



AMC Engineering PLLC

18-36 42nd Street
Astoria, NY 11105
718.545.0474
Fax 516.706.3214

Revised – Underlined text is
revised / added

June 17, 2019

Mr. Steve Watts, PE
NYSDEC, Region 2
Division of Water
47-40 21st Street
Long Island City, NY 11101-5407

Ref.: LONG ISLAND WELL PERMIT EQUIVALENT APPLICATION
REVISION 5
GROUNDWATER DISCHARGE TO COMBINED SEWER
REDEVELOPMENT PROJECT
ROSE CASTLE – Former NY Cleaning and Dyeing (C224264)
376-378 FLUSHING AVENUE
BROOKLYN, NY 11205
Block 1884 Lots 40, 48

Dear Mr. Watts:

The present is prepared to seek an amendment to our application sent [dated February 11, 2019] for a Long Island Well Permit (LIWP) Equivalent, to temporarily withdraw groundwater at a maximum rate of 900 gallons per minute (1,296,000 gallons per day) in Brooklyn, New York. This filing subsequent to our most recent submittal (revision 4), for a flow rate of 440 GPM. All of the conditions remain the same as our “Revision 4” filing, with the exception of the flow rate and the addition of one new 6” connection that connects to the 12” combined sewer on Little Nassau Street.

Revision/Submittal History

Revision 0 (Original Submittal) – 5/21/2018 – Request to draw 1200 GPM.

Revision 1 – 6/25/2018 – Request to lower draw rate from 1200 GPM to 150 GPM. Prior to finalizing the dewatering design, a pump test will be performed to better understand subsurface conditions and anticipated recharge rate. This revision reduces the total proposed draw rate, and the size of required treatment.

Revision 2 – 11/7/2018 – Request to increase draw rate from 150 GPM to 730 GPM. A pump test was performed on August 27, 2018, which provided more insight on the existing groundwater quality and the expected dewatering quantity.

Revision 3 – 2/11/2019 – Request to change the dewatering system from a deep well system to a two-tier wellpoint system. Wellpoint systems provide better control of the dewatering discharge and volume, and is more suitable for this project, where there is no anticipated cutoff.

Revision 4 – 5/8/2019 – Request to reduce the draw rate from 730 GPM to 440 GPM, as per letter by NYSDEC (dated May 3, 2019; signed by Mr. Patrick Foster).

Revision 5 – 6/14/2019 – Request to increase the draw rate from 440 GPM to 900 GPM. Additionally, to add a point of discharge on Lot 40, which connects to the 12" sewer on Little Nassau Street. Included herein is the proposed offsite groundwater drawdown monitoring via monitoring wells.

Background

Lotus Residences LLC is the owner of the Site located at 376-378 Flushing Avenue, Brooklyn NY 11205. The property is identified as Block 1884 Lots 40 and 48 on the Brooklyn Borough Tax Map. The site is irregularly-shaped, with an approximate area of 39,307 square feet. The site has frontage on Flushing Avenue, Franklin Avenue, and Little Nassau Street.

The site is currently undergoing remediation. Proposed development of the site consists of the excavation and construction of a new 8-story mixed-use building with cellar.

The site is a private development, and zoned M1-2 – Light Manufacturing District (High Performance). There are environmental restrictions for hazardous materials (HAZMAT), noise, and air for this site. This project is part of the NYSDEC's Brownfield Cleanup Program (BCP) under project number C-224264.

Grade elevation for the site slopes from El: +13.5-21', with an average elevation at El: +17'. Groundwater was encountered at El: +3.25'. According to existing data, clay/organic peat layer was encountered to 10-15' below grade. A medium-fine sandy layer exists below this clay layer, to the bottom of aquifer. The bottom of excavation is approximately El: -13.75' (25' below grade).

The Water Pollution Control Plant for this area is the Newtown Creek WWTP. There is a 72" combined sewer on Flushing Avenue. The proposed discharge is through a new connection, which feeds into the 72" combined sewer.

An application for a DEP dewatering permit has been filed under separate cover for a flow rate of up to 900 GPM. A copy of their quality approval (DEP-BWT) is attached herein. Two separate applications were submitted to BWSO for review and approval: a) for 720 gpm from Lot 48 into the 72" combined sewer on Flushing avenue, and b) for 180 gpm from Lot 40 into the 12" combined sewer on Little Nassau Street. Copies of their quantity approvals (DEP-BWSO) are attached herein.

Regulatory Background

Since this action proposes the withdrawal (and discharge) of groundwater over 45 GPM, as per 6 CRR-NY Part 602.1, a permit is required to withdraw the water for this particular action. The attached checklist (Region 2 Long Island Well Permit

Application Supplement (Revised 9/12/2017) provides additional information and can be found in **Attachment 1**.

Proposed Dewatering Activities and Treatment

Through a two-tier wellpoint system, it is proposed to dewater a maximum of 1,296,000 gallons per day (900 GPM) during remediation activities for one year (365 days) for the removal of contaminated soil.

Dewatering will be achieved using (138) 1.5" wellpoints, which feed into an 8" PVC header pipe. Wellpoints will be installed around and through the site to El: -17', as shown on the attached site plan. The mobilization of equipment and installation of wells will be performed by Groundwater Treatment & Technology, LLC.

The wellpoint installation will follow the sequence below:

- 1) Install wellpoints from El: +9' (precut elevation) to El: -17';
- 2) Install 8" PVC header pipe at El: +9';
- 3) When excavation activities reach El: -1', install second 8" PVC header pipe to El: -1';
- 4) Continue dewatering using new header pipe to bottom of excavation;

The groundwater from the wellpoints feed into an 8" PVC header pipe, which empties into one 18,000 gallon settling tank (Adler or equivalent). The effluent from the tank will be gravity-discharged into one of two locations: a) through an existing 6" connection on Lot 48, which feeds into the 72" combined sewer on Flushing Avenue, or b) through a new proposed 6" connection on Lot 40, which feeds into the 12" combined sewer on Little Nassau Street.

A throttling valve and flowmeter are installed at the discharge end of the treatment to cap the discharge flow to 900 GPM.

Offsite Groundwater Quality Monitoring

Immediately prior to commencement of and during dewatering activities the offsite groundwater quality and drawdown will be monitored in three offsite monitoring wells, as depicted in the attached site plan. The monitoring wells are:

1. MW-1 Existing monitoring well located on the western sidewalk of Franklin Ave., 15 ft south of Flushing Ave.
2. MW-2 New Proposed monitoring well, located on Little Nassau St.'s northern sidewalk
3. 4" well: New Proposed monitoring well, located on the northern sidewalk of Flushing Ave., 35 ft east from Kent Ave. This well will be constructed with 19ft of screen and 10 ft of riser.

The drawdown (depth to water compared to static gw elevation) and visual quality (which can assess presence or absence of free product) will be logged into daily log sheets. Sample of log sheet is below:

Date Dewatering Commenced:					Site: 378 Flushing, BK		
Date/Time	Survey	MW-1	MW-2	MW-3 (4")			
	DTW						
Date	Time	Recorded DTW measurements (ft)			Observed Product?	Comments/notes	Flow (GPM)
		MW-1	MW-2	MW-3 (4")	yes / no / tr		

Groundwater Sampling Event

On August 27, 2018, AMC personnel mobilized onsite during the pump test, described in our June 25, 2018 submittal. Two samples, “influent” and “treated”, were obtained from the dewatering system (at the mouth of the settling tank where the groundwater from the pump empties into the tank, and at the discharge end of the carbon treatment). The “influent” sample did not undergo any treatment and is equivalent to a raw sample from a monitoring well. The “treated” sample underwent settling, filtration, and carbon treatment prior to its collection. The sampling location is indicated on the attached plan.

Temperature and pH were measured onsite using a portable pH – temperature meter: T=79.0 °F pH= 7.64

The samples were immediately labeled and stored in a container, maintained at 4 degrees C. The laboratory courier from Phoenix (ELAP #11301) picked up the samples from the AMC office on August 28, 2018. A chain of custody was relinquished from AMC personnel to the lab personnel. The sample was tested for the full DEP discharge parameters.

The analytical results indicate that all parameters are compliant with the DEP discharge criteria.

The results in tabular form are shown below:

Tabulated Results

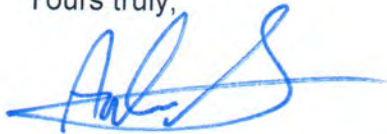
Phoenix Environmental Laboratories, Inc.		Units	NY DEP EFF				
587 East Middle Turnpike							
P.O. Box 370	Lab Sample Id			CB20134		CB20133	
Manchester, CT 06040	Collection Date			8/27/2018		8/27/2018	
(860) 645-1102	Client Id			INFLUENT		TREATED	
	Matrix			Gw Discharge		Gw Discharge	
Project Id : 376 FLUSHING AVE BK		CAS					
				Result	RL	Result	RL
Miscellaneous/Inorganics							
Carbonaceous BOD	PHNX - CBOD	mg/L		< 2.4	2.4	< 4.0	4.0
Chloride	16887-00-6	mg/L		280	15.0	301	15.0
Flash Point	PHNX - FLASH POINT	Degree F	-140	>200	200	>200	200
Ignitability	PHNX - IGNITABILITY	degree F		Passed	140	Passed	140
Nitrite-N	14797-65-0	mg/L		0.012	0.010	0.01	0.010
Nitrate-N	14797-55-8	mg/L		6.49	0.10	6.57	0.20
pH	PHNX - PH	pH Units	5-12	7.72	1.00	8.17	1.00
Nitrogen Tot Kjeldahl	PHNX - NITTOTKJELD	mg/L		< 0.10	0.10	< 0.10	0.10
Total Nitrogen	PHNX - TOTNIT	mg/L		6.5	0.10	6.58	0.10
O&G, Non-polar Material	PHNX - OIL-GREASE-NP	mg/L	50	< 1.4	1.4	< 1.4	1.4
Total Suspended Solids	PHNX - TOTSUSPENDSOL	mg/L	350	< 5.0	5.0	< 5.0	5.0
Total Solids	PHNX - TOTSOLIDS	mg/L		900	10	930	10
Metals, Total							
Cadmium	7440-43-9	mg/L	2	< 0.001	0.001	< 0.001	0.001
Chromium	7440-47-3	mg/L		< 0.001	0.001	< 0.001	0.001
Copper	7440-50-8	mg/L	5	< 0.003	0.003	< 0.003	0.003
Lead	7439-92-1	mg/L	2	< 0.001	0.001	< 0.001	0.001
Mercury	7439-97-6	mg/L	0.05	< 0.0002	0.0002	< 0.0002	0.0002
Nickel	7440-02-0	mg/L	3	0.005	0.001	< 0.001	0.001
Zinc	7440-66-6	mg/L	5	0.033	0.002	0.005	0.002
PCBs By E608							
PCB-1016	12674-11-2	ug/L	1	< 0.047	0.047	< 0.047	0.047
PCB-1221	11104-28-2	ug/L	1	< 0.047	0.047	< 0.047	0.047
PCB-1232	11141-16-5	ug/L	1	< 0.047	0.047	< 0.047	0.047
PCB-1242	53469-21-9	ug/L	1	< 0.047	0.047	< 0.047	0.047
PCB-1248	12672-29-6	ug/L	1	< 0.047	0.047	< 0.047	0.047
PCB-1254	11097-69-1	ug/L	1	< 0.047	0.047	< 0.047	0.047
PCB-1260	11096-82-5	ug/L	1	< 0.047	0.047	< 0.047	0.047
PCB-1262	37324-23-5	ug/L		< 0.047	0.047	< 0.047	0.047
PCB-1268	11100-14-4	ug/L		< 0.047	0.047	< 0.047	0.047
Volatiles By E624.1							
1,1,1-Trichloroethane	71-55-6	ug/L		< 0.50	0.50	< 0.50	0.50
1,1,2,2-tetrachloroethane	79-34-5	ug/L		< 0.50	0.50	< 0.50	0.50
1,1,2-Trichloroethane	79-00-5	ug/L		< 0.50	0.50	< 0.50	0.50
1,1-Dichloroethane	75-34-3	ug/L		0.5	0.50	< 0.50	0.50
1,1-Dichloroethene	75-35-4	ug/L		< 0.50	0.50	< 0.50	0.50
1,2-Dichlorobenzene	95-50-1	ug/L		< 0.50	0.50	< 0.50	0.50
1,2-Dichloroethane	107-06-2	ug/L		< 0.50	0.50	< 0.50	0.50
1,2-Dichloropropane	78-87-5	ug/L		< 0.50	0.50	< 0.50	0.50
1,3-Dichlorobenzene	541-73-1	ug/L		< 0.50	0.50	< 0.50	0.50
1,4-Dichlorobenzene	106-46-7	ug/L		< 0.50	0.50	< 0.50	0.50
Benzene	71-43-2	ug/L	57	5.5	0.50	< 0.50	0.50
Bromodichloromethane	75-27-4	ug/L		< 0.50	0.50	< 0.50	0.50
Bromoform	75-25-2	ug/L		< 0.50	0.50	< 0.50	0.50
Bromomethane	74-83-9	ug/L		< 0.50	0.50	< 0.50	0.50
Carbon tetrachloride	56-23-5	ug/L		< 0.50	0.50	< 0.50	0.50
Chlorobenzene	108-90-7	ug/L		< 0.50	0.50	< 0.50	0.50
Chloroethane	75-00-3	ug/L		< 0.50	0.50	< 0.50	0.50
Chloroform	67-66-3	ug/L		< 0.50	0.50	< 0.50	0.50
Chloromethane	74-87-3	ug/L		< 0.50	0.50	< 0.50	0.50
cis-1,2-Dichloroethene	156-59-2	ug/L		8.1	0.50	< 0.50	0.50
cis-1,3-Dichloropropene	10061-01-5	ug/L		< 0.40	0.40	< 0.40	0.40
Dibromochloromethane	124-48-1	ug/L		< 0.50	0.50	< 0.50	0.50
Ethylbenzene	100-41-4	ug/L	142	0.61	0.50	< 0.50	0.50
m&p-Xylene	179601-23-1	ug/L	74	2.2	0.50	< 0.50	0.50
Methyl tert-butyl ether (MTBE)	1634-04-4	ug/L	50	0.54	1.0	< 1.0	1.0
Methylene chloride	75-09-2	ug/L		< 0.50	0.50	< 0.50	0.50
o-Xylene	95-47-6	ug/L	74	0.83	0.50	< 0.50	0.50
Tetrachloroethene	127-18-4	ug/L	20	10	0.50	< 0.50	0.50
Toluene	108-88-3	ug/L	28	2	0.50	< 0.50	0.50
trans-1,2-Dichloroethene	156-60-5	ug/L		0.29	0.50	< 0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	ug/L		< 0.40	0.40	< 0.40	0.40
Trichloroethene	79-01-6	ug/L		5.2	0.50	< 0.50	0.50
Trichlorofluoromethane	75-69-4	ug/L		< 0.50	0.50	< 0.50	0.50
Vinyl chloride	75-01-4	ug/L		0.27	0.50	< 0.50	0.50
Semivolatiles By E625.1							
1,2,4-Trichlorobenzene	120-82-1	ug/L		< 4.9	4.9	< 4.8	4.8
Naphthalene	91-20-3	ug/L	19	< 4.9	4.9	< 4.8	4.8
Phenol	108-95-2	ug/L		< 4.9	4.9	< 4.8	4.8
Result Detected							
Result Exceeds Criteria							

Attached, and for your reference, please find:

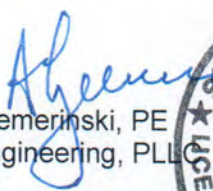
1. Region 2 Long Island Well Permit Application Supplement Form
2. Joint Application Form - Revised
3. Short Environmental Assessment Form
4. Analytical results of water to be discharged
5. Technical information of proposed treatment system
6. Sanborn Maps
7. Digital Map
8. DEP BW&S sewer map
9. DEP BWT Approval Letter
10. DEP BWSO Approval Letters (180 GPM on Little Nassau Street and 720 GPM on Flushing Avenue)
11. Structural and Archeological Assessment Form (SAAF)
12. State Historic Preservation Office (SHPO) No Impact Letter
13. Copy of Phase I Report
14. Copy of Phase II Report
15. Site Plan and Proposed Process Flow Diagram

Please, let me know if you require any additional information.

Yours truly,



Andrew Sung, EIT
AMC Engineering, PLLC



Ariel Czemerinski, PE
AMC Engineering, PLLC

Attachments



Project: Rose Castle
Location: 376-378 Flushing Avenue, Brooklyn

Applicant and Project Owner:

Contact: Zelig Weiss
Lotus Residences LLC
266 Broadway, Suite 301
Brooklyn, NY 11211
zelig@riversideny.com
(432) 363-5377

Dewatering Contactor

Contact: Sam Gilfillan
Ground/ Water Treatment & Technology, LLC
627 Mt. Hope Road
Wharton, NJ 07885
sgilfillan@gwtllc.com
(973) 983-0901 x-249

Dewatering Engineer

Contact: Ariel Czemerinski, P.E.
AMC Engineering, PLLC
18-36 42nd Street
Astoria, NY 11105
ariel@amc-engineering.com
(718) 545-0474

LETTER OF AUTHORIZATION

Date: 05/10/2018

To Whom It May Concern:

Re.: Premises: 376-378 Flushing Ave
Street Address
Brooklyn Brooklyn
City Borough
Lot No.: 40, 48 Block No.: 1884

I, Zelig Weiss, have authorized ARIEL CZEMERINSKI P.E. / R.A. / Agent
Owner's Name PE / RA / Agent's Name
18-36 42nd Street Queens NY 11105
PE / RA / Agent's Street Address Floor # Borough State Zip

to file plans and specifications to install:
a pump and treatment system (if necessary) to drain groundwater into the combined storm sewer during
construction activities and to file for the necessary permits from NYSDEC and NYCDEP

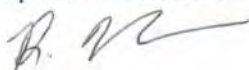
at the above premises.

The signature of the owner constitutes an agreement that the owner assumes responsibility for the installation, alteration and use of the equipment to be installed for dewatering purposes.

Signature of Owner	Name of incorporated entity Lotus Residences, LLC		
If corporation, state title of officer signing Zelig Weiss	Street Address 266 Broadway, Suite 301		
	City Brooklyn	State NY	Zip 11211

Notarization:

Rachel Mittelman
Notary Public, State of New York
No. 01MI6306050
Qualified in Kings County
Commission Expires June 16, 2018



1) Region 2 Long Island Well Permit Application Supplement Form

Region 2 Long Island Well Permit Application Supplement (Revised 09/12/17)

PLEASE SUBMIT TWO HARDCOPIES AND ONE ELECTRONIC COPY (PDF) TO:

Regional Permit Administrator
NYSDEC Division of Environmental Permits, Region 2
47-40 21st Street; Long Island City, New York 11101

1. **Forms and Documents** (forms are located at <http://www.dec.ny.gov/permits/6222.html>)
 - ☒ Joint Application Form (see [6 NYCRR Part 602.3\(b\)](#) for signature requirements)
 - ☒ CEQR/SEQR Documentation (in many cases CEQR/SEQR has been completed. A record of CEQR determinations for various projects, including rezonings, filed with the Mayor's Office of Environmental Coordination can be found at: <https://a002-ceqraccess.nyc.gov/ceqr/>. If CEQR/SEQR has not been completed, submit a completed Part 1 of a Short/Long Environmental Assessment Form. Forms are available at: <http://www.dec.ny.gov/permits/6191.html>. Please utilize DEC's EAF Mapper Application which will help complete geographic based questions).
 - ☒ Structural Archeological Assessment Form plus NYSOPRHP SHPO Cultural Resource Information System (CRIS) determination letter <https://parks.ny.gov/shpo/online-tools/> (if pumping capacity is greater than 1 MGD)
 - ☒ Detailed description of the proposed project
 - ☒ Authorization Letter (if applicant is not owner of facility and/or for permission to allow the contractor to conduct the proposed work and submit application materials)
 - ☐ If applicable, proof of property ownership (deed, etc.) or right under lease to apply
 - ☐ If owner is a corporation, provide at a minimum, the following documents:
 - a) copies of the Certificate of Incorporation and any supplemental documents thereto;
 - b) the names, titles, and business and residence addresses of all principles and officers of the subject business entity and any subsidiaries thereof; and
 - c) identification of the registered agent for service of process.
 - ☒ Environmental Site Assessment(s) (Phase 1 and/or Phase 2) for site - if none are submitted, applicant certifies that none exist
 - ☒ Spill Reports, Remedial Action Work Plans, Corrective Action Plans, etc. for site - if none are submitted, applicant certifies that none exist
2. **Nature of Project (Specify)**
 - ☒ a) Temporary dewatering for construction
 - ☐ b) New installation/routine replacement
 - ☐ c) Spill, leak, brownfield, etc. related (include reference number & project manager name)
 - ☐ d) Other _____
3. **Site Plan to Scale with North Arrow (must include following items and date prepared, revision dates and Professional Engineer stamp)**
 - ☒ a) Show all construction activity (e.g. excavation, pathway of new pipe(s), new outfall(s), treatment system(s) etc.)
 - ☒ b) Location of wells/wellpoints, existing and proposed
 - ☒ c) Header piping and pumps
 - ☐ d) Location of existing, removed and proposed underground storage tank(s) (if applicable)
 - ☒ e) Proposed point of discharge

- ☒ f) Groundwater sample locations
- ☐ g) Indicate location of tidal or freshwater wetland(s) and adjacent areas (if applicable)
- ☐ h) Indicate equipment storage area, if wetlands are present

4. **Dewatering System Specification**

- ☒ Complete Dewatering System Detail sheet (page 3)

5. **Cross Section Drawing to Scale (must include following items)**

"Typical Construction" style drawings can be used, but depth of points must be specified.

- ☒ a) Depth to groundwater
- ☒ b) Well Point
- ☒ c) Riser, Header
- ☒ d) Annular material (if used), and any other equipment associated with each point.

6. **Proposed Point of Discharge**

- ☒ Complete Dewatering System Detail sheet - if proposed discharge is to NYCDEP sanitary or combined sewer please provide NYCDEP Authorization Letters, if available, from both Bureau of water and Sewer Operations and Bureau of Wastewater Treatment (Pollution Prevention and Monitoring Section).

7. **Description of Neighborhood**

- ☒ A short narrative on land use in the area, paying attention to any potential sources of groundwater contamination that are in or may migrate into the dewatering system's cone of depression, such as gas stations, chemical plants, wrecking yards, sanitary landfills, transfer stations, etc. Include a Sanborn Map of the area.

8. **Subsurface Condition Description**

- ☒ Submit any information determined from preliminary soil borings, lithologies from other dewatering wells already in existence, general geological information characterizing soils at proposed dewatering location, known buried stream beds and marshes, etc.

9. **Radius of Influence and Known Spills or Remediation sites**

- ☒ Calculate the Radius of Influence (ROI) and provide a map of the project area with the ROI overlaid. Through information from an existing Environmental Site Assessment and/or search of the Department's online databases at <http://www.dec.ny.gov/chemical/8437.html>, provide a list of all open spills and remediation sites within the ROI. These can also be shown on the ROI map if desired.

10. **Groundwater Analysis for Proposed Discharges to Surface Water or Storm Sewer**

- ☒ A minimum of two (2) representative water samples should be collected within the vicinity of the proposed excavation area. The location, depth of monitoring well, and date of collection must be provided for each sample. See attached "NYSDEC Region 2 - Dewatering Project Sampling Information" sheet for sampling parameters, methods and requirements. Along with submitting the results with this application, a separate SPDES Jurisdictional Determination Request must be submitted, unless the applicant is submitting a SPDES application package.

Region 2 Long Island Well Dewatering System Detail Sheet

1. PROJECT DESCRIPTION -

Dewatering for a new building. Dewatered groundwater to be discharged into one of two points of discharge: 1) an existing 6" sewer connection, discharging into the 72" storm sewer on Flushing Avenue, and 2) a new proposed 6" connection, discharging into the 12" combined sewer on Little Nassau Street. Anticipated dewatering is upwards of 900 GPM (1,296,000 GPD).

2. PROPOSED DEWATERING SYSTEM (Complete all items)

- a. Number of wells/wellpoints 138 (wellpoints)
- b. Diameter of wells/wellpoints 1.5"
- c. Spacing of wells/wellpoints 7' around perimeter; 10' interior
- d. Length of screen 3' / 3' (tier 1 / tier 2)
- e. Depth to bottom of screen El: -8' / -17' (tier 1 / tier 2)
- f. Number of pumps 2
- g. Capacity of pumps submersible: 1000 GPM (total throttled to 910 GPM)
- h. Static water level El: +3.25' (approx. 14' BG)
- i. Drawdown required 17' (new slab)
- j. Duration of dewatering 12 months
- k. Radius of Influence 954 ft (max)
- l. Maximum daily pumpage 1,296,000 GPD
- m. Estimated daily pumpage 1,296,000 GPD

3. PROPOSED POINT OF DISCHARGE (Show on site plan and check one of the following)

Surface Water _____; if checked, provide name of body of water _____

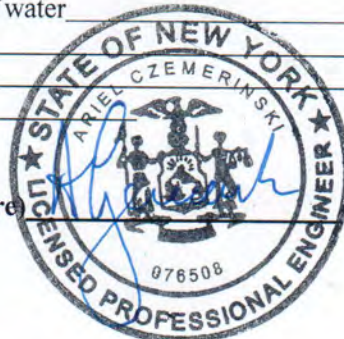
Combined or Sanitary Sewer X; if checked, provide WPCP drainage area Newtown Creek WTPP

Storm Sewer _____; if checked, provide name of body of water _____ and
NYCDEP Outfall number _____

Other _____; explain _____

Prepared by: (Print) Ariel Czemerinski (Signature) _____

(Date) 6/17/19



NYSDEC Region 2 - Dewatering Project Sampling Information (Revised- 09/12/17)

PROJECT NAME / ID #:

#	PARAMETER	TYPE	EPA METHOD	DETECTION
1	pH	Grab	150.1	
2	Temperature	°F	After Pumping	
3	Oil & Grease	Grab	1664A or 1664B	
4	Total Suspended Solids	Grab	160.2	
5	Volatile Organic Compounds (VOC)	Grab	624	EPA MDL
6	Semi VOCs/ Base Neutral Compounds	Grab	625	EPA MDL
7	Nitrate/Nitrite	Grab	300 or 353.3	EPA MDL
8	Metals–Total and Dissolved (13 Priority Pollutant non-Hg Metals)	Grab	200.7 Rev 4.4 – Preferred Method 200.2, 200.8	EPA MDL
	Mercury- Total and Dissolved	Grab	1669 – Sampling Method 1631 – Analysis	EPA MDL
9	PCBs	Grab	608	EPA MDL

NOTES

- Well/Wellpoint samples are to be collected after development of the well by a licensed well driller duly registered in accordance with Section 15-1525 of the Environmental Conservation Law of the State of New York.
- Water samples collected from a test pit will only be accepted from projects where all dewatering is taking place via sumping from trenches.
- A minimum of two (2) raw samples must be collected in accordance with standards specified in 40 CFR Part 136. Samples should be collected from two (2) representative locations within the vicinity of the proposed excavation area. Location, depth [of monitoring well/wellpoint or test pit], and date of collection must be provided for each sample.
- The Department may require sampling from additional locations depending on the size of the proposed project area.
- Samples must be tested for each parameter using the EPA approved method listed above. If another method is used, the Department will not accept the results.
- The Department may require testing for additional parameters if the proposed dewatering site is suspected of being contaminated.
- All analyses must be performed by a laboratory certified by the [NYS Department of Health](#).
- The Method Detection Limit (MDL) is the level at which the analytical procedure referenced is capable of determining with a 99% probability that the substance is present. This value is determined in distilled water with no interfering substances present.
- When collecting samples, temporary discharge must be contained on-site or disposed of off-site and must not cause or contribute to a contravention of surface or ground water quality standards.

PLEASE submit an electronic copy (CD with OCR searchable pdf) of all information including complete sampling data, test results and lab records (i.e. data sheets and chain of custodies) and TWO (2) hardcopies of the sampling summary report (along with required application materials) to:

Regional Permit Administrator

NYSDEC Division of Environmental Permits, Region 2

47-40 21st Street; Long Island City, New York 11101

2) Joint Application Form



JOINT APPLICATION FORM

For Permits for activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

1. Applications To:

>NYS Department of Environmental Conservation

☐ Check here to confirm you sent this form to NYSDEC.

Check all permits that apply:

☐ Stream Disturbance

☐ Dams and Impoundment Structures

☐ Tidal Wetlands

☐ Water Withdrawal

☐ Excavation and Fill in Navigable Waters

☐ 401 Water Quality Certification

☐ Wild, Scenic and Recreational Rivers

☒ Long Island Well

☐ Docks, Moorings or Platforms

☐ Freshwater Wetlands

☐ Coastal Erosion Management

☐ Incidental Take of Endangered / Threatened Species

>US Army Corps of Engineers

☐ Check here to confirm you sent this form to USACE.

Check all permits that apply: ☐ Section 404 Clean Water Act

☐ Section 10 Rivers and Harbors Act

Is the project Federally funded? ☐ Yes ☐ No

If yes, name of Federal Agency:

General Permit Type(s), if known:

Preconstruction Notification: ☐ Yes ☐ No

>NYS Office of General Services

☐ Check here to confirm you sent this form to NYSOGS.

Check all permits that apply:

☐ State Owned Lands Under Water

☐ Utility Easement (pipelines, conduits, cables, etc.)

☐ Docks, Moorings or Platforms

>NYS Department of State

☐ Check here to confirm you sent this form to NYSDOS.

Check if this applies: ☐ Coastal Consistency Concurrence

2. Name of Applicant

Lotus Residences LLC

Taxpayer ID (if applicant is NOT an individual)

90-1129704

Mailing Address

266 Broadway, Suite 301

Post Office / City

Brooklyn

State

NY

Zip

11211

Telephone 718-599-1145

Email zelig@riversideny.com

Applicant Must be (check all that apply): ☒ Owner ☐ Operator ☐ Lessee

3. Name of Property Owner (if different than Applicant)

Lotus Residences LLC

Mailing Address

266 Broadway, Suite 301

Post Office / City

Brooklyn

State

NY

Zip

11211

Telephone 718-599-1145

Email zelig@riversideny.com

For Agency Use Only

Agency Application Number:

4. Name of Contact / Agent

Ariel Czemerinski		Post Office / City		State	Zip
Mailing Address		Astoria		NY	11105
18-36 42nd Street					
Telephone	718-545-0474	Email	ariel@amc-engineering.com		

5. Project / Facility Name

Rose Castle		Property Tax Map Section / Block / Lot Number:	
		Brooklyn / 1884 / 40,48	
Project Street Address, if applicable		Post Office / City	State Zip
376-378 Flushing Avenue		Brooklyn	NY 11205
Provide directions and distances to roads, intersections, bridges and bodies of water			
Bounded by Flushing Avenue to the north, Franklin Avenue to the East, and Little Nassau Street to the South			
☐ Town	☐ Village	☒ City	County
Brooklyn		Kings	Stream/Waterbody Name
		N/A	
Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:			
Latitude:	40°	41'	53.952"
		Longitude:	73° 57' 33.768"

6. Project Description: Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. Purpose of the proposed project:

New development project (8-story building)

b. Description of current site conditions:

1-story building (to be demolished)

c. Proposed site changes:

Construction of a new 8-story building.

d. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):

None

e. Area of excavation or dredging, volume of material to be removed, location of dredged material placement:

No dredging. Area of excavation consists of the new building footprint to 25' below grade.

f. Is tree cutting or clearing proposed? ☐ Yes If Yes, explain below. ☒ No

Timing of the proposed cutting or clearing (month/year):

Number of trees to be cut: Acreage of trees to be cleared:

g. Work methods and type of equipment to be used:

Soil Excavation (Backhoe/excavator);
Pour new building foundation, install pile caps and pits

h. Describe the planned sequence of activities:

Excavate soil, install new foundation, pour new slab, raise new building

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

Treatment for dewatering activities in the form of one (1) 18,000 gallon settling tank,

j. Erosion and silt control methods that will be used to prevent water quality impacts:

Silt fence around the property.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

No regulated areas near project site. A treatment system in the form of a 18,000 gallon settling tank will be used to minimize fines being discharged into the combined sewer.

l. Proposed use: ☒ Private ☐ Public ☐ Commercial

m. Proposed Start Date: 12-3-2018 Estimated Completion Date: 12-1-2019

n. Has work begun on project? ☒ Yes If Yes, explain below. ☐ No

The project has been enrolled into the NYSDEC's BCP under project # C-224264. Dewatering activities and equipment mobilization have not occurred yet.

o. Will project occupy Federal, State, or Municipal Land? ☐ Yes If Yes, explain below. ☒ No

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

N/A

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

☒ Yes If Yes, list below. ☐ No

NYCDOB: Building Permit;
NYCDEP: Dewatering Permit;

7. Signatures.

Applicant and Owner (If different) must sign the application.

Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

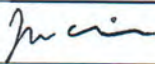
I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant

Date



6/13/2019

Applicant Must be (check all that apply): ☒ Owner ☐ Operator ☐ Lessee

Printed Name

Title

Lotus Residences LLC

Owner

Signature of Owner (if different than Applicant)

Date

(same as above)

Printed Name

Title

Signature of Contact / Agent

Date



6/17/19

Printed Name

Ariel Czemerinski



For Agency Use Only

DETERMINATION OF NO PERMIT REQUIRED

Agency Application Number

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name

Title

Signature

Date

3) Short Environmental Assessment Form

Short Environmental Assessment Form

Part 1 - Project Information

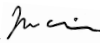
Instructions for Completing

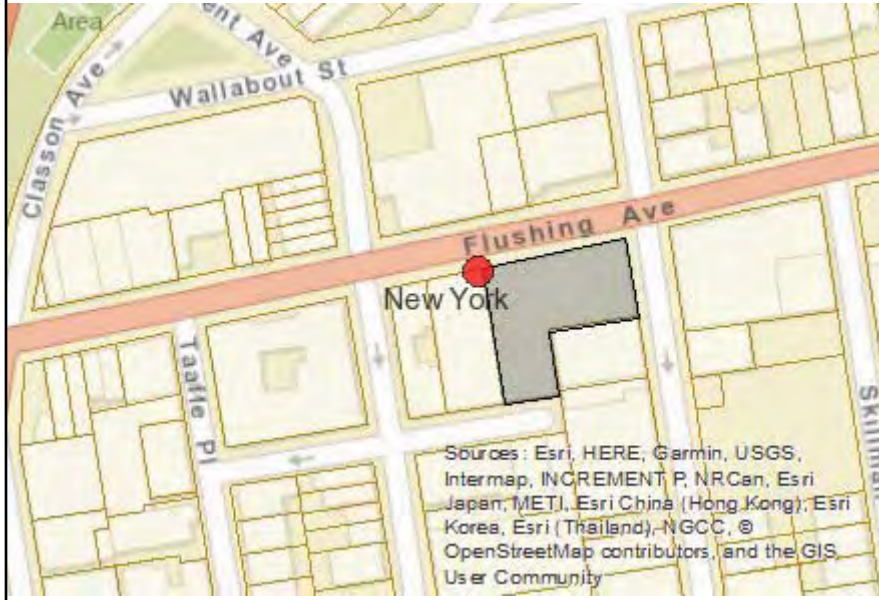
Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information							
Name of Action or Project: Rose Castle - 376-378 Flushing Avenue, Brooklyn							
Project Location (describe, and attach a location map): Site has frontage on Flushing Avenue, Franklin Avenue, and Little Nassau Street.							
Brief Description of Proposed Action: Lotus Residences LLC is the owner of the Site located at 376-378 Flushing Avenue, Brooklyn NY 11223. The property is identified as Block 1884 Lots 40 and 48 on the Brooklyn Borough Tax Map. The site is irregularly-shaped, with an approximate area of 39,307 square feet. The site has frontage on Flushing Avenue, Franklin Avenue, and Little Nassau Street. It is proposed to dewater a maximum of 1,296,000 gallons per day during construction activities for six months for sitewide dewatering activities. (138) 1.5" wellpoints will be utilized during operations.							
Name of Applicant or Sponsor: Lotus Residences LLC		Telephone: 718-999-1145					
		E-Mail: zelig@riversideny.com					
Address: 266 Broadway, Suite 301							
City/PO: Brooklyn		State: NY	Zip Code: 11211				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; text-align: center;"> <tr> <th style="width: 50%;">NO</th> <th style="width: 50%;">YES</th> </tr> <tr> <td>☒</td> <td>☐</td> </tr> </table>	NO	YES	☒	☐
NO	YES						
☒	☐						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: NYCDEP BWSO - Sewer Use Approval NYCDEP BWT - Dewatering Permit			<table border="1" style="width: 100%; text-align: center;"> <tr> <th style="width: 50%;">NO</th> <th style="width: 50%;">YES</th> </tr> <tr> <td>☐</td> <td>☒</td> </tr> </table>	NO	YES	☐	☒
NO	YES						
☐	☒						
3.a. Total acreage of the site of the proposed action?		_____ 0.902 acres					
b. Total acreage to be physically disturbed?		_____ 0.902 acres					
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		_____ 0.902 acres					
4. Check all land uses that occur on, adjoining and near the proposed action. ☒ Urban ☐ Rural (non-agriculture) ☒ Industrial ☒ Commercial ☐ Residential (suburban) ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____ ☐ Parkland							

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO ☐	YES ☒	N/A ☐
b. Consistent with the adopted comprehensive plan?	☐	☒	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO ☐	YES ☒	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO ☒	YES ☐	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO ☒	YES ☐	
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☒	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☐	☒	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO ☐	YES ☒	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	NO ☐	YES ☒	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	NO ☐	YES ☒	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places? b. Is the proposed action located in an archeological sensitive area?	NO ☒ ☒	YES ☐ ☐	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	NO ☒ ☒	YES ☐ ☐	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: ☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional ☐ Wetland ☒ Urban ☐ Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO ☒	YES ☐	
16. Is the project site located in the 100 year flood plain?	NO ☒	YES ☐	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? ☐ NO ☐ YES b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☐ YES _____	NO ☒	YES ☐	

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ Treatment system (18,000 gallon settling tank) _____ _____	NO ☐	YES ☒
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____ _____	NO ☒	YES ☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ The subject property is currently enrolled in the NYSDEC's Brownfield Cleanup Program (BCP) under project number C-224624. _____	NO ☐	YES ☒
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor name: <u>Zelig Weiss</u> Date: <u>6/13/2019</u> Signature: <u></u>		



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National Register of Historic Places]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	Yes

4) Analytical Results of Water to be Discharged

Treated Sample Results



Wednesday, September 05, 2018

Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Project ID: 376 FLUSHING AVE BK
Sample ID#s: CB20133

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

September 05, 2018

FOR: Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Sample Information

Matrix: GW DISCHARGE
Location Code: AMC-ENG
Rush Request: Standard
P.O.#:

Custody Information

Collected by: BG
Received by: SW
Analyzed by: see "By" below

Date

08/27/18
08/28/18

Time

12:05
15:00

Laboratory Data

SDG ID: GCB20133
Phoenix ID: CB20133

Project ID: 376 FLUSHING AVE BK
Client ID: TREATED

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Cadmium	< 0.001	0.001		mg/L	1	08/31/18	EK	E200.7
Chromium	< 0.001	0.001		mg/L	1	08/31/18	EK	E200.7
Copper	< 0.003	0.003		mg/L	1	08/31/18	EK	E200.7
Mercury	< 0.0002	0.0002		mg/L	1	08/29/18	RS	E245.1
Nickel	< 0.001	0.001		mg/L	1	08/31/18	EK	E200.7
Lead	< 0.001	0.001		mg/L	1	08/31/18	EK	E200.7
Zinc	0.005	0.002		mg/L	1	08/31/18	EK	E200.7
Carbonaceous BOD	< 4.0	4.0		mg/L	2	08/28/18 15:30	RVM/RM	SM5210B-11
Chloride	301	15.0		mg/L	5	08/31/18	MC	SM4500CLE-11
Flash Point	>200	200		Degree F	1	08/29/18	Y	SW1010A
Ignitability	Passed	140		degree F	1	08/29/18	Y	SW846-Ignit 1
Nitrite-N	0.010	0.010		mg/L	1	08/28/18 18:37	MC	E353.2
Nitrate-N	6.57	0.20		mg/L	10	08/28/18 18:34	MC	E353.2
pH	8.17	1.00		pH Units	1	08/29/18 09:02	RR/EG	SM4500-H B-00 1
Nitrogen Tot Kjeldahl	< 0.10	0.10		mg/L	1	08/29/18	KDB	E351.1
Total Nitrogen	6.58	0.10		mg/L	1	08/29/18	KDB	SM4500NH3/E300.0-97 1
O&G, Non-polar Material	< 1.4	1.4		mg/L	1	08/30/18	MSF	E1664A 1
Total Suspended Solids	< 5.0	5.0		mg/L	1	08/29/18	KMH/EG	SM2540D-11
Total Solids	930	10		mg/L	1	08/30/18	EG/DA	SM2540B-11
Mercury Digestion	Completed					08/29/18	Q/I	E245.1
PCB Extraction (2 Liter)	Completed					08/28/18		E608
Semi-Volatile Extraction	Completed					08/28/18	P/S/D/RD	E625
Total Metals Digestion	Completed					08/30/18	AG	

Polychlorinated Biphenyls

PCB-1016	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1221	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1232	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
PCB-1242	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1248	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1254	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1260	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1262	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1268	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
<u>QA/QC Surrogates</u>								
% DCBP (Surrogate Rec)	87			%	1	08/30/18	AW	30 - 150 %
% TCMX (Surrogate Rec)	81			%	1	08/30/18	AW	30 - 150 %

Volatiles

1,1,1-Trichloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1,2,2-tetrachloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1,2-Trichloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1-Dichloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1-Dichloroethene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,2-Dichloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,2-Dichloropropane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Benzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Bromodichloromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Bromoform	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Bromomethane	ND	0.50	0.50	ug/L	1	08/28/18	MH	E624.1
Carbon tetrachloride	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chloroform	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chloromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
cis-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	08/28/18	MH	E624.1
Dibromochloromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Ethylbenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
m&p-Xylene	ND	0.50	0.42	ug/L	1	08/28/18	MH	E624.1
Methyl tert-butyl ether (MTBE)	ND	1.0	0.50	ug/L	1	08/28/18	MH	E624.1
Methylene chloride	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
o-Xylene	ND	0.50	0.45	ug/L	1	08/28/18	MH	E624.1
Tetrachloroethene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Toluene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
trans-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	08/28/18	MH	E624.1
Trichloroethene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Trichlorofluoromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Vinyl chloride	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	100			%	1	08/28/18	MH	70 - 130 %
% Bromofluorobenzene	93			%	1	08/28/18	MH	70 - 130 %
% Dibromofluoromethane	100			%	1	08/28/18	MH	70 - 130 %
% Toluene-d8	99			%	1	08/28/18	MH	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Semivolatiles</u>								
1,2,4-Trichlorobenzene	ND	4.8	1.4	ug/L	1	08/31/18	HM	E625.1
Naphthalene	ND	4.8	1.4	ug/L	1	08/31/18	HM	E625.1
Phenol	ND	4.8	1.5	ug/L	1	08/31/18	HM	E625.1
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	86			%	1	08/31/18	HM	30 - 130 %
% 2-Fluorophenol	65			%	1	08/31/18	HM	10 - 130 %
% Nitrobenzene-d5	74			%	1	08/31/18	HM	15 - 130 %
% Phenol-d5	71			%	1	08/31/18	HM	10 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

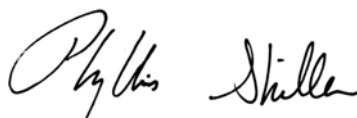
Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If there are any questions regarding this data, please call Phoenix Client Services.

This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director

September 05, 2018

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

September 05, 2018

QA/QC Data

SDG I.D.: GCB20133

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 445242 (mg/L), QC Sample No: CB19767 (CB20133)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	88.9			72.5			80 - 120	20 m
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 445516 (mg/L), QC Sample No: CB19923 (CB20133)													
<u>ICP Metals - Aqueous</u>													
Cadmium	BRL	0.0005	<0.001	<0.0005	NC	93.7			94.6			75 - 125	20
Chromium	BRL	0.0005	0.001	0.0012	NC	92.5			96.0			75 - 125	20
Copper	BRL	0.0025	0.032	0.0315	1.60	95.5			102			75 - 125	20
Lead	BRL	0.0010	<0.001	<0.0010	NC	90.1			94.5			75 - 125	20
Nickel	BRL	0.0005	0.014	0.0134	4.40	92.8			97.1			75 - 125	20
Zinc	BRL	0.0020	0.019	0.0181	4.90	92.0			94.9			75 - 125	20

m = This parameter is outside laboratory MS/MSD specified recovery limits.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

September 05, 2018

QA/QC Data

SDG I.D.: GCB20133

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 445423 (mg/L), QC Sample No: CB19470 (CB20133)													
Total Solids	BRL	10	850	850	0	102						85 - 115	20
QA/QC Batch 445208 (mg/L), QC Sample No: CB20039 (CB20133)													
Nitrate-N	BRL	0.02	<0.02	<0.02	NC	103			103			90 - 110	20
Nitrite-N	BRL	0.01	0.018	0.02	NC	100			94.4			90 - 110	20
QA/QC Batch 445190 (mg/L), QC Sample No: CB20063 (CB20133)													
Nitrogen Tot Kjeldahl	BRL	0.10	0.47	0.45	NC	104			96.5			85 - 115	20
Comment: TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.													
QA/QC Batch 445253 (mg/L), QC Sample No: CB20078 (CB20133)													
Total Suspended Solids	BRL	5.0	<5.0	<5.0	NC	92.0						85 - 115	20
QA/QC Batch 445157 (mg/L), QC Sample No: CB20105 (CB20133)													
B.O.D./5 day	BRL	2.0	<4.0	<4.0	NC	127			55.3			70 - 130	20 m
B.O.D./5 day GGA CBOD						107						84 - 115	20
QA/QC Batch 445428 (mg/L), QC Sample No: CB20110 (CB20133)													
O&G, Non-polar Material	BRL	1.4	<1.4	<1.4	NC	90.0			88.0			85 - 115	20
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 445270 (pH), QC Sample No: CB20405 (CB20133)													
pH			7.52	7.39	1.70	97.9						85 - 115	20
QA/QC Batch 445327 (Degree F), QC Sample No: CB20642 (CB20133)													
Flash Point			>200	>200	NC	100						75 - 125	30
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 445773 (mg/L), QC Sample No: CB22569 (CB20133)													
Chloride	BRL	3.0	11.8	11.9	NC	96.8			104			90 - 110	20

m = This parameter is outside laboratory MS/MSD specified recovery limits.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

September 05, 2018

QA/QC Data

SDG I.D.: GCB20133

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 445202 (ug/L), QC Sample No: CB19054 (CB20133)										
<u>Polychlorinated Biphenyls</u>										
PCB-1016	ND	0.050	96	97	1.0				40 - 140	20
PCB-1221	ND	0.050							40 - 140	20
PCB-1232	ND	0.050							40 - 140	20
PCB-1242	ND	0.050							40 - 140	20
PCB-1248	ND	0.050							40 - 140	20
PCB-1254	ND	0.050							40 - 140	20
PCB-1260	ND	0.050	87	89	2.3				40 - 140	20
PCB-1262	ND	0.050							40 - 140	20
PCB-1268	ND	0.050							40 - 140	20
% DCBP (Surrogate Rec)	88	%	93	97	4.2				30 - 150	20
% TCMX (Surrogate Rec)	85	%	100	101	1.0				30 - 150	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 445255 (ug/L), QC Sample No: CB20132 (CB20133)

Volatiles

1,1,1-Trichloroethane	ND	1.0	84	88	4.7	93	91	2.2	75 - 125	20
1,1,2,2-Tetrachloroethane	ND	0.50	97	98	1.0	102	99	3.0	60 - 140	20
1,1,2-Trichloroethane	ND	1.0	92	94	2.2	92	87	5.6	71 - 129	20
1,1-Dichloroethane	ND	1.0	87	91	4.5	99	96	3.1	72 - 128	20
1,1-Dichloroethene	ND	1.0	84	87	3.5	94	90	4.3	50 - 150	20
1,2-Dichlorobenzene	ND	1.0	93	95	2.1	96	92	4.3	63 - 137	20
1,2-Dichloroethane	ND	1.0	91	92	1.1	100	95	5.1	68 - 132	20
1,2-Dichloropropane	ND	1.0	89	89	0.0	91	90	1.1	40 - 160	20
1,3-Dichlorobenzene	ND	1.0	94	98	4.2	96	94	2.1	73 - 127	20
1,4-Dichlorobenzene	ND	1.0	94	95	1.1	94	90	4.3	63 - 137	20
Benzene	ND	0.70	89	92	3.3	93	90	3.3	64 - 136	20
Bromodichloromethane	ND	0.50	91	94	3.2	98	94	4.2	65 - 135	20
Bromoform	ND	1.0	100	102	2.0	106	101	4.8	71 - 129	20
Bromomethane	ND	1.0	89	95	6.5	82	84	2.4	40 - 160	20
Carbon tetrachloride	ND	1.0	82	85	3.6	94	90	4.3	73 - 127	20
Chlorobenzene	ND	1.0	92	96	4.3	94	92	2.2	66 - 134	20
Chloroethane	ND	1.0	92	93	1.1	102	97	5.0	40 - 160	20
Chloroform	ND	1.0	87	89	2.3	94	93	1.1	67 - 133	20
Chloromethane	ND	1.0	76	80	5.1	82	79	3.7	40 - 160	20
cis-1,2-Dichloroethene	ND	1.0	91	94	3.2	96	93	3.2	69 - 131	20
cis-1,3-Dichloropropene	ND	0.40	94	94	0.0	91	89	2.2	40 - 160	20
Dibromochloromethane	ND	0.50	104	107	2.8	106	102	3.8	67 - 133	20
Ethylbenzene	ND	1.0	91	94	3.2	94	89	5.5	59 - 141	20
m&p-Xylene	ND	1.0	94	97	3.1	95	92	3.2	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	93	94	1.1	102	99	3.0	70 - 130	30

QA/QC Data

SDG I.D.: GCB20133

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Methylene chloride	ND	1.0	86	87	1.2	95	92	3.2	60 - 140	20
o-Xylene	ND	1.0	97	99	2.0	97	94	3.1	70 - 130	30
Tetrachloroethene	ND	1.0	89	96	7.6	88	87	1.1	73 - 127	20
Toluene	ND	1.0	92	93	1.1	93	97	4.2	74 - 126	20
trans-1,2-Dichloroethene	ND	1.0	84	89	5.8	94	91	3.2	69 - 131	20
trans-1,3-Dichloropropene	ND	0.40	83	95	13.5	83	86	3.6	50 - 150	20
Trichloroethene	ND	1.0	92	95	3.2	95	92	3.2	66 - 134	20
Trichlorofluoromethane	ND	1.0	81	85	4.8	95	91	4.3	48 - 152	20
Vinyl chloride	ND	1.0	86	90	4.5	95	92	3.2	40 - 160	20
% 1,2-dichlorobenzene-d4	99	%	99	99	0.0	101	100	1.0	70 - 130	30
% Bromofluorobenzene	95	%	100	99	1.0	100	99	1.0	70 - 130	30
% Dibromofluoromethane	100	%	96	95	1.0	97	102	5.0	70 - 130	30
% Toluene-d8	98	%	99	98	1.0	99	104	4.9	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
 LCS - Laboratory Control Sample
 LCSD - Laboratory Control Sample Duplicate
 MS - Matrix Spike
 MS Dup - Matrix Spike Duplicate
 NC - No Criteria
 Intf - Interference


 Phyllis Shiller, Laboratory Director
 September 05, 2018

Sample Criteria Exceedances Report
GCB20133 - AMC-ENG

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
--------	-------	-----------------	----------	--------	----	----------	----------------	-------------------

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

September 05, 2018

SDG I.D.: GCB20133

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



NY Temperature Narration

September 05, 2018

SDG I.D.: GCB20133

The samples in this delivery group were received at 4.7°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

GCB 20133

Shannon Wilhelm

From: Ariel <ariel@amc-engineering.com>
Sent: Wednesday, August 29, 2018 10:50 AM
To: Shannon Wilhelm
Subject: RE: 376 Flushing Ave
Attachments: DEP- Table A.PDF; DEP- Table A - Reduced List.pdf

Hi Shannon,
The ones for Flushing Ave do require the full list (see attached).

The one for E156th Street only the reduced list.

From: Shannon Wilhelm [<mailto:shannon@phoenixlabs.com>]
Sent: Wednesday, August 29, 2018 10:24 AM
To: 'ariel@amc-engineering.com'
Subject: 376 Flushing Ave
Importance: High

Hi Ariel,
Please see attached and confirm if you need PCB's on these. The comment indicates not to analyze for PCB's. Thank you.

Shannon Wilhelm
Client Services Representative
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester CT 06040
860-645-1102

Untreated Sample Results



Wednesday, September 05, 2018

Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Project ID: 376 FLUSHING AVE BK
Sample ID#s: CB20134

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

September 05, 2018

FOR: Attn: Ariel Czemerinski
AMC Engineering PLLC
18-36 42nd Street
Astoria, NY 11105

Sample Information

Matrix: GW DISCHARGE
Location Code: AMC-ENG
Rush Request: Standard
P.O.#:

Custody Information

Collected by: BG
Received by: SW
Analyzed by: see "By" below

Date

08/27/18
08/28/18

Time

11:45
15:00

Laboratory Data

SDG ID: GCB20134
Phoenix ID: CB20134

Project ID: 376 FLUSHING AVE BK
Client ID: INFLUENT

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Cadmium	< 0.001	0.001		mg/L	1	08/30/18	CPP	E200.7
Chromium	< 0.001	0.001		mg/L	1	08/30/18	CPP	E200.7
Copper	< 0.003	0.003		mg/L	1	08/30/18	CPP	E200.7
Mercury	< 0.0002	0.0002		mg/L	1	08/29/18	RS	E245.1
Nickel	0.005	0.001		mg/L	1	08/30/18	CPP	E200.7
Lead	< 0.001	0.001		mg/L	1	08/30/18	CPP	E200.7
Zinc	0.033	0.002		mg/L	1	08/30/18	CPP	E200.7
Carbonaceous BOD	< 2.4	2.4		mg/L	3	08/28/18 15:30	RVM/RM	SM5210B-11
Chloride	280	15.0		mg/L	5	08/31/18	MC	SM4500CLE-11
Flash Point	>200	200		Degree F	1	08/29/18	Y	SW1010A
Ignitability	Passed	140		degree F	1	08/29/18	Y	SW846-Ignit 1
Nitrite-N	0.012	0.010		mg/L	1	08/28/18 18:38	MC	E353.2
Nitrate-N	6.49	0.10		mg/L	5	08/28/18 18:39	MC	E353.2
pH	7.72	1.00		pH Units	1	08/28/18 20:17	RR/EG	SM4500-H B-00 1
Nitrogen Tot Kjeldahl	< 0.10	0.10		mg/L	1	08/29/18	KDB	E351.1
Total Nitrogen	6.50	0.10		mg/L	1	08/29/18	KDB	SM4500NH3/E300.0-97 1
O&G, Non-polar Material	< 1.4	1.4		mg/L	1	08/30/18	MSF	E1664A 1
Total Suspended Solids	< 5.0	5.0		mg/L	1	08/29/18	KMH/EG	SM2540D-11
Total Solids	900	10		mg/L	1	08/30/18	EG/DA	SM2540B-11
Mercury Digestion	Completed					08/29/18	Q/I	E245.1
PCB Extraction (2 Liter)	Completed					08/28/18		E608
Semi-Volatile Extraction	Completed					08/28/18	P/S/D/RD	E625
Total Metals Digestion	Completed					08/29/18	AG	

Polychlorinated Biphenyls

PCB-1016	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1221	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1232	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
PCB-1242	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1248	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1254	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1260	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1262	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
PCB-1268	ND	0.047	0.047	ug/L	1	08/30/18	AW	E608
QA/QC Surrogates								
% DCBP (Surrogate Rec)	88			%	1	08/30/18	AW	30 - 150 %
% TCMX (Surrogate Rec)	79			%	1	08/30/18	AW	30 - 150 %

Volatiles

1,1,1-Trichloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1,2,2-tetrachloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1,2-Trichloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1-Dichloroethane	0.50	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,1-Dichloroethene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,2-Dichloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,2-Dichloropropane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Benzene	5.5	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Bromodichloromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Bromoform	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Bromomethane	ND	0.50	0.50	ug/L	1	08/28/18	MH	E624.1
Carbon tetrachloride	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chlorobenzene	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chloroethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chloroform	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Chloromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
cis-1,2-Dichloroethene	8.1	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	08/28/18	MH	E624.1
Dibromochloromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Ethylbenzene	0.61	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
m&p-Xylene	2.2	0.50	0.42	ug/L	1	08/28/18	MH	E624.1
Methyl tert-butyl ether (MTBE)	0.54	J 1.0	0.50	ug/L	1	08/28/18	MH	E624.1
Methylene chloride	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
o-Xylene	0.83	0.50	0.45	ug/L	1	08/28/18	MH	E624.1
Tetrachloroethene	10	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Toluene	2.0	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
trans-1,2-Dichloroethene	0.29	J 0.50	0.25	ug/L	1	08/28/18	MH	E624.1
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	08/28/18	MH	E624.1
Trichloroethene	5.2	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Trichlorofluoromethane	ND	0.50	0.25	ug/L	1	08/28/18	MH	E624.1
Vinyl chloride	0.27	J 0.50	0.25	ug/L	1	08/28/18	MH	E624.1

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	99			%	1	08/28/18	MH	70 - 130 %
% Bromofluorobenzene	95			%	1	08/28/18	MH	70 - 130 %
% Dibromofluoromethane	95			%	1	08/28/18	MH	70 - 130 %
% Toluene-d8	100			%	1	08/28/18	MH	70 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Semivolatiles</u>								
1,2,4-Trichlorobenzene	ND	4.9	1.5	ug/L	1	08/31/18	HM	E625.1
Naphthalene	ND	4.9	1.4	ug/L	1	08/31/18	HM	E625.1
Phenol	ND	4.9	1.6	ug/L	1	08/31/18	HM	E625.1
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	81			%	1	08/31/18	HM	30 - 130 %
% 2-Fluorophenol	57			%	1	08/31/18	HM	10 - 130 %
% Nitrobenzene-d5	72			%	1	08/31/18	HM	15 - 130 %
% Phenol-d5	66			%	1	08/31/18	HM	10 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

If there are any questions regarding this data, please call Phoenix Client Services.

This report must not be reproduced except in full as defined by the attached chain of custody.



Phyllis Shiller, Laboratory Director

September 05, 2018

Reviewed and Released by: Kathleen Cressia, QA/QC Officer



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

September 05, 2018

QA/QC Data

SDG I.D.: GCB20134

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 445242 (mg/L), QC Sample No: CB19767 (CB20134)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	88.9			72.5			80 - 120	20 m
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 445351 (mg/L), QC Sample No: CB20342 (CB20134)													
<u>ICP Metals - Aqueous</u>													
Cadmium	BRL	0.0005	<0.001	<0.0005	NC	97.0			96.2			75 - 125	20
Chromium	BRL	0.0005	0.057	0.0573	0.50	97.9			97.0			75 - 125	20
Copper	BRL	0.0025	0.076	0.0786	3.40	98.8			107			75 - 125	20
Lead	BRL	0.0010	<0.001	<0.0010	NC	97.5			96.4			75 - 125	20
Nickel	BRL	0.0005	0.074	0.0754	1.90	97.9			95.5			75 - 125	20
Zinc	BRL	0.0020	0.007	0.0075	NC	97.5			100			75 - 125	20

m = This parameter is outside laboratory MS/MSD specified recovery limits.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

September 05, 2018

QA/QC Data

SDG I.D.: GCB20134

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 445423 (mg/L), QC Sample No: CB19470 (CB20134)													
Total Solids	BRL	10	850	850	0	102						85 - 115	20
QA/QC Batch 445208 (mg/L), QC Sample No: CB20039 (CB20134)													
Nitrate-N	BRL	0.02	<0.02	<0.02	NC	103			103			90 - 110	20
Nitrite-N	BRL	0.01	0.018	0.02	NC	100			94.4			90 - 110	20
QA/QC Batch 445190 (mg/L), QC Sample No: CB20063 (CB20134)													
Nitrogen Tot Kjeldahl	BRL	0.10	0.47	0.45	NC	104			96.5			85 - 115	20
Comment: TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.													
QA/QC Batch 445253 (mg/L), QC Sample No: CB20078 (CB20134)													
Total Suspended Solids	BRL	5.0	<5.0	<5.0	NC	92.0						85 - 115	20
QA/QC Batch 445157 (mg/L), QC Sample No: CB20105 (CB20134)													
B.O.D./5 day	BRL	2.0	<4.0	<4.0	NC	127			55.3			70 - 130	20 m
B.O.D./5 day GGA CBOD						107						84 - 115	20
QA/QC Batch 445428 (mg/L), QC Sample No: CB20110 (CB20134)													
O&G, Non-polar Material	BRL	1.4	<1.4	<1.4	NC	90.0			88.0			85 - 115	20
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 445264 (pH), QC Sample No: CB20134 (CB20134)													
pH			7.72	7.67	0.60	98.0						85 - 115	20
QA/QC Batch 445327 (Degree F), QC Sample No: CB20642 (CB20134)													
Flash Point			>200	>200	NC	100						75 - 125	30
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 445773 (mg/L), QC Sample No: CB22569 (CB20134)													
Chloride	BRL	3.0	11.8	11.9	NC	96.8			104			90 - 110	20

m = This parameter is outside laboratory MS/MSD specified recovery limits.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

September 05, 2018

QA/QC Data

SDG I.D.: GCB20134

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 445202 (ug/L), QC Sample No: CB19054 (CB20134)										
<u>Polychlorinated Biphenyls</u>										
PCB-1016	ND	0.050	96	97	1.0				40 - 140	20
PCB-1221	ND	0.050							40 - 140	20
PCB-1232	ND	0.050							40 - 140	20
PCB-1242	ND	0.050							40 - 140	20
PCB-1248	ND	0.050							40 - 140	20
PCB-1254	ND	0.050							40 - 140	20
PCB-1260	ND	0.050	87	89	2.3				40 - 140	20
PCB-1262	ND	0.050							40 - 140	20
PCB-1268	ND	0.050							40 - 140	20
% DCBP (Surrogate Rec)	88	%	93	97	4.2				30 - 150	20
% TCMX (Surrogate Rec)	85	%	100	101	1.0				30 - 150	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 445255 (ug/L), QC Sample No: CB20132 (CB20134)

Volatiles

1,1,1-Trichloroethane	ND	1.0	84	88	4.7	93	91	2.2	75 - 125	20
1,1,2,2-Tetrachloroethane	ND	0.50	97	98	1.0	102	99	3.0	60 - 140	20
1,1,2-Trichloroethane	ND	1.0	92	94	2.2	92	87	5.6	71 - 129	20
1,1-Dichloroethane	ND	1.0	87	91	4.5	99	96	3.1	72 - 128	20
1,1-Dichloroethene	ND	1.0	84	87	3.5	94	90	4.3	50 - 150	20
1,2-Dichlorobenzene	ND	1.0	93	95	2.1	96	92	4.3	63 - 137	20
1,2-Dichloroethane	ND	1.0	91	92	1.1	100	95	5.1	68 - 132	20
1,2-Dichloropropane	ND	1.0	89	89	0.0	91	90	1.1	40 - 160	20
1,3-Dichlorobenzene	ND	1.0	94	98	4.2	96	94	2.1	73 - 127	20
1,4-Dichlorobenzene	ND	1.0	94	95	1.1	94	90	4.3	63 - 137	20
Benzene	ND	0.70	89	92	3.3	93	90	3.3	64 - 136	20
Bromodichloromethane	ND	0.50	91	94	3.2	98	94	4.2	65 - 135	20
Bromoform	ND	1.0	100	102	2.0	106	101	4.8	71 - 129	20
Bromomethane	ND	1.0	89	95	6.5	82	84	2.4	40 - 160	20
Carbon tetrachloride	ND	1.0	82	85	3.6	94	90	4.3	73 - 127	20
Chlorobenzene	ND	1.0	92	96	4.3	94	92	2.2	66 - 134	20
Chloroethane	ND	1.0	92	93	1.1	102	97	5.0	40 - 160	20
Chloroform	ND	1.0	87	89	2.3	94	93	1.1	67 - 133	20
Chloromethane	ND	1.0	76	80	5.1	82	79	3.7	40 - 160	20
cis-1,2-Dichloroethene	ND	1.0	91	94	3.2	96	93	3.2	69 - 131	20
cis-1,3-Dichloropropene	ND	0.40	94	94	0.0	91	89	2.2	40 - 160	20
Dibromochloromethane	ND	0.50	104	107	2.8	106	102	3.8	67 - 133	20
Ethylbenzene	ND	1.0	91	94	3.2	94	89	5.5	59 - 141	20
m&p-Xylene	ND	1.0	94	97	3.1	95	92	3.2	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	93	94	1.1	102	99	3.0	70 - 130	30

QA/QC Data

SDG I.D.: GCB20134

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Methylene chloride	ND	1.0	86	87	1.2	95	92	3.2	60 - 140	20
o-Xylene	ND	1.0	97	99	2.0	97	94	3.1	70 - 130	30
Tetrachloroethene	ND	1.0	89	96	7.6	88	87	1.1	73 - 127	20
Toluene	ND	1.0	92	93	1.1	93	97	4.2	74 - 126	20
trans-1,2-Dichloroethene	ND	1.0	84	89	5.8	94	91	3.2	69 - 131	20
trans-1,3-Dichloropropene	ND	0.40	83	95	13.5	83	86	3.6	50 - 150	20
Trichloroethene	ND	1.0	92	95	3.2	95	92	3.2	66 - 134	20
Trichlorofluoromethane	ND	1.0	81	85	4.8	95	91	4.3	48 - 152	20
Vinyl chloride	ND	1.0	86	90	4.5	95	92	3.2	40 - 160	20
% 1,2-dichlorobenzene-d4	99	%	99	99	0.0	101	100	1.0	70 - 130	30
% Bromofluorobenzene	95	%	100	99	1.0	100	99	1.0	70 - 130	30
% Dibromofluoromethane	100	%	96	95	1.0	97	102	5.0	70 - 130	30
% Toluene-d8	98	%	99	98	1.0	99	104	4.9	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
 LCS - Laboratory Control Sample
 LCSD - Laboratory Control Sample Duplicate
 MS - Matrix Spike
 MS Dup - Matrix Spike Duplicate
 NC - No Criteria
 Intf - Interference


 Phyllis Shiller, Laboratory Director
 September 05, 2018

Wednesday, September 05, 2018

Criteria: NY: DEP EFF

State: NY

Sample Criteria Exceedances Report

GCB20134 - AMC-ENG

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
--------	-------	-----------------	----------	--------	----	----------	----------------	-------------------

*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

September 05, 2018

SDG I.D.: GCB20134

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



NY Temperature Narration

September 05, 2018

SDG I.D.: GCB20134

The samples in this delivery group were received at 4.7°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

GCB 20134

Shannon Wilhelm

From: Ariel <ariel@amc-engineering.com>
Sent: Wednesday, August 29, 2018 10:50 AM
To: Shannon Wilhelm
Subject: RE: 376 Flushing Ave
Attachments: DEP- Table A.PDF; DEP- Table A - Reduced List.pdf

Hi Shannon,
The ones for Flushing Ave do require the full list (see attached).

The one for E156th Street only the reduced list.

From: Shannon Wilhelm [<mailto:shannon@phoenixlabs.com>]
Sent: Wednesday, August 29, 2018 10:24 AM
To: 'ariel@amc-engineering.com'
Subject: 376 Flushing Ave
Importance: High

Hi Ariel,
Please see attached and confirm if you need PCB's on these. The comment indicates not to analyze for PCB's. Thank you.

Shannon Wilhelm
Client Services Representative
Phoenix Environmental Laboratories
587 East Middle Turnpike
Manchester CT 06040
860-645-1102

5) Technical Information of Proposed Treatment System



Easy-to-clean, smooth-wall interior



18,000 Gallon Open-Top Weir Tank

Capacity: 18,060 gal (430 bbl)
Height: 13'
Width: 8'
Length: 43' 6"
Tare Weight: 30,000 lbs

All sizes are approximate

At Adler Tank Rentals, we are committed to providing safe and reliable containment solutions for all types of applications where performance matters.

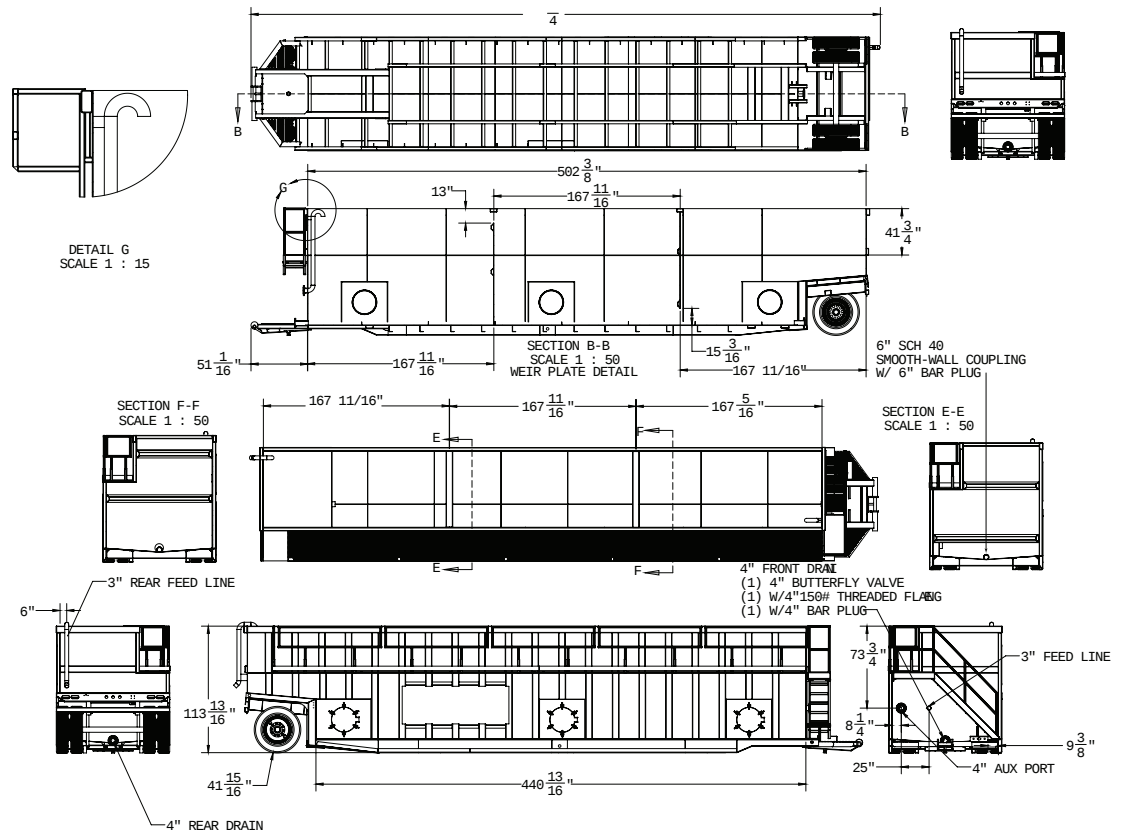
Designed with internal weirs to promote faster separation of oils and particulate contaminants from stored groundwater, the 18,000 Gallon Open-Top Weir Tank can efficiently accommodate flows of up to 100 GPM or more in either pump-through or batch-treatment capacities.



Mechanical Features

- 3" fill line
- Three (3) standard 22" side-hinged manways
- Multiple 4" valved fill/drain ports, including floor-level valves for low point drain out
- Sloped and V bottom for quicker drain out and easier cleaning
- Easy-to-clean design with smooth-wall interior, no corrugations and no internal rods
- Front-mounted ladderwell for top access
- Fixed rear axle for increased maneuverability
- Nose rail cut-out for easy access when installing hose and fittings on the front/bottom of tank
- Internal baffles, or weirs (over and under), to accelerate settling of unwanted solids and fine sediments; may also be used in the separation of unwanted floating materials
- Can be used in a pump-through or batch-treatment capacity
- Flows of up to 100 GPM achievable depending on circumstances; may also be modified to achieve higher flows while maintaining efficiency
- One (1) front and one (1) rear 4" valved fill/drain port

18,000 Gallon Open-Top Weir Tank



Safety Features

- Non-slip step materials on ladderwells and catwalks
- "Safety yellow" rails and catwalks for high visibility
- Safe operation reminder decals
- Built-in stair and walkway

Options

- Weirs
- Audible alarms, strobes and level gauges (digital and mechanical)

Comprehensive Service

Adler Tank Rentals provides containment solutions for hazardous and non-hazardous liquids and solids. We offer 24-hour emergency service, expert planning assistance, transportation, repair and cleaning services. All of our rental equipment is serviced by experienced Adler technicians and tested to exceed even the most stringent industry standards.



GWTT Dewatering Pump Can

Flexible Capacity

Available in different sizes
Can accommodate any size
dewatering project needs

Pulse Radar Liquid Level Transmitter

Controls the pump speed, saves energy
Prevents pump from running dry

High Flow Delusion Valves

Automatic vacuum relief
Protection from occasional water surge

Uncomplicated Design

Focuses on performance and strength
with no extra moving parts.

Available Width as Low as 18"

Designed with metro area
space limitations in mind

Low Energy Consumption

5HP-25HP submersible pump



Up to 28" HG of Vacuum

Assists holding vacuum in
extra long dewatering systems

Consumable-Free

No additional supplies required
for operation. Virtually maintenance-free

24/7 Operation

Can run continuously for months
Does not overheat

Safe and Quiet Running

< 45 dB at 20 feet

Sturdy Frame

For damage prevention

Auto-Dialer Monitoring System

Sends alarms to the callout list
of your choice

Powered by reliable submersible pumps manufactured by an industry leader. Capable of handling up to 1,000 GPM per unit.

Power requirement: 480 V/3 Phase, 7.5 - 40 Amps

GWTT 30HP Dewatering Vacuum Station

Dual Ports
Allow for unrestricted higher air flow
resulting in higher performance
at cooler temperatures

Cooling Fan
High performance cooling fan
No extra moving parts

Carbon Fibre Vanes
Requires 50% less oil
Lasts 4x - 5x longer than Kevlar

Uncomplicated design
Focuses on performance and strength
with no extra moving parts.

Environmentally Friendly
Oil drip collection to built-in
11 Gal oil catch basin

Low Energy Consumption
30HP electric motor



Up to 28" HG of Vacuum
Can hold vacuum in
extra long dewatering systems

Oil Injection Pump
for metered oil delivery
No adjustment required

10 Gal Oil Tank
Can run continuously for days
without adding oil

Safe and Quiet Running
< 85 dB at 20 feet

Sturdy Frame
for damage prevention

Auto-Dialer Monitoring System
Sends alarms to the callout list
of your choice

Powered by 600 CFM rotary vane vacuum pump capable of holding up to 28" HG of vacuum in an extra-large wellpoint dewatering system.

Power requirement: 480 V/3 Phase, 100 Amps



ECO-VALVE

Figure # 267AB

Low Lead Brass Gate Valve

Product Features

- 200# WOG
- Low Lead Brass Body
- Non-Rising Stem
- Solid Disc
- Threaded Ends
- Inserted bonnet
- NSF61-G



Certified to
ANSI/NSF 61

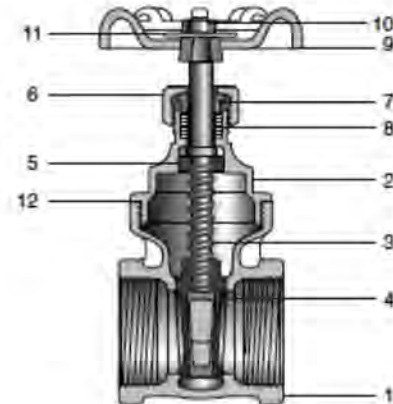


Technical Specifications

Pressure/Temperature Ratings	
200# WOG	212°F max temp.

Materials & Specifications

Item	Description	Material	Specification
1	Body	Low Lead Brass	CW510L
2	Bonnet	Low Lead Brass	CW510L
3	Stem	Low Lead Brass	CW510L
4	Disc	Low Lead Brass	CW510L
5	Lock Nut	Low Lead Brass	CW510L
6	Gland nut	Brass	B124
7	Gland	Brass	B124
8	Packing	PTFE	-
9	Handwheel	Aluminum	-
10	Nut	Steel	A36
11	Tag	Aluminum	-
12	Gasket	PTFE	-



Dimensions, Weights (inches-lbs.) & Valve Data

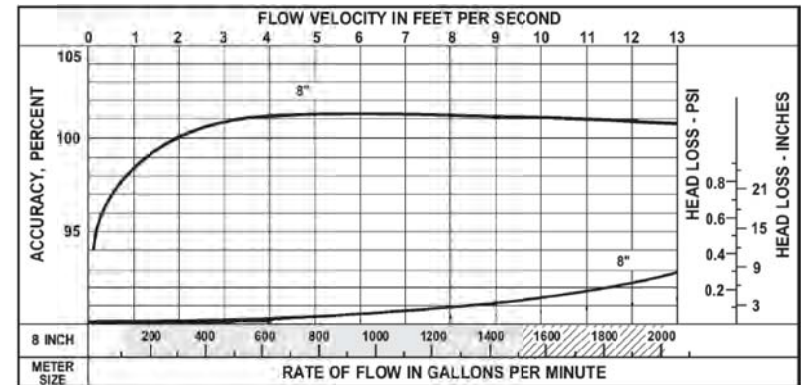
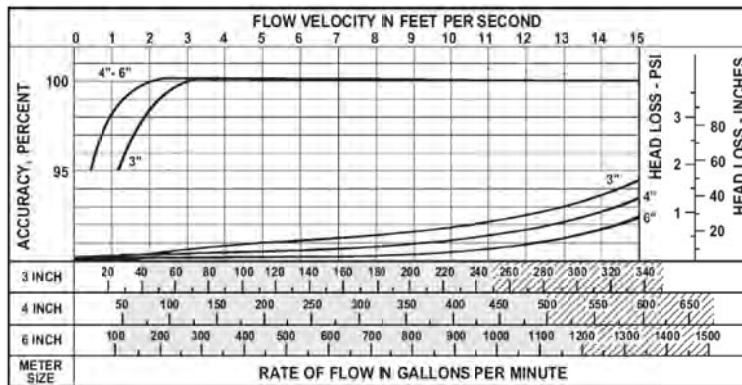
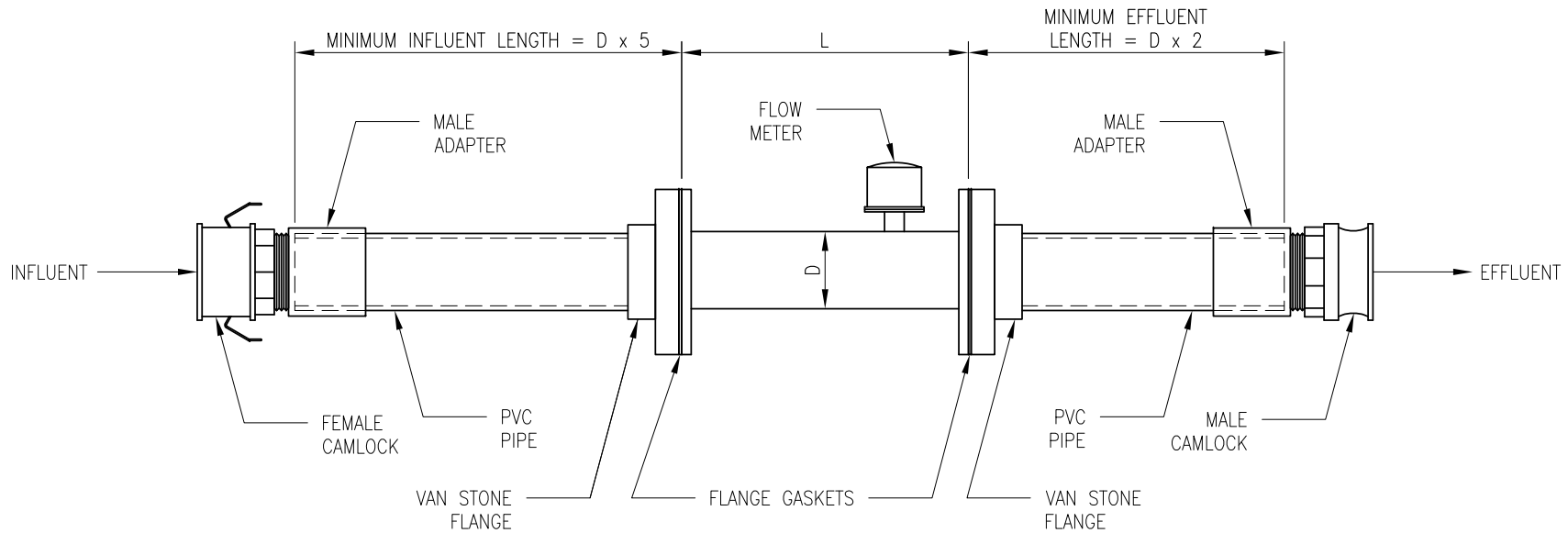
Size	1/2	3/4	1	1-1/4	1-1/2	2
D	1.78	1.78	2.05	2.38	2.38	2.12
H	2.75	3.18	3.50	4.35	4.75	5.60
L	1.67	1.77	2.03	2.25	2.37	2.60
Wt.	0.40	0.60	0.90	1.50	1.80	2.70



RED-WHITE VALVE CORP.

20600 Regency Lane, Lake Forest, CA 92630

TEL: 949.859.1010 • FAX: 949.859.7200 • www.redwhitevalvecorp.com



MF100 FLOW METER SPECIFICATIONS

METER SIZE, D (INCHES):	3	4	6	8
MAXIMUM FLOW U.S. GPM:	250	600	1200	1500
MINIMUM FLOW U.S. GPM:	40	50	90	100
HEAD LOSS IN INCHES AT MAX FLOW:	29.50	23.00	17.00	6.75
H (INCHES):	12.91	13.66	16.03	17.28
L (INCHES):	13	20	20	20
O.D. OF METER TUBE:	3.50	4.50	6.625	8.625
MIN. INFLUENT LENGTH (INCHES):	15	20	30	40
MIN. EFFLUENT LENGTH (INCHES):	6	8	12	16
MAXIMUM TEMPERATURE:	160°F CONSTANT			
PRESSURE RATING:	150 PSI			

B	UPDATED TO NEW CAD STANDARDS	RJS	09/03/15
A	PRELIMINARY DESIGN	AAV	01/28/09
NO.	REVISIONS	BY	DATE
TITLE: EQUIPMENT SPECIFICATION STANDARD FLOW METER ASSEMBLY			
SCALE: NTS		APPROVED BY: MSM	
DATE: 01/28/09		DRAWN BY: AAV	
 GWTT Ground/Water Treatment & Technology, LLC 627 MOUNT HOPE ROAD • WHARTON, NJ 07885 PHONE: 973-983-0901 • FAX: 973-983-0903 www.gwttllc.com			
THIS INFORMATION IS THE PROPERTY OF GROUND/WATER TREATMENT AND TECHNOLOGY, LLC AND IS LOANED TO YOU SUBJECT TO RETURN ON DEMAND. ITS CONTENTS ARE CONFIDENTIAL AND MUST NOT BE COPIED OR GIVEN TO ANY THIRD PARTIES FOR USE OR EXAMINATION UNLESS OTHERWISE AGREED TO IN WRITING BY GROUND/WATER TREATMENT AND TECHNOLOGY, LLC.			
DWG SIZE: A	SHEET: 1 OF 1	DRAWING NO.:	ST-000052-SPC01 B

6) Sanborn Maps

Flushing Avenue Site

376-378 Flushing Avenue
Brooklyn, NY 11205

Inquiry Number: 4379579.3
August 11, 2015

Certified Sanborn® Map Report



6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

8/11/15

Site Name:

Flushing Avenue Site
376-378 Flushing Avenue
Brooklyn, NY 11205

Client Name:

Equity Env. Engineering LLC
227 Route 206 North
Flanders, NJ 07836-0000

EDR Inquiry # 4379579.3

Contact: Faron Moser



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Equity Env. Engineering LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name: Flushing Avenue Site
Address: 376-378 Flushing Avenue
City, State, Zip: Brooklyn, NY 11205
Cross Street:
P.O. # 2014041 Flushing & Franklin
Project: 2014041
Certification # 21E4-438C-8BE9



Sanborn® Library search results
Certification # 21E4-438C-8BE9

Maps Provided:

2007	2001	1987	1979	1921
2006	1996	1986	1977	1918
2005	1995	1984	1965	1904
2004	1993	1982	1950	1887
2003	1991	1981	1947	
2002	1989	1980	1935	

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☒ Library of Congress
- ☒ University Publications of America
- ☒ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Equity Env. Engineering LLC (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2015 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



2007 Source Sheets



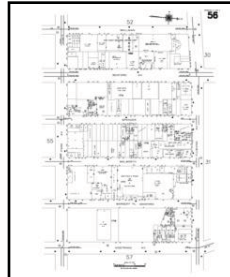
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52



Volume 3, Sheet 56

2006 Source Sheets



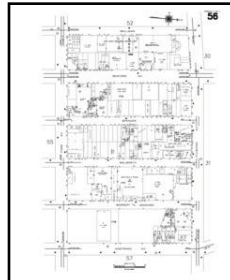
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52



Volume 3, Sheet 56

2005 Source Sheets



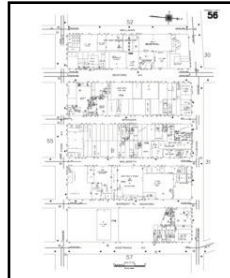
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52



Volume 3, Sheet 56

2004 Source Sheets



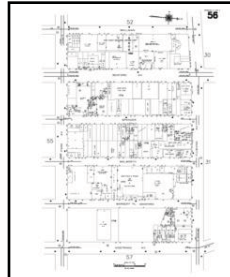
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52



Volume 3, Sheet 56

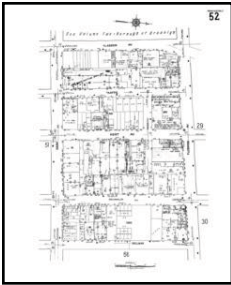
2003 Source Sheets



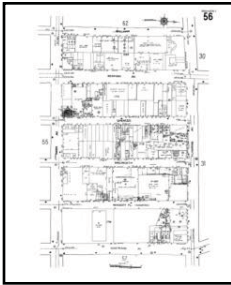
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52



Volume 3, Sheet 56

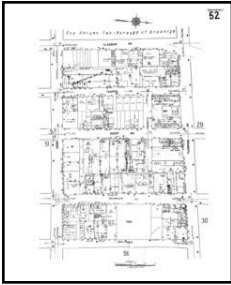
2002 Source Sheets



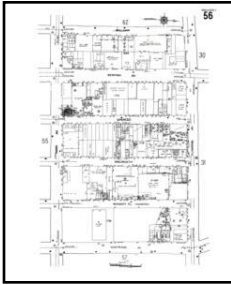
Volume 3, Sheet 29



Volume 3, Sheet 30

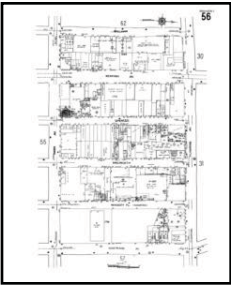


Volume 3, Sheet 52



Volume 3, Sheet 56

2001 Source Sheets



Volume 3, Sheet 56



Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52

1996 Source Sheets



Volume 3, Sheet 52



Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 56

1995 Source Sheets



Volume 3, Sheet 56



Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52

1993 Source Sheets



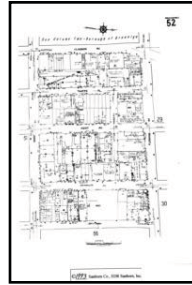
Volume 3, Sheet 56



Volume 3, Sheet 30



Volume 3, Sheet 29



Volume 3, Sheet 52

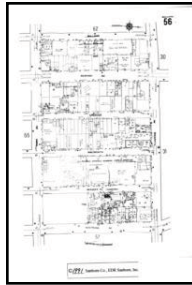
1991 Source Sheets



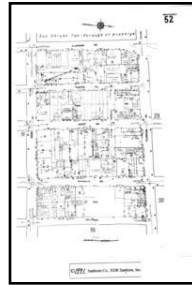
Volume 3, Sheet 29



Volume 3, Sheet 30

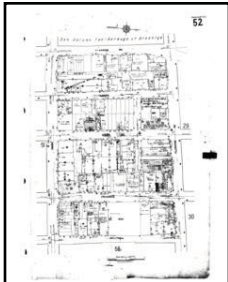


Volume 3, Sheet 56

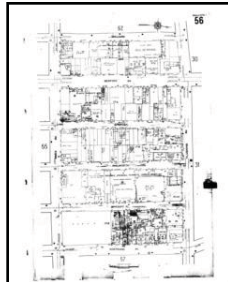


Volume 3, Sheet 52

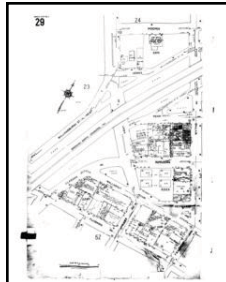
1989 Source Sheets



Volume 3, Sheet 52



Volume 3, Sheet 56



Volume 3, Sheet 29



Volume 3, Sheet 30

1981 Source Sheets



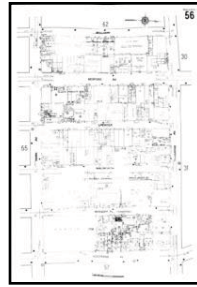
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52



Volume 3, Sheet 56

1980 Source Sheets



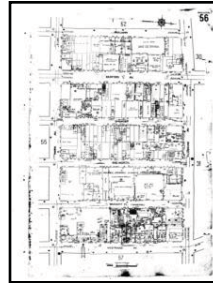
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52

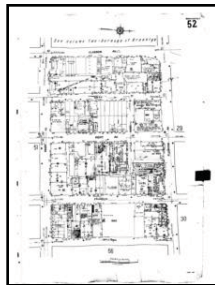


Volume 3, Sheet 56

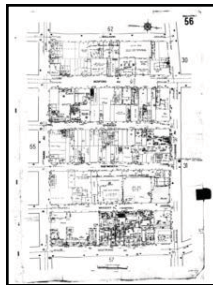
1979 Source Sheets



Volume 3, Sheet 30



Volume 3, Sheet 52



Volume 3, Sheet 56

1977 Source Sheets



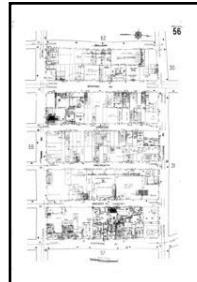
Volume 3, Sheet 29



Volume 3, Sheet 30

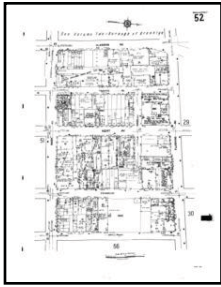


Volume 3, Sheet 52

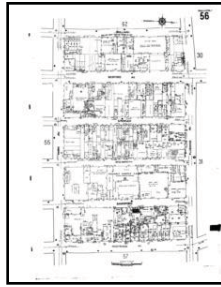


Volume 3, Sheet 56

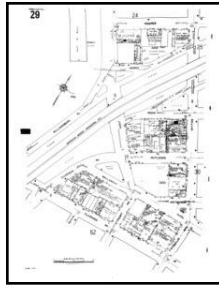
1965 Source Sheets



Volume 3, Sheet 52



Volume 3, Sheet 56



Volume 3, Sheet 29



Volume 3, Sheet 30

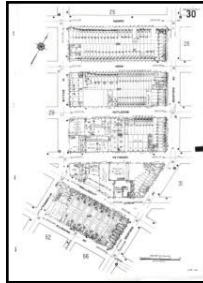
1950 Source Sheets



Volume 3, Sheet 56



Volume 3, Sheet 29



Volume 3, Sheet 30

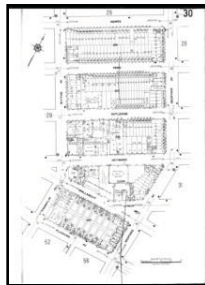


Volume 3, Sheet 52

1947 Source Sheets



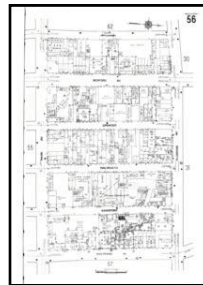
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52

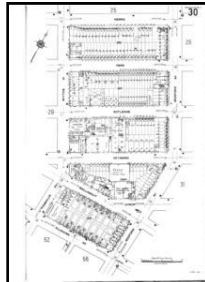


Volume 3, Sheet 56

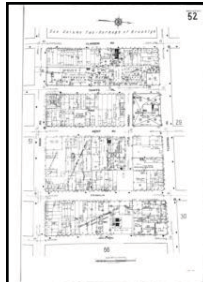
1935 Source Sheets



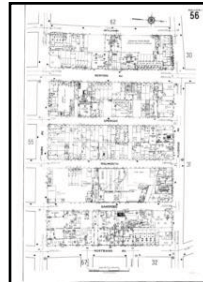
Volume 3, Sheet 29



Volume 3, Sheet 30



Volume 3, Sheet 52



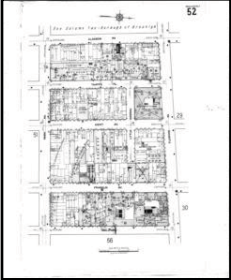
Volume 3, Sheet 56

1921 Source Sheets

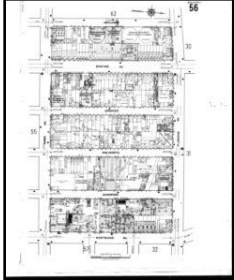


Volume Atlas Maps, Sheet b-14

1918 Source Sheets



Volume 3, Sheet 52



Volume 3, Sheet 56

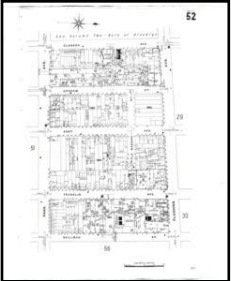


Volume 3, Sheet 29

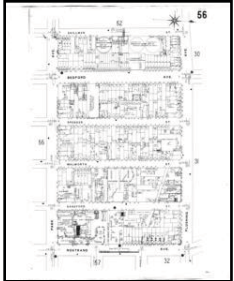


Volume 3, Sheet 30

1904 Source Sheets



Volume 3, Sheet 52



Volume 3, Sheet 56



Volume 3, Sheet 29



Volume 3, Sheet 30

1887 Source Sheets



Volume 3, Sheet 63



Volume 3, Sheet 64



Volume 3, Sheet 74

2007 Certified Sanborn Map



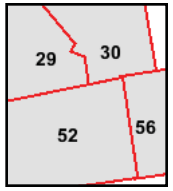
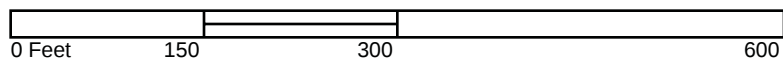
The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # 21E4-438C-8BE9

Site Name: Flushing Avenue Site
 Address: 376-378 Flushing Avenue
 City, ST, ZIP: Brooklyn NY 11205
 Client: Equity Env. Engineering LLC
 EDR Inquiry: 4379579.3
 Order Date: 8/11/2015 3:26:01 PM
 Certification #: 21E4-438C-8BE9



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



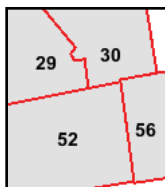
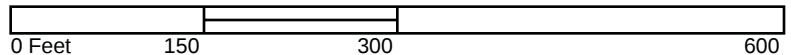
- Volume 3, Sheet 29
- Volume 3, Sheet 30
- Volume 3, Sheet 52
- Volume 3, Sheet 56



2006 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



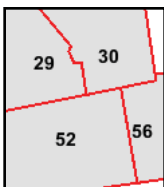
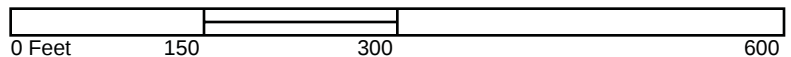
Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56



2005 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



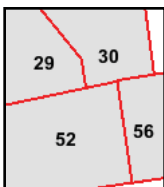
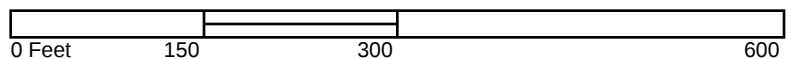
Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56



2004 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



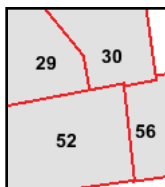
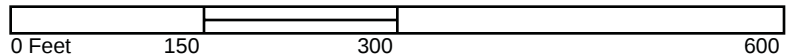
Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56



2003 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



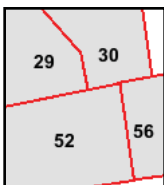
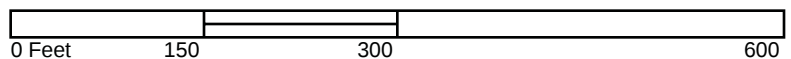
Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56



2002 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



Volume 3, Sheet 29
Volume 3, Sheet 30
Volume 3, Sheet 52
Volume 3, Sheet 56



2001 Certified Sanborn Map



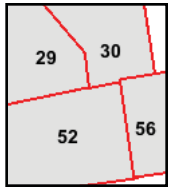
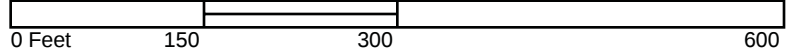
The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification #
21E4-438C-8BE9

Site Name: Flushing Avenue Site
Address: 376-378 Flushing Avenue
City, ST, ZIP: Brooklyn NY 11205
Client: Equity Env. Engineering LLC
EDR Inquiry: 4379579.3
Order Date: 8/11/2015 3:26:01 PM
Certification #: 21E4-438C-8BE9



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



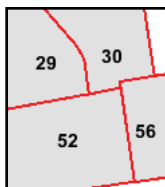
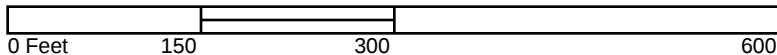
Volume 3, Sheet 56
Volume 3, Sheet 29
Volume 3, Sheet 30
Volume 3, Sheet 52



1996 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



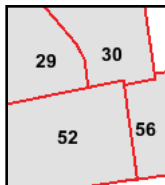
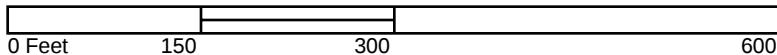
Volume 3, Sheet 52
 Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 56



1995 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



Volume 3, Sheet 56
 Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52



1993 Certified Sanborn Map



1991 Certified Sanborn Map



The certified Sanborn Map search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

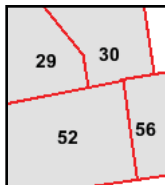
Certification # 21E4-438C-8BE9

Site Name: Flushing Avenue Site
Address: 376-378 Flushing Avenue
City, ST, ZIP: Brooklyn NY 11205
Client: Equity Env. Engineering LLC
EDR Inquiry: 4379579.3
Order Date: 8/11/2015 3:26:01 PM
Certification #: 21E4-438C-8BE9
Copyright: 1991



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600



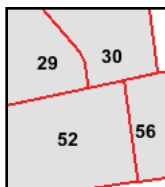
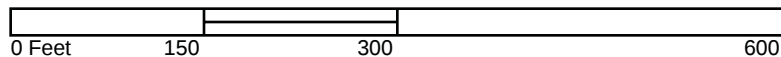
Volume 3, Sheet 29
Volume 3, Sheet 30
Volume 3, Sheet 56
Volume 3, Sheet 52



1989 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.



Volume 3, Sheet 52
Volume 3, Sheet 56
Volume 3, Sheet 29
Volume 3, Sheet 30



1987 Certified Sanborn Map



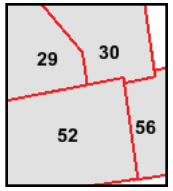
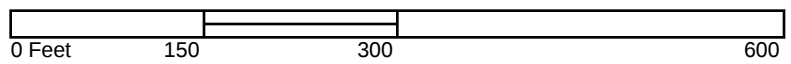
The certified Sanborn Library search results in this report can be authenticated by visiting www.edr.com/sanborn and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # 21E4-438C-8BE9

Site Name: Flushing Avenue Site
 Address: 376-378 Flushing Avenue
 City, ST, ZIP: Brooklyn NY 11205
 Client: Equity Env. Engineering LLC
 EDR Inquiry: 4379579.3
 Order Date: 8/11/2015 3:26:01 PM
 Certification #: 21E4-438C-8BE9
 Copyright: 1987



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



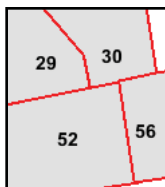
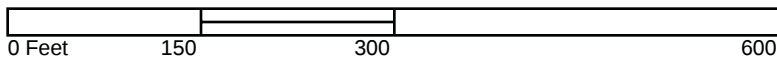
- Volume 3, Sheet 29
- Volume 3, Sheet 30
- Volume 3, Sheet 52
- Volume 3, Sheet 56



1986 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56

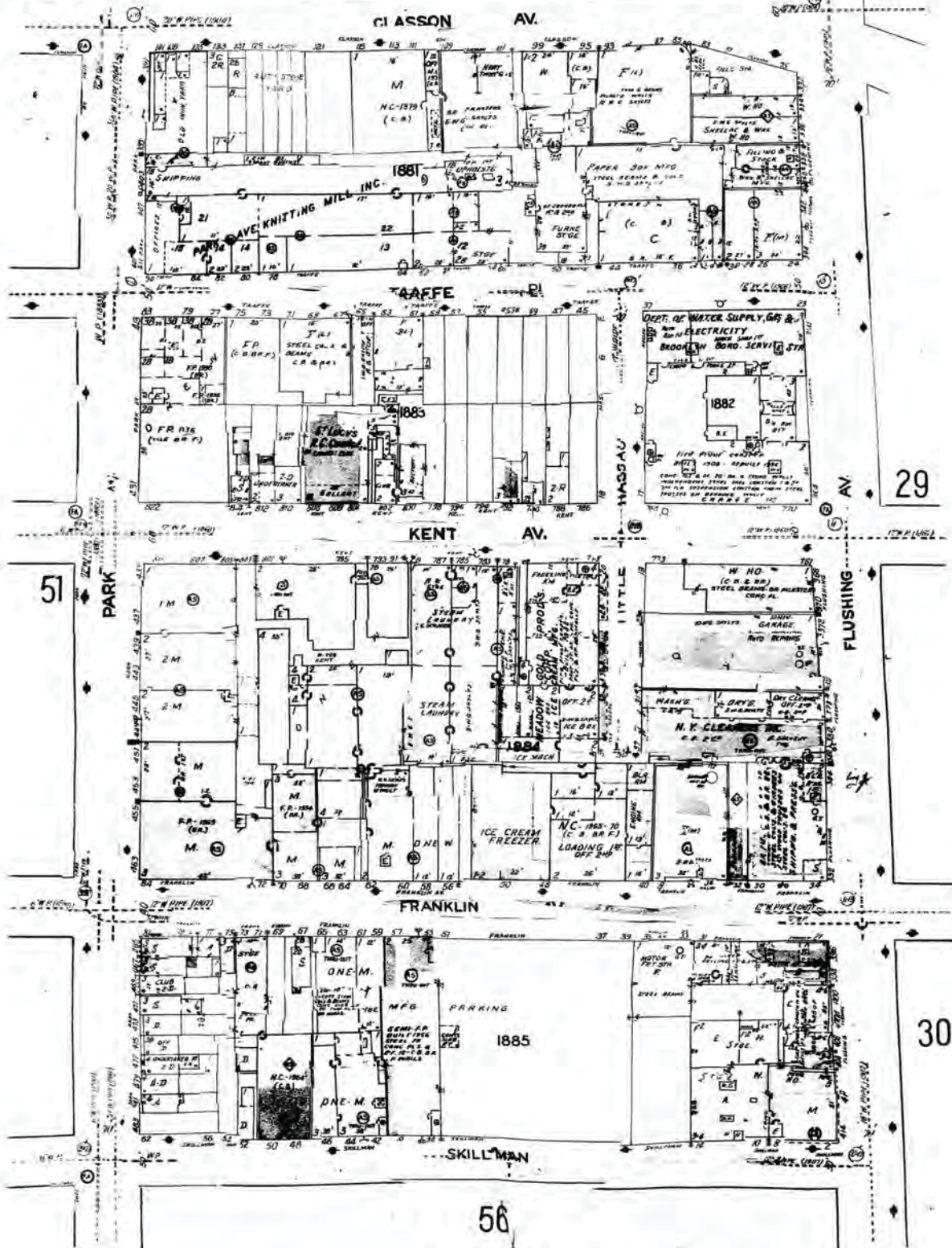


1984 Certified Sanborn Map

BROOKLYN, N.Y. Vol. 3

52

See Volume Two - Borough of Brooklyn



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # 21E4-438C-8BE9

Site Name: Flushing Avenue Site
 Address: 376-378 Flushing Avenue
 City, ST, ZIP: Brooklyn NY 11205
 Client: Equity Env. Engineering LLC
 EDR Inquiry: 4379579.3
 Order Date: 8/11/2015 3:26:01 PM
 Certification # 21E4-438C-8BE9
 Copyright: 1984

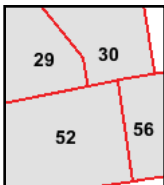
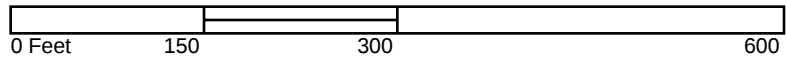


Scale 50 Ft. to One Inch
 Made by the Sanborn Map Co.

1982 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



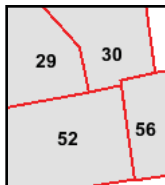
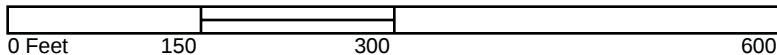
Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56



1981 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



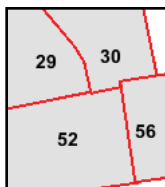
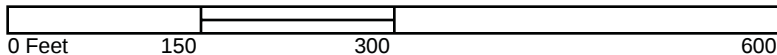
Volume 3, Sheet 29
Volume 3, Sheet 30
Volume 3, Sheet 52
Volume 3, Sheet 56



1980 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56

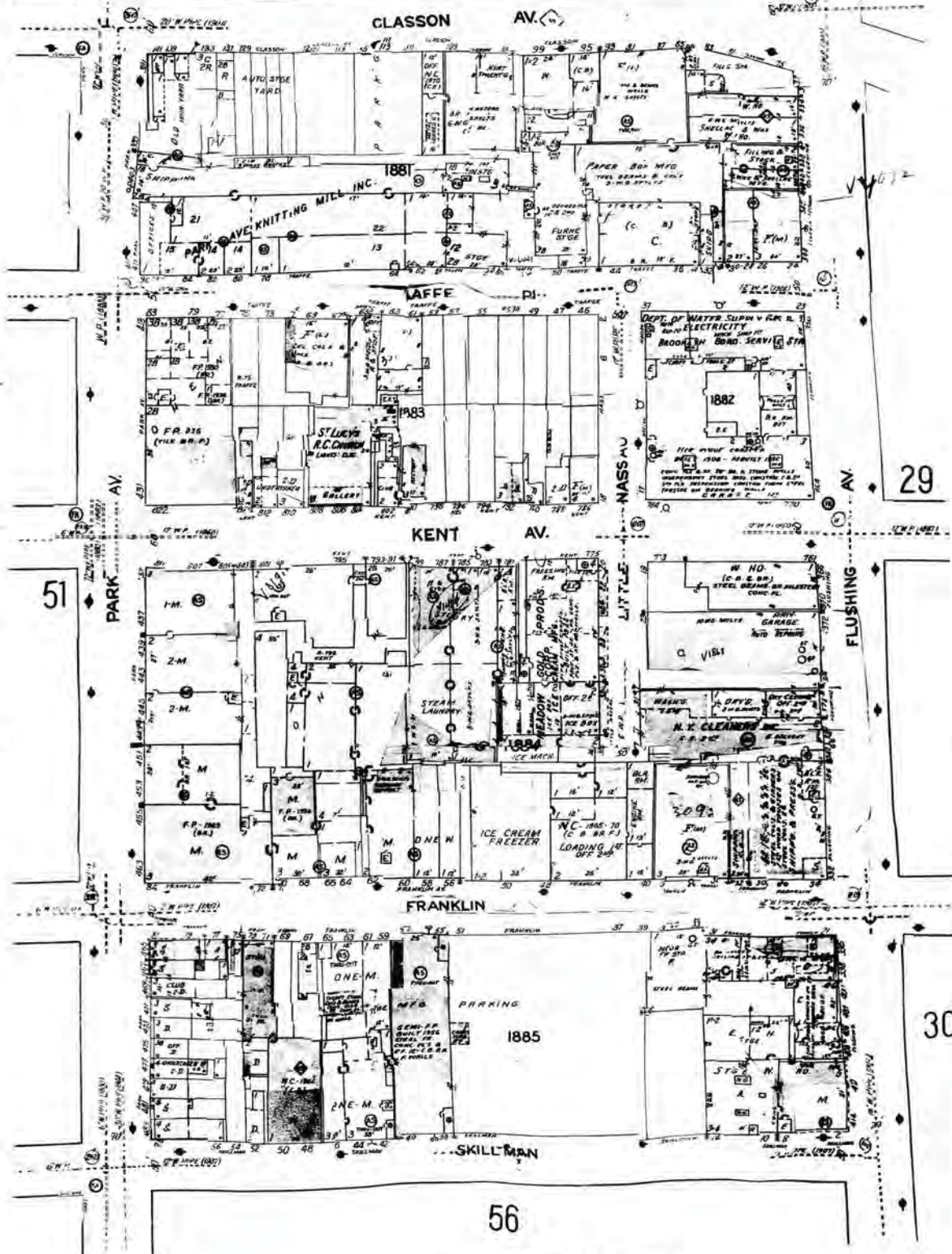


1979 Certified Sanborn Map

BROOKLYN, N.Y. VOL. 3

52

See Volume Two - Borough of Brooklyn



The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

Certification # 21E4-438C-8BE9

Site Name: Flushing Avenue Site
Address: 376-378 Flushing Avenue
City, ST, ZIP: Brooklyn NY 11205
Client: Equity Env. Engineering LLC
EDR Inquiry: 4379579.3
Order Date: 8/11/2015 3:26:01 PM
Certification #: 21E4-438C-8BE9
Copyright: 1979

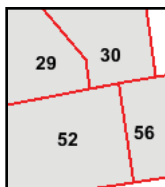
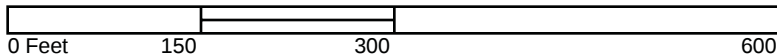


Scale 60 ft. to one inch

1977 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



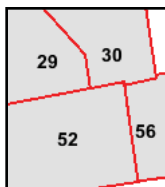
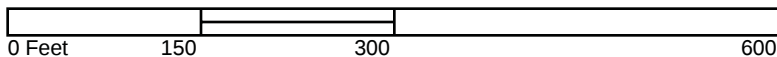
Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56



1965 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



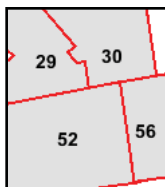
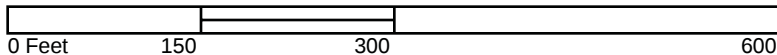
Volume 3, Sheet 52
 Volume 3, Sheet 56
 Volume 3, Sheet 29
 Volume 3, Sheet 30



1950 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



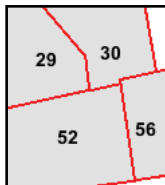
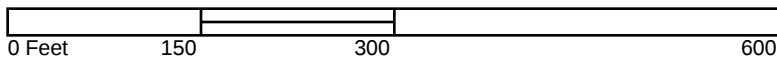
Volume 3, Sheet 56
 Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52



1947 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



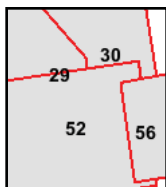
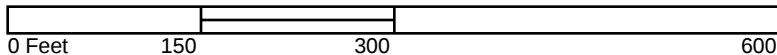
Volume 3, Sheet 29
Volume 3, Sheet 30
Volume 3, Sheet 52
Volume 3, Sheet 56



1935 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



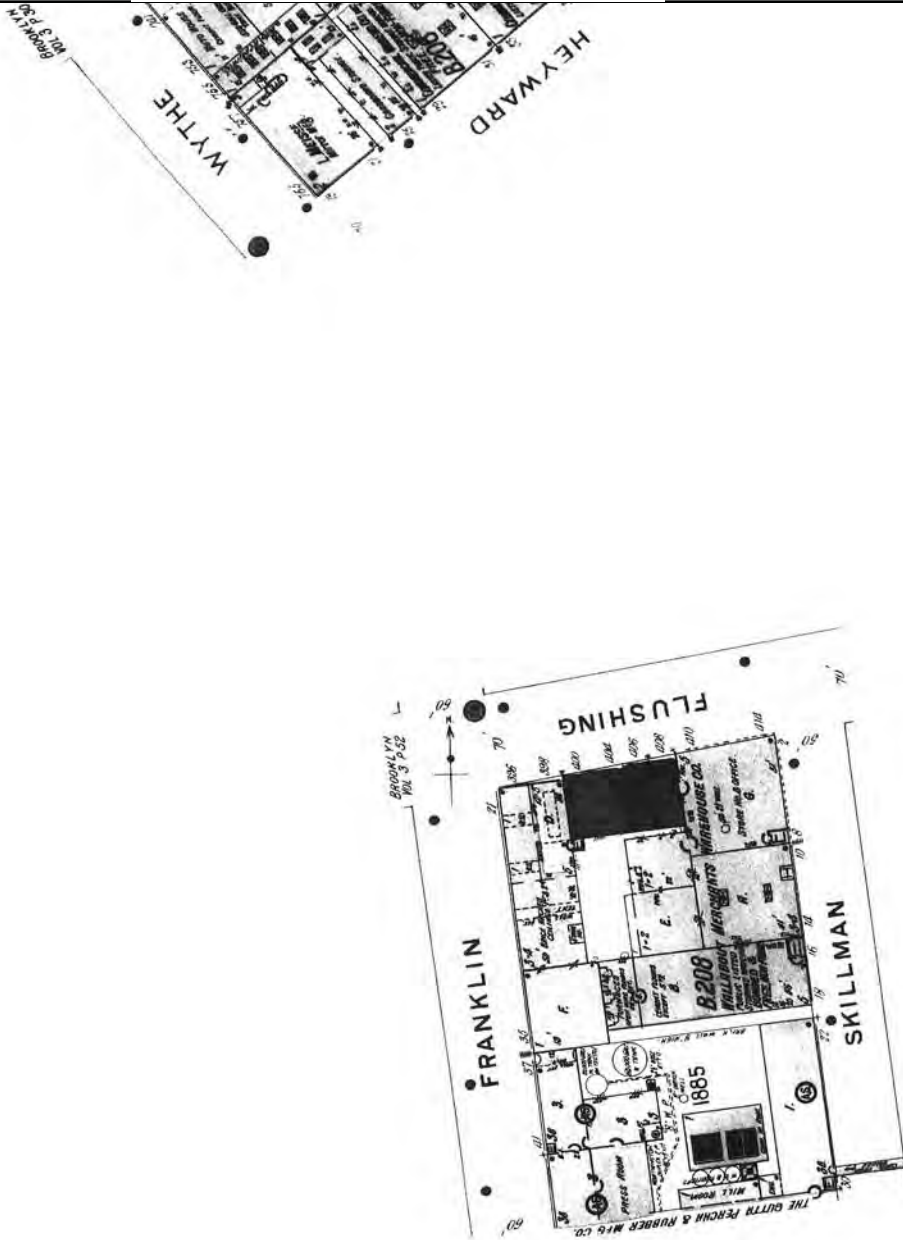
Volume 3, Sheet 29
 Volume 3, Sheet 30
 Volume 3, Sheet 52
 Volume 3, Sheet 56



1921 Certified Sanborn Map

The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources, Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by The Sanborn Library LLC, the copyright holder for the collection.

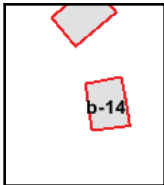
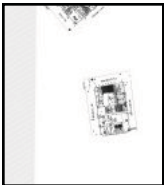
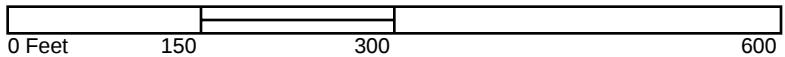
Certification # 21E4-438C-8BE9



Site Name: Flushing Avenue Site
Address: 376-378 Flushing Avenue
City, ST, ZIP: Brooklyn NY 11205
Client: Equity Env. Engineering LLC
EDR Inquiry: 4379579.3
Order Date: 8/11/2015 3:26:01 PM
Certification #: 21E4-438C-8BE9
Copyright: 1921



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.



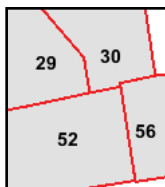
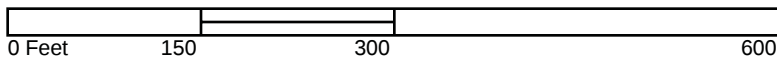
Volume Atlas Maps, Sheet b-14



1918 Certified Sanborn Map



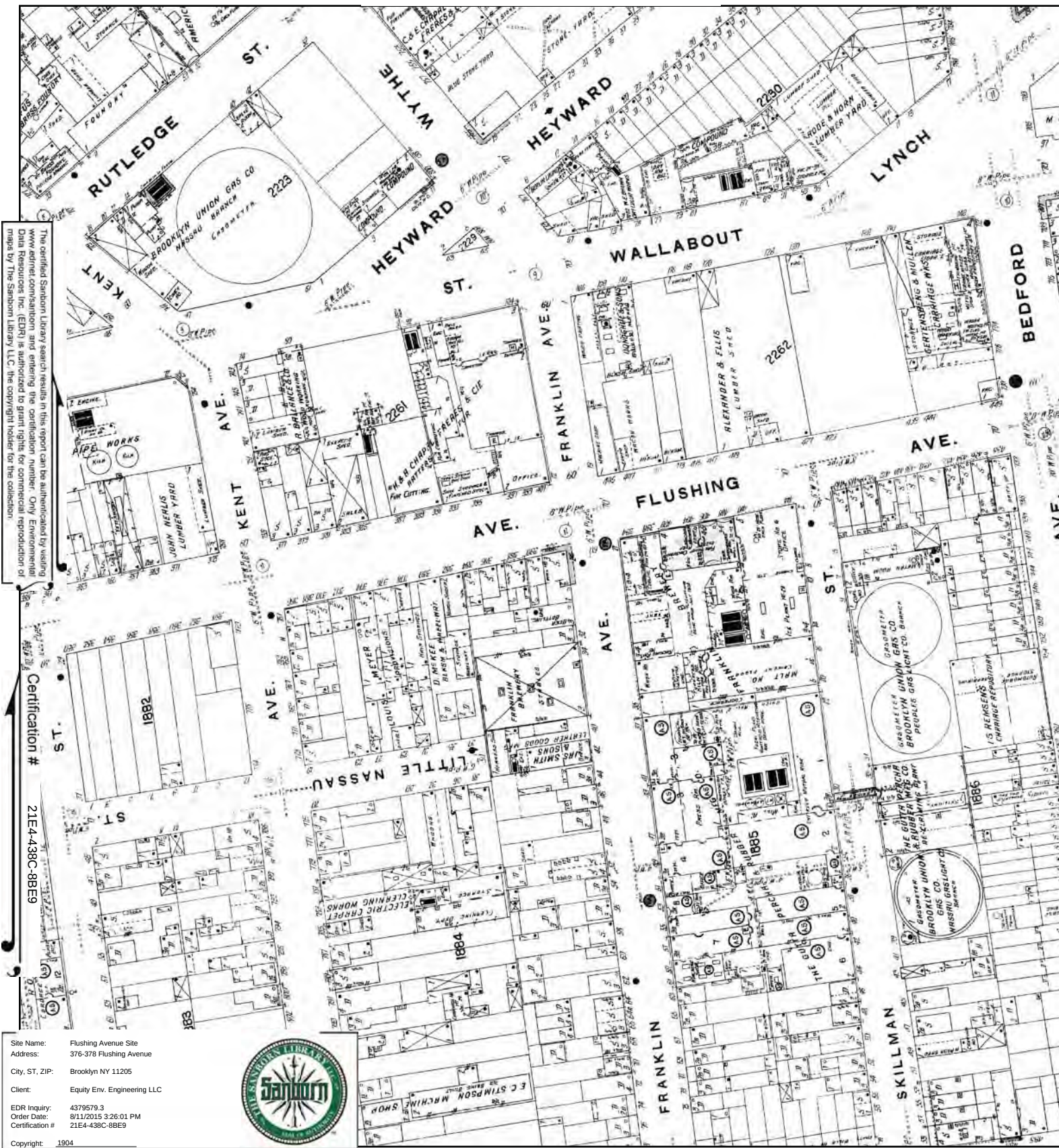
This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



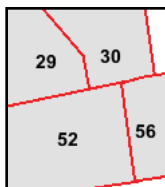
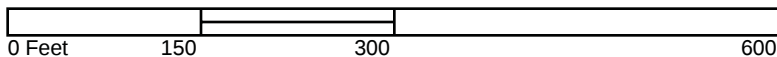
Volume 3, Sheet 52
 Volume 3, Sheet 56
 Volume 3, Sheet 29
 Volume 3, Sheet 30



1904 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
 Outlined areas indicate map sheets within the collection.



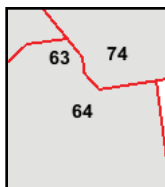
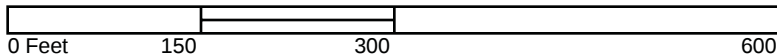
Volume 3, Sheet 52
 Volume 3, Sheet 56
 Volume 3, Sheet 29
 Volume 3, Sheet 30



1887 Certified Sanborn Map



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

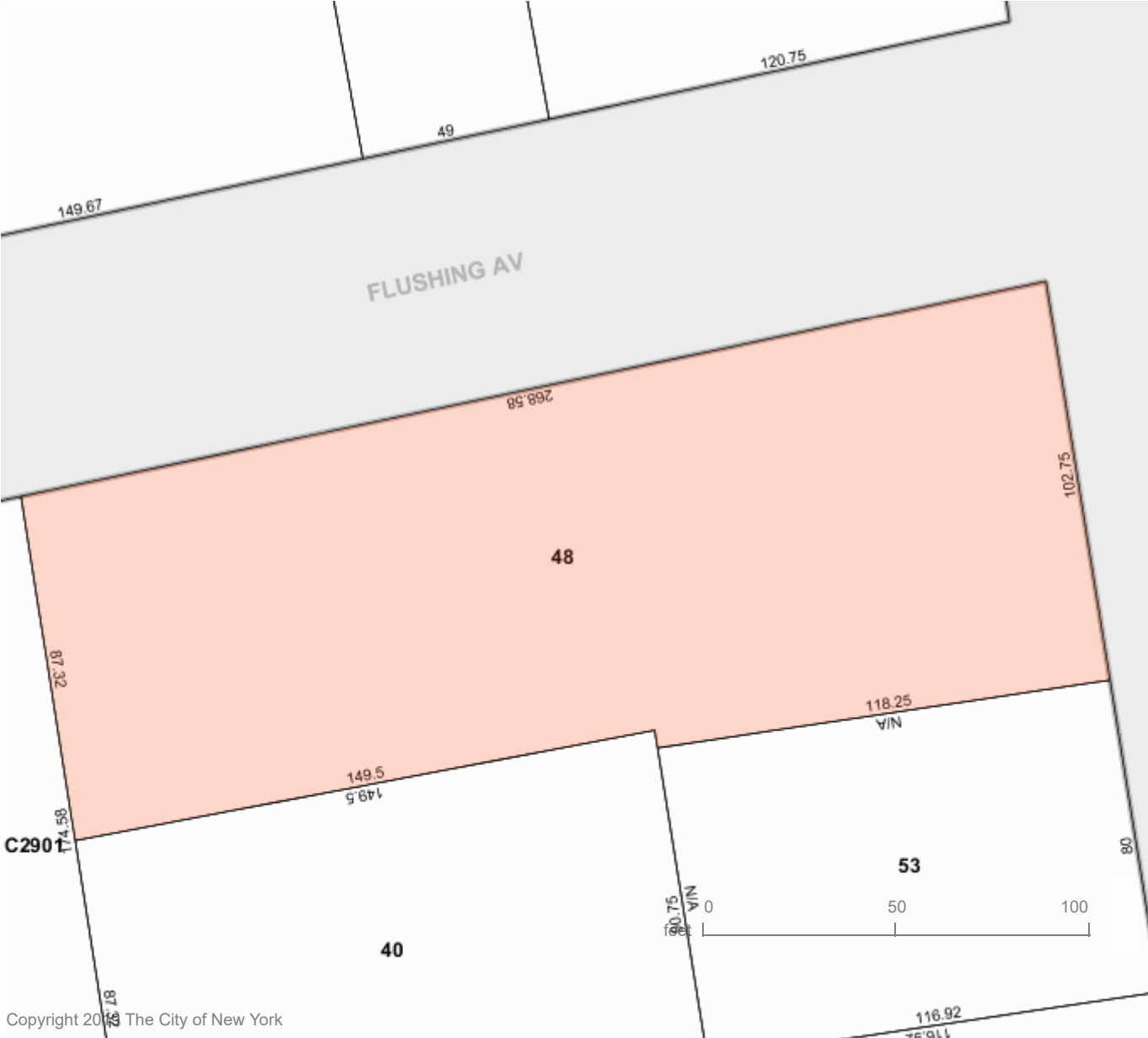


Volume 3, Sheet 63
Volume 3, Sheet 64
Volume 3, Sheet 74



7) Digital Map

[Lot 48 - Digital Tax Map - New York City Dept. of Finance \(5/13/2019\)](#)



- Borough Boundary
- Tax Block Boundary
- 50

Tax Block Number
- Tax Lot Boundary
- 50

Tax Lot Number
- ~~50~~

Condo FKA Tax Lot Number
- 50.5

Tax Lot Dimension
- +/-5.5

Approximate Tax Lot Dimension
- 1500 - 1550

Condo Units Range Label
- Building Footprint
- C50

Condo Flag/Condo Nunber
- A50

Air Right Flag/Lot Number
- S50

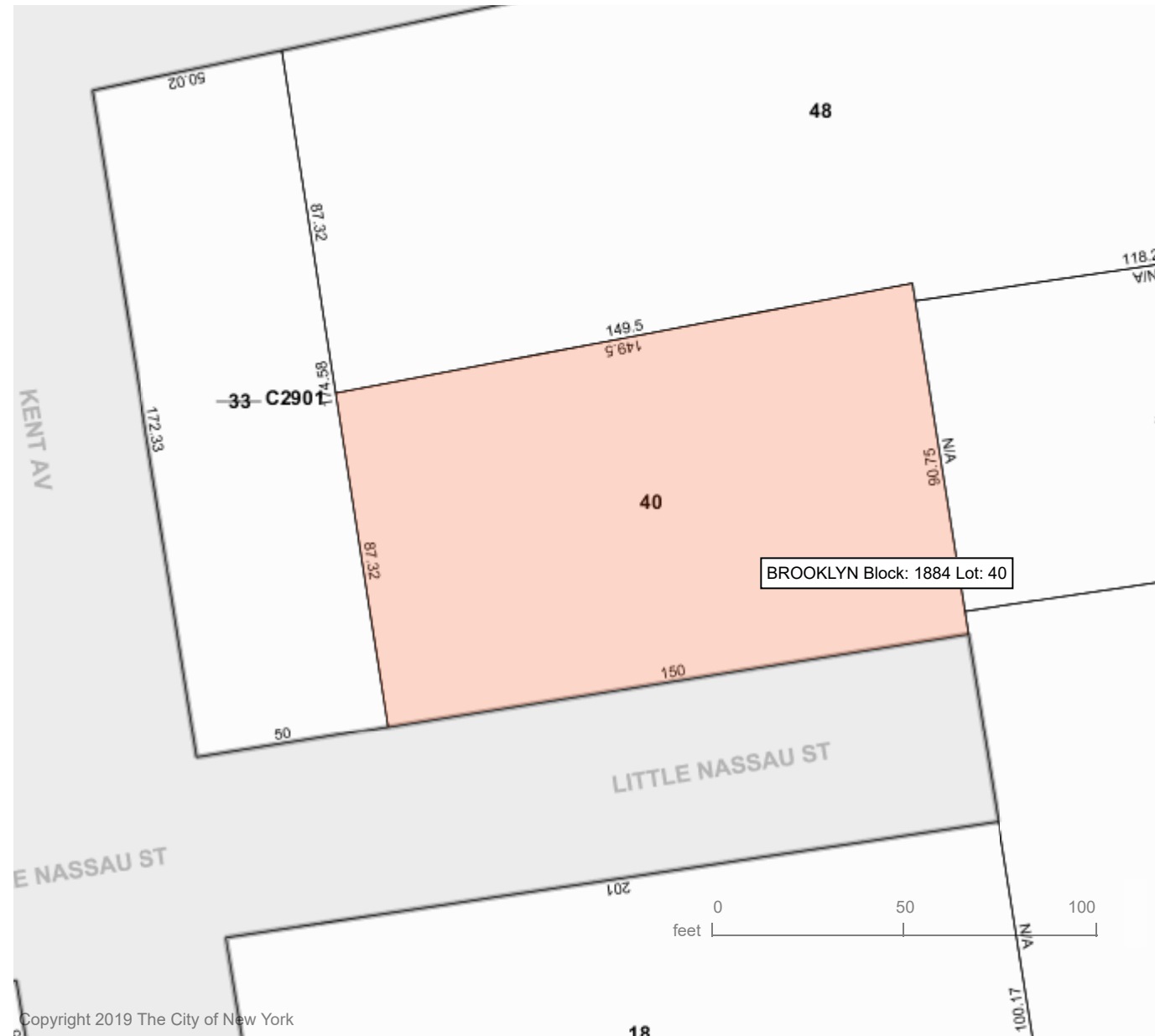
Subterranean Right Flag/Lot Number
- R

REUC Flag
- Under Water Tax Lot Boundary
- Other Boundary
- └

Possession Hook
- Misc

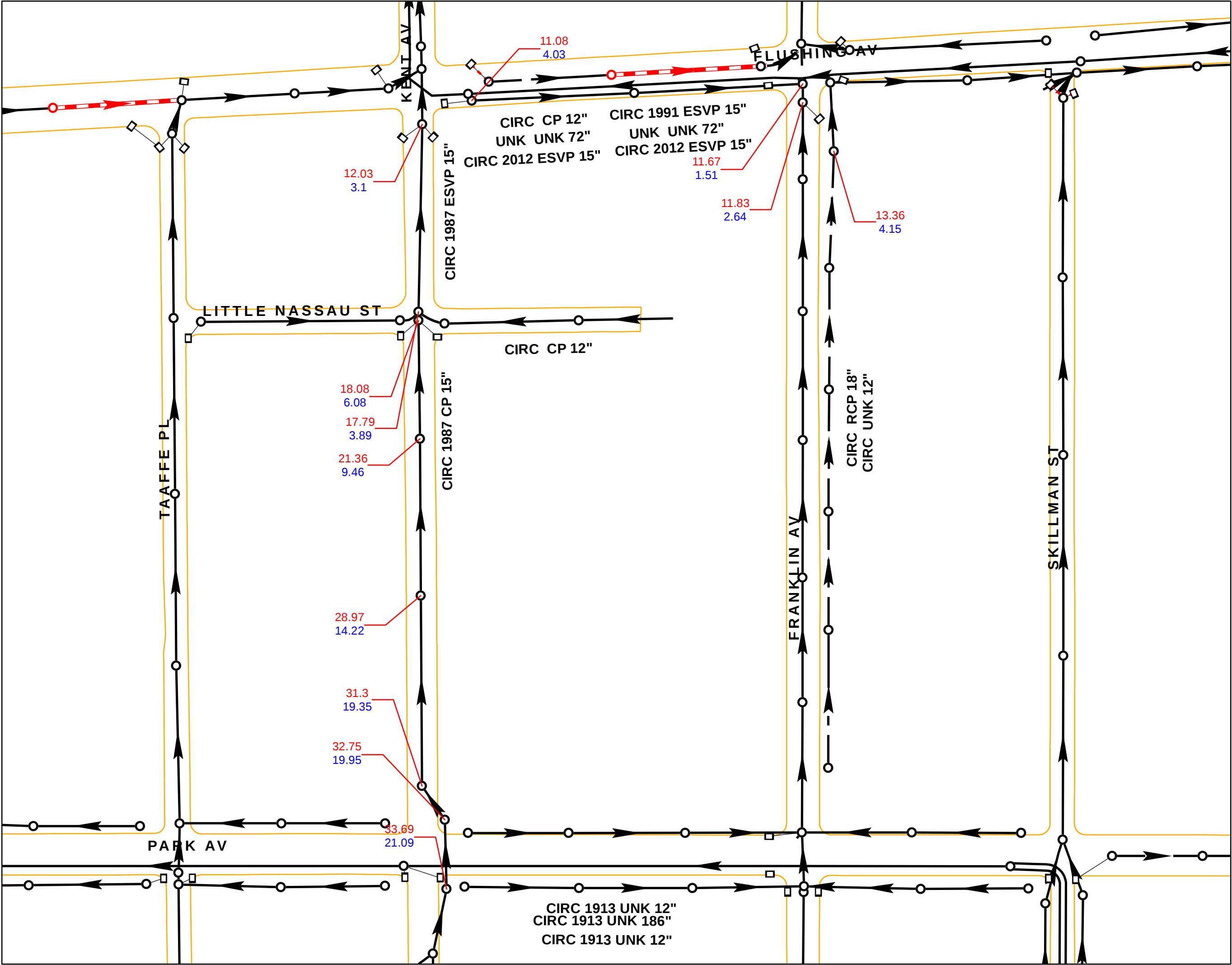
Miscellaneous Text
- Small Tax Lot Dimension
- Surface Water

[Lot 40 - Digital Tax Map - New York City Dept. of Finance \(5/13/2019\)](#)



	Borough Boundary	C50	Condo Flag/Condo Nunber
	Tax Block Boundary	A50	Air Right Flag/Lot Number
50	Tax Block Number	S50	Subterranean Right Flag/Lot Number
	Tax Lot Boundary	R	REUC Flag
50	Tax Lot Number		Under Water Tax Lot Boundary
	Condo FKA Tax Lot Number		Other Boundary
50.5	Tax Lot Dimension		Possession Hook
+/-5.5	Approximate Tax Lot Dimension	Misc	Miscellaneous Text
	Condo Units Range Label		Small Tax Lot Dimension
	Building Footprint		Surface Water

8) DEP BW&S Sewer Map



LEGEND:

NYC DEP		NYS DOT	
	Sanitary Sewer		Sewer
	Storm Sewer		Trough
	Combined Sewer		Catch Basin\Scupper Connector
	Combined Sewer Overflow		Temporary Connection and Plumber's Drain
	Relief Storm Sewer		Flow Direction
	Relief Combined Sewer		Manhole
	Highway Drain		Catch Basin
	Intercepting Sewer		Chamber
	Intercepting Collector		Outfall
	Branch Intercepting		Headwall
	Intercepting Force Main		Culvert
	Force Main		Bulkhead
	Emergency Construction Sewer		Pumping Station
	Catch Basin Connector		
	Unknown Sewer		
	Manhole	Sewer Shape	Abbreviation
	Catch Basin	Double Circular	DCIR
	Chamber	Egg	EGG
	Weir Chamber	Elliptical	ELP
	Tide Gate	Vertical Elliptical	VELP
	Outfall	Horizontal Elliptical	HELP
	Headwall	Box	BOX
	Culvert	Regulator	DB
	Bulkhead	Triple Barrel	TB
	Pumping Station	Quadruple Barrel	QB
		Circular Barrel	CIRB
		Oval	OVL
		Flat Top	FT
		Double Flat Top	DFT
		Tunnel	TUN
		Double Tunnel	DTUN
		Circular Pipe	CIRC
		Arch	ARCH
		Irregular	IRRG
		Unknown	UNK
Sewer Ownership	Abbreviation	PIPE ANNOTATION	
Private	Pvt	Pipe shown as shape, year of installation, material and pipe diameter.	
Temporary Connection	TC	Example: CIRC 1945 VCP 24"	
Plumber's Drain	PID	Pipes with a second or height dimension will be displayed	
Triborough Bridge & Tunnel Authority	TBTA	with the height dimension, in inches, directly after the diameter	
Work Progress Administration	WPA	Example BOX 1955 CIP 48" x 32"	

RESPECTIVE BOROUGH HIGHWAY AND SEWER DATUMS
(ABOVE MEAN SEA LEVEL AT SANDY HOOK, NEW JERSEY)

BOROUGH	SEWER DATUM	HIGHWAY DATUM
BRONX	2.608 FEET	2.608 FEET
BROOKLYN	1.720 FEET	2.560 FEET
MANHATTAN	2.750 FEET	2.750 FEET
QUEENS	2.725 FEET	2.725 FEET
STATEN ISLAND	3.192 FEET	3.192 FEET

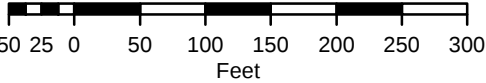
MANHOLE RIM AND INVERT ELEVATIONS,
WHERE AVAILABLE, ARE DISPLAYED BY COLOR

25.67 = Manhole Rim elevation
25.67 = Manhole Invert elevation

Sewer Mapping

NYC Department of Environmental Protection
Bureau of Water and Sewer Operations
59-17 Junction Boulevard, 3rd Floor
Corona, NY 11373-5108

Map Print Date: 4/27/2018



Sewer Material	Abbreviation		Abbreviation		Abbreviation		Abbreviation		Abbreviation		Abbreviation		Abbreviation		Abbreviation	
Brick	BRK	Concrete Pipe	CRTP	Reinforced Concrete Culvert Pipe	RCCP	Wood	WD	Steel	STL	Liner Plate	LRPL	Block	BLK	This map is intended to be a schematic representation of the sewer system ONLY, and is not warranted to be accurate for construction and/or surveying purposes and is based on the best information available.		All warranties, UCC and otherwise, express or implied, including, warranties as to accuracy of data shown hereon and merchantability and fitness for a particular purpose are expressly disclaimed. All incidental, consequential or special damages arising out of or in connection with the use or performance of the data shown on the map are expressly disclaimed. Map is not for public dissemination and is agreed by recipient not to be copied.
Reinforced Concrete Brick	RC/BR	Reinforced Concrete	RC	Corrugated Metal Pipe	CMP	Wood Pipe	WDP	Steel Pipe	STLP	Reinforced Concrete Liner Plate	RC LRPL	Tile	TILE			
Cement Pipe	CMTP	Reinforced Concrete Pipe	RCP	High Density Polyethylene Pipe	HDPEP	Clay Pipe	CP	Cast Iron	CI	Steel Liner Plate	STL LRPL	Stone	STON			
Asbestos Cement Pipe	ASBCMTP	Precast Reinforced Concrete	PRC	Corrugated High Density Polyethylene Pipe	CHDPEP	Vitrified Clay Pipe	VCP	Cast Iron Pipe	CIP	Cast Iron Liner Plate	CI LRPL	Fiberglass	FBGL			
Concrete	CRT	Precast Reinforced Concrete Pipe	PRCP	Polyvinyl Chloride Pipe	PVCP	Extra Strength Vitrified Clay Pipe	ESVP	Ductile Iron Pipe	DIP	Ductile Liner Plate	DI LRPL	Unknown	UNK			

9) DEP BWT Approval Letter



April 25, 2019

Lotus Residences LLC
266 Broadway, Suite 301
Brooklyn, NY 11211
Attn: Zelig Weiss

Vincent Sapienza, P.E.
Commissioner

Re: Groundwater Discharge, 376-378 Flushing Avenue, Brooklyn
File # C-6629

Pam Elardo, P.E.
Deputy Commissioner

Dear Mr. Weiss:

This Letter of Approval is an amendment to the Letter of Approval issued on October 30, 2018.

Bureau of Wastewater
Treatment
96-05 Horace Harding
Expressway – 2nd Floor
Corona, NY 11368

Tel. (718) 595-6924
Fax (718) 595-4084

This is in response to the April 5, 2019 submission requesting permission to discharge up to **1,310,400 gallons per day (gpd)** of groundwater generated during the construction of a new 8-story mixed-use building located at 376-378 Flushing Avenue, Brooklyn, NY 11205 (New York State Department of Environmental Conservation Brownfield Cleanup Program Site Code C224264). The groundwater will be treated through one 18,000 gallon settling tank, per provided schematic and information, before discharging to one of the following points of discharge (POD) at the specified flow rates:

POD # 1 – up to 1,051,200 gpd to an existing 6” sewer connection that leads to the existing 72” combined sewer located at Flushing Avenue between Kent and Franklin Avenues in Brooklyn, NY.

POD # 2 – up to 259,200 gpd to a new 6” sewer connection that leads to the existing 12” combined sewer located at Little Nassau Street between Kent and Franklin Avenues in Brooklyn, NY.

The total combined flow to the above PODs shall not exceed 1,310,400 gpd.

Based upon the information, schematic and analytical data submitted, the property owner Lotus Residences LLC and agents of the property owner who are authorized to act on the property owner’s behalf in this matter (hereinafter referred to as “the owner and its authorized agents”) are hereby conditionally authorized, to discharge up to 1,310,400 gpd of the groundwater, treated through the above system, per provided schematic and information, as specified in your submissions, **for a total of 188 days**, to the combined sewers at the above mentioned locations. **This Letter of Approval shall expire at midnight on October 29, 2019.**

The owner and its authorized agents are prohibited from discharging any groundwater during wet weather events.

This conditional approval, however, is subject to your obtaining a groundwater discharge Approval, specifying allowable flow rates, from the Chief of Permitting and Compliance, Bureau of Water and Sewer Operations. The owner and its authorized agents are required to follow manufacturer specifications for the operation and maintenance of the selected equipment. **This Letter of Approval is contingent upon compliance on the part of the owner and its authorized agents with any other Federal, State or Local laws applicable to the permitted activity.**

Under no circumstances shall muddy groundwater be discharged into the public sewer.

Payment shall be made to and permit obtained from the Bureau of Customer Service for groundwater discharge into the New York City Wastewater System in accordance with the Water and Wastewater Rate Schedule established by the New York City Water Board.

The owner or its authorized agents must notify this section in writing prior to the commencement of discharge. Refer to File # C-6629 in any correspondence to this office.

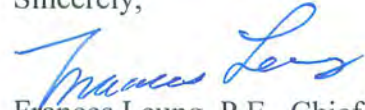
The owner or its authorized must collect samples of the groundwater after the pretreatment system *in each quarter of the calendar year*. The samples must be analyzed for the parameter(s) included in the attached chart by a New York State Department of Health certified laboratory. The results must be submitted to this office within 21 days after each sampling date. If the sampling results, or any other sampling results, exceed the DEP limits, the discharge must cease and the Bureau of Wastewater Treatment must be notified immediately by phone at (718) 595-4715 and by email at shulbert@dep.nyc.gov.

The owner and its authorized agents are prohibited from discharging any groundwater that exceeds the attached discharge limit(s), as well as those contained in Title 15 Rules of the City of New York Chapter 19.

This Letter of Approval is an Order of the Commissioner of the Department of Environmental Protection, and applies to the owner and its authorized agents. Please be advised that failure to comply with this Letter of Approval by the owner and its authorized agents may result in the issuance of summonses to either the owner or its authorized agents, or both (returnable to the New York City Office of Administrative Trials and Hearings) and/or revocation of the Letter of Approval. Summonses carry penalties of up to \$10,000 a day, per violation.

If you have any questions concerning this matter, please contact Sean H. Hulbert, P.E., Assistant Chemical Engineer, at (718) 595-4715.

Sincerely,



Frances Leung, P.E., Chief
Industrial Inspections and
Permitting Section

enc: Sampling Requirements and Limitations

SAMPLING REQUIREMENTS AND LIMITATIONS

Parameter ¹	Daily Limit	Units	Sample Type	Monthly Limit
Non-polar material ²	50	mg/l	Instantaneous	---
pH	5-12	SU's	Instantaneous	---
Temperature	< 150	Degree F	Instantaneous	---
Flash Point	> 140	Degree F	Instantaneous	---
Cadmium	2	mg/l	Instantaneous	---
	0.69	mg/l	Composite	---
Chromium (VI)	5	mg/l	Instantaneous	---
Copper	5	mg/l	Instantaneous	---
Lead	2	mg/l	Instantaneous	---
Mercury	0.05	mg/l	Instantaneous	---
Nickel	3	mg/l	Instantaneous	---
Zinc	5	mg/l	Instantaneous	---
Benzene	134	ppb	Instantaneous	57
Carbontetrachloride	---	---	Composite	---
Chloroform	---	---	Composite	---
1,4 Dichlorobenzene	---	---	Composite	---
Ethylbenzene	380	ppb	Instantaneous	142
MTBE (Methyl-Tert-Butyl-Ether)	50	ppb	Instantaneous	---
Naphthalene	47	ppb	Composite	19
Phenol	---	---	Composite	---
Tetrachloroethylene (Perc)	20	ppb	Instantaneous	---
Toluene	74	ppb	Instantaneous	28
1,2,4 Trichlorobenzene	---	---	Composite	---
1,1,1 Trichloroethane	---	---	Composite	---
Xylenes (Total)	74	ppb	Instantaneous	28
PCB's (Total) ³	1	ppb	Composite	---
Total Suspended Solids (TSS)	350	mg/l	Instantaneous	---
CBOD	---	---	Composite	---
Chloride	---	---	Instantaneous	---
Total Nitrogen ⁴	---	---	Composite	---
Total Solids	---	---	Instantaneous	---
Other				

- 1 All handling and preservation of collected samples and laboratory analyses of samples shall be performed in accordance with 40 C.F.R. pt. 136. If 40 C.F.R. pt. 136 does not cover the pollutant in question, the handling, preservation, and analysis must be performed in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater." All analyses shall be performed using a detection level less than the lowest applicable regulatory discharge limit. If a parameter does not have a limit, then the detection level is defined as the method detection limit (MDL) and limit of quantitation (LOQ) required by the analytical method that is used to analyze the parameter. If the method does not contain an MDL or LOQ, the lab must use an approved method that does contain an MDL or LOQ. If none of the approved methods contain an MDL or LOQ for that parameter then the lab must develop its own LOQ, and report it with the analytical results.
- 2 Non-Polar Material shall mean that portion of the oil and grease that is not eliminated from a solution containing N-Hexane, or any other extraction solvent the EPA shall prescribe, by silica gel absorption.
- 3 Analysis for PCB's must be done by EPA method 608 with MDL=<65 ppt. PCB's (total) is the sum of PCB-1242 (Aroclor 1242), PCB-1254 (Aroclor 1254), PCB-1221 (Aroclor 1221), PCB-1232 (Aroclor 1232), PCB-1248 (Aroclor 1248), PCB-1260 (Aroclor 1260) and PCB-1016 (Aroclor 1016).
- 4 Total Nitrogen = Total Kjeldahl Nitrogen (TKN) + Nitrite (NO₂) + Nitrate (NO₃).

10) BWSO Approvals

180 GPM into Little Nassau Street



May 14, 2019

Ariel Czemerinski, P.E.
AMC Engineering, PLLC
18-36 42nd Street
Astoria, NY 11105

**RE: Dewatering at 33 Little Nassau Street
Block # 1884, Lot # 40
Borough of Brooklyn**

Vincent Sapienza, P.E.
Commissioner

Dear Mr. Czemerinski:

We are in receipt of your dewatering submittal dated May 3, 2019, requesting permission to temporarily discharge up to 259,200 gallons per day (gpd) of groundwater, continuously for a period of one year, during construction, through a proposed 6" diameter (dia.) connection to the 12" diameter (dia.) combined sewer (as per SCP ID # 10806) in Little Nassau Street between Franklin Avenue and Kent Avenue in the Borough of Brooklyn.

Based upon the information, schematic and analytical data submitted, you are hereby authorized to obtain DEP permit to temporarily discharge during the construction up to 259,200 gallons per day (gpd) of ground water at the rate not to exceed 0.401 cubic feet per second (cfs) for a period of one year as specified in your submission, during dry weather only, to the combined sewer at the above referenced location. The Industrial Inspections and Permitting Section has given the approval (C-6629) for this dewatering discharge by a letter dated April 25, 2019.

The discharger shall indemnify and hold the City harmless for any damage or liability incurred by the City due to the dewatering and in the event that the discharge results in overloading the capacity of the discharge sewer. See copy of the special Indemnity Agreement, to be signed and filed with the discharge permit application.

Please note that no dewatering permit will be issued until the application for a sewer connection is approved by the Brooklyn Borough Records Office and payment is made to the Bureau of Customer Service for groundwater discharge into the New York City Wastewater System in accordance with the Water and Wastewater Rate Schedule established by the New York City Water Board.

If you have any further questions concerning this matter, please contact:
Mr. Suresh Kumar at (718) 595-5205.

Very truly yours,

Ketki Patel, P.E., Deputy Chief
Site Connection & Application Review

Anastasios Georgelis, P.E.
Deputy Commissioner
Bureau of Water &
Sewer Operations

59-17 Junction Bl,
Flushing, NY 11373

Connections@dep.nyc.gov

720 GPM into Flushing Avenue



June 14, 2019

Ariel Czemerinski, P.E.
AMC Engineering, PLLC
18-36 42nd Street
Astoria, NY 11105

**Re: Dewatering at 376 Flushing Avenue
Block # 1884, Lot # 48
Borough of the Brooklyn**

Dear Mr. Czemerinski:

Vincent Sapienza, P.E.
Commissioner

We are in receipt of your dewatering submittal dated June 13, 2019, requesting permission to temporarily discharge up to 1,036,800 gallons per day (gpd) of groundwater, continuously for a period of one year, during remediation, through an existing 6" diameter (dia.) connection to the 72" dia. combined sewer in Flushing Avenue between Franklin Avenue and Kent Avenue in the Borough of Brooklyn.

Based upon the information, schematic and analytical data submitted, you are hereby authorized to temporarily discharge during the construction up to 1,036,800 gallons per day (gpd) of ground water, at the rate not to exceed 1.604 cubic feet per second (cfs) for a period of one year as specified in your submission, during dry weather only, to the combined sewer at the above referenced locations. The Industrial Inspections and Permitting Section has given the approval (C-6629) for this dewatering discharge by a letter dated April 25, 2019.

Anastasios Georgelis, P.E.
Deputy Commissioner
Bureau of Water &
Sewer Operations

The discharger shall indemnify and hold the City harmless for any damage or liability incurred by the City due to the dewatering and in the event that the discharge results in overloading the capacity of the discharge sewer. See copy of the Special Indemnity Agreement, to be signed and filed with the discharge permit application.

59-17 Junction Bl,
Flushing, NY 11373

Please note that no dewatering permit will be issued until the payment is made to the Bureau of Customer Service for groundwater discharge into the New York City Wastewater System in accordance with the Water and Wastewater Rate Schedule established by the New York City Water Board.

Connections@dep.nyc.gov

This letter supersedes the previous letter of approval for the 376 Flushing Avenue, Lot # 40, dated November 30, 2018.

If you have any further questions concerning this matter, please contact:
Mr. Suresh Kumar at (718) 595-5205.

Very truly yours,

Ketki Patel, P.E., Deputy Chief
Site Connection & Application Review

11) Structural and Archeological Assessment Form (SAAF)



PART 1 – APPLICANT COMPLETES

APPLICANT INFORMATION

1. Applicant Name: Lotus Residences LLC
2. Applicant Address: 266 Broadway, Suite 301, Brooklyn NY 11211

PROJECT INFORMATION

3. Project/Facility Name: The Rose Castle - 376-378 Flushing Avenue, Brooklyn
4. Project/Facility Location: 376-378 Flushing Avenue, Brooklyn, NY 11205
5. Is the proposed project adjacent to, or does it contain a building or structure listed in the State or National Register of Historic Places? ☐ Yes ☒ No
6. Are there any buildings or structures 50 years old or older adjacent to or within the proposed project area? ☒ Yes ☐ No

If the answer to question 5 and /or 6 is yes, provide the following information for each building and structure (use attachments if necessary):

- a. Name of structure: 34 Franklin Avenue
- b. Location: 34 Franklin Avenue, Brooklyn, NY 11205
- c. Type of structure (ex. house, outbuilding, barn, bridge, dam, ruins): Mixed-Use Building
- d. Approximate age or date of construction: 1940

7. Might the proposed project have any impact (physical/visual) upon any buildings or structures listed in the State or National Register of Historic Places or 50 years old or older? ☐ Yes ☒ No

If yes, describe briefly (use attachments if necessary):

8. Provide photographs of every building and structure that may be impacted by the project as described in number 7, on the opposite side of this page. The following standards are recommended:

- Minimum of 2 photographs
- Photographs must be 3.5" x 5" in size or larger
- Photos must be clear and focused
- Digital photographs must be printed on photo paper and be produced at a printer setting of a minimum of 600 dpi
- Clearly label photos so it is obvious what is being illustrated; key photos to map or plan, if possible
- Photo 1: show both the entire front and side of the structure in a single shot from as close to the building as possible. Be sure the structure is not partially or fully blocked by trees or other obstructions
- Photo 2: show relationship of building or structure to roadway or surroundings

9. Has the land within the proposed project area been previously disturbed or altered (excavated, landscaped, filled, utilities installed)? ☒ Yes ☐ No

If yes, describe briefly, including depth of disturbance (use attachments if necessary):

Various utilities installed to 4' below grade (general street work and excavation).

10. Approximate percentage of proposed project area with slopes:

- 0-10% 95 %
- 10-15% 5 %
- 15% or greater 0 %

11. Approximate percentage of proposed project site with the following drainage characteristics:

- Well drained 95 %
- Moderately well drained 5 %
- Poorly drained 0 %

Prepared By (Print or type name): Lotus Residences LLC (Zelig Weiss)

Signature: 

Date: 6/17/19

PART 2 – DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) COMPLETES

APPLICANT/PROJECT INFORMATION

1. Applicant Name:

2. Project/Facility Name:

3. DEC Number:

BUILDINGS AND STRUCTURES

4. Might the proposed project have any impact (physical/visual) upon any buildings or structures listed in the State or National Register of Historic Places or 50 years old or older? ☐ Yes ☐ No

If yes, DEC must consult with the Office of Parks, Recreation and Historic Preservation (OPRHP). DEC must request a determination of eligibility for the State Register of Historic Places and/or comments regarding project impact. Include information supplied by the applicant in response to questions 5, 6, 7 and 8 of **Part 1** of this form.

ARCHAEOLOGICAL SITES

5. Does the proposed project area coincide with a circle, square or stippled area on OPRHP's Statewide Archaeological Inventory Map? ☐ Yes ☐ No

6. Is the proposed project area outside of a circle or square, but one for which information has been provided (ex: documented reports of known sites) that suggests the area is archaeologically sensitive? ☐ Yes ☐ No

If yes, what is the nature and source of information?

7. Is the proposed project area apparently undisturbed? ☐ Yes ☐ No

8. Will the proposed action include a physical disturbance of the project area? ☐ Yes ☐ No

9. Is the slope in the area characteristically less than 15% (unless on limestone/flint escarpments)? ☐ Yes ☐ No

DEC SECTION CONTINUES ON REVERSE SIDE

10. Is the proposed project area characteristically moderately well or well drained? ☐ Yes ☐ No

If the answers to 5, 7-10 are yes, an archeological survey should be performed by the applicant. Provide the applicant with a copy of or the link to the *State Historic Preservation Office Phase 1 Archaeological Report Format Requirements (08/05)*.

If the answer to 5 is no, but answers to 6-10 are yes, DEC must consult with OPRHP before requiring that the applicant perform an archaeological survey.

RESULTS OF EVALUATION

- ☐ SHPA-1 No buildings, structures or archaeological sites identified at the project location.
- ☐ SHPA-2 Buildings, structures or archaeological sites identified, but no impacts will occur, no survey required. No further cultural resources review required.
- ☐ Consultation by DEC with OPRHP required. ☐ Structures
- ☐ Archaeology
- ☐ Archaeological survey required.

Prepared by:

Date:

RESET PART 2

12) State Historic Preservation office (SHPO) No Impact Letter



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ERIK KULLESEID
Commissioner

June 07, 2019

Mr. Andrew Sung
EIT
AMC Engineering, PLLC
18-36 42nd Street
Astoria, NY 11105

Re: DEC
The Rose Castle - 376-378 Flushing Avenue, Brooklyn
376 Flushing Avenue, Brooklyn, NY 11205
18PR03060

Dear Mr. Sung:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Michael F. Lynch, P.E., AIA
Director, Division for Historic Preservation

13) Copy of Phase I Report

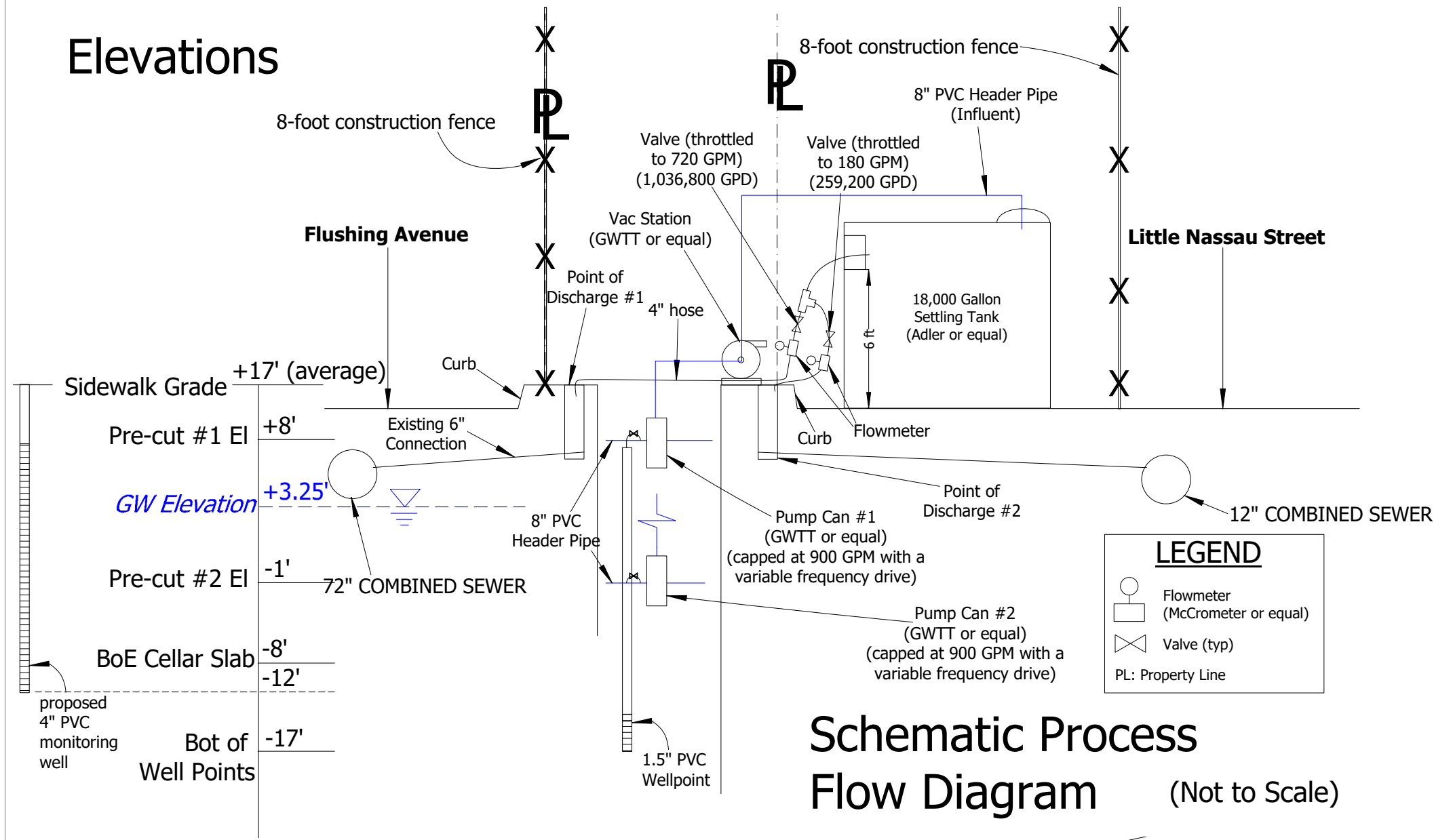
(See CD)

14) Copy of Phase II Report

(See CD)

15) Site Plan and Proposed Process Flow Diagram

Elevations



Schematic Process Flow Diagram (Not to Scale)

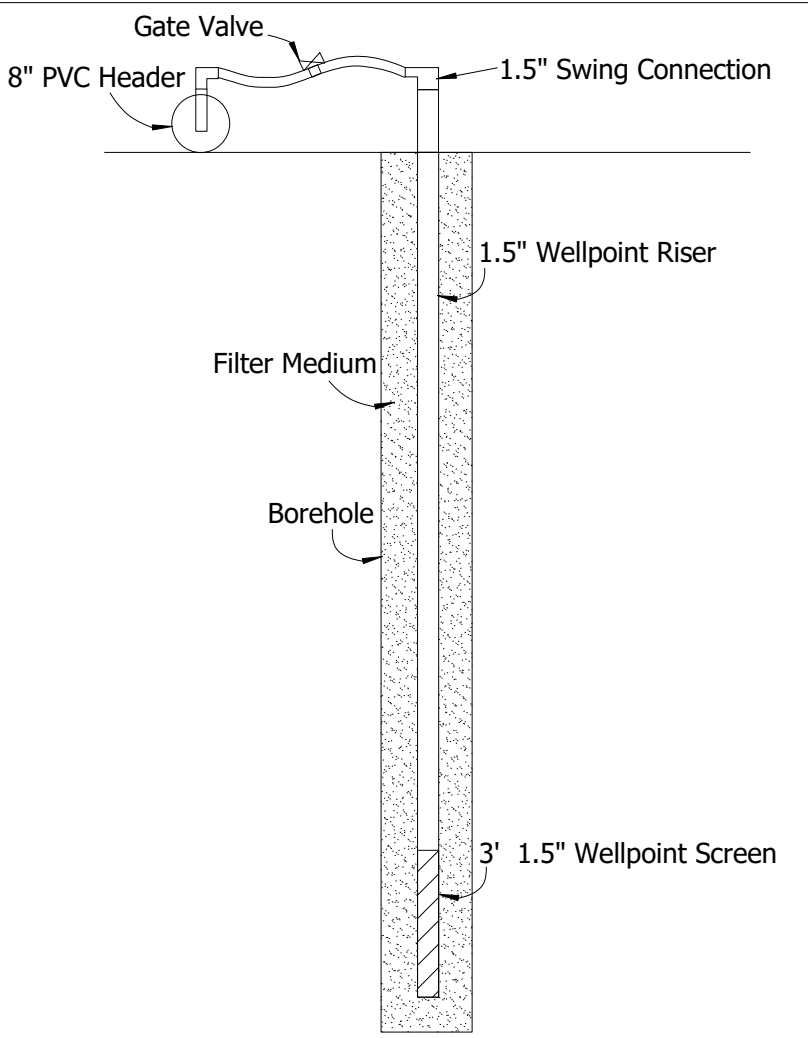
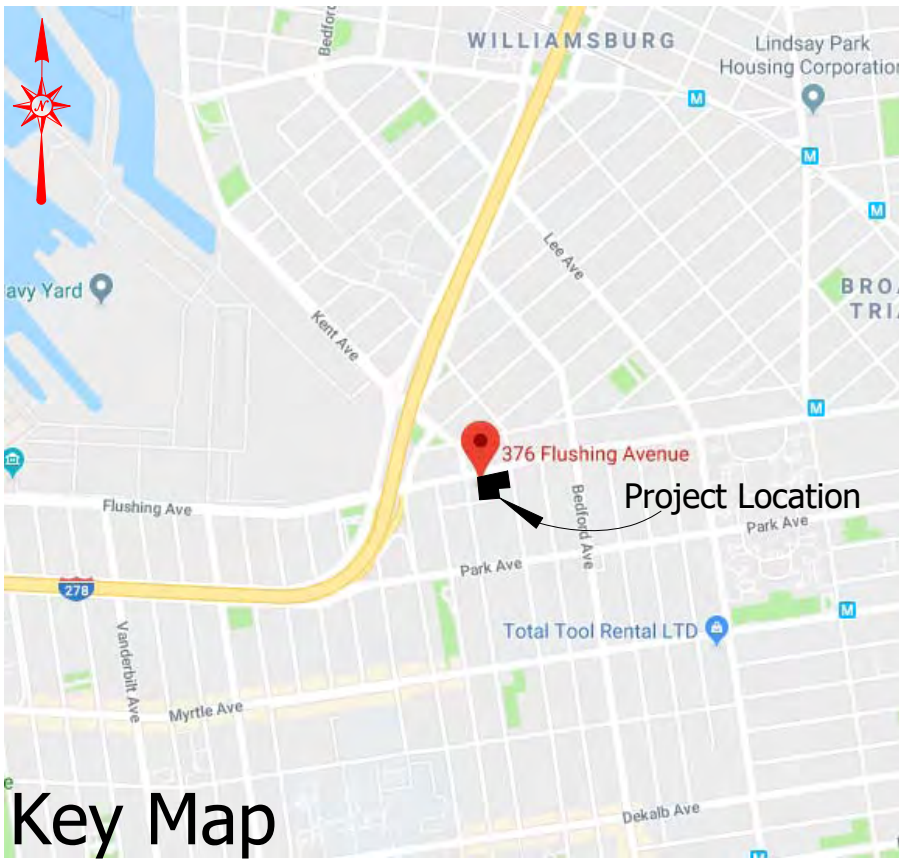
- NOTES TO GC:
1. ENSURE THAT ALL UTILITIES ARE MARKED OUT AND SITE IS SAFE FOR EXCAVATION. FOLLOW ALL CITY, STATE AND FEDERAL REGULATIONS WHEN WORKING AT THIS SITE.
 2. PROVIDE PROOF OF UTILITY MARK OUT TO ENGINEER OF RECORD.
 3. OBTAIN APPROVAL FROM OWNER OR STRUCTURAL ENGINEER THAT LOCATION OF TREATMENT SYSTEM IS ADEQUATELY SUPPORTED. DO NOT PLACE TREATMENT EQUIPMENT UNTIL INDICATED SO BY STRUCTURAL ENGINEER.
 4. A DEWATERING PERMIT WILL BE OBTAINED FROM NYCDEP. DO NOT COMMENCE DISCHARGE UNTIL SUCH PERMIT IS SECURED.
 5. ALL CONDITIONS MUST BE VIF. ANY DISCREPANCIES MUST BE BROUGHT UP TO THE ATTENTION OF THE DEWATERING CONTRACTOR AND ENGINEER.
 6. SINCE DISCHARGE EXCEEDS 10,000 GPD, DISCHARGE MUST OCCUR THROUGH A CONNECTION. OBTAIN SUCH APPROVAL FROM THE BWSO.
 7. SINCE DISCHARGE EXCEEDS 45 GPM, A LONG ISLAND WELL PERMIT MUST BE OBTAINED FROM THE NYSDEC.
 8. If excavation / construction activities occur within 200 ft of a rail line (MTA), then plans must be filed with respective MTA agency to obtain letter of no exception.
 9. Site information and elevations obtained from plans by permission from owner.

Important Note: Dewatering system may affect subsurface conditions on adjacent properties, and must be continuously monitored. Precautions will be needed to limit the risk of cracks, heave or settlement of adjacent structures.

- MONITORING WELL NOTES:
1. MW-1 IS AN EXISTING 2" MONITORING WELL.
 2. MW-2 IS A NEW PROPOSED 2" MONITORING WELL. IT WILL BE INSTALLED TO EL: -12' (APPROX. 29' BELOW GRADE). MW-2 WILL COMPRISE OF 10' RISER AND 19' SCREEN.
 3. A NEW PROPOSED 4" MONITORING WELL WILL BE INSTALLED ACROSS FLUSHING AVENUE, ON THE SIDEWALK. THE 4" WELL WILL COMPRISE OF 10' RISER AND 19' SCREEN.

- DEWATERING NOTES:
1. Obtain approval from structural engineer to position treatment where indicated.
 2. Dewatering required for the new cellar slab.
 3. Groundwater El is approximately +3.25'.
 4. Bottom of excavation for cellar slab is El: -8'.
 5. Monitor movement of adjacent structures: Vibration settling and optical monitoring (by others). Coordinate these activities with geotechnical engineer.
 6. Using pumps will require a continuous power supply, and back up generators to ensure continuous pumps operation.
 7. Sequence of Wellpoint Installation:
 - a) Install wellpoints to El: -17', as shown on this plan.
 - b) Install 8" PVC header pipe at El: +9'.
 - c) When excavation activites reach El: -1', install second 8" PVC header pipe to El: -1'.
 - d) Continue dewatering using new header pipe to bottom of excavation.

Disclaimer:
This plan has been prepared for the purpose of obtaining a dewatering permit from the overseeing agency. This plan (and supplemental documents) have been prepared based on the information provided by others and through reasonable engineering assumptions. The recommendations expressed in this plan are not an opinion concerning the compliance of any past or present owner or operator of the site with any federal, state, or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or conclusions expressed in this plan. The project construction manager and thereabouts the project owner hereby agree to indemnify and to save harmless AMC Engineering, PLLC and its professionals from and against any and all claims, suits, actions, proceedings, and losses that may arise after the date of this agreement from the construction, maintenance, operation, or use of any equipment (direct or indirect) for the purpose of dewatering at this location. Additionally, AMC Engineering, PLLC is held harmless due to any harmful side effects of lowering the water table, such as but not limited to: impact of drawdown on the perimeter of the site, salt water intrusion, movement of adjacent structures, movement of contaminated groundwater, backflow due to surcharge of outlet sewer and effect on any wetlands. Monitoring procedures for securing adjacent structures against any impacts during dewatering such as settlement, drawing of fines from beneath existing structures, and formation of cracks should be adopted.



1.5" Well Point Detail

Property Owner:
Zelig Weiss
Lotus Residences LLC
266 Broadway, Suite 301
Brooklyn, NY 11211

AMC ENGINEERING PLLC
18-36 42nd Street
Astoria, NY 11105
718 545-0474

PROJECT
376-378 Flushing Avenue
Brooklyn, NY 11205
Block: 1884 Lot: 40, 48

TITLE:
Long Island Well Permit
Equivalent Proposed
Dewatering Plan
(Sitewide Dewatering)

SEAL & SIGNATURE:



DATE: JUN 13, 2019

PROJECT No:

DRAWING BY: AS

CHK BY:

DWG No:

DW-1.05

123

1 of 1