



March 20, 2018

Honorable Bill de Blasio  
Mayor of the City of New York  
City Hall  
New York, NY 10007

**Vincent Sapienza, P.E.**  
*Commissioner*

Honorable Corey Johnson  
Speaker of the New York City Council  
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RE: City Council Reporting Requirements Pursuant to Local Law No. 56  
of 2017, Council Int. No. 1198-A of 2016

Dear Mayor de Blasio and Speaker Johnson:

This letter is submitted pursuant to the requirements of Local Law No. 56 of 2017, Council Int. No 1198-A of 2016 on the Southeast Queens Flood Mitigation Plan.

The intent of this report is to provide the specific information required by §24-530 of the Administrative Code of the City of New York, entitled Southeast Queens Flood Mitigation Plan (enacted by Local Law 56 of 2017). This section states,

“By no later than one year after the effective date of the local law that added this section, the department of environmental protection shall submit to the mayor and speaker of the council, and make publicly available online, a plan for mitigating flooding in Queens community districts 12 and 13. Such a plan shall include, but not be limited to, a timeline for implementation of the plan, annual performance milestones and a description of funds anticipated to be expended by or on behalf of the city in connection with such flood mitigation, including, but not limited to, funds committed in fiscal year 2016 for such purposes.”

This initial report, along with the attached table, summarizes DEP’s fulfillment of the requirements for a flood mitigation plan in Queens Community Districts 12 and 13. DEP has also developed an interactive online map that shows the completed and ongoing construction in Southeast Queens. This map can be accessed by visiting:  
<http://www.nyc.gov/dep/seqprojects>

## **The Southeast Queens Mitigation Plan**

As the City's water and wastewater utility, the New York City Department of Environmental Protection (DEP) is responsible for building and maintaining sewer infrastructure to manage sanitary waste and stormwater from homes and businesses. Southeast Queens (comprised of Queens Community Districts 12 and 13) experienced rapid residential and commercial growth from the 1920s through 1960s, and many of the natural watercourses that previously drained the area were paved over by developers, exacerbating flooding. The low-lying topography of the area and the enlargement of Idlewild/Kennedy Airport significantly complicated the installation of large storm sewers, making planned work extremely costly. Major projects had been deferred until Mayor de Blasio authorized \$1.5B over ten years for the Southeast Queens Flood Mitigation Plan. This has since been increased to \$1.9 billion.

Together with our partners at the Department of Design and Construction and the Department of Transportation, DEP has developed a four-pronged approach to improve conditions in the area:

1. Construct quick fixes, such as storm sewer extensions, targeted full size sewers, and green infrastructure to bring near term flooding relief.
2. Build neighborhood sewer projects where there is existing available capacity in the sewer system.
3. Create future capacity for further neighborhood sewer projects by investing in large trunk sewers.
4. Evaluate opportunities to reduce groundwater flooding.

Together, these four approaches will deliver both immediate and long lasting relief for many residents of Southeast Queens.

### **1. Quick Fixes**

DEP has conducted an extensive engineering analysis to identify areas throughout the two community boards that have had the most severe flooding complaints over the past several years. Based on this analysis, DEP can:

- a. Install storm sewer extensions, which are short sewers that can connect previously unsewered areas to an existing sewer nearby. Since July 2015, DEP has installed storm sewer extensions in fourteen locations in Southeast Queens, relieving the existing conditions. These locations are:
  1. Nashville Blvd between Grayson St and Nellis St
  2. Intersection of 115 Ave and Marsden St
  3. 157 St between 111 Ave and Linden Blvd
  4. 177 St between Sayres Ave and Murdock Ave
  5. 176 St between Sayres Ave and Murdock Ave
  6. 111 Ave between 155 St and 156 St
  7. North half of 224 St between 145 Rd and 146 Ave
  8. Intersection of Francis Lewis Blvd and North Conduit Ave
  9. 116 Ave between 201 St and 202 St
  10. Leslie Rd between 178 St and Irwin Pl

11. Irwin Pl between Sunbury Rd and Troutville Rd
12. 148 Ave between 259 St and Francis Lewis Blvd
13. Sunbury Rd between Merrick Blvd and Irwin Pl
14. Leslie Rd between 178 Pl and an alley

Moving forward, DEP will continue to evaluate and install storm sewer extensions where feasible. Completed storm sewer extensions will be reported to the Council in the annual report each year.

- b. Utilize “when and where” contracts to install 3-6 blocks of targeted full size sewers. Our partners at DOT will also make minor roadway improvements concurrent with the installation of the sewer improvements. This work can be seen in the attached table under “quick fixes.”
- c. Target opportunities to install green infrastructure. Green infrastructure, such as rain gardens, subsurface detention facilities, and green roofs, can naturally divert stormwater from the sewer system. In Southeast Queens, DEP will install 200 rain gardens to alleviate street flooding. This work is currently in procurement, and construction is expected to begin next year.

In addition, DEP will partner with the Department of Parks and Recreation and the School Construction Authority (SCA) to integrate green infrastructure wherever possible. To date, DEP has partnered with SCA to incorporate green infrastructure into two active school construction projects at P.S. 40 and P.S. 50. Both of these projects are currently in construction and are expected to be completed in the next year.

## **2. Neighborhood Sewer Projects**

In some cases, DEP determined that the most effective solution to address flooding is to construct neighborhood storm sewers that take advantage of existing downstream capacity in the system. To date, DEP has completed six neighborhood sewer projects and has another five neighborhood sewer projects in construction. The current status of all neighborhood sewer projects, including the projected registration year and funding level, can be seen in the attached table under “neighborhood sewers.”

## **3. Trunk Sewers**

Trunk sewers build stormwater capacity for the future by creating new large conduits to move stormwater out of upland Southeast Queens into Jamaica Bay. In Southeast Queens, DEP must build additional trunk sewers to provide enough capacity to drain all of Community Districts 12 and 13. In 2017, DDC completed design of SE823, the first trunk sewer project to be constructed under the Southeast Queens Plan. This project is expected to be registered in FY18.

Over the next year, DEP will continue planning efforts on additional trunk sewer projects; until DEP finalizes the scope of work, the funds dedicated to the trunk sewers appear in the attached table in lines 36-38. DEP will update the Council each year as we complete planning and move funds out of this holding code into project specific budget codes.

#### 4. Groundwater

In July 2017, Mayor de Blasio announced that the City would conduct a feasibility study for a groundwater drainage project aimed at addressing basement flooding in southeast Queens. The groundwater table in southeast Queens has risen over the last two decades and there are a number of residential and commercial properties that report water rising up through their basement foundations. The study will measure how high the groundwater table has risen, how much it must be lowered in order to mitigate the basement flooding, and the feasibility of a radial collection plan. The study is expected to be completed in the next few months.

#### Annual Reports

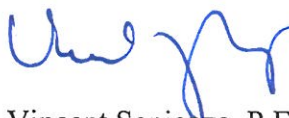
To satisfy §24-530.b, DEP will submit annual reports to the Council to demonstrate our progress in implementing the plan laid out above. These reports will update the attached table to show any changes to the plan and a description of all funds expended at the time of the future reports. The annual reports will be available no later than six months after the end of each fiscal year, with the first annual report to be submitted by December 31, 2019.

For your convenience, the following table has been included to summarize the total funding by project status. This table will be updated with each annual report as projects are completed.

<b>SEQ Flood Mitigation Plan Summary 2/28/2018</b>	
<b>Status</b>	<b>Funding</b>
Complete	\$23.1 M
Construction	\$144.6 M
Procurement	\$306.3 M
Design	\$187.7 M
Pre-Design	\$106.5 M
Funds in Holding Codes	\$509.0 M
Future Spine Sewer Funds	\$619.0 M
<b>Total:</b>	<b>\$1,896.2 M</b>

I trust you will find this information useful. If you have any questions or comments concerning any of the information provided in this initial report, please do not hesitate to contact me.

Sincerely,



Vincent Sapienza, P.E.