

January 20, 2021

Girish Desai, P.E. New York State Department of Environmental Conservation 50 Circle Road Stony Brook, New York 11790

Re: SSDS Follow-Up Status Report

Fourth Quarter 2020

Bulova Watch Factory Site No. 152139

15 Church Street, Village of Sag Harbor, New York

Dear Mr. Desai:

On behalf of the Watchcase Factory Condominium, Roux Environmental Engineering and Geology, D.P.C. (Roux), is submitting this follow-up status report to summarize the actions taken in response to the shutdown incident of the Factory Building sub-slab depressurization system (SSDS) located at the Bulova Watch Factory Site No. 152139, 15 Church Street, Village of Sag Harbor, New York (Site). The Factory Building SSDS was offline from December 17 to December 23, 2020 (approximately 158 hours). The shutdown incident resulted from a power outage caused by a winter storm. This report summarizes the response actions taken after the SSDS shutdown, the work activities performed to repair and re-start the SSDS, and the monitoring activities performed to assess SSDS performance following the system downtime. SSDS response and monitoring activities were conducted in accordance with the January 27, 2009 Site Management Plan (SMP), the May 7, 2012 SMP Addendum No. 1, the October 2017 SMP Addendum No. 2, and the January 20, 2015 Operation, Maintenance, and Monitoring (OM&M) Plan all submitted to the New York State Department of Environmental Conservation (NYSDEC).

### SSDS Shutdown Response Actions and Repair

On December 17, 2020, a power outage occurred at the Site as a result of a winter storm passing through the area. The power outage triggered a response from the SSDS Autodialer, which alerted the Watchcase Factory Condominium and Roux team that the Factory Building SSDS was offline. When power was restored at the facility, the Factory Building SSDS did not come back online. The Watchcase Factory Condominium and Roux reset the system at the control panel and attempted to re-start the blowers, but the blowers did not start. Other services at the Site, such as the telecommunications, were also offline following the power restoration. Therefore, the team decided to wait for full service to be restored to the facility at the Site then try to re-start the system.

On December 18, 2020, full service was restored to facility at the Site and another reset/restart of the Factory Building SSDS system was attempted, but the system remained offline. Roux contacted Gasho Inc., the SSDS vendor who installed the system, and attempted to schedule an electrician for repair, but Gasho Inc. did not have immediate availability. Roux and Gasho troubleshooted the issue over the phone and determined that the likely cause was from a blown fuse inside the control panel. Prior to scheduling a Roux technician to replace the control panel fuses, Roux and the Watchcase Factory

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Condominium attempted to troubleshoot the issue one more time. Maintenance staff from the Watchcase Factory Condominium noticed the control panel wasn't getting power, therefore the main circuit breaker that provided power to the SSDS was located and the breaker was reset. Power was not restored to the Factory Building SSDS.

On December 21, 2020, Roux ordered replacement fuses for SSDS control panel, which were scheduled for delivery on December 23, 2020. Roux scheduled a technician to visit the Site and replace the fuses on December 23, 2020.

On December 22, 2020, Roux notified NYSDEC of the shutdown incident that occurred at the Site. NYSDEC informed Roux that the Factory Building SSDS must be repaired and brough back online by the following day.

On December 23, 2020, Roux visited the Site and inspected the control panel for the Factory Building SSDS. The circuit was tested using a Digital Multimeter and a Roux field technician determined that the power issue was coming from somewhere upstream of the blower room, because the three-phase power coming into the panel was not at full voltage. Roux informed the Watchcase Factory Condominium, who scheduled their local certified electrical contractor for an immediate Site visit to troubleshoot the issue. On December 23, the Condominium's electrical contractor resolved the issue by repairing the main circuit breaker. Power was restored to the control panel and the Factory Building SSDS came back online.

### **Response Action Follow-Up**

Following the power restoration, Roux and the Watchcase Factory Condominium discussed future response actions in case a similar event occurs in the future. If the Factory Building SSDS and/or Garage SSDS shutdown and do not come back online following reset of the system at the control panel, the Watchcase Factory Condominium will contact their local certified electrical contractor to repair the system immediately. If this action was taken during the December 17, 2020 shutdown incident, the issue could have been resolved in a timelier manner.

#### **SSDS Performance Testing**

Following the December 17, 2020 shutdown incident, Roux returned to the Site on December 31, 2020 to ensure the SSDS performance was not affected. In addition to visual inspections of the SSDS mechanical and above-grade piping components, the following parameters were monitored:

- Vacuum/pressure and air flow readings at the blower inlet and outlet;
- Vacuum readings at the moisture separator tank;
- · Vacuum readings at the SSDS monitoring points; and
- Photoionization detector (PID) readings at the blower outlets.

During the Site visit, vacuum readings were collected at each SSDS monitoring point using a handheld micromanometer and the blower effluents were screened using a PID. Vacuum monitoring results and PID readings from SSDS start-up through the December 31, 2020 follow-up monitoring event are summarized in Table 1 (attached). A review of Table 1 indicates that the SSDS was operating properly at each leg (i.e., maintaining a minimum vacuum of 0.004 in. w.c.).

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If you have any questions or require additional information regarding this monitoring summary, please feel free to contact the undersigned at 631-232-2600.

Sincerely,

ROUX ENVIRONMENTAL ENGINEERING AND GEOLOGY, D.P.C.

Nicholas Palumbo Project Engineer

Nathan Epler, Ph.D. Principal Hydrogeologist

## Attachments

- 1. SSDS Monitoring Summary Tables
- 2. Factory Building SSDS As-Builts
- 3. Garage SSDS As-Builts

## **ATTACHMENTS**

- 1. SSDS Monitoring Summary Tables
- 2. Factory Building SSDS As-Builts
- 3. Garage SSDS As-Builts

# **ATTACHMENT 1**

SSDS Monitoring Summary Tables

Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

		Factory Building SSDS													
	SSDS Zones Inside Blower Room							Blower 1		Blower 2					
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Runtime	Influent	K.O	Effluent	PID	Runtime	Influent	K.O	Effluent	PID
Date	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(hours)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(ppm)	(hours)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(ppm
March 6, 2015	2.50	2.40	1.90	5.80	6.50	-	25	31				20	8		
March 12, 2015	2.58	2.06	3.24	5.93	6.73										
March 19, 2015															
March 24, 2015	6.38	5.76	3.15	5.77	6.46										
April 2, 2015	2.51	2.06	3.21	5.81	6.52	2,750.6	22	31	20	0.0	1,943.8	20	10	19	0.0
April 7, 2015	2.44	2.06	3.3	5.64	6.47	2,871.4	25	32	20	0.0	2,064.4	20	19	20	0.0
April 14, 2015	2.59	1.97	3.51	5.38	6.73	3,040.2	32	30	20	0.0	2,033.2	20	20	20	0.0
April 22, 2015	2.48	2.02	3.24	5.53	6.46	3,231.2	25	31	20	0.0	2,424.1	21	10	18	0.0
May 5, 2015	2.52	2.03	3.19	5.78	6.42	3,512.8	18	32	20	0.0	2,705.7	21	9	18	0.0
May 11, 2015	2.54	1.98	3.28	5.72	6.53	3,621.5	25	31	20	0.0	2,814.4	21	10	17	0.0
May 27, 2015	2.78	2.26	3.37	0.31	0.46	3,821.9	Blowe	r 1 down si	nce May 23,	2015	3,112.8	29	32	6	0.0
June 2, 2015	2.78	2.26	3.40	0.31	0.43	3,821.9			nce May 23,		3,256.6	29	38	6	0.0
June 9, 2015	2.44	2.07	3.24	5.66	6.50	3,833.0	20	10	15		3,485.2	24	30	20	
July 29, 2015	2.61	2.07	3.24	3.82	6.59	4.853.2	21	10	19	0.0	4,288.2	25	20	20	0.0
August 6, 2015	2.63	2.17	3.31	5.72	6.46	5,048.4	21	9	18	0.0	4,483.5	25	20	20	0.0
September 11, 2015	2.62	2.17	3.30	5.74	6.55	5,910.9	21	10	19	0.0	5,340.0	24	20	19	0.0
December 31, 2015	2.62	2.14	3.30	5.74	6.48	8.576.6	22	10	18	0.0	8.011.3	21	20	20	0.0
	2.62			5.67		9.078.4	22	10	18		-,-	22	19	19	
January 21, 2016	-	2.04	3.25		6.45	- ,				0.2	8,513.5				0.1
March 22, 2016	2.66	1.98	3.31	5.78	6.42	10,543.2	25	20	20	0.0	9,979.0	21	10	18	0.1
April 22, 2016	2.60	2.04	3.26	5.62	6.37	11,286.5	22	20	20	0.1	10,721.4	21	9	18	0.0
May 27, 2016	2.63	2.05	3.24	5.61	6.44	12,195.4	22	20	20	0.0	11,463.2	21	10	18	0.0
June 21, 2016	2.68	2.07	3.20	5.65	6.42	12,724.4	23	20	20	0.0	12,159.4	21	9	18	0.0
March 22, 2017	2.63	2.09	3.29	5.69	6.43	19,046.5		20	20	0.0	18,481.0	21			
May 5, 2017	2.62	2.03	2.99	5.79	6.47	20,105.3	21		18	0.0	19,540.3	27	20	20	0.0
July 21, 2017	2.68	1.93	3.01	5.79	5.72	21,953.8	27	10	18	0.0	21,388.1	21	20	19	0.0
December 13, 2017	2.66	1.96	2.41	5.62	6.37	25,433.2	25	10	18	0.1	24,868.2	25	20	18	0.0
February 12, 2018	2.6	2.20	3.29	5.75	6.46		20	10	18	0.1		25	20	20	0.0
May 15, 2018	2.66	2.01	2.41	5.82	6.53	29,104.8	24	10	18	0.0	28,539.7	25	20	19	0.0
August 16, 2018	2.63	2.08	2.49	5.81	6.58	31,273.0	26	9	18	0.0	30,707.0	22	20	18	0.0
October 3, 2018	2.64	1.98	2.66	5.75	6.52	32,427.7	24	10	18	0.0	31,861.0	22	20	18	0.0
January 16, 2019	2.51	1.98	2.69	5.75	6.46	34,947.8	22	8	18	0.0	34,381.6	24	18	20	0.0
April 5, 2019	2.71	2.14	2.71	5.77	6.65	36,839.8	22	10	19	0.0	36,274.5	24	20	19	0.0
August 2, 2019	2.63	2.20	2.98	5.73	6.58	39,672.0	22	10	19	0.0	39,106.7	24	20	19	0.0
December 23, 2019	2.69	2.10	2.45	5.79	6.52	43.131.3	26	10	16	0.0	42.565.8	19	20	18	0.0
March 31, 2020	2.66	2.10	2.05	5.78	6.54	45,505.2	24	8	10	0.0	44,939.6	19	20	18	0.0
June 17, 2020	2.64	2.04	2.26	5.79	6.58	47,375.8	26	8	14	0.0	46,810.2	20	20	18	0.0
September 16, 2020	2.12	2.53	2.34	5.87	6.57	49.669.6	26	6	8	0.0	48,994.1	20	18	20	0.0
	2.12	2.33	2.34	5.55	6.59	51.555.6	26	14	o 8	0.0	50.990.6	30	22	20 16	0.0
December 8, 2020						. ,			8		,		22 26		
December 9, 2020	5.09	5.20	3.22	2.72	3.21	51,580.1	25 25	15	-	0.0	51,014.6	35		16	0.0
December 15, 2020	5.17	5.16	3.05	2.42	4.07	51,721.5		14	8	0.0	51,155.9	35	26	16	0.0
December 31, 2020 tes:	5.13	5.21	3.04	2.56	4.01	51,947.6	22	12	10	0.0	51,382.6	35	22	17	0.0

226.1

384

157.9 6.5791667

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room

Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room

Garage Blower: Rotron EN909 15Hp, located in garage blower room

Zone 1: SSDS Green Line, Blower 2

Zone 2: SSDS Purple Line, Blower 2

Zone 3: SSDS Orange Line, Blower 2

Zone 4: SSDS Red Line, Blower 1

Zone 5: SSDS Blue Line, Blower 1

Perm. E.: SSDS Perimeter East Line, Garage Blower Perm. W.: SSDS Perimeter West Line, Garage Blower

Garage: SSDS Garage Line, Garage Blower

Influent: Blower Influent Vacuum Gauge

K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge

Effluent: Blower Effluent Pressure Gauge

PID: Photoionization Detector

in. w.c.: inches of water column

ppm: parts per million

--: measurement was not collected



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Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	Garage & Perimeter SSDS											
	SSDS Zon	es Inside Blo	ower Room	Garage Blower								
	Perm. E.	Perm. W.	Garage	Runtime	Influent	K.O.	Effluent	PID				
Date	(in. w.c.)	(in. w.c.)	(in. w.c.)	(hours)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(ppm)				
March 6, 2015	2.20	2.00	0.90		28	19		-				
March 12, 2015	2.63	2.34	0.52									
March 19, 2015	2.57	2.23	0.56									
March 24, 2015	2.61	2.17	0.51									
April 2, 2015	2.52	2.20	0.51	2,859.4	24	11	2.2	0.0				
April 7, 2015	2.67	2.24	0.53	2,980.0	24	27	2.5	0.0				
April 14, 2015	2.88	2.39	0.57	3,148.8	27	18	2	0.0				
April 22, 2015	2.89	2.48	0.58	3,340.4	27	18	2	0.0				
May 5, 2015	2.72	2.23	0.61	3,651.1	27	19	2	0.0				
May 11, 2015	2.61	2.18	0.51	3,796.6	27	19	2	0.0				
May 27, 2015	2.59	2.16	0.57	4.179.4	27	19	2	0.0				
June 2, 2015	2.70	2.28	0.68	4,323.1	28	18	2	0.0				
June 9, 2015	2.72	2.12	0.57	4,492.1	28	18	2					
July 29, 2015	2.48	2.02	0.66	5.502.1	27	19	2	0.0				
August 6, 2015	2.45	1.95	0.56	5,698.0	27	18	2	0.0				
September 11, 2015	2.88	2.34	0.52	6,559.7	27	19	2	0.0				
December 31, 2015	2.94	2.52	0.64	9.226.1	27	19	2	0.0				
	2.68	2.32	0.56	9,727.9	27	19	2	0.0				
January 21, 2016				- ,			2					
March 22, 2016	2.79	2.33	0.62	11,192.6	27 27	19		0.1				
April 22, 2016	2.68	2.17	0.57	11,836.2		18	2 2	0.0				
May 27, 2016	2.72	2.14	0.63	12,482.2	27	18		0.0				
June 21, 2016	2.65	2.26	0.59	13,373.5	27	19	2	0.0				
March 22, 2017	2.71	2.21	0.61		28	18	2	0.0				
May 5, 2017	2.96	2.55	0.59		27	19	2	0.0				
July 21, 2017	2.62	2.14	0.68	22,856.7	25	18	2	0.0				
December 13, 2017	2.59	2.17	0.53	26,335.8	25	18	2	0.0				
February 12, 2018	2.52	1.97	0.54		25	18	2	0.0				
May 15, 2018	2.7	2.24	0.52	30,007.3	26	18	2	0.0				
August 16, 2018	2.51	2.06	0.60	32,115.6	27	19	2	0.0				
October 3, 2018	2.29	2.69	0.58	33,329.5	27	18	2	0.1				
January 16, 2019	2.57	2.14	0.53	35,849.1	27	18	2	0.0				
April 5, 2019	2.49	1.99	0.56	37,741.0	27	18	2	0.0				
August 2, 2019	2.68	2.34	0.54	40,573.2	27	18	2	0.0				
December 23, 2019	2.26	1.77	0.53	44,034.1	25	15	2	0.0				
March 31, 2020	2.39	1.77	0.45	46,406.5	23	16	2	0.0				
June 17, 2020	2.15	1.75	0.61	48,278.5	25	16	3	0.0				
September 16, 2020	2.06	1.52	0.53	50.461.1	25	10	2	0.0				
December 8, 2020	1.45	1.82	0.83	52,457.5	25	15	2	0.0				
December 9, 2020	1.45	1.80	0.85	52,482.0	21	10	2	0.0				
December 15, 2020	NM	NM	NM	NM	NM	NM	NM	NM				
December 31, 2020	1.97	1.61	0.94	53,003.9	21	10	2	0.0				
Notes:			0.0.	50,000.0				0.0				

Blower 1: Rotron EN808, 7.5Hp, located in factory building blower room

Blower 2: Rotron EN808, 7.5Hp, located in factory building blower room

Garage Blower: Rotron EN909 15Hp, located in garage blower room

Zone 1: SSDS Green Line, Blower 2

Zone 2: SSDS Purple Line, Blower 2

Zone 3: SSDS Orange Line, Blower 2

Zone 4: SSDS Red Line, Blower 1

Zone 5: SSDS Blue Line, Blower 1

Perm. E.: SSDS Perimeter East Line, Garage Blower

Perm. W.: SSDS Perimeter West Line, Garage Blower Garage: SSDS Garage Line, Garage Blower

Influent: Blower Influent Vacuum Gauge

K.O.: Blower Knockout Tank/Moisture Separator Vacuum Gauge

Effluent: Blower Effluent Pressure Gauge

PID: Photoionization Detector

in. w.c.: inches of water column

ppm: parts per million

--: measurement was not collected



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Table 1. SSDS Monitoring Summary, Bulova Watch Case Factory Site No. 1-52-139

	SSDS Monitoring Points													
	Factory Building										Garage & Perimeter			
	MP1-1	MP1-2	MP2-1	MP2-2	MP3-1	MP3-2	MP4-1	MP4-2	MP5-1	MP5-2	MP6-1	MP6-2	MP6-3	MP7-1
Date	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.)	(in. w.c.
June 9, 2015	N/A	0.030	0.000	0.367	0.110	N/A	0.007	1.155	0.017	0.010	0.164	0.084	N/A	1.978
July 29, 2015	0.042	0.042	0.009	0.135	0.034	0.019	N/A	1.178	N/A	0.012	0.129	0.094	0.038	1.838
August 6, 2015	0.119	0.041	0.009	0.386	0.032	0.008	0.030	1.168	0.021	0.118	0.131	0.092	0.039	1.808
September 11, 2015	0.111	0.049	0.008	0.393	0.035	0.010	0.035	1.177	0.019	0.120	0.129	0.040	0.090	1.799
December 31, 2015	0.123	0.031	0.008	N/A	0.024	0.010	0.025	0.991	0.008	0.189	0.124	0.266	0.011	2.259
January 21, 2016	0.112	0.020	0.008	N/A	0.013	0.013	0.023	0.915	0.021	0.278	0.105	0.230	0.066	1.963
March 22, 2016	0.104	0.024	0.007	0.025	0.023	0.014	0.020	0.891	0.011	0.375	0.114	0.252	0.075	2.112
April 22, 2016	0.155	0.026	0.004	0.759	0.015	0.012	0.017	0.898	0.017	0.098	0.117	0.258	0.076	5.733
May 27, 2016	0.109	0.034	0.006	0.549	0.021	0.010	0.025	0.912	0.022	0.205	0.131	0.267	0.081	2.064
June 21, 2016	0.122	0.030	0.009	0.261	0.019	0.012	0.022	0.940	0.014	0.240	0.128	0.269	0.086	2.021
March 22, 2017	0.087	0.019	0.021	0.219	0.007	0.010	0.014	0.847	0.004	0.401	0.125	0.246	-0.083	2.014
May 5, 2017	0.101	0.021	0.006	0.205	0.005	0.011	0.019	0.889	0.026	0.071	0.191	0.254	N/A	2.309
July 21, 2017	0.118	0.036	0.012	0.236	0.007	0.014	0.020	0.938	0.008	0.101	0.128	0.244	0.082	1.944
December 13, 2017	0.086	0.022	0.006	0.194	0.011	0.011	0.016	0.877	0.012	0.329	0.129	0.248	0.080	1.933
February 12, 2018	0.118	0.040	0.009	0.089	0.031	0.010	0.032	1.155	0.027	0.118	0.134	0.035	0.091	1.808
May 15, 2018	0.104	0.023	0.009	0.195	0.008	0.014	0.019	0.883	0.012	0.015	0.129	1.950	0.080	2.080
August 16, 2018	0.110	0.032	0.005	0.229	0.007	0.009	0.023	0.937	0.011	0.010	0.127	0.222	0.085	1.883
October 3, 2018	0.109	0.028	0.006	0.253	0.008	0.010	0.044	0.927	0.010	0.010	0.124	0.244	0.078	2.123
January 16, 2019	0.121	0.022	0.009	0.180	0.008	0.009	0.019	0.860	0.012	0.119	0.128	0.235	0.095	1.969
April 5, 2019	0.119	0.020	0.004	0.191	0.007	0.010	0.015	0.850	0.004	0.008	0.109	0.228	0.068	1.845
August 2, 2019	0.108	0.022	0.006	0.196	0.008	0.010	0.022	0.910	0.009	0.008	0.120	0.221	0.082	2.070
December 23, 2019	0.119	0.025	0.007	0.182	0.007	0.012	0.019	0.854	0.010	0.006	0.112	0.192	0.068	1.745
March 31, 2020	0.135	0.026	0.008	0.190	0.006	0.009	0.023	0.852	0.010	0.007	0.115	0.192	0.073	1.871
June 17, 2020	0.109	0.024	0.008	0.214	0.008	0.013	0.020	0.904	0.011	0.011	0.112	0.201	0.081	1.591
September 16, 2020	0.105	0.021	0.020	0.210	0.010	0.010	0.040	0.922	0.013	0.009	0.118	0.190	0.104	1.370
December 8, 2020		0.022	0.005	0.214	0.007	0.007	0.016	0.872	0.010	0.014	0.161	0.258		1.371
December 9, 2020		0.030	0.013	0.331	0.015	0.012	0.013	0.504	0.023	0.011	0.162	0.252	0.103	1.335
December 15, 2020	0.147	NM	NM	NM	NM									
December 31, 2020	0.147	0.030	0.062	0.315	0.010	0.012	0.011	0.497	0.017	0.010	0.148	0.267	0.112	1.424

Zone 1: SSDS Green Line, Blower 2

Zone 2: SSDS Purple Line, Blower 2

Zone 3: SSDS Orange Line, Blower 2

Zone 4: SSDS Red Line, Blower 1

Zone 5: SSDS Blue Line, Blower 1

Zone 6: SSDS Garage Line, Garage Blower

Zone 7: SSDS Perimeter East/West Line, Garage Blower

MP2-1 installed incorrectly. Corrected on July 7, 2015

N/A: measurement was not collected, point inaccessible

Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.

SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.

Vacuum readings were previously reported in negative pressure (shown as negative value). This was corrected by reporting vacuum readings as postive values.

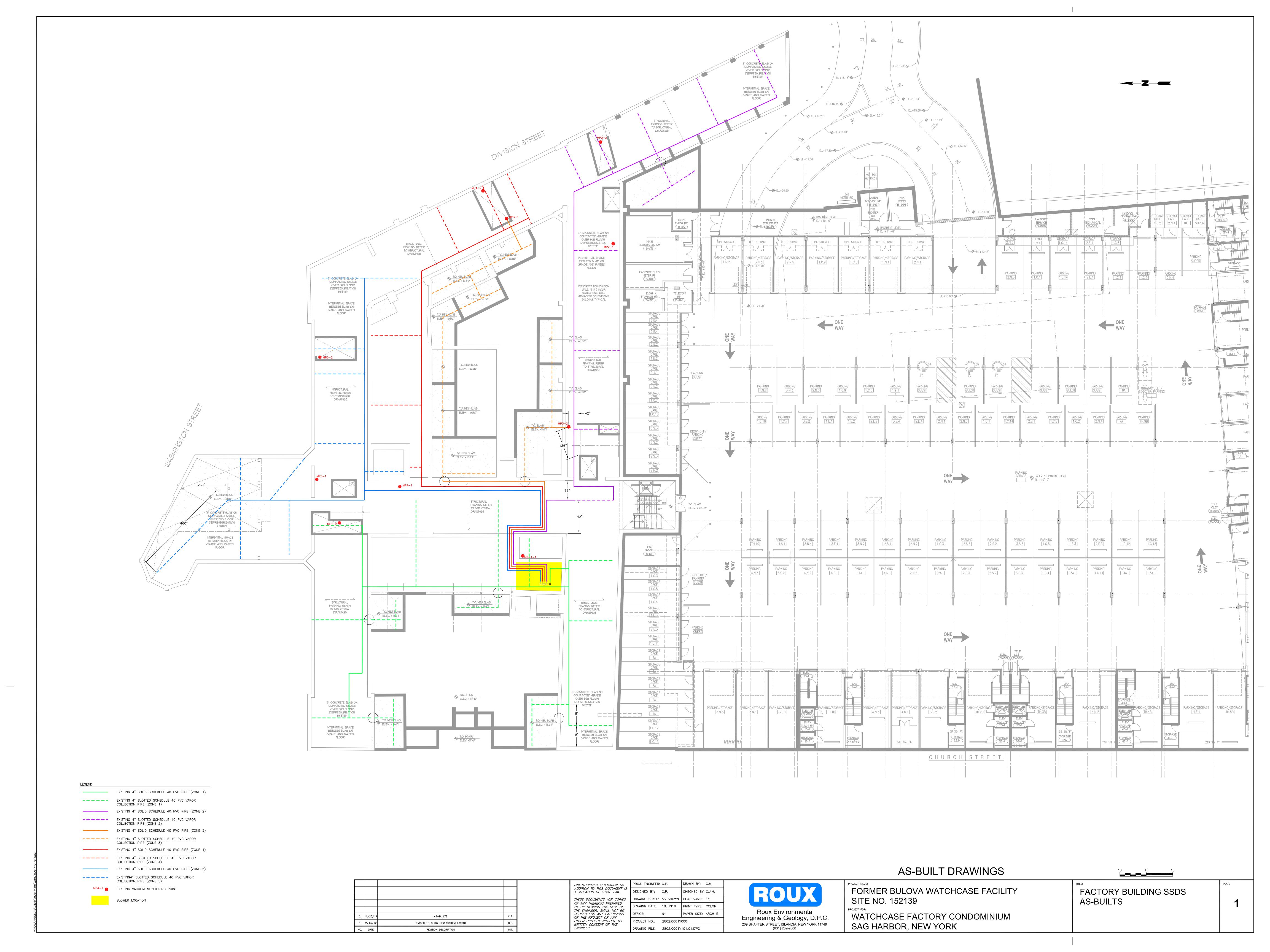
SSDS Zones, SSDS Monitoring Points, Influent, and K.O. reported in terms of vacuum. Effluent reported in terms of pressure.



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# **ATTACHMENT 2**

Factory Building SSDS As-Builts



# **ATTACHMENT 3**

Garage SSDS As-Builts

