

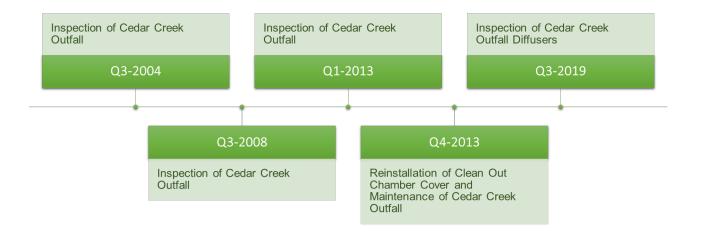


Cedar Creek Ocean Outfall - Executive Summary of Past Inspections

This document is an executive summary of recent inspections for the Cedar Creek ocean outfall and is intended to provide a synopsis of the activities conducted during each inspection. The Cedar Creek ocean outfall was constructed in 1971 and is generally considered to have a design life of 100 years.

Nassau County periodically performs routine inspections to monitor the condition of the Cedar Creek ocean outfall pipeline, with the most recent inspection taking place in Q3 2019 (see Figure 1). Based on the past routine inspections of the Cedar Creek ocean outfall, Nassau County has not encountered any conditions that indicate functional deficiencies apart from routine maintenance and cleaning. As part of the Bay Park Conveyance Project, the Design-Builder will be performing a full inspection, cleaning and making any required repairs of the outfall pipe network. At the completion of the Conveyance Project, the Cedar Creek ocean outfall will continue to be monitored and undergo routine inspections as needed.

Figure 1 – Timeline of Past Inspections/Maintenance of the Cedar Creek Ocean Outfall



Q3-2004 (September 2004) Inspection of Cedar Creek Outfall

In September 2004, Inspectronic Corporation was tasked to perform the following activities for the Nassau County Department of Public Works (NCDPW):

- 1. Survey all diffusers, including the cleanout chamber at the intersection of the east and west diffuser lines.
- 2. Determine ocean-bottom conditions surrounding each diffuser and the cleanout chamber
- 3. Install a series of down line buoys at predetermined diffuser locations to aid in dive inspection navigation.





4. Install a travel line to each diffuser along the entire route east and west of the cleanout chamber to aid dive inspection navigation.

Q3-2008 (August 2008) Inspection of Cedar Creek Outfall

In August 2008, Inspectronic Corporation was tasked to perform the following activities for the Nassau County Department of Public Works (NCDPW):

- 1. Survey all diffusers including the cleanout chamber at the intersection of the east and west diffuser lines.
- 2. Determine ocean-bottom conditions surrounding each diffuser and the cleanout chamber.
- 3. Install a series of down line buoys at predetermined diffuser locations to aid in dive inspection navigation.
- 4. Install a travel line to each diffuser along the entire route east and west of the clean out chamber to aid in dive inspection navigation.

Q1 2013 (December 2012 - January 2013) Inspection of Cedar Creek Outfall

From December 2012 through January 2013, Inspectronic Corporation was tasked to perform the following activities for the Nassau County Department of Public Works (NCDPW):

Inspectronic was tasked to perform the following activities:

- 1. Survey all diffusers including the cleanout chamber at the intersection of the east and west diffuser lines.
- 2. Determine bottom conditions surrounding each diffuser and the cleanout chamber.
- 3. Install a series of down line buoys at predetermined diffuser locations to aid in dive inspection navigation.
- 4. Install a travel line to each diffuser along the entire route east and west of the cleanout chamber to aid in dive inspection navigation.
- 5. Replace majority of labels marking each diffuser.

Q4-2013 (September – December 2013) Reinstallation of Clean Out Chamber Cover and Maintenance of Cedar Creek Outfall

From September 2013 through December 2013, Inspectronic Corporation was tasked to perform the following activities for the Nassau County Department of Public Works (NCDPW):

- 1. Survey all diffusers including the cleanout chamber at the intersection of the east and west diffuser lines.
- 2. Install a travel line to each diffuser along the entire route east and west of the clean out chamber to aid in dive inspection navigation.
- 3. Remove all sand located in the outfall system.
- 4. Reinstall 3 diffuser caps.





- 5. Reinstall the cleanout chamber cover.
- 6. Pressure wash 120 diffusers and cleanout chamber hardware.
- 7. Remove and replace corroded retaining bolts.
- 8. Weld new retention brackets on various diffuser caps.

Q3-2019 (August 2019) Inspection of Cedar Creek Outfall Diffusers

As part of the Preliminary Engineering Services for the Bay Park Conveyance Project, the County DPW subcontracted with Marine Infrastructure Engineering Solutions, P.C. to conduct an underwater inspection and multi-beam bathymetric survey of the Cedar Creek ocean outfall and diffuser array. During the dive inspection, it was found that the concrete cleanout chamber cover was askew and that some of the hardware had started to corrode, but there are no immediate actions required with respect to repairs. The County is performing further investigations. The resulting design and repair work has been incorporated into the Design-Builder's scope of work.