

## CASE STUDY

# POST-HURRICANE IDA CCTV ASSESSMENTS IN HACKENSACK, NEW JERSEY

**City looks to investigate overburdened sewer and stormwater lines post-hurricane.**

### THE CHALLENGE

In early September 2021, the City of Hackensack, New Jersey found itself facing extreme downpours that damaged homes and businesses alike. Hurricane Ida, a tropical storm-turned Category 4 hurricane, caused extreme flooding across the state. These floods overburdened Hackensack's sewer and storm drain systems and increased the occurrence of restricted flows and sewer backups. Post-Ida, FEMA's Hazard Mitigation Grant Program granted the city federal assistance. As part of the rebuilding process, the city decided to get approximately 200,000 LF of its sanitary sewer, combined sewer, and storm drains thoroughly cleaned and inspected via CCTV. These inspections would help the city assess their assets' current conditions and provide essential information for future rehabilitation efforts. Vortex Services was selected for this project because of its lower bid cost and track record of high-quality inspection work.



**VORTEX**  
services



### PROJECT SNAPSHOT

#### PROJECT OWNER

City of Hackensack, New Jersey

#### GENERAL CONTRACTOR

Suburban Consulting Engineers

#### SUB-CONTRACTOR

Vortex Services - Mid-Atlantic  
Division

#### PROBLEM

200,000 LF of 8"-120" sanitary  
sewer, combined sewer, and  
stormwater lines in need of cleaning  
and assessment.

#### SOLUTION

Cleaned all 200,000 LF of piping  
using a Jet-Vac truck. Inspected all  
lines with CUES' CCTV Inspection  
Unit.

#### CONTACT

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Without promptly cleaning and surveying these lines, the city ran the risk of overwhelming its sewer system, which would lead to more flooding and sewer backups for residents and businesses. Plus, any potential excess debris in the pipes would cause restricted flows or even dangerous pipe collapses.

### THE SOLUTION

First, the Vortex Services crew cleaned the approximately 200,000 LF of pipe, which varied from 8" to 120" in diameter, using a Jet-Vac truck. Once cleaned, the pipes were inspected section by section using CUES' CCTV Inspection Unit. During the inspection phase, the team worked closely with Suburban Consulting Engineers, who provided exceptional support in the way of confirming, naming, numbering, and often locating unknown structures. The crew had to navigate several areas of severely collapsed pipe, which were quickly intercepted and repaired by Hackensack's emergency excavation contractor. Jobs 4 Blue and the City of Hackensack Police Department were also essential partners throughout this project, detouring heavy traffic and protecting the public and the work crews.



## IMPACT

1

Successfully cleaned and assessed 200,000 LF of piping for Hackensack post-Hurricane Ida.

2

Helped Hackensack prioritize future rehabilitation efforts.

3

Team prepared to meet with general contractor (Suburban Consulting Engineers) post-job to discuss further rehabilitation opportunities

### THE RESULTS

While this project is ongoing with an expected completion date of July 2024, the City of Hackensack has been pleased with the Vortex Services team's strong and consistent progress. In fact, Hackensack extended the project's scope past its original completion date of September 2023; in August 2024, the team will begin additional work that was laid out in the change order. The team also plans to meet with Suburban Consulting Engineers in late 2024 to discuss further rehabilitation opportunities, products, and services.