



March 19th, 2026

Christopher Allan, PE
New York State Department of Environmental Conservation
Division of Environmental Remediation - Region 2
47-40 21st Street, Long Island City, NY 11101

Re: **Sub-Slab Depressurization (SSD) and Soil Vapor Extraction (SVE)**
Pilot Test Work Plan
223-220 Braddock Avenue, Queens Village, NY 11428

Dear Mr. Allan:

EnviroTrac has prepared this work plan to detail the work required to perform SSD and SVE pilot testing at the above referenced site. The purpose of the pilot test is to determine the operating parameters required for the proposed SSD/SVE system to be installed to provide vacuum influence beneath the building slab and remediate the remaining soil contamination in the former UST area. A site location map is included as **Figure 1**.

Task #1 – Remedial Well Installations

Two (2) SVE wells constructed of 2" SCH 40 PVC screen (0.020" screen size) and riser pipe will be installed in the area of the former UST. SVE well SVE-1S will be installed to a depth of 10-ft and screened from 2-10'. SVE well SVE-1D will be installed to a depth of 20-ft and screened from 10-20'. Two (2) vacuum monitoring points constructed of 1" SCH 40 PVC screen (0.020" screen size) and riser pipe will also be installed to test for vacuum influence during the pilot test. Monitoring point VMP-1S will be installed to a depth of 10-ft and screened from 2-10'. Monitoring point VMP-1D will be installed to a depth of 20-ft and screened from 10-20'. The locations of the proposed remedial wells are shown in **Figure 2**. Construction details for the proposed wells are shown in **Figure 3** and **Figure 4**.

Prior to well installation activities EnviroTrac will notify 811 and have a private utility markout performed. Following markouts and before drilling activities begin each well location will be pre-cleared to 6-ft using manual and vacuum extraction methods.

EnviroTrac will subcontract a driller to install the four (4) proposed wells using a telescoping mast rig that will not require disturbance to the roof above each drill location. Wells will be installed using direct push technology therefore no drill cuttings will be generated.

Task #2 – SVE Well Piping/Surface Restoration & SSD Test Point Installation

SVE wells SVE-1S and SVE-1D will each be finished with a 2" tee connection and bolt-down manhole. 2" SCH 40 PVC pipe will be installed below grade from each well to the nearby wall where it will transition to 2" SCH 40 Galvanized steel pipe. The 2" galvanized steel pipe will stub up along the wall at a height of approximately 1-ft and capped with a gripper plug. Following installation of the subsurface piping an 8" bolt-down manhole will be installed over each well and the currently exposed floor area where the former UST was located will be sealed with concrete. To prevent settlement of the new concrete rebar will be dowelled into the surrounding concrete floor.

One (1) 4-inch diameter SSD extraction point will be installed in the location shown on **Figure 2** using a core drill with a 6-inch diameter bit. The SSD extraction point will be constructed using 4-inch diameter schedule 40 PVC well screen (20-slot) that will extend down into the subgrade soil (~1 ft bgs) and shall be fitted with an end cap or plug. Well sand will be installed around the well screen up to the elevation of the bottom of the existing concrete floor slab. The well screen shall transition to solid 4" CI pipe at the bottom of the existing concrete floor slab with the annulus between the outside of the CI pipe and the concrete edge sealed with hydraulic cement. Eight (8) temporary vacuum monitoring points will be drilled through the concrete floor for use during the pilot test. Construction details for the SSD points are shown in **Figure 5**.

Task #3 – SSD and SVE Pilot Testing

EnviroTrac will provide the equipment and labor required to perform SSD and SVE pilot tests. The purpose of the pilot tests will be to provide critical data needed to determine the SSD and SVE system performance requirements, and thus to be used to finalize the design of the system vacuum blower(s) and any ancillary equipment.

The SSD and SVE test equipment will consist of the following:

- 3.0-hp Regenerative Vacuum Blower (140 cfm @ 40" H₂O vacuum).
- RadonAway High Suction Inline Fan Model #HS-5000
- Digital Manometer
- Digital Air Flow Meter
- Photoionization Detector (PID)
- 50' of 3-inch diameter vacuum hose and related connections



- 10kW Portable Generator

EnviroTrac will apply vacuum to each SVE extraction well and the SSD extraction point utilizing the provided blower, fans, hose, and fittings. During the test, vacuum, flow, and VOC monitoring will be performed at the extraction well, with vacuum influence readings collected from the monitoring points and existing monitoring wells. Each SVE extraction well/point will be tested at a minimum of four different steps of increasing flow and vacuum.

In order to gauge potential VOC recovery rates associated with the proposed SVE system, an off-gas sample will be collected from the well and test step that produces the highest PID reading. The sample will be collected in a 1L summa canister from the sample port located on the discharge piping of the test equipment. The sample will be transported to a certified laboratory and analyzed for relevant VOCs via a modified EPA TO-15 analysis.

Task #4 – SVE & SSD Pilot Test Analysis and System Design

Based on the results of the test, EnviroTrac will prepare a report summarizing the findings of the test and provide SVE and SSDS equipment design documents. A sample SVE/SSD system process and instrumentation diagram (P&ID) is included as **Figure 6**.

SVE/SSD Design Documents to Include:

- Site Plan with Proposed Radius of Influence
- Layout drawing depicting locations of SVE/SSD system components including the extraction wells, vacuum blower, discharge stack, vacuum and pressure piping, and vacuum influence points.
- P&ID depicting the SVE/SSD equipment and instrumentation locations in the system's process flow, piping configurations, and control interlocks.
- Single Line Electrical Power Diagram – specifying circuit breakers, wire, and conduit sizes for the SVE system electrical motors and controls.
- Specification sheets for SVE/SSD blower(s) and all associated instrumentation and controls.

Sincerely,

EnviroTrac Ltd.



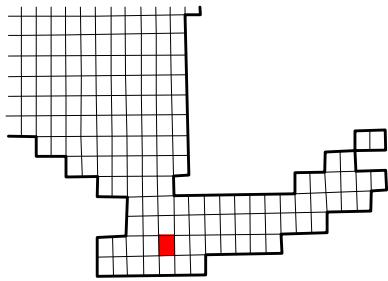
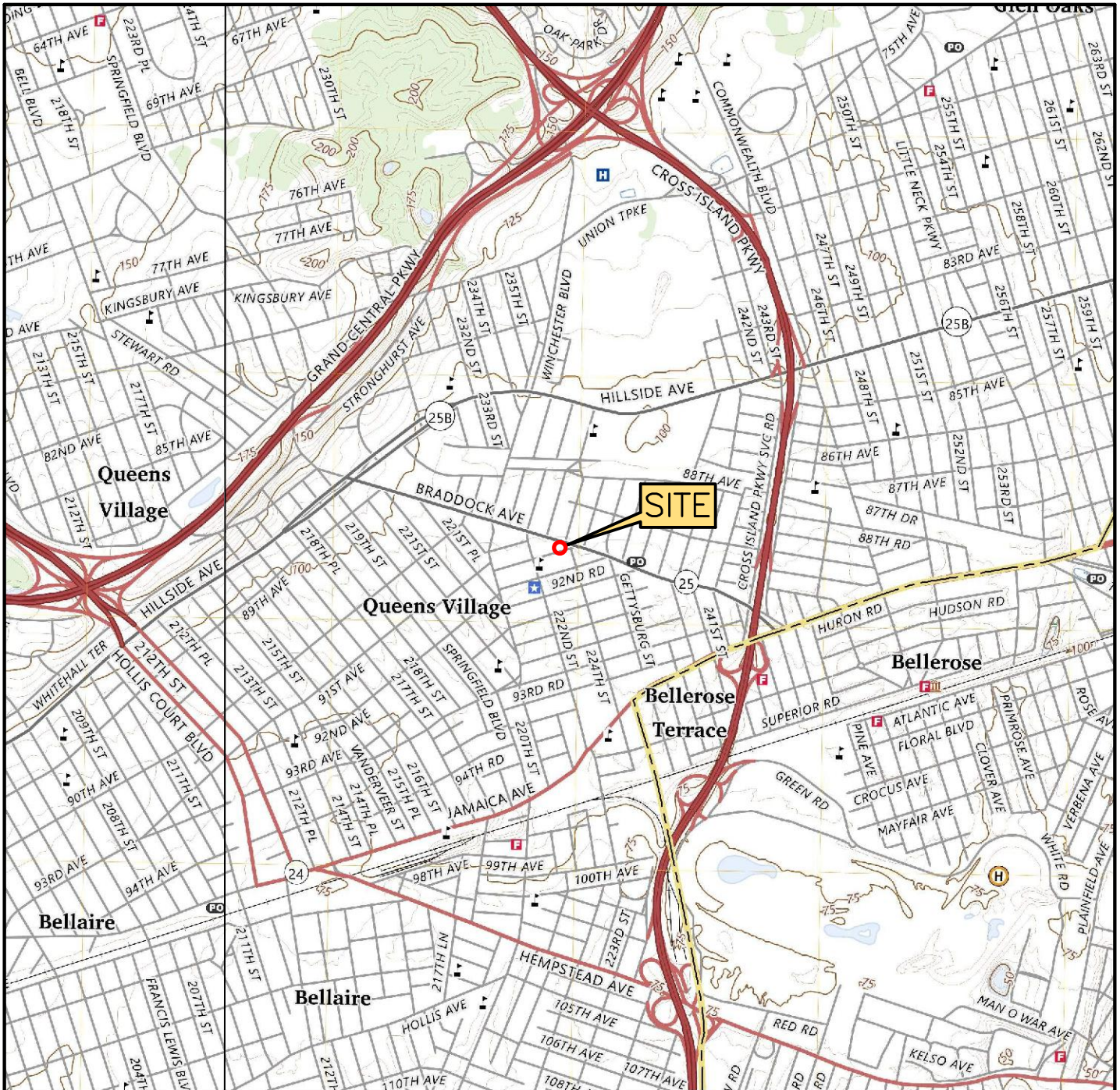
James Wilkinson, P.E.
Senior Engineer



ATTACHMENTS

1. Figure 1: Site Location Map
2. Figure 2: Site Plan with Proposed Pilot Test Well Locations
3. Figure 3: Proposed SVE Well Construction Details
4. Figure 4: Proposed SVE Monitoring Point Construction Details
5. Figure 5: Proposed SSD Well Construction Details
6. Figure 6: Typical SVE/SSD System P&ID

ATTACHMENTS




QUADRANGLE LOCATION:
LYNBROOK, NEW YORK

APPROXIMATE ELEVATION:
90 FT.

SOURCE:
USGS 7.5 MINUTE SERIES



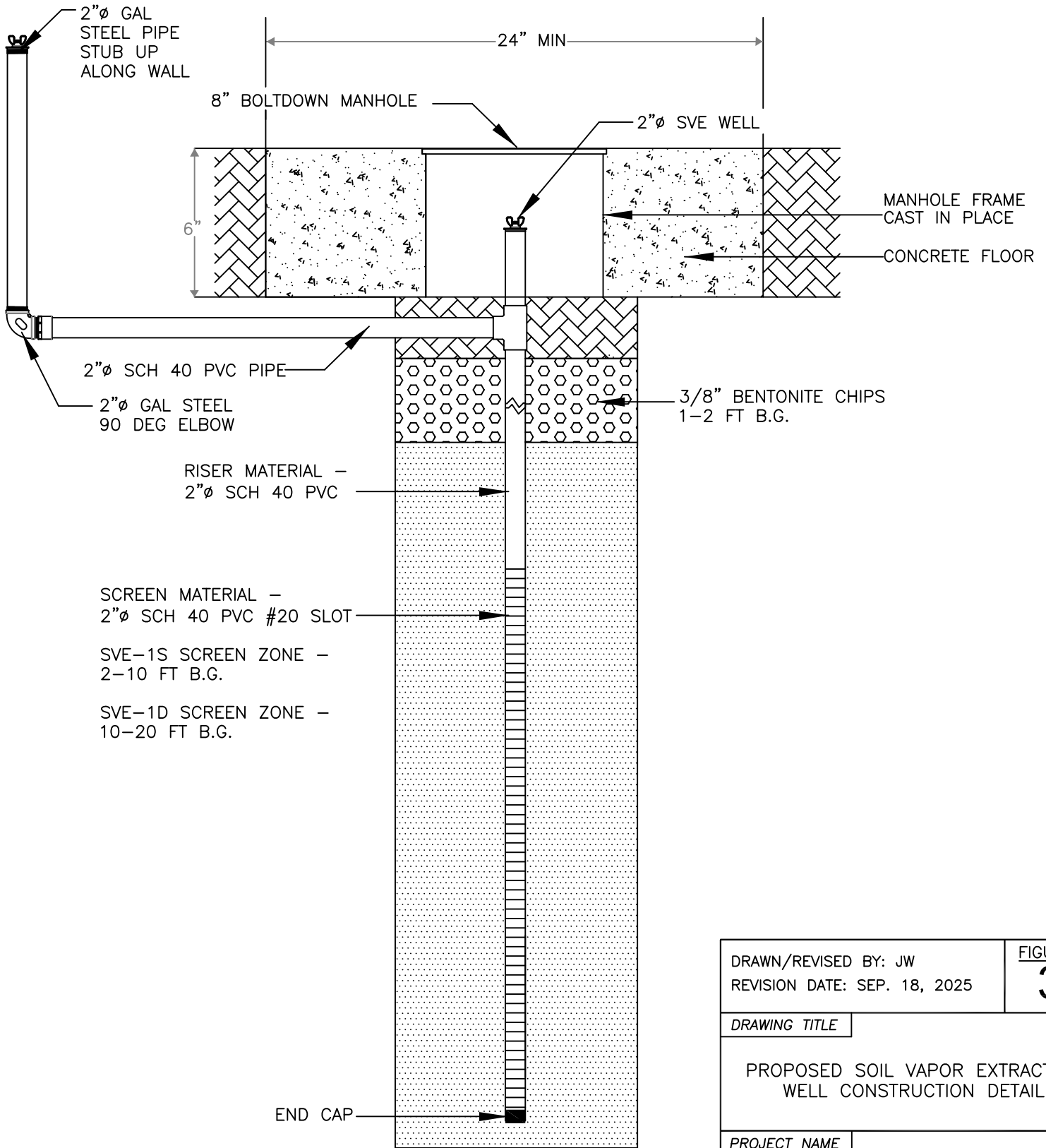
FIGURE # 1	SITE LOCATION MAP 223-20 BRADDOCK AVENUE QUEENS, NEW YORK	DRAWN BY: B.S.	 ENVIRONMENTAL SERVICES 5 OLD DOCK ROAD, YAPHANK, NEW YORK 11980 PHONE: (631)924-3001 FAX: (631)924-5001
		REVISION DATE: 9/8/2025	



LEGEND:

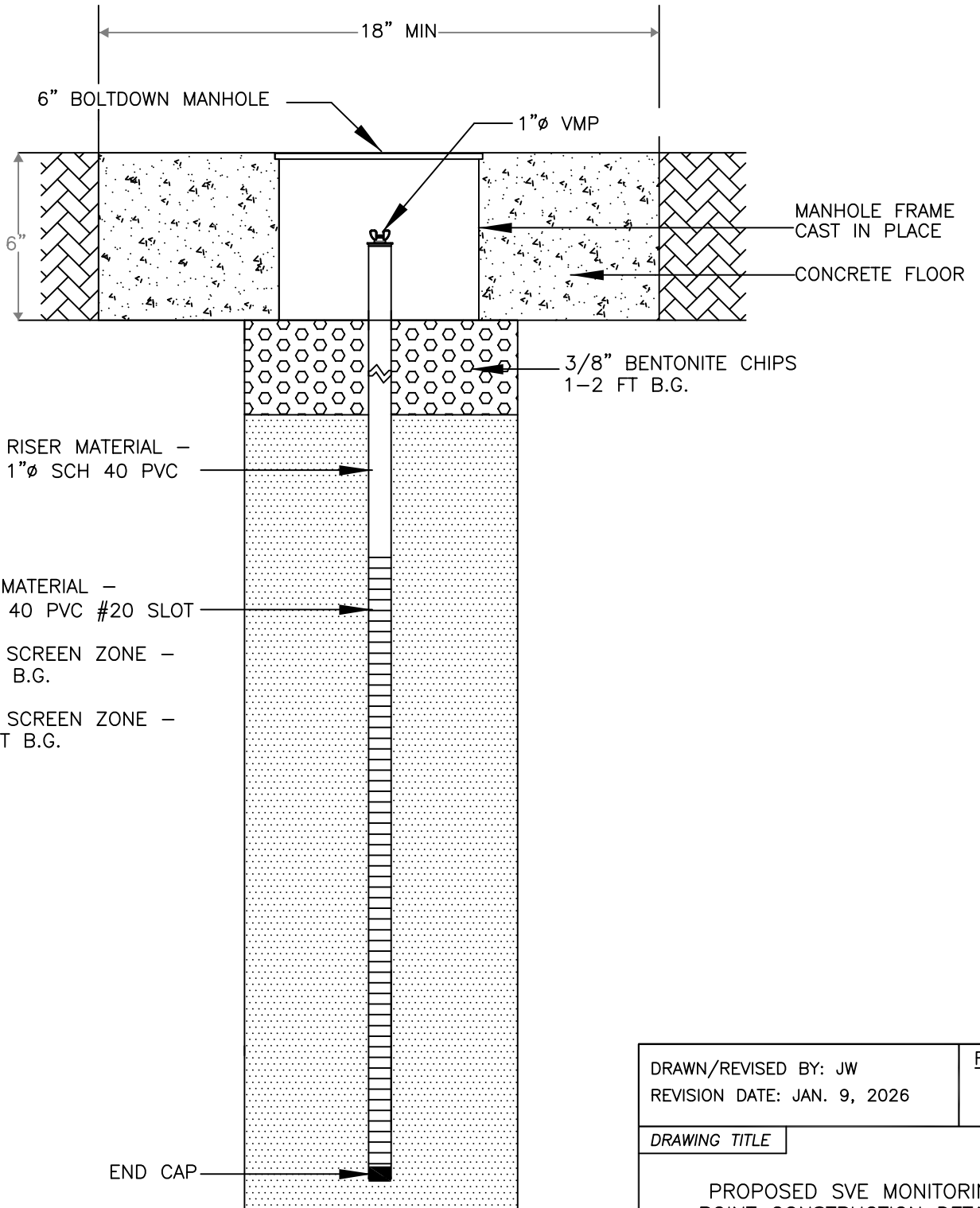
- SITE BOUNDARY
- PROPERTY LINE
- ⊕ GROUNDWATER MONITORING WELL
- ⊕ SUB-SLAB SOIL VAPOR SAMPLE
- ⊕ PROPOSED SOIL VAPOR EXTRACTION WELL
- ⊠ PROPOSED SVE MONITORING POINT
- PROPOSED SUB-SLAB DEPRESSURIZATION EXTRACTION POINT
- ⊠ PROPOSED TEMPORARY SSD MONITORING POINT


SOIL VAPOR EXTRACTION WELL



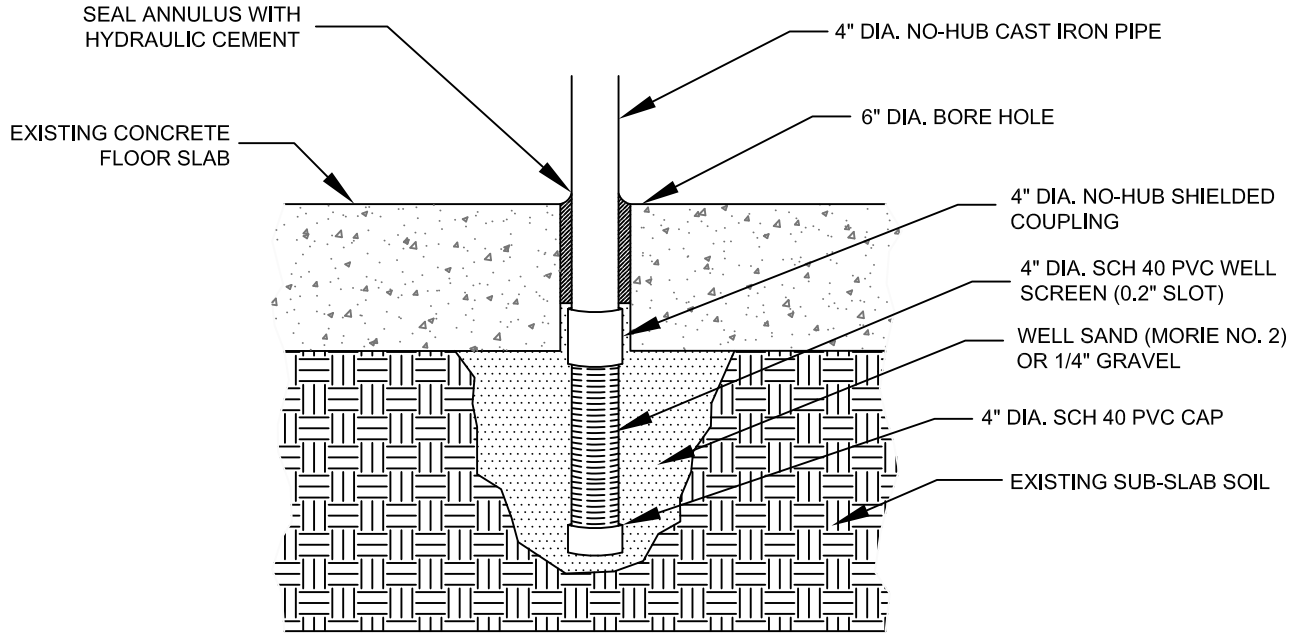
DRAWN/REVISED BY: JW REVISION DATE: SEP. 18, 2025	FIGURE: 3
DRAWING TITLE PROPOSED SOIL VAPOR EXTRACTION WELL CONSTRUCTION DETAIL	
PROJECT NAME 223-20 BRADDOCK AVENUE QUEENS, NEW YORK	

SVE MONITORING POINT

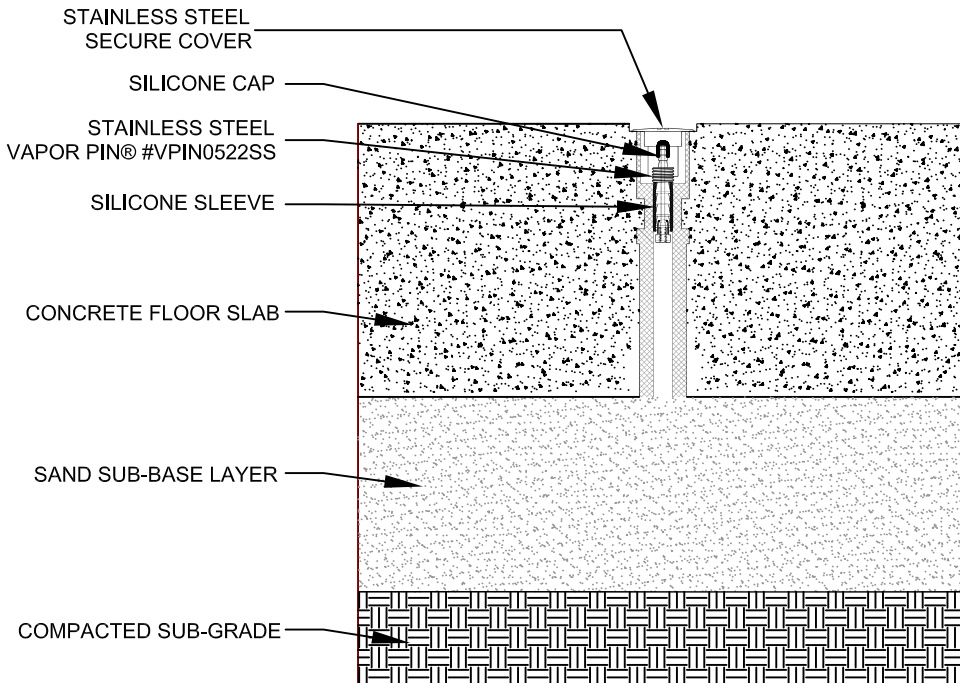


DRAWN/REVISED BY: JW REVISION DATE: JAN. 9, 2026	FIGURE: 4
DRAWING TITLE PROPOSED SVE MONITORING POINT CONSTRUCTION DETAILS	
PROJECT NAME 223-20 BRADDOCK AVENUE QUEENS, NEW YORK	
 ENVIRONMENTAL SERVICES 5 OLD DOCK ROAD, YAPHANK, NEW YORK 11980 PHONE: (631)924-3001 FAX: (631)924-5001	

SUB-SLAB DEPRESSURIZATION EXTRACTION POINT



SUB-SLAB DEPRESSURIZATION VACUUM MONITORING POINT

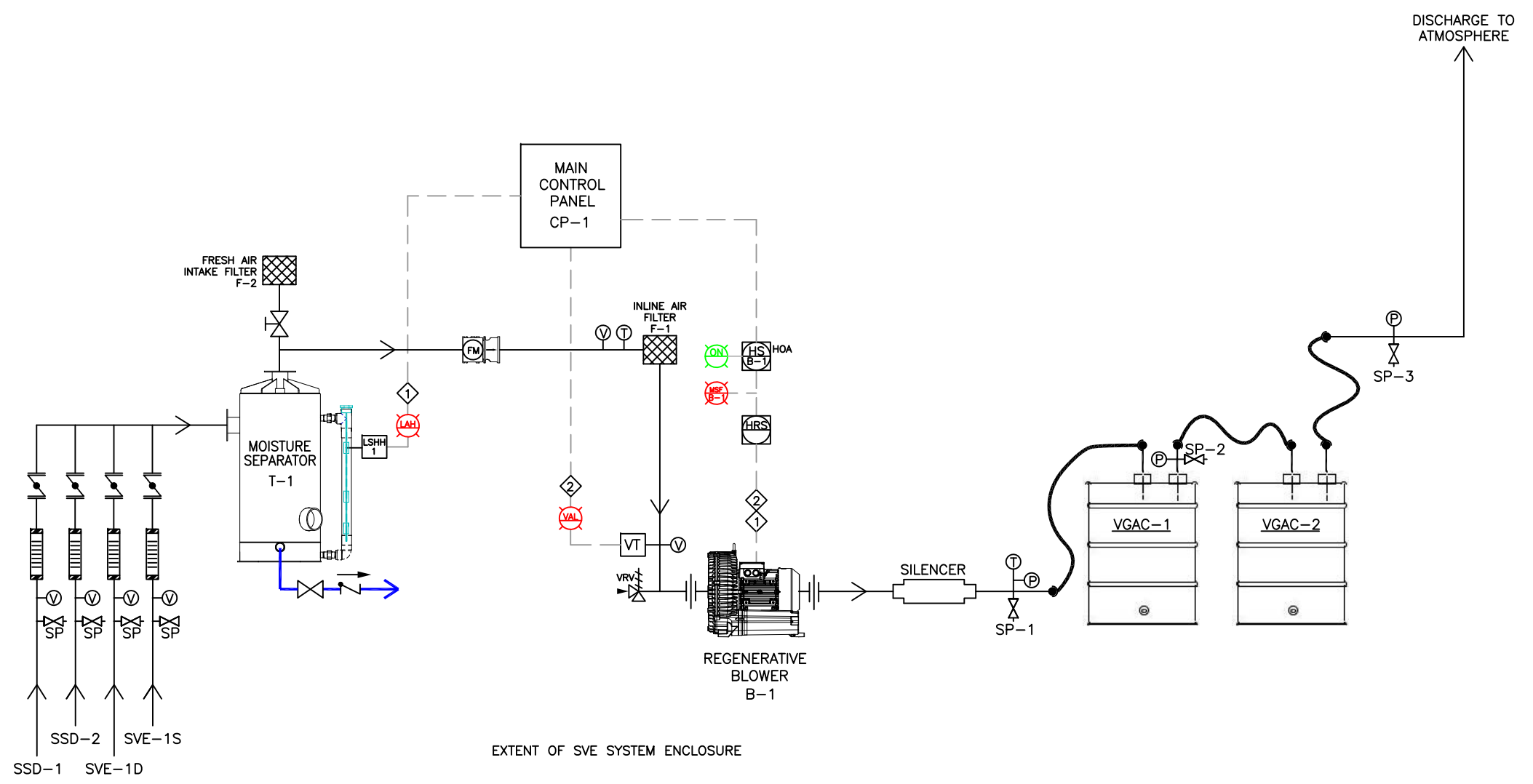


DRAWN/REVISED BY: JW REVISION DATE: JAN. 9, 2026	FIGURE: 5
DRAWING TITLE PROPOSED SUB-SLAB DEPRESSURIZATION WELL CONSTRUCTION DETAILS	
PROJECT NAME 223-20 BRADDOCK AVENUE QUEENS, NEW YORK	

SYSTEM LEGEND:

- VACUUM GAUGE
- TEMPERATURE GAUGE
- PRESSURE GAUGE
- VENTURI FLOW METER
- ROTAMETER FLOW METER
- LEVEL SWITCH
- VACUUM TRANSMITTER
- BUTTERFLY VALVE
- BALL VALVE
- GATE VALVE
- SAMPLE PORT
- VACUUM RELIEF VALVE
- CHECK VALVE
- UNION
- HAND SWITCH PANEL MOUNTED
- RUN TIME METER
- CONTROL PANEL INDICATOR LIGHT
- CONTROL PANEL INTERLOCK

--- ELECTRIC LINE
 ← AIR FLOW DIRECTION
 ← CONDENSATE WATER FLOW DIRECTION
 - - - ENCLOSURE LIMITS



- HMI INDICATOR INDEX:**
- LEVEL ALARM HIGH
 - VACUUM ALARM LOW
 - MOTOR STARTER FAULT
 - MOTOR RUN INDICATOR

- INTERLOCK SCHEDULE:**
- HIGH LEVEL IN T-1 - SHUT DOWN B-1, SEND ALARM NOTIFICATION..
 - LOW OR HIGH BLOWER VACUUM - SHUT DOWN B-1, SEND ALARM NOTIFICATION.