MIAMIBEACH

OFFICE OF THE CITY MANAGER

LTC # 347-2025

LETTER TO COMMISSION

TO: Honorable Mayor Steven Meiner and Members of the City Commission

FROM: Eric Carpenter, City Manager Eric Carpenter

DATE: August 22, 2025

SUBJECT: **UPDATE ON THE IMPLEMENTATION OF "OPERATION CLEAN WATER" PROGRAM - #5**

The purpose of this Letter to Commission (LTC) is to provide the Mayor and City Commission an update on "Operation Clean Water," adopted on March 19, 2025, by Resolution No. 2025-33559.

At the July 10, 2025 meeting of the Land Use and Sustainability Committee, City staff provided an update of the item "Discuss the North Beach Water Quality and Park View Canal Report." At the conclusion of the discussion, a motion was made, directing the Administration to provide weekly updates of its efforts at the Park View Canal, with a focus on Biscayne Beach Elementary hotspots and associated lateral pipe-lining, above-ground cleanliness (alleyways, street sweeping, pressure washing), and homeless outreach.

Biscayne Beach Elementary

The pipe-lining contractor Vortex Infrastructure Services, LLC, began work on the Biscayne Beach Elementary school grounds on the morning of August 8, 2025. They began cleaning lateral lines and performing a closed-circuit television (CCTV) video inspection of the lines through existing pipe-access points. Lateral line cleaning involves the removal of debris, tuberculation, and rust from the pipes to better assist with video inspections, point repairs, and the subsequent pipe lining. Vortex's scope of work also includes replacing at least five (5) existing deteriorated cleanouts, and the installation of additional cleanouts as needed in order to have proper access points for lining. Vortex shifted its lateral line work activities to occur at night on August 14, 2025 to eliminate any conflicts with the school's daytime activities.

Since work began, the City has been actively communicating and coordinating with the School Board of Miami-Dade County and Biscayne Beach Elementary's representatives regarding the project's progress, challenges, and anticipated completion schedule. The largely inaccurate as-built plans that were provided to the team that did not have the proper location of the school's lateral lines, has prolonged the initial CCTV exploration, clean, point repair phase of the work. This has ultimately contributed to a delay in the project's completion. The CCTV exploration, clean, point repair and clean-out installation phase of the work is anticipated to be completed by August 27, 2025, with the lining of the lateral pipes expected to occur on August 29 and 30, 2025, and again for the next three consecutive weekends. Due to the distinctive off-gassing associated with newly lined pipes, the lateral pipes will only be lined on weekends when no one is on campus to allow enough time for the lining to fully cure and the odor to dissipate properly without disrupting classes. The attached maps, 'EXHIBIT – A' provides a graphical update on the scope of work completed to date, and what is anticipated to be completed in the following weeks.

In addition to the CCTV inspection, point repairs, and lateral pipe-lining efforts on the Biscayne Beach Elementary property, over the last several years the City has performed extensive sanitary sewer assessments and rehabilitation activities on Park View Island and the Park View Extended area, see attached 'EXHIBIT – B' for additional details.

Ultraviolet Sanitization Pilot Project (No Update)

The formal agreement between the City of Miami Beach and the University of Miami (UM) for the Ultraviolet Sanitation Pilot Project has been reviewed and executed by the City Manager's Office, and it has been provided to the University of Miami. Once the agreement is executed by the University of Miami, the purchase order will be issued, and both parties will proceed with the study.

One of the primary recommendations of the report was to focus on "cleaning" street surfaces, as best as possible, to reduce levels of enterococci entering the stormwater system. Recommendations include increasing the frequency of street sweeping, augmenting street sweeping by removing visible debris and fecal deposits manually, and the possible use of ultra-violet (UV) light to disinfect street surfaces. UV light is a known disinfection technology which is environmentally friendly, in that it does not impart a chemical residual.

The scope of the pilot project includes 73rd Street, which was documented as a "hot spot". This location was also chosen because it is a uniform, two-lane street with a median which can facilitate experimental and traffic logistics, and it is an area where both University of Miami studies demonstrated elevated levels of enterococci. The street can be partitioned into three segments to evaluate six conditions (one set of three for streets, and another set of three for sidewalks), and the conditions to be tested are: no cleaning, sweeping (industrial for streets and manual for sidewalks), and sweeping plus UV. These conditions are proposed to be tested three times, once at each segment, to assess whether the UV treated segments show a significant improvement over non-UV treated segments.

Stormwater Management (No Update)

The Miami-Dade County Environmental Resources Management (DERM), which has approved the responses submitted to their last Request For Information (RFI), issued the Class II permit for the seven Downstream Defender hydrodynamic separator/water quality structures on Friday August 1, 2025, allowing the City to move forward with the final design and the procurement process. Construction is scheduled to commence in the first quarter of 2026.

Routine maintenance efforts remain ongoing. Stormwater structures from 72nd to 77th Streets, between Dickens Avenue and Collins Avenue, have been cleaned twice since March 2025, a third cleaning was completed during the week of July 28, 2025, and two additional cleanings are scheduled to occur before the end of the 2025 calendar year.

The Public Works and Communications Departments are working together to display messaging on the side of waste collection trucks around the City. Details are being coordinated for this effort, but below are two mock-ups to see how the designs will look on the trucks:

Sanitation (No Update)

The Sanitation Division continues to provide:

- Hand-sweeping crews and mechanical sweeping are conducted three times per week in the Park View area (Monday, Wednesday, and Friday). The Multihog machine operates on alternating days (Tuesday, Thursday, and Saturday), focusing on alleyways between 73rd and 76th Streets.
- There are eleven (11) doggie-bag dispensers installed in the area of Park View Island, they are refilled twice weekly, and the associated waste is collected daily (seven days a week).
- Service frequency in Crab Alley has increased from twice to three times per week. Crews have been equipped with extended-reach pick sticks (up 6 feet) to improve access within the mangroves.
- New, once a week service is being provided to the mangroves located between 72nd and 73rd Street on the west side.
- An additional litter can has been placed at 75th Street and Dickens Avenue street end.

- Waste haulers, Waste Management and Waste Connections were asked to check all the garbage cans in the alleys from 73rd to 76th Street to make sure that all cans had plugs and lids that were functioning properly, have completed their work.

Homeless Services Engagements

Below is a summary of the Housing & Community Services Department's activities in the Park View area from August 13, 2025 - August 19, 2025:

Parkview Homeless Services Engagements:		
8/13/2025		New Hope visit at 10:40 PM. No persons found.
8/14/2025	Homeless Outreach Services Team visit at 9:49 AM. (1) persons engaged. Refused services.	New Hope visit at 10:20 PM. No persons found.
8/15/2025	Homeless Outreach Services Team visit at 9:21 AM. (1) persons engaged. Refused services.	New Hope visit at 10:00 PM. No persons found.
8/16/2025	Homeless Outreach Services Team visit at 10:45 AM. No person(s) found.	New Hope visit at 12:45 AM. No persons found.
8/17/2025	Homeless Outreach Services Team visit at 8:25 AM. No person(s) found.	New Hope visit at 12:30 AM. No persons found.
8/18/2025	Homeless Outreach Services Team visit at 8:33 AM. (1) persons engaged. Refused services.	New Hope visit at 10:20 PM. No persons found.
8/19/2025	Homeless Outreach Services Team visit at 5:59 AM. No person(s) found.	New Hope visit at 9:00 PM and 12:00 AM. No persons found.

Code Compliance

To support "Operation Clean Water," Code Compliance has conducted weekly walk-throughs in the North Beach watershed area, completing 605 inspections. These inspections check for sanitation issues such as illegal dumping, overflowing dumpsters, and trash in the alleys. These efforts resulted in 89 written violations for the creation of a health hazard/nuisance. The data below is from the timeframe of March 19 to August 20, 2025.

Violations	Count
City Code Violation	**3**
Environmental - Illicit Discharge	3
Property Maintenance Violation	**7**
Deteriorated Rain Gutter	1
Rain Gutter (Stagnant Water)	1
Stagnant Water	4
Tree Debris	1
Sanitation Violation	**79**

Deteriorated Dumpster	1
Garbage/Trash Alley	2
Illegal Dumping/Disposal	54
Illicit Discharge (Raw Sewage, Grease)	3
No Garbage Container Permit	1
No Garbage Service	1
Overflowing Dumpster	11
Overflowing Dumpster / Illegal Dumping Alley	3
Refrigerator on ROW	2
Dumpster on ROW	1
Grand Total	**89**

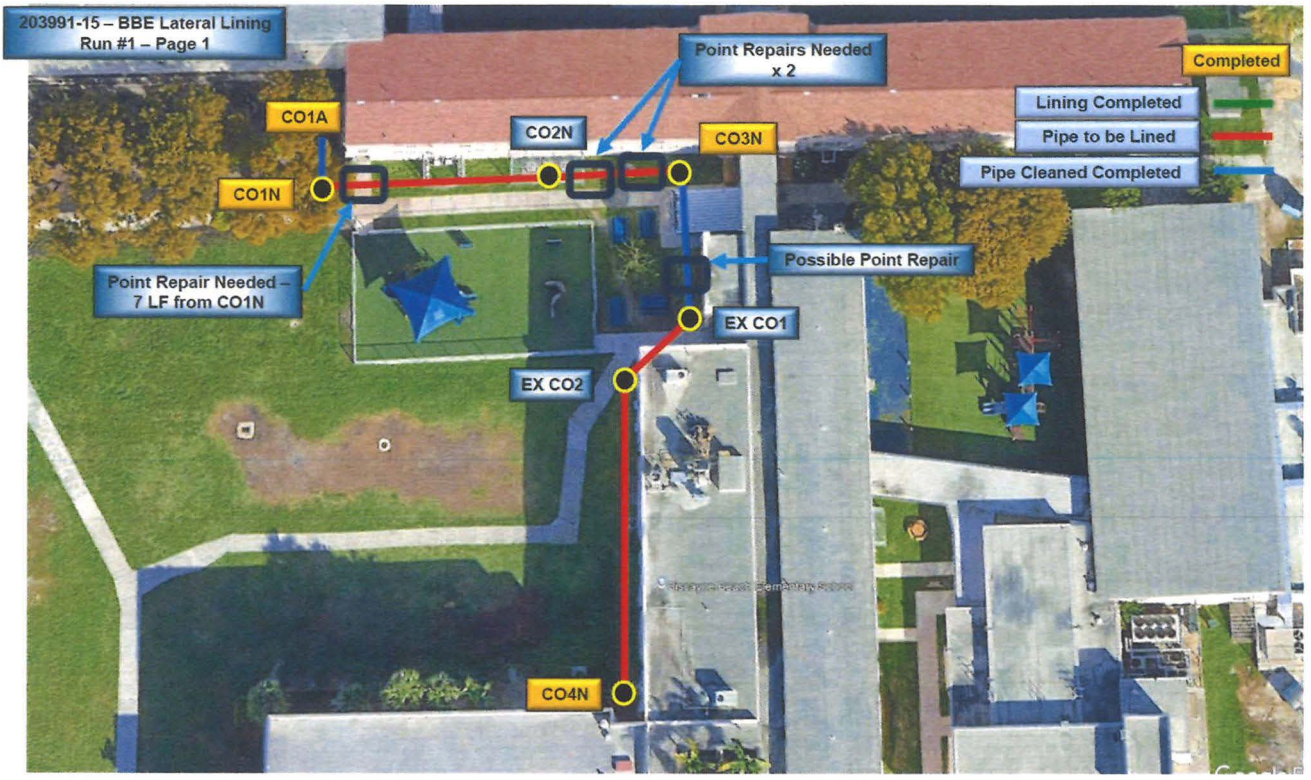
Pursuing Dredging to Increase Flow/ Flushing (No Update)

Since Park View Canal is an angled and narrow canal within the Tatum Waterway, natural flushing to dilute pollutants associated with urban stormwater runoff is limited. Dredging of the canal is a potential option to increase flushing of the waterway. Bathymetric and geotechnical surveys and flushing analysis are completed. These analyses are necessary to understand the efficacy of potential dredging of the canal. The results of these evaluations are being carefully reviewed for desired water quality outcomes. If the construction phase moves forward, project mobilization is recommended to coincide with the hydrodynamic separator installation to reduce sediment inputs into the canal following dredging.

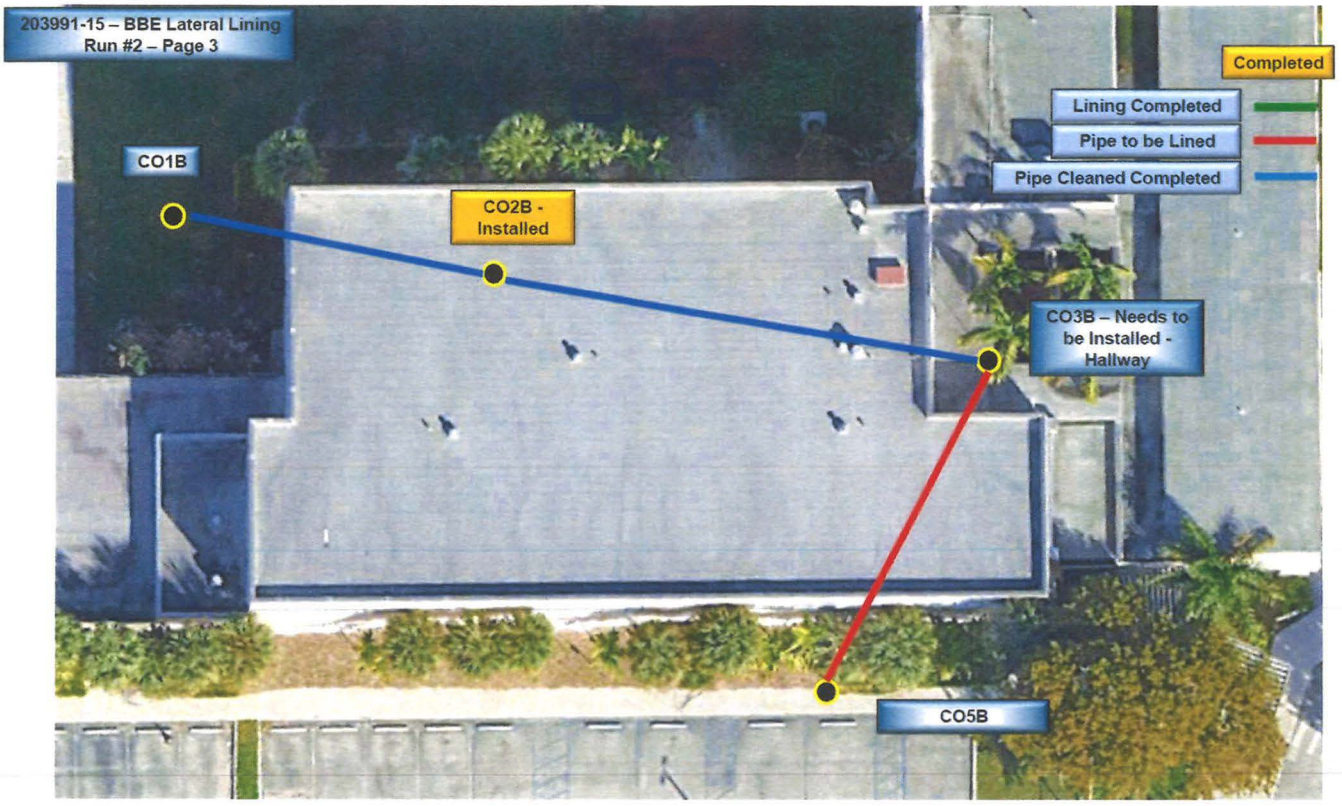
For more information, contact Rodney Knowles, Assistant Director at RodneyKnowles@miamibeachfl.gov.

DM/RK

EXHIBIT - A


203991-15 – BBE Lateral Lining
Run #1 – Page 1
Point Repairs Needed
x 2
Completed
Lining Completed
Pipe to be Lined
Pipe Cleaned Completed
CO1A
CO2N
CO3N
CO1N
Possible Point Repair
Point Repair Needed –
7 LF from CO1N
EX CO1
EX CO2
CO4N


203991-15 – BBE Lateral Lining
Run #1 – Page 2
CO4N
Completed
Lining Completed
Pipe to be Lined
Pipe Cleaned Completed
CO 2
CO5N
Possible Point Repair
CO 3
CO 4
MH 29359


203991-15 – BBE Lateral Lining
Run #2 – Page 3
Completed
Lining Completed
Pipe to be Lined
Pipe Cleaned Completed
CO1B
CO2B - Installed
CO3B – Needs to be Installed - Hallway
CO5B

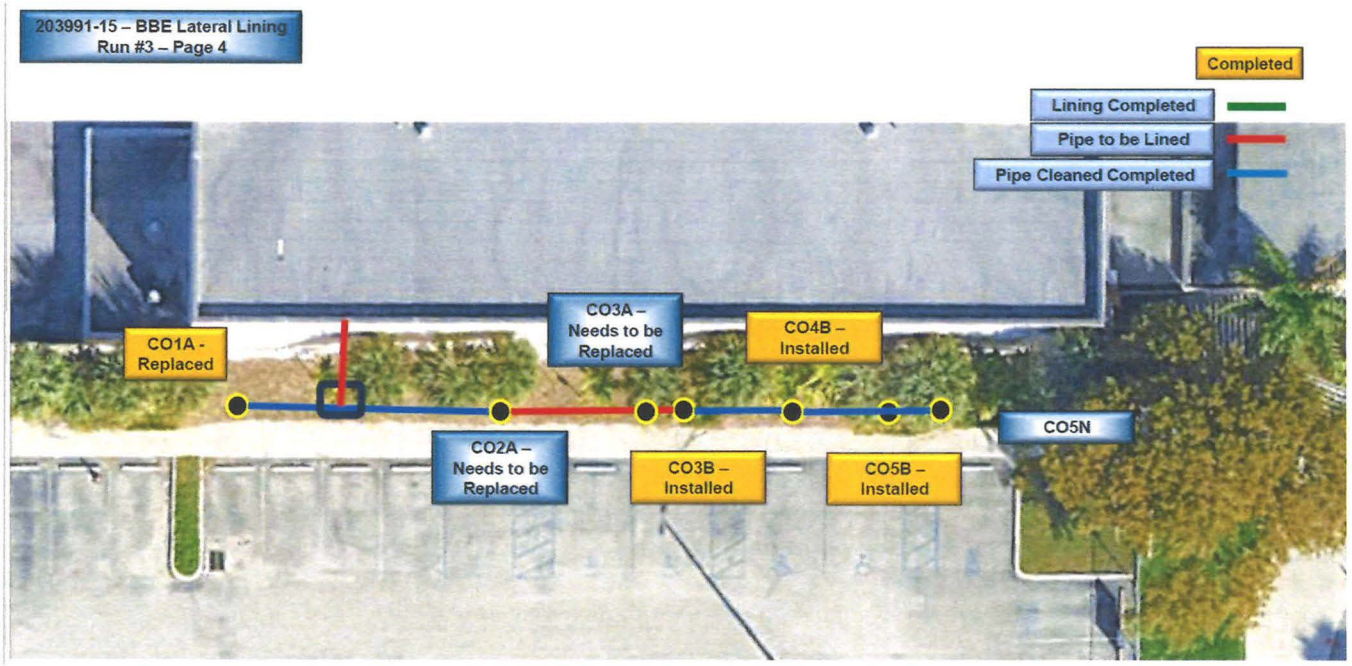

203991-15 – BBE Lateral Lining
Run #3 – Page 4
Completed
Lining Completed
Pipe to be Lined
Pipe Cleaned Completed
CO1A - Replaced
CO3A – Needs to be Replaced
CO4B – Installed
CO5N
CO2A – Needs to be Replaced
CO3B – Installed
CO5B – Installed

EXHIBIT - B

Sanitary Sewer Assessment and Rehabilitation Summary

The Public Works Department has had a proactive, nonstop, find-and-fix approach to performing its sanitary sewer assessment and rehabilitation efforts. The work has been a joint effort between the Public Works Operations Division's in-house staff and contractors. Below is a summary of the work completed thus far in the Park View Island and Park View extended areas:

City Wide Smoke Test and Manhole Assessment (2021): Smoke Test and Manhole Inspection was performed on the gravity sewer system Citywide by a contractor first half of 2021. Smoke tests detect private and public defects on sewer laterals as well as any illegal connection of private drainage systems to public sanitary sewer systems. All public defects were rehabilitated by Operations within a month of discovery. Private defects were reported to Miami-Dade Department of Environmental Resource Management (DERM) per Chapter 24 County Code for enforcement.

Clean and Video Inspection (CCTV) of all Sewer Gravity Pipe in Park View Island and Park View extended area (July 2021): A contractor was hired to do a complete video inspection of 100% of all gravity sewer mains in Park View Island and Park View extended area on public property. CCTV of the inside of the gravity pipe is done to understand the condition of the pipe and to put together the scope of work for the needed type of rehabilitation.

Force main Air Release Valve (ARV) Replacement Program by Public Works Operations (February 2023): On February 2023 Operations completed the force main ARV Replacement Project for the force mains associated with Sewer Pump Station #23 and Sewer Pump Station #24. These two force mains are in the area of Park View extended area. A total of sixteen (16) ARVs were replaced or rehabilitated.

Leak Detection Dye Test on Transmission System by Operations and Engineering (1st Qtr. 2023): Dye was introduced into the wet wells of Sewer Pump Station #23 and Sewer Pump Station #24 to test the integrity of the transmission system (pressurized pipe). Several staff members from Public Works' Operations and Engineering teams were positioned in various locations at canal outfalls, stormwater manholes, and on a boat in Park View Canal for approximately 2 to 3 hours. No dye was observed in the canal nor in the stormwater system.

Gravity Sewer Lining and Manhole Rehabilitation of Park View Island (1st Qtr. 2023): Approximately 98% of sewer laterals were lined and 95% of manholes were rehabilitated in Park View. Suspect laterals were also inspected using CCTV and were found to be in good condition on the public property. Lining and rehabilitation of sewer and manholes extends the life of the infrastructure and stops leaks in or out of the structure.

Gravity Sewer Lining and Manhole Rehabilitation of Park View Extended Area (4th Qtr. 2024): Approximately 98% of the sewer gravity lines from 72nd Street north to 76th Street, and Dickens Avenue to Ocean Terrace were inspected using CCTV and lined in order to extend the infrastructure's lifespan and to stop any observed leaks. The manholes were rehabilitated as needed in the area.

Complete Rehabilitation of Sewer Pump Station #23 on 75th Street (1st Qtr. 2023): Complete rehabilitation of the sewer pump station, including the replacement of two existing pumps and motors, and replacing 20 linear feet of piping, two check valves, and two plug valves. Pump station wet well rehabilitation was done as part of the Citywide well rehabilitation project.

City Wide Pump Station Wet Well Rehabilitation (Completed August 2025): Rehabilitation and lining of seventeen (17) sewer pump station wet wells Citywide. The remaining six (6) wet wells will be rehabilitated as part of future Public Works projects. A wet well collects all sanitary flow from the contributing basin to be pumped via force main to the Miami-Dade Central Wastewater Treatment Plant. Rehabilitation and lining extents the lifespan of the wet well and seals any existing leaks.

CCTV of Laterals on Public Property at 75th Street and Dickens Avenue Intersection by Public Works Operations (03/16/2024): Operations conducted a CCTV assessment of the lateral pipes in the public right-of-way, located at the intersection of 75th Street and Dickens Avenue, including only the portion of the lateral coming from Biscayne Beach Elementary on 75th Street that lies within the right-of-way. The public right-of-way laterals on Dickens Avenue and 75th Street intersection were found to be in good condition.

Force Main Leak Detection (City Wide) Performed by Contractor (09/2024): A Citywide leak detection test was performed by a contractor on the sanitary sewer transmission system in early September 2024. The leak detection test revealed no leaks.

CCTV of Private Biscayne Beach Elementary up to and including the ROW by Public Works Operations (04/26/2025): The School's as-built records from the 1990's were shared with the City in 2024. The records showed one existing lateral line extending from the school to the public manhole at 75th Street. Public Works Operations performed a CCTV inspection of the private lateral pipe from visible cleanouts or access points on the school's property. The CCTV inspections on the private laterals identified several deficiencies, and at one point, the CCTV inspection was abandoned due to buckling/pipe belly-and-sag due to severe corrosion and heavy sediment buildup inside of the private sewer pipe. Operations marked the approximate location of the private lateral based on the CCTV inspection performed that day, and uploaded the survey information to the City's GIS system. The school also conducted their own independent CCTV inspection of the lateral the same day (04/26/2025), alongside Operations.

Dye Test on Biscayne Elementary Lateral (05/05/2025) by Operations: Dye testing was performed by introduced dye into cleanouts (access points within the lateral lines,) and at the school's toilet in an attempt to locate any leaks into stormwater system. Even though the test was performed at the lowest tide (10:00 AM) that day, the school's private stormwater system remained full, therefore, the dye test was inconclusive.

Visual Inspection of Stormwater Conflict Structure that houses City force main (05/16/2025 & 05/17/2025) by Operations: On 05/16/2025, the Operations team conducted a visual inspection of the conflict manhole at low tide (11:20 AM) and at high tide (5:20 PM) to determine the integrity of the force main. Operations returned the next day (5/17/2025) to clean the force main at the conflict structure. The force main was found to be in good condition with no leaks. Both the duplex Sewer Pump Station #23 and #24 were turned on by hand at the time of the observation. No leaks were detected on the force main.