



Vincent Sapienza, P.E. Commissioner

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Tel. (718) 595-6565 Fax (718) 595-3525 vsapienza@dep.nyc.gov Honorable Bill de Blasio Mayor of the City of New York City Hall New York, NY 10007

Honorable Corey Johnson Speaker of the New York City Council 105 East 116th Street New York, NY 10029

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 to provide an update to the initial report on the Southeast Queens Flood Mitigation Plan submitted on March 20th, 2018, which was pursuant to the requirements of Local Law No. 56 of 2017, Council Int. No 1198-A of 2016.

The intent of this report is to provide an update of the specific information required by \$24-530.b 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 six months after the end of each fiscal year, beginning with the first fiscal year that commences more 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 a report on progress in implementing the plan required by subdivision a of this section during the prior fiscal year. Each such report shall include, but not be limited to, a description of any changes to such plan, a description of any changes in funds committed by or on behalf of the city in furtherance of such plan and a description of all funds expended by or on behalf of the city in furtherance of such plan."

This updated 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: <a href="http://www.nyc.gov/dep/seqprojects">http://www.nyc.gov/dep/seqprojects</a>

## 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 \$1.5 billion over ten years for the Southeast Queens Flood Mitigation Plan. This has since been increased to \$2.5 billion through the approved 2021 September Plan.

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 are delivering 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 will:

- a. Utilize "when and where" contracts to install 3-6 blocks of targeted full size sewers. Our partners at DOT may also make minor roadway improvements concurrent with the installation of the sewer improvements.
- b. 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.
- c. Evaluate and install storm sewer extensions where feasible. Completed storm sewer extensions will be reported to the Council in the annual report each year.

In 2020, DEP completed construction of 170 green infrastructure practices in the streets and sidewalks around the St. Albans and Cambria Heights neighborhoods. Similarly, in fall of 2021, DEP completed an additional 53 green infrastructure practices in the Idlewild area in partnership with the New York Rising initiative. These practices are managing stormwater runoff from roads and sidewalks and alleviating street flooding within Southeast Queens.

Through partnerships with other city agencies, DEP is designing and implementing green infrastructure retrofits on publicly owned lands like schools, parks, playgrounds, and housing sites. In partnership with NYC School Construction Authority (SCA) and Department of Education (DOE), green infrastructure has been implemented at P.S. 40 and P.S. 50 and, in conjunction with the New York Rising initiative, is currently in construction at M.S. 72.

In addition, DEP is collaborating with NYC Parks on green infrastructure retrofits. Green infrastructure at Roy Wilkins Park was completed in summer 2021. Two additional sites are at final design or nearing final design, including Detective Keith Williams Park and Cambria Playground. These projects are expected to start construction in 2023. DEP has also completed green infrastructure retrofit designs for Railroad Park and the designs have been transferred to Parks for integration into a larger capital improvement plan for the park.

Through an in-house design team, DEP is identifying opportunities for large scale green infrastructure practices within publicly owned medians. So far, DEP has three locations identified within Southeast Queens for median improvements: Hillside Ave between Braddock Ave and 231 St, Martin Van Buren High School at 232 St and Hillside Ave intersection, and Winchester Blvd between Seward Ave and 87 Ave. These projects are anticipated to start construction in 2022 or early 2023.

Finally, DEP has also identified locations in Southeast Queens to implement "cloudburst projects." Cloudburst projects use a combination of green and grey infrastructure strategies to slow, delay, and divert stormwater to minimize nuisance flooding and damage to property and infrastructure and typically manage more stormwater than traditional green infrastructure. DEP is in final design on a cloudburst project at NYCHA South Jamaica Houses and is initiating design on a cloudburst project within the public right-of-way in the St. Albans and Addisleigh Park neighborhoods. Several other locations within Southeast Queens are being assessed for cloudburst project feasibility.

# 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 sixteen 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 currently in construction and is scheduled to be completed in 2022.

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 line 46. DEP will update the Council each year as we complete planning and move funds out of this holding code into project specific budget codes.

### **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.

SEQ Flood Mitigation Plan Summary		
Status	Baseline Funding (2/28/2018)	Project Total Funding (11/10/21)
Complete	\$23.1	\$163.5
Construction	\$144.6	\$286.4
Procurement	\$306.3	\$34.4
Design	\$187.7	\$259.6
Pre-Design	\$106.5	\$37.1
Funds in Holding Codes	\$509.0	\$825.2
Future Spine Sewer Funds	\$619.0	\$887.7
Future Green Infrastructure Funds	\$0.0	\$0.0
Cancelled Projects	\$0.0	\$3.3
Total:	\$1,896.2 M	\$ 2,494.9M

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.
Commissioner