



Vincent Sapienza, P.E. Commissioner

59-17 Junction Blvd. Flushing, NY 11373

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: 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 \$1.5 billion 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 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 can:

a. Install storm sewer extensions, which are short sewers that can connect previously unsewered areas to an existing sewer nearby. Since the first Local Law report was submitted on March 20, 2018, DEP has installed storm sewer extensions in ten locations in Southeast Queens, relieving the existing flooding conditions. These locations are:

- 1. 108 Dr. between 164 Pl and 167 St
- 2. 157 St between 145 Ave and 146 Ave
- 3. 148 Rd between Hook Creek Blvd and 259 St
- 4. 157 St between 145 Ave and 146 Ave
- 5. 112 Ave and West Colfax St
- 6. 109 Ave between 169 Pl and Merrick Blvd
- 7. 93rd Rd and Gettysburg St
- 8. 111 Ave between 216 St and Springfield Blvd
- 9. 178 Pl between 119 Rd and 120 Ave
- 10. Murdock Ave between 178 St and 177 St

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 may 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 construction, which is expected to be completed in 2021. Similarly, DEP will install nearly 100 additional rain gardens in the Idlewild area in partnership with New York Rising. That work is projected to begin in 2020.

In addition, DEP is collaborating with the Department of Parks and Recreation (DPR) 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 school construction projects at P.S. 40 and P.S. 50. Both of these projects have been completed. DEP also partnered with DPR on three projects at Detective Keith Williams Park, Railroad Park, and Roy Wilkins Park. Roy Wilkins Park is currently in construction; Detective Keith Williams Park and Railroad Park are expected to start construction in 2020.

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 eleven neighborhood sewer projects and has another seven 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 2021.

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.

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 initial feasibility study, now completed, measured the current groundwater elevation(s) and how much it must be lowered in order to mitigate the basement flooding. This study also provided some potential recommendations for mitigation. However, given constructability challenges, DEP is pursuing a more individualized approach to mitigating basement flooding, partnering with property owners to identify site specific solutions that can improve their conditions.

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 (11/07/19)					
Complete	\$23.1 M	\$115.3					
Construction	\$144.6 M	\$327.0					
Procurement	\$306.3 M	\$21.5					
Design	\$187.7 M	\$361.7					
Pre-Design	\$106.5 M	\$6.1					
Funds in Holding Codes	\$509.0 M	\$213.9					
Future Spine Sewer Funds	\$619.0 M	\$821.9					
Future Green Infrastructure Funds	\$0.0 M	\$21.9					
Total:	\$1,896.2 M	\$1,889.4 M					

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

	SOUTHEAST QUEENS PROGRAM STATUS (10/30/19)								
				EXPECTED REGISTRATION	FUNDS DEDICATED (FY15 - FY19)	APPROVED FY20 SEPT PLAN BUDGET (FY20 - FY25)	FY15 - FY25 PROJECT TOTAL FUNDING	BASELINE FUNDING (2/23/2018	PROJECT STATUS
NUM.	PROJECT ID	TYPE OF SEWER PROJECT	DESCRIPTION	YEAR	(A)	(B)	(A + B)	REPORT)	AS OF 9/20/2019
1	550200526	NEICHBORHOOD	CENTEDS AND WATER MANNE IN 102 ST FROM HILLSIDE AVE AND 00 AVE	2012	Ć 0 0 M	Ć 4 C NA	Ć 4 C N 4	ć 4 7 N	COMPLETE
_	SEQ200536	NEIGHBORHOOD	SEWERS AND WATER MAINS IN 182 ST FROM HILLSIDE AVE AND 90 AVE	2013	\$ 0.0 M	\$ 1.6 M		\$ 1.7 M	
	SEQ200483	NEIGHBORHOOD	SEWERS IN HOOK CREEK BLVD FROM 128 ST & MERRICK BLVD	2014	\$ 2.8 M	\$ 0.1 M	\$ 2.9 M	\$ 2.9 M	
	SEQ002672 SEQ200581	NEIGHBORHOOD NEIGHBORHOOD	SEWER EXTENSIONS IN SPRINGFIELD BLVD, 90 AVE, AND 91 RD SEWERS AND WATER MAINS IN 183 ST	2015	\$ 3.3 M \$ 10.0 M	\$ 0.0 M \$ 0.0 M	\$ 3.3 M \$ 10.0 M	\$ 3.3 M \$ 10.0 M	
	SEQ200511	NEIGHBORHOOD	SEWERS IN 217 ST, 105 AVE, HOLLIS AVE, AND 211 ST AREAS	2015	\$ 10.0 M	\$ 0.0 M	\$ 10.0 M	\$ 10.0 M	+
	SEQ200560	NEIGHBORHOOD	SEWER EXTENSION IN 208 ST FROM 90 AVE AND 93 AVE	2015	\$ 0.2 M	\$ 0.0 M	\$ 3.7 M	\$ 3.6 M	
	SEQ200568	NEIGHBORHOOD	SEWERS AND WATER MAINS IN MERRILL ST	2017	\$ 1.3 M	\$ 0.0 M	\$ 1.3 M	\$ 1.3 M	
-	SEQ200538	NEIGHBORHOOD	SEWERS ON 69 AVE FROM 261 ST - 266 ST, GLEN OAKS AREA	2016	\$ 12.7 M	\$ 0.0 M	\$ 12.7 M	\$ 12.7 M	
	SEQ200436/HWQ121B4	NEIGHBORHOOD	SEWERS IN LAKEVIEW BLVD EAST, STILLING BASIN BUILT IN BAISLEY POND	2016	\$ 11.8 M	\$ 0.0 M	\$ 11.8 M	\$ 11.8 M	
	SE854	NEIGHBORHOOD	SEWERS AND WATER MAINS IN 119 AVE	2017	\$ 23.9 M	\$ 0.0 M	\$ 23.9 M	\$ 22.6 M	
	SEQ200584	NEIGHBORHOOD	SEWERS AND WATER MAINS IN 119 RD	2017	\$ 10.0 M	\$ 1.7 M	\$ 11.8 M	\$ 10.0 M	
	SEQNS001	QUICK FIXES	SEWER WHEN & WHERE CONTRACT IN SOUTHEAST QUEENS	2017	\$ 31.9 M	\$ 0.2 M	\$ 32.1 M	\$ 31.9 M	
	QED976/HWQ976	NEIGHBORHOOD	TRUNK WATER MAIN IN FRANCIS LEWIS BLVD, 90 AVE TO 99 AVE	2017	\$ 55.6 M	\$ 0.2 M	\$ 55.8 M		CONSTRUCTION
-	SE848	NEIGHBORHOOD	SEWERS AND WATER MAIN IN N. CONDUIT AVE AND BAISLEY BLVD AREA	2017	\$ 57.7 M	\$ 0.1 M	\$ 57.8 M		CONSTRUCTION
	SE823	TRUNK	LAURELTON TRUNK SEWER SPINE ON 229TH ST FROM 145 AVE TO 147 AVE	2018	\$ 79.9 M	\$ 5.2 M	\$ 85.2 M		CONSTRUCTION
	SEQ200561/SEQ002539/HWQ002539	NEIGHBORHOOD	SEWER EXTENSIONS AND WATER MAINS IN 91 ROAD	2018	\$ 22.4 M	\$ 5.5 M	\$ 27.9 M		CONSTRUCTION
	SEQ200529	NEIGHBORHOOD	SEWERS IN 130 RD FROM 244 ST & BROOKVILLE BLVD	2018	\$ 17.1 M	\$ 2.0 M	\$ 19.1 M		CONSTRUCTION
-	SEQ200531	NEIGHBORHOOD	SEWER EXTENSIONS AND WATER MAINS IN 239 ST, BELLEROSE AREA	2018	\$ 9.5 M	\$ 2.5 M	\$ 12.0 M		CONSTRUCTION
_	SEQ200446/HWQ274F1	NEIGHBORHOOD	SEWERS IN HOOK CREEK BLVD, ROSEDALE NORTH	2018	\$ 11.9 M	\$ 3.0 M			CONSTRUCTION
_	SEQNS002		SEWER WHEN & WHERE CONTRACT IN SOUTHEAST QUEENS	2018	\$ 10.3 M	\$ 0.8 M	\$ 11.1 M		CONSTRUCTION
21	SEQ200596	NEIGHBORHOOD	SEWERS IN 183 ST FROM 90 AVE AND JAMAICA AVE	2019	\$ 10.0 M	\$ 1.9 M	\$ 11.9 M	\$ 11.0 M	CONSTRUCTION
22	SEQGI-01	GREEN INFRASTRUCTURE	GREEN INFRASTRUCTURE IN SOUTHEAST QUEENS	2019	\$ 8.6 M	\$ 20.8 M	\$ 29.4 M	\$ 8.0 M	CONSTRUCTION
23	SEQ-ROYWP	GREEN INFRASTRUCTURE	GREEN INFRASTRUCTURE CONSTRUCTION FOR ROY WILKINS PARK	2020	\$ 0.0 M	\$ 2.0 M	\$ 2.0 M	\$ 0.0 M	CONSTRUCTION
24	SEQ200578	NEIGHBORHOOD	SEWERS & WATER MAINS IN FOCH BLVD	2020	\$ 0.0 M	\$ 21.5 M	\$ 21.5 M	\$ 13.3 M	PROCUREMENT
25	SEQ-DKWPK	GREEN INFRASTRUCTURE	GREEN INFRASTRUCTURE CONSTRUCTION FOR DETECTIVE KEITH WILLIAMS PARK	2021	\$ 0.0 M	\$ 1.3 M	\$ 1.3 M	\$ 0.0 M	DESIGN
26	SEQ-RAILP	GREEN INFRASTRUCTURE	GREEN INFRASTRUCTURE CONSTRUCTION FOR RAILROAD PARK	2021	\$ 0.0 M	\$ 2.3 M	\$ 2.3 M	\$ 0.0 M	DESIGN
27	SEQNS003	QUICK FIXES	SEWER WHEN & WHERE CONTRACT IN SOUTHEAST QUEENS	2020	\$ 0.0 M	\$ 28.9 M	\$ 28.9 M	\$ 28.9 M	DESIGN
28	SE862/HWQ662G	NEIGHBORHOOD	SEWER REPLACEMENTS AND EXTENSIONS, SPRINGFIELD GARDEN PHASE V	2022	\$ 0.0 M	\$ 82.3 M	\$ 82.3 M	\$ 79.8 M	DESIGN
29	SEQ200519/HWQ724B	NEIGHBORHOOD	RECONSTRUCTION OF STREETS IN THE BROOKVILLE - EDGEWOOD TRIANGLE AREA	2022	\$ 0.4 M	\$ 59.1 M	\$ 59.4 M	\$ 11.0 M	DESIGN
30	SEQ200562/HWQ121B3	NEIGHBORHOOD	SEWER EXTENSION AND WATER MAINS, 158 ST FROM 110 & 116 AVE	2021	\$ 0.0 M	\$ 16.2 M	\$ 16.2 M	\$ 5.8 M	DESIGN
	DOTSEQ01/SEQPGRD1	NEIGHBORHOOD	DOT SEQ PROJECT FOR GROUP 1 PRIORITY GRID SEGMENTS	2021	\$ 0.4 M	\$ 11.3 M	\$ 11.7 M	\$ 0.0 M	
	DOTSEQ02/SEQPGRD2	NEIGHBORHOOD	DOT SEQ PROJECT FOR GROUP 2 PRIORITY GRID SEGMENTS	2021	\$ 0.4 M	\$ 15.1 M	\$ 15.5 M	\$ 0.0 M	
	SE850	NEIGHBORHOOD	STORM AND SANITARY SEWERS, FORCE MAIN AND WATER MAIN IN LIVERPOOL ST	2023	\$ 0.0 M	\$ 43.3 M	\$ 43.3 M	\$ 43.3 M	
	SEQ200547	NEIGHBORHOOD	SEWERS IN COMMONWEALTH BLVD	2023	\$ 0.0 M	\$ 9.3 M	\$ 9.3 M	\$ 5.6 M	
	SEQNS004	·	SEWER WHEN & WHERE CONTRACT IN SOUTHEAST QUEENS	2020	\$ 0.0 M	\$ 23.3 M	\$ 23.3 M	\$ 25.0 M	
	SEQNS005	`	SEWER WHEN & WHERE CONTRACT IN SOUTHEAST QUEENS	2021	\$ 0.0 M	\$ 25.0 M	\$ 25.0 M	\$ 25.0 M	
	SEQ200592/HWQ274F2	NEIGHBORHOOD	SEWERS IN HOOK CREEK BLVD, ROSEDALE SOUTH	2021	\$ 0.0 M	\$ 38.3 M	\$ 38.3 M	\$ 53.3 M	
	SEQ-SJH	GREEN INFRASTRUCTURE	CLOUDBURST PROJECT AT SOUTH JAMAICA HOUSES	2022	\$ 0.0 M	\$ 5.0 M	\$ 5.0 M	\$ 0.0 M	
	SEQNS006	QUICK FIXES	SEWER WHEN & WHERE CONTRACT IN SOUTHEAST QUEENS	2022	\$ 0.0 M	\$ 3.3 M	\$ 3.3 M	\$ 3.3 M	
40	SEQ-STA	GREEN INFRASTRUCTURE	CLOUDBURST PROJECT AT ST ALBANS	2022	\$ 0.0 M	\$ 2.8 M		\$ 0.0 M	
	CEO CREEN		LIQUADING CORE FOR CREEK INTERACTRICATION CONCERNION	SUBTOTAL #1:	\$ 395.8 M	\$ 435.8 M	\$ 831.6 M	\$ 768.2 M	
	SEQ-GREEN	NA NA	HOLDING CODE FOR GREEN INFRASTRUCTURE CONSTRUCTION	NA NA	NA	\$ 6.9 M		\$ 0.0 M	
	SEQ-TREES	NA NA	HOLDING CODE FOR CREEN INFRASTRUCTURE IN PRIORITY CRIES	NA NA	NA	\$ 3.0 M	\$ 3.0 M	\$ 0.0 M	
	SEQ-PGRID	NA NA	HOLDING CODE FOR GREEN INFRASTRUCTURE IN PRIORITY GRIDS	NA NA	NA NA	\$ 15.0 M	\$ 15.0 M	\$ 0.0 M	
	DOTSEQBO	NA	HOLDING CODE	NA	NA NA	\$ 0.0 M	\$ 0.0 M	\$ 37.0 M	
	SEQCB1213	NA NA	HOLDING CODE	NA	NA	\$ 210.9 M	-	\$ 472.0 M	
-	ALLOCATION AVAILABLE FOR FUTURE SP			NA	\$ 11.5 M	\$ 810.4 M	\$ 821.9 M	\$ 619.0 M	
47	ALLOCATION AVAILABLE FOR FUTURE GR	REEN INFRASTRUCTURE PROJECT	<u> </u>	NA	\$ 0.0 M	\$ 0.0 M		\$ 0.0 M	
				SUBTOTAL #2:	\$ 11.5 M	\$ 1,046.2 M	\$ 1,057.8 M	\$ 1,128.0 M	
					\$ 407.3 M	\$ 1,482.0 M	\$ 1,889.4 M	\$ 1,896.2 M	

PROJECT STATUS KEY

COMPLETE	PROJECTS AT SUBSTANTIAL COMPLETION	
CONSTRUCTION	ACTIVE CONSTRUCTION PROJECTS	
PROCUREMENT	BID, AWARD, AND REGISTRATION PROCESS	
DESIGN	CREATION OF CONSTRUCTION DRAWINGS AND DOCUMENTS	
PRE-DESIGN	PROJECT SCOPE PREPARATION	