening so we could explain to the public the plans to rebuild our underground infrastructure. I hope as a result, those in our community will once again recognize our commitment to ensure that our water, sewer and stormwater systems will keep pace with the demands that we have put on them.

We cannot have sewage regularly flowing through our streets, yards and waterways. It is simply unacceptable.

There won't be catchy slogans for this undertaking, but rather a sharp focus on getting the job done. This City Commission intends to invest as much as possible as fast possible across all our vital infrastructure — not only our sewer system, but our water and stormwater utilities as well.

You would think that installing new pipes and building new pump stations would not be the normally eye-catching news that grabs headlines, leads TV programs or lands on your Twitter feed. But here we are.

When this City Commission took office in March 2018, we vowed that infrastructure would be a top priority. In fact, one issue that led me to run for mayor was my frustration with the pace of infrastructure improvement. It was something we sorely needed.

No one – not me, not the city manager, not the City Commission — is happy about what happened in December. But the fact is we have made major strides after inheriting an untenable situation.

The issues we are now addressing did not occur overnight - and cannot be fixed overnight.

Let's remember how this commission's tenure began. We were burdened with a management team that was in total denial of the condition of our infrastructure and whose policies and priorities were in fact responsible for the years of inattention.

They abandoned water and sewer master plans – including the replacement of the 54-inch sewer main that runs through the core of the city. This was a line that everyone knew was at risk of failure, and that’s what happened in the run-up to Christmas in Rio Vista.

The prior administration raided utility funds and spent the money to balance the budget for the city’s general operations. This shell game took \$20 million a year that should have been earmarked for utility maintenance and upgrades. In all, they drained \$120 million in reserves.

It took us time to assemble new leadership at the top of city government and in the Public Works Department. Just a year ago, we hired Chris Lagerbloom as city manager. He brought energy and a drive for innovation. He then hired Rob Hernandez as his deputy. And, I’m pleased to announce that a new public works director is starting next week.

After a national search, the city manager has hired Raj Verma.

He comes with more than 30 years of experience directing and leading water, wastewater and stormwater utilities. The great thing is he also previously worked here and knows our system and our needs well.

And... He is a professional engineer. Our prior administration did not think it necessary to have an engineer running the Public Works Department. We do.

Extricating the city from the annual utility raids was equally difficult given the level of dependence that the prior administration created. I fought it then, and now we’ve changed it.

This commission decided to wean the general operations off the use of the utility money over a four-year timespan. The city manager now believes we can do it in three years or less.

To have attempted it all at once would have shocked the budgetary system overnight by withdrawing the support in a single year. Still, the money we have restored is allowing us to act more aggressively in addressing infrastructure needs.

So, what is this new course that City Manager Chris Lagerbloom – and this commission – have charted?

We have launched a five-year plan of major undertakings and are putting in place the means to fund this important work so the city can be resilient, competitive and secure in the evolving world of the 21st century.

Yes, even before the December breaks, plans had been drawn up and we were already at work.

The irony of what occurred is that this City Commission allocated money to begin the rebuilding of the 54-inch line days before it broke. That financing was based on engineering plans that were already shovel-ready.

This pipe was installed in the 1970s and suffered from major corrosion. Worse, although it is the main line serving the center of the city, there was no back-up in case of problems. The situation should have been addressed long ago.

The city manager has used his emergency purchasing authority to fund a design/build project to immediately replace the disintegrating pipe in Rio Vista. That section of the work should be completed within 90 days.

This is an immediate fix that will get rid of the bypass that was put in place to stop the sewage flow into the waterways and streets.

Two days ago, this commission approved the long-term fix: the replacement of the entire seven miles of collection line from its start at the Coral Ridge Country Club to the sewage treatment plant at Port Everglades.

This critical sewer main will be brought into the modern era. It's one of three primary north-south lines in the city. The other two are newer and do not pose a threat.

The manager plans an innovative approach with a pair of contractors working together to compress the construction schedule to 18 months. This will take months, not years!

Once that is completed, the old line will be revitalized with liner sleeve technology so we will have a backup pipe that can be used should a break occur on the other.

And, he's accomplished this at a lower price than anticipated. Our consultants had previously estimated building a new line would cost \$80 million, but the city manager's signed contract is for about \$65 million.

Hopefully, this is a sign that all upcoming projects can be done at a lower cost. If so, the saved money will be plowed into further underground work.

In all, four major projects are now underway in response to the December events. The immediate repair in Rio Vista and the replacement of the entire 54-inch line that I just mentioned are two. The others are the replacement of the pipes that broke in Victoria Park and Coral Ridge.

Let me emphasize that: Work is underway as we speak.

The speed and scope of this action speaks to this commission's commitment to the community to greatly improve infrastructure. I earlier said that we have been making progress on infrastructure. This cannot be understated.

With our sewer, we are ahead of schedule in addressing an action plan that the city set with the Florida Department of Environmental Protection following breaks in 2017.

In all, we have completed almost half of the 51 milestones listed in the DEP's consent order with the city.

Four miles of new sewer mains now serve downtown and Northwest neighborhoods. Work on the main serving Las Olas is underway.

Our focus has been on lengthy, large-diameter force mains critical to the entire system that were made of high-risk material. Significant sections are more than 50 years old and at the end of their service lives, according to the Reiss Report. That's a report that the city had commissioned.

Pump stations serving the Central Beach and Harbor Beach have been replaced and one in the Imperial Point neighborhood has been rehabilitated.

The city also has been working extraordinarily hard to prevent the infiltration of groundwater and stormwater into our systems. Heavy rains have in the past caused sewer overflows, reduced capacity in the system and led to costly treatment expense. The Reiss Report indicated that this was a major problem that had gone unaddressed.

As a result, some 43 miles of sewer have been evaluated to identify problems. Almost 1,000 manholes have been assessed. Today, more than 36 miles of sewer have been lined to prevent inflow based on our evaluations.

What is next? Plenty.

We expect an assessment of the entire sewer force main system to be completed by March. Let me say that again.

We will have completed an assessment of the entire sewer main system. We will no longer be blind to where our problems are or the degree of their severity.

Further, the remainder of the work to prevent stormwater infiltration in designated priority basins will be completed this year.

That encompasses the entirety of the Rio Vista, downtown, Victoria Park, Flagler Heights, Dorsey-Riverbend and Central Beach sewer basins. These were the areas that have experienced the most severe intrusion.

We fully intend to complete the entirety of the work required under the consent order well ahead of the September 2026 deadline.

Another \$177 million is scheduled to be invested in 118 miles of pipe. And, \$20 million in funding is already committed to repair or rehabilitate 29 pump stations over the next five years.

Moreover, we are making critical upgrades at the George T. Lohmeyer Wastewater Treatment Plant. And, work on our 3,000-foot deep injection wells will be completed in March.

I think we can say that despite the setbacks of late, Fort Lauderdale is headed in the right direction in fixing our sewer system – rapidly and without delay.

Still, I think this commission needs to commit itself to go even further than this. Several additional steps became clear to me as I met with our key staff over the past couple weeks.

I am proposing that we must immediately make use of the sewer line risk analysis to broaden our construction program.

We have already identified in this review which pipes are at a high risk of failure. We should accelerate our construction program to fund their repair or replacement as soon as possible. We must be proactive.

To fund these initiatives, we will look to our management team to recommend fair and balanced measures to raise needed funds. Keeping this in mind, residents should not shoulder the entire burden.

We already are making developers pay more of the cost.

This was unreported in the news media, but the City Commission raised the water and sewer impact fees assessed on new development in September of last year. The new rate structure went into effect at the end of December.

This was the first update on the impact fees since 2005. Imagine: Our impact fees had not been adjusted in 15 years.

The adjustments we made were dramatic. The sewer impact fee more than tripled. Water impact fees increased more than 40 percent.

This will generate critical revenue that will be spent on expanding our utility network.

I've asked the city manager to undertake a broader review of all other impact fees to see if there are other updates required. He has promised to do this.

I am proud to say that the leadership of the business community and representatives of many of the developers have already told me that they understand the situation and want to help proactively in resolving our infrastructure challenges. I thank them for their willingness to be involved and willingness to ensure they pay their fair share.

Let me talk for a moment about development and infrastructure.

There has been a lot of concern in the public about whether our utilities, particularly the sewer system, can handle the amount of new residential and commercial construction.

The fact is that what has transpired with the series of breaks is by and large the result of deferred maintenance. Experts who we have consulted are steadfast on this point. We had large pipes that could carry sufficient volume, but they were old pipes.

Still, the city must ensure that it does not end up with a capacity problem. We would be negligent if we did not look at this, too.

In my meetings with staff, I have raised this matter.

I expressed particular concern regarding downtown, where the bulk of development is occurring. Public works administrators have assured me that they have been pursuing projects to ensure the downtown has the capacity to address the development trends.

They have been adding more pump stations and re-distributing the Flagler Village, the south side of the river and the Sistrunk area among these pump stations to guarantee adequate capacity well into the future. For instance, by the end of this month, a new pump station will be brought online downtown that adds 1 million gallons of additional daily sewage capacity to the area.

The work that I mentioned earlier to stem stormwater infiltration is having a significant impact in helping to add capacity.

Let's now turn to our water system.

The vulnerability of the existing water system was made clear this past summer when an FPL subcontractor mistakenly drilled into the pipe that runs from our wellfields to the main water treatment plant. The city scrambled to restore service.

The most critical aspect of the water system in need of attention is the Fiveash Water Treatment Plant.

The Reiss Report tells us this 60-year-old plant has a real risk of failure. The just-released Carollo report has now confirmed that it needs replacement. Renovation is no longer a viable option, according to the report's authors.

We need a new plant.

The issues at the Fiveash Plant are no secret – with coloration being the most obvious to the public. Several international players in the water industry have expressed interest in a fast-tracked public/private solution that can bring more efficiency, more stable costs, guaranteed maintenance — and higher quality water.

This is a good thing.

Fort Lauderdale has shown that these types of cooperative arrangements work. Our deal with Inter Miami and David Beckham led to a soccer stadium being built in the span of months, not years, at the Lockhart site. The private sector is investing more than \$130 million there, not taxpayer money.

Utilities around the world have successfully turned to this model to achieve great results in plant construction so it may be just the right fit for us.

Still, a new plant will not be an overnight effort. So, we are taking measures to improve Fiveash until a replacement is on line.

We are doing more than building a new plant. The Reiss Report identified the need to invest more in improving our water pipes. The good news? We are making progress.

More than four miles of new water main has been installed in Croissant Park and Lake Estates. And, work is underway to replace deteriorated pipe in Victoria Park and Bermuda Riviera.

By 2025, water main improvements will be completed in areas that include Bay Colony, Coral Ridge, Coral Ridge Country Club, Coral Shores, Lake Aire Palm View, Lauderdale Isles, Hendricks Isle, Seabreeze Boulevard, Riverland Road and Twin Lakes – with some \$53 million invested in the rehabilitation of almost 60 miles of water mains.

Other critical issues are being addressed rapidly.

Based on this summer's accident, the city realized the need to definitively locate key valves and consistently test them.

We have now mapped 11,224 water distribution valves, with only 10 percent left to go. At Tuesday's City Commission, we re-launched a crew whose job is to test valves. They will ensure the valves are properly maintained and functioning.

This crew was disbanded by the prior administration – apparently as a cost-savings measure. Their job was clearly necessary.

Experts are working on computerized modeling of the entire water system to identify improvements needed as a result of low pressure and inadequate flows in mains.

The city has installed 22 auto-flushing devices - and will add 50 more within the next year - to remove sediment deposits and biofilm from pipes.

And because redundancy is critical, we will upgrade three existing interconnections with the city of Pompano Beach and build a new one on State Road A1A. Design of this new interconnect is complete. Its construction will begin in the second quarter of this year.

This commission has also been forward-looking in safeguarding adequate water supply for future generations in the face of sea level rise and rising consumption.

We have explored several options, including desalination and the use of the deeper Floridan Aquifer – both expensive undertakings.

We now feel confident that our wellfields are far enough inland that salt water intrusion will not be an issue for many decades to come. But, we must still accept the fact that our population is growing. As such, we have joined a consortium of other local governments in a major initiative called the C-51 Reservoir.

The C-51 was first contemplated as a regional alternative water supply in the early 1990s.

Phase 1 is complete and only a limited supply of available water remains uncommitted after reservations made by other cities. We have notified authorities that we are purchasing the rights to 3 million gallons of water a day with an option for another 3 million gallons.

Another effort underway should help address concerns of some residents about unusual spikes in their water bill.

Our long-term plans call for the replacement of all water meters with ones that can be read wirelessly rather than by crews that go door to door.

This will allow us to provide detailed usage reports to residents so they can better manage their water consumption. This technology will offer real-time alerts to high usage so they can act on leaks before receiving a large water bill.

It just makes sense.

Lastly, let me address our efforts regarding stormwater.

This work is critical in light of climate change. High tides and heavy rains now more frequently flood our low-lying areas.

We are making progress.

In all, 165 tidal valves have been installed to prevent tidal water from backing up through storm drains. In the heavily impacted area of the Las Olas Isles neighborhoods and Rio Vista, work has also included installing catch basins and drainage pipes and elevating public seawalls.

We have long waited for the city to move forward with stormwater work in seven areas determined to be most lacking in protections and most prone to problematic flooding. I am pleased to say the time has arrived.

The total price tag of the work in the seven areas will be about \$200 million, and we are finalizing a rate structure that will be used to borrow the money.

In the meantime, the city manager is using an innovative way to start work now ... before the bonds are issued.

With funding through a line of credit, we will begin stormwater improvements in the Edgewood and River Oaks neighborhoods. Work will start in the other areas – Durrs, Dorsey Riverbend, Victoria Park, Progresso Village and the greater Southeast Isles area of the Las Olas Isles and Rio Vista – once the bonds are issued.

All of the work should be completed in five years.

What will this money be used for?

The city will add stormwater pump stations, exfiltration trenches, catch basins, stormwater pipes, permeable pavement, swales, force mains. We also will improve additional seawalls and dredge canals to address sedimentation and improve flow.

This work will encompass repairing or rehabilitating almost 22 miles of stormwater pipes, installing another 129 tidal control valves and building seven new pump stations.

As this work is in progress, the city will also finish designing stormwater improvements for neighborhoods in the next phase - Flagler Village, Harbour Inlet, Harbour Isles, Melrose Manors, Riverland, Sailboat Bend and Tarpon Bend.

The totality of the program I've discussed represents an undertaking without precedent in the history of Fort Lauderdale in both size and scope: more than \$600 million will be spent in less than five years.

One of my colleagues recently referred to us as the can-do commission. Nothing speaks more to our results-driven approach than these initiatives.

To get us to where we need to be, the city manager has triggered a transformation in how staff thinks about infrastructure investment.

No longer will City Hall look at matters on a project-by-project basis, but rather they will take a comprehensive, holistic approach. And, the city manager is expediting work by bundling projects and using a variety of different procurement strategies depending on the circumstances.

This is more than bureaucratic jingoism.

Take the sewer pipe replacements in Victoria Park and Coral Ridge. Historically, the city would have taken the approach of simply removing the segment of the pipes where the breaks occurred. Now, we are replacing full lengths of pipes. In the case of Victoria Park, that runs the breadth of the neighborhood. It does not make sense to know adjacent sections of pipe are likely in a similar condition, but wait until they break to replace them.

I would remind, though, everyone that Fort Lauderdale is not unique.

Decaying infrastructure is an issue that many communities across the state and nation are facing. A study recently showed that some 23,000 sewage spills were reported to the state Environmental Protection Department in the past decade. Miami, Tampa, Boca Raton, Jacksonville and Daytona Beach have all faced sewage infrastructure issues recently.

In Fort Lauderdale, we are moving forward with a sense of urgency and will ensure that no section of the city is left behind. We also are committed not to repeat past mistakes and defer vital maintenance.

There will be challenges – whether the result of an accident, climate change or the failure of a remaining older part in the system.

But I promise this: At the end of the day, Fort Lauderdale will have the utility infrastructure that a modern metropolitan area expects and deserves.

This is a vibrant, dynamic city that we can be proud of, a great place to live, work and play. We will be a resilient city – one with clean and plentiful drinking water, one with a safe and secure sewer system and one unbowed by the forces of climate change.