



SUB-SLAB VENTILATION (SSV) SYSTEM OPERATIONS AND MAINTENANCE PLAN



Former Union Cleaners II Property

1220 S Main Street
Lebanon, Oregon 97355

Agency Information

ODEQ ECSI Site ID 1699

Prepared for:

HUI Inc.

Attn: William Rauch
884 Park Street
Lebanon, Oregon 97355

Issued on:

August 25, 2023

Prepared by:



Project No. 724-10001-05E

Offices in Portland and Bend, OR / San Rafael, CA
P.O. Box 14488, Portland, Oregon 97293
T. 503-452-5561 / E. ENW@EVREN-NW.com

This

Sub-Slab Vapor (SSV) System Operations, Maintenance and Monitoring Plan

Report for the:

Former Union Cleaners II Property

1220 S Main Street
Lebanon, Oregon 97355

Has been prepared for the sole benefit and use of our Client:

HUI Inc.

Attn: William Rauch
884 Park Street
Lebanon, Oregon 97355

and its assignees

Issued August 25, 2023 by:



EVREN NORTHWEST INC.
environmental natural resource consultants



EXP. 2/1/2024

Paul M. Trone

Lynn D. Green

Paul M. Trone, R.G.
Principal Geologist

Lynn D. Green, C.E.G.
Principal Engineering Geologist

SSV System O&M Hand-Out

Purpose

This SSV Operations, Maintenance, and Monitoring Plan (Plan) must be followed by any person or entity hired or granted permission to conduct annual inspections of the passive SSV system at the subject site (1220 S Main Street, Lebanon, Oregon). This Plan applies to SSV operations, maintenance, and monitoring, and:

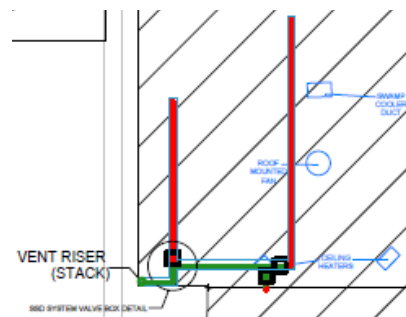
A qualified professional should perform these O&M inspections and if performed by in house maintenance staff, such staff must review, understand, and follow this Plan. Acknowledgement is required (Appendix A).

- Has been designed as a tool for owners, in-house maintenance staff, engineers, and others involved in assuring the passive SSV system continues to conduct potentially impacted soil vapor¹ from beneath the building to ambient air above the building, thereby minimizing soil vapors from entering the building space.
- Has been prepared in accordance with State of Oregon requirements to minimize vapor intrusion risk to building occupants and patrons.
- Provides a description of the passive SSV system components.
- Provides SSV system O&M guidance, schedule, record keeping, and reporting requirements.
- Provides contact names and numbers for an emergency, environmental consultant, and ODEQ project manager familiar with the SSV system.

System Description

The SSV system includes the following components:

- An east-west-trending 4-inch ID PVC collector pipe connecting two north-south-trending vent legs in filter fabric-lined SSV trenches. The 20-foot-long westside SSV leg and 30-foot-long eastside SSV leg each consist of 4-inch ID perforated PVC pipe on gravel bedding with a gravel covering that were all wrapped in filter fabric and covered with polyethylene sheeting prior to pouring concrete in the trench cuts. A 4-inch ID PVC ball valve is positioned in a flush-to-floor vault at each leg. The vent legs were each sloped so that condensate, if present, would pool and drain into the perforated sections.



Use

This plan has been prepared for use during SSV system operation verification and maintenance. The property owner must provide a copy of this Plan to any person or entity hired or granted permission to conduct annual inspections of the SSV system. The SSV system observation schedule is summarized below.

Component	Riser		Wind-Driven Turbine	Flush to Floor Valve Boxes		Concrete Trench Patches		
	Confirm Riser is Unobstructed	Confirm Riser is Undamaged	Confirm Turbine is Undamaged & Free-Spinning	West Leg	East Leg	Collector	West Leg	East Leg
Start-Up (1/24/2023)	Confirmed	Confirmed	Confirmed (New)	Confirmed	Confirmed	Confirmed	Confirmed	Confirmed
Monitoring Interval	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30
Action	Clear if Obstructed	Repair if Damaged	Repair or Replace if Binding	Open if Closed, and Replace if Damaged		Seal any gaps, cracks or entryways >1/8-inch. Remove and replace any concrete that settles or becomes fractured.		

Record Keeping, Reporting, Contacts

An SSV Annual O&M Form (Attachment B) will be completed during the annual site visit (by June 30th). Operational parameters will be recorded on the O&M form, along with the name of the operator, date, time, and weather conditions. The discovery of damaged SSV or HVAC components resulting from a catastrophic event should also be reported to the property manager / owner. Other contacts knowledgeable about the SSV system are below.

Owner and Property Manager:

HUI Inc.
William or Luke Rauch
884 Park Street
Lebanon, Oregon 97355
(541) 259-1201

Environmental Consultant:

EVREN Northwest, Inc.
Evan Bruggeman
40 SE 24th Avenue, Unit A
Portland, Oregon 97214
(503) 452-5561
evanb@evren-nw.com

ODEQ Project Manager:

Western Region Environmental Cleanup and Emergency Response
Don Hanson
165 E 7th Avenue, Suite 100
Eugene, Oregon 97401
(541) 687-7349
don.hanson@deq.oregon.gov

¹ Tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC) are the historical soil gas / sub-slab vapor constituents of concern (COCs).

Table of Contents

1.0	Introduction	1
1.1	Site Setting and Environmental Listing	1
1.2	Site Environmental Action Summary	1
2.0	Passive SSV System Purpose.....	2
3.0	System Description	2
4.0	System Operation Verification and Maintenance	3
5.0	Record Keeping and Reporting	4
6.0	Project Personnel.....	5
7.0	Additional Contacts.....	5
8.0	Limitations.....	2

List of Tables, Figures and Appendices

Tables

IN TEXT (*labeled by Section – Number*)

3-1 SSV System Monitoring Schedule

Figures

1 Site Vicinity Map
2 Site Plan
3 Sub-Slab Venting System (SSV) Layout

Appendices

A SSV System Photographs
B SSV System Operation and Maintenance Form
C Acknowledgement Signature Form

1.0 Introduction

At the request of HUI Inc. (Client), EVREN Northwest, Inc. (ENW) has prepared this Operations and Maintenance (O&M) Plan for a sub-slab ventilation (SSV) system located at 1220 S Main Street in Lebanon, Oregon (subject site; see Figures 1 and 2). This plan is intended to guide personnel responsible for ongoing operation, maintenance, and monitoring for the SSV system.

1.1 Site Setting and Environmental Listing

The site is developed with a strip mall consisting of a single-story commercial building containing several commercial businesses including a hair salon, tattoo studio, and pet-supply store. Historically, a dry-cleaning facility operated under a variety of names at the site during the period from 1953 to 1986. Because a dry-cleaning facility formerly operated at the site and impacts from dry-cleaning solvents are found in soil and ground water below the site,² the former Union Cleaners II site is included within the Oregon Department of Environmental Quality (ODEQ)-designated Lebanon Area Groundwater Contamination (ODEQ Environmental Cleanup Site Information [ECSI] database site number 1089) as a contributing source to the area-wide ground water contamination. Union Cleaners II is listed as individual cleanup Site #1699 in the ECSI database.

1.2 Site Environmental Action Summary

Given these impacts, the ODEQ identified expanded assessment of soil vapors and mitigation of risk of intrusion into indoor air as the highest priority for this site. In response, ENW prepared an Interim Remedial Action Measure (IRAM) Work Plan in August 2012,³ to address ODEQ's priorities at the site. The Work Plan included installation and operation of a sub-slab depressurization (SSD) system consisting of two north-south-trending active vent legs connected to an east-west-trending collector line, a vent riser, an in-line exterior fan, and appurtenant fittings, valves, and valve boxes to facilitate assembly and operation. System start-up was on March 4, 2013.

During a September 2017 Vapor Intrusion (VI) Assessment,⁴ trichloroethene (TCE) was detected in sub-slab vapor beneath the southeast corner (near SUB03) of the former drycleaner space at a concentration exceeding ODEQ's occupational RBCs for *VI into Buildings*. Performance testing confirmed that SSD system operation created a pressure differential between the sub-surface and the ambient interior (greater than the minimum U.S. Environmental Protection Agency-recommended value of 0.2 inches of water) sufficient to mitigate potential vapor intrusion of TCE and other chlorinated volatile organic constituents (CVOCs).

² ENW, March 9, 2012. *Subsurface Investigation and Interim Remedial Action Plan*, Former Union Cleaners II Property, 1220 S Main Street, Lebanon, Oregon 97355.

³ ENW, August 18, 2012. *Interim Remedial Action Measure Work Plan*, Vapor Intrusion Expanded Assessment and Mitigation, Former Union Cleaners II Property, 1220 S Main Street, Lebanon, Oregon, prepared for HUI, Inc.

⁴ ENW, November 30, 2017. *Sub-Slab Vapor Re-Assessment*, Former Union Cleaners II Property, 1220 S Main Street, Lebanon, Oregon, prepared for HUI, Inc.

During November 2020, ENW oversaw the injection of product consortia to enhance in-situ chemical reduction of tetrachloroethene (PCE) and its degradation products to ethene in shallow ground water on- and offsite, as part of an ODEQ-approved scope of work.⁵ During the last five post-remediation ground water monitoring events from February 2021 through November 2022, PCE and TCE decreased to below method reporting limits (MRLs) in the shallow water-bearing unit (three of the five events at EMW07-S), corroborating shallow water quality monitoring data which suggests that reductive dechlorination processes are taking place.

During post-remediation sub-slab vapor sampling in November 2022, neither PCE, TCE nor their degradation products were present in soil gas vent or sub-slab vapor samples collected beneath the former drycleaners space or south-adjacent space at concentrations exceeding ODEQ's occupational RBCs for *VI into Buildings*.⁶ Based on these data, ODEQ concurred with ENW's recommendations to convert the active SSD to operate as a passive SSV and discontinue further soil gas or sub-slab vapor sampling.⁷ Upon receiving ODEQ's approval, ENW shut down the SSD, and installed a wind-driven turbine fan in place of the inline fan on January 24, 2023.

2.0 Passive SSV System Purpose

The passive SSV system is designed to conduct potentially impacted soil vapor from beneath the building to ambient air above the building. The system minimizes soil vapors entering the building space, thereby minimizing any risk to building occupants and visitors.

Consistent attention to the proper operation and maintenance of the passive SSV system will ensure the ongoing objectives of the system are met.

3.0 System Description

The SSV system includes the following components (see Figure 3 and photographs in Appendix A):

- An east-west-trending 4-inch inside diameter (ID) polyvinyl chloride (PVC) collector pipe connecting two north-south-trending vent legs in filter fabric-lined SSV trenches that are 12-inches wide by 8- to 12-inches deep. The 20-foot-long westside SSV leg and 30-foot-long eastside SSV leg each consist of 4-inch ID perforated PVC pipe on gravel bedding with a gravel covering that were all wrapped in filter fabric and covered with polyethylene sheeting prior to pouring concrete in the trench cuts. A 4-inch ID PVC ball valve is positioned in a flush-to-floor

⁵ ENW, July 23, 2019. *Remedial Action Work Plan*, Former Union Cleaners II Property, 1220 S Main Street, Lebanon, Oregon, prepared for HUI, Inc.

⁶ ENW, December 21, 2022. *Post-Remediation Sub-Slab Vapor Confirmation*, Former Union Cleaners II Facility, 1220 S Main Street, Lebanon, Oregon, ECSI File No. 1699: Prepared for HUI Inc., Attn: William Rauch, 884 Park Street, Lebanon, Oregon 97355.

⁷ January 3, 2023. Email from Don Hansen, ODEQ to Lynn Green RE: Work plan for VI assessment/confirmation, Former UCII.

vault at each leg. The vent legs were each sloped so that condensate, if present, would pool and drain into the perforated sections.

- A 4-inch ID PVC vertical vent riser running to the roof near the southwest corner of the former dry cleaner space. The vent riser is connected to the collector pipe in the trench with a 90° elbow, a short nipple, and a Fernco fitting.
- A wind-driven turbine fan attached to the vent riser to pull a vacuum through the system.
- A U-tube manometer to monitor system operations installed on the vertical riser vent pipe following manufacturer recommendations. *Note: this is a remnant of the active SSD system and is not needed for the passive SSV system.*

4.0 System Operation Verification and Maintenance

The SSV system will be operated according to this plan. Plan will be reviewed and kept current any time conditions change, until it is determined by ODEQ, in writing, that the SSV system is no longer required.

A template form for documenting system monitoring is included as an attachment. The following table summarizes the current monitoring components and schedule for the SSV system.

Table 3-1. SSV System Observation Schedule

Component	Riser		Wind-Driven Turbine	Flush to Floor Valve Boxes		Concrete Trench Patches		
	Confirm Riser is Unobstructed	Confirm Riser is Undamaged	Confirm Turbine is Undamaged & Free-Spinning	West Leg	East Leg	Collector	West Leg	East Leg
Start-Up (1/24/2023)	Confirmed	Confirmed	Confirmed (New)	Confirmed	Confirmed	Confirmed	Confirmed	Confirmed
Monitoring Interval	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30	Annually by June 30
Action	Clear if Obstructed	Repair if Damaged	Repair or Replace if Binding	Open if Closed, and Replace if Damaged		Seal any gaps, cracks or entryways >1/8-inch. Remove and replace any concrete that settles or becomes fractured.		

Notes:

1. A qualified professional should perform these inspections and if performed by in house maintenance staff, such staff shall be trained in system operations.
2. Inspections should be conducted subsequent to any catastrophic event, i.e., fire, earthquake, etc., that could damage SSV system components.

Verify System is Operable. Observations will include:

- **Observe the SSV riser.** From exterior roof-level, confirm that the riser opening is unobstructed, i.e., not clogged with debris such as bird or wasp nesting material. Clear out all obstructing debris. Also confirm that the riser is not bent or broken. Repair or replace the riser if damaged. From the interior of the building, confirm that the riser pipe is not damaged or broken. Repair or replace the riser if damaged.

- **Observed the Wind-Driven Turbine.** From the exterior roof-level, confirm that the wind-driven turbine is undamaged and free-spinning. Replace turbine if damaged. If turbine is binding, trouble-shoot and correct the cause, i.e., lubricate and free obstruction. Replace the wind-driven turbine if attempts to free it are unsuccessful.
- **Observe Valve Boxes.** From the interior of the building, open and inspect the west leg and east leg valve boxes. At each valve box, confirm that the valve is open and allows airflow from the perforated vent leg to the collector line and to the vent riser. Confirm that the valves are operational and undamaged and in the open position. Replace any valve that is broken or stuck in the closed position.
- **Observe Concrete Trench Patches.** From the interior of the building, observe the condition of the concrete patches over the collector, west leg, and east leg trenches, if not obscured by flooring. Confirm that both sides of the concrete patch are tight against the cut edges of the existing concrete floor, without any gaps. Substantial gaps, cracks, or other through-going entryways should be sealed with self-leveling polyurethane sealant or polyurethane caulk. Confirm that the concrete patch has not settled, and is intact, unfractured, and uncracked. If the concrete patch is covered by flooring, look for evidence of settling or damage such as linear depressions or broken segments of flooring that mimic the trench edges or outline. If a portion of the trench settles or becomes fractured, remove the damaged concrete, polyethylene liner, and gravel sufficient to inspect the underlying PVC pipe for damage. Replace any damaged sections of pipe. Replace and compact the gravel to match the subgrade. Restore the polyethylene liner and re-pour the damaged section with high-strength concrete to match surrounding slab floor grade.

Photo Documentation. Any items of note should be documented with photos and immediately brought to the attention of ENW.

SSV Maintenance and Repair. If a component of the system needs repair or replacement it will be done according to manufacturer's specifications using the same or equivalent equipment and materials, by properly trained and licensed personnel.

Building Renovations. Anytime building renovations will include or have the potential to affect the passive SSV system ODEQ should be notified and ENW consulted in advance.

5.0 Record Keeping and Reporting

O&M Record Keeping. An SSV Annual O&M Form (Attachment B) will be completed during the annual site visit (by June 30th) to document system operations and maintenance. Operational parameters will be recorded on the O&M form, along with the name of the operator, date, time, and weather conditions. The O&M form includes the frequency of which each O&M item should be conducted. An O&M form will also be completed during unanticipated site visits in response to a catastrophic event, i.e., fire, earthquake, etc., that could damage SSV system components. The effect(s) of the unanticipated event on the SSV system operations will be documented, along with corrective actions.

Reporting. Copies of completed O&M forms will be maintained in perpetuity by the property owner / manager. While there is no required submittal of these forms to ODEQ, these forms will be made available to ODEQ upon request.

Emergency Reporting. The discovery of damaged SSV or HVAC components resulting from a catastrophic event should also be reported to the property manager / owner. Emergency contact information will be provided on a flyer posted adjacent to the vent riser in the event of damage or any emergency encountered. The emergency contact is below:

Owner and Property Manager:

HUI Inc.
William or Luke Rauch
884 Park Street
Lebanon, Oregon 97355
(541) 259-1201
brauch@srbh.com

6.0 Project Personnel

Project Team. HUI personnel responsible for implementing this O&M plan will be trained to ensure they are correctly performing the O&M activities outlined herein. ENW will provide initial onsite training for personnel responsible for operation of the SSV. The elements of this SSV O&M Plan will be reviewed and understood by HUI personnel prior to monitoring the operation of the SSV.

7.0 Additional Contacts

A thorough reading of this Plan will answer most SSV system O&M questions. In the event a question arises that is not addressed in this Plan, additional contacts are provided below.

Environmental Consultant:

EVREN Northwest, Inc.
Evan Bruggeman
40 SE 24th Avenue, Unit A
Portland, Oregon 97214
(503) 452-5561
evanb@evren-nw.com

ODEQ Project Manager:

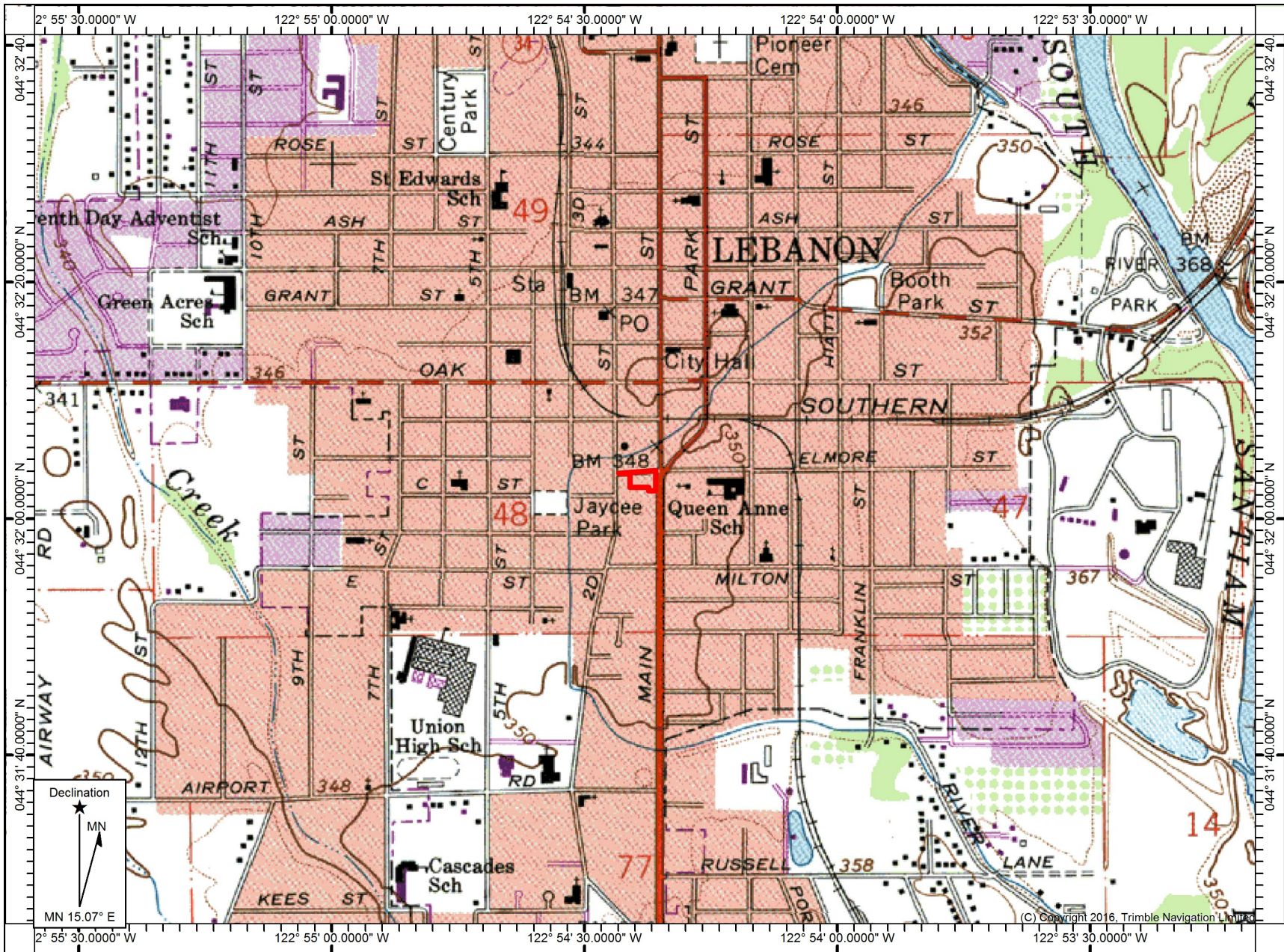
Western Region Environmental Cleanup
and Emergency Response
Don Hanson
165 E 7th Avenue, Suite 100
Eugene, Oregon 97401
(541) 687-7349
don.hanson@deq.oregon.gov

8.0 Limitations

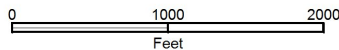
The professional opinion presented in this technical memo has been made based on the information provided by others, as described above. No other representation, expressed or implied, and no warranty or guarantee is included or intended. The standard of care used to conduct this work was consistent with reasonable and normal standards used by industry professionals. EVREN Northwest, Inc. may not be held responsible for conditions that they did not specifically evaluate at the time this report was prepared.

We have performed our services for this project in accordance with our agreement and understanding with the Client. This document and the information contained herein have been prepared solely for the use of the Client.

Figures



Name: LEBANON
Date: Jan 1, 1986



Location: 044° 32' 03.3606" N, 122° 54' 22.8467" W
Contour Interval: 10 ft



Date Drawn: 10/28/2020
CAD File Name: 724-10001-fig1sv_map(v02)
Drawn By: JOB
Approved By: LDG

Former Union Cleaners II
1220 S Main Street
Lebanon, Oregon

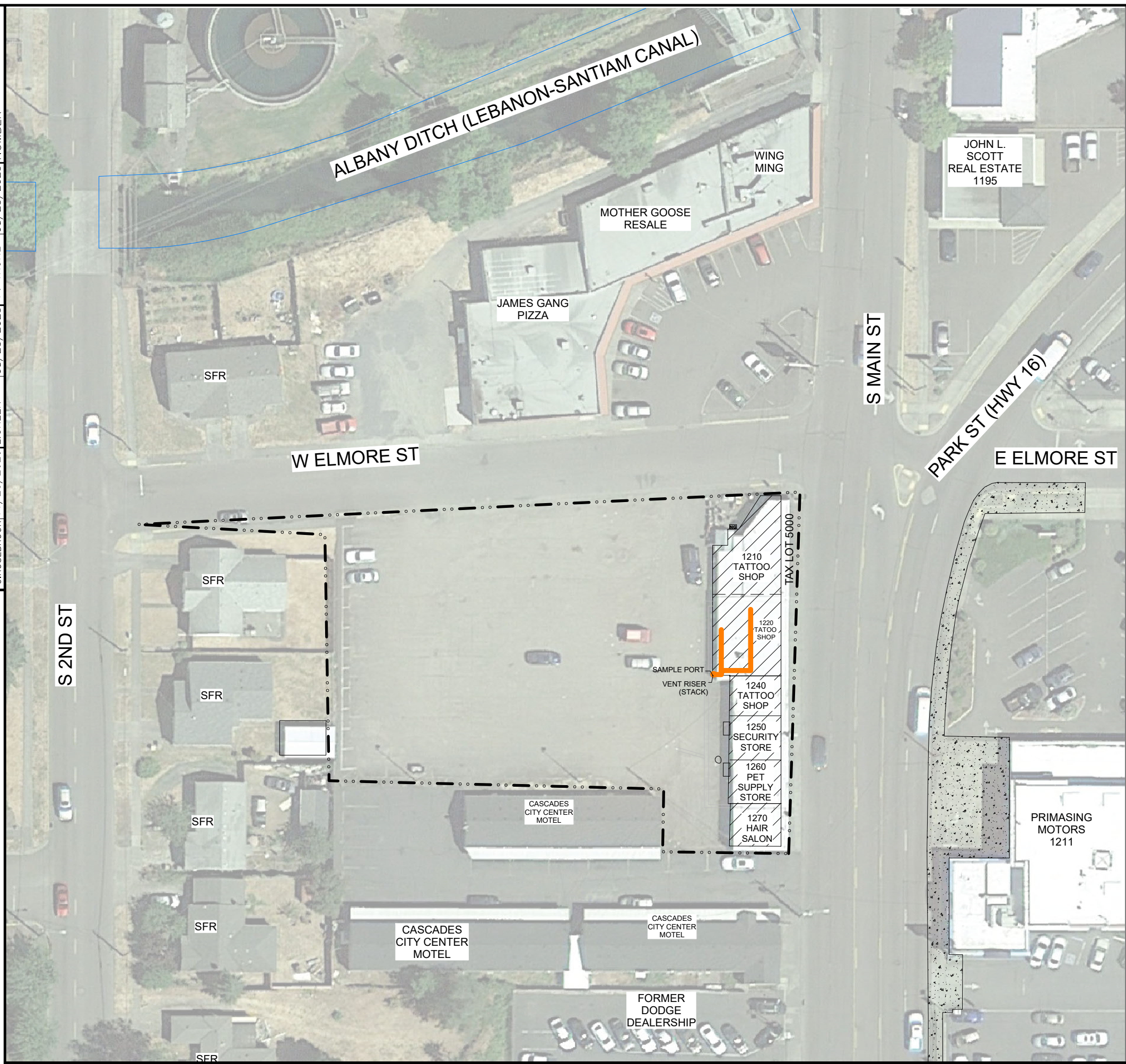
Site Vicinity Map

Project No.
724-10001





Figure No.

1

DRAWN BY: C. ROSEBROOK 11/25/2020 L. GREEN 08/25/2023
 CHECKED BY: L. GREEN 08/25/2023 P. TRONE 08/25/2023
 APPROVED BY: P. TRONE 08/25/2023
 DRAWING NUMBER: 724-10001(v20)





LEGEND:


-  SUBJECT PROPERTY BOUNDARIES
-  SUBJECT BUILDINGS
-  BUILDING LOCATIONS
-  SUB-SLAB VENT SYSTEM

- NOTES:**
1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2019 AND ENW FIELD NOTES.
 2. ALL BUILDING, STREET, AND FEATURE LOCATIONS ARE APPROXIMATE.

APPROXIMATE SCALE







environmental natural resource consultants

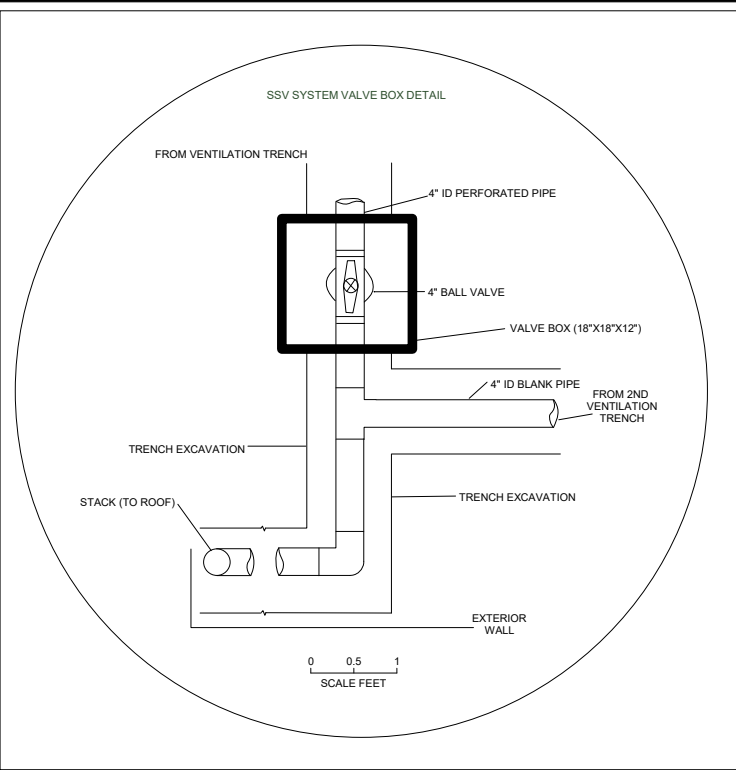
PO BOX 14488, PORTLAND, OREGON 97293
 T. (503)452-5561 E.ENW@EVREN-NW.com

FIGURE 2

SITE PLAN

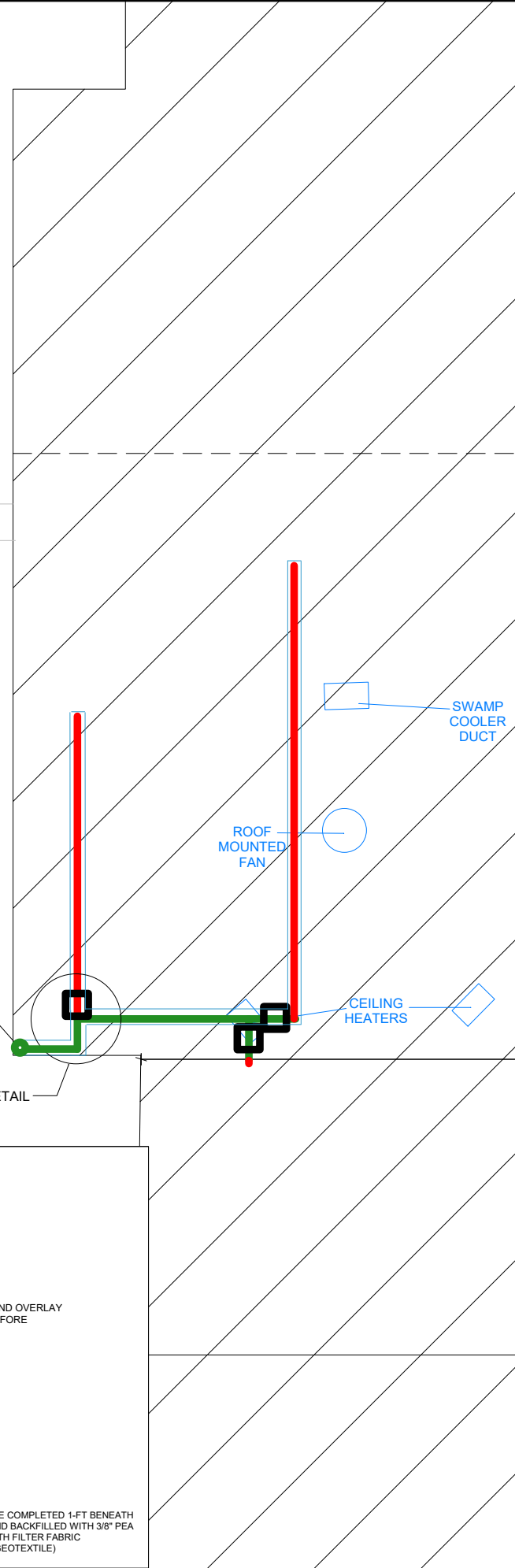
FORMER UNION CLEANERS II SITE
 1220 S MAIN STREET
 LEBANON, OREGON

DRAWN BY H. ROMER 01/31/2023
 CHECKED BY L. GREEN 08/25/2023
 APPROVED BY P. TRONE 08/25/2023
 DRAWING NUMBER 724-10001(v01)








VENT RISER (STACK)

SSD SYSTEM VALVE BOX DETAIL



LEGEND:

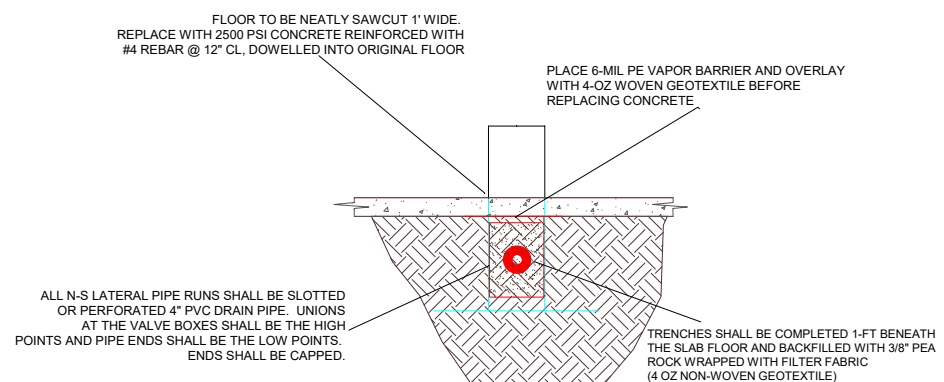
-  APPROXIMATE SUBJECT BUILDINGS
-  SOLID PVC PIPE SECTIONS
-  PERFORATED PVC PIPE SECTIONS IN TRENCH
-  FLUSH MOUNTED FLOOR VAULT FOR SSV VALVES
-  SSV PIPE TRENCH, 12" WIDE

SSV = SUB-SLAB VENTILATION SYSTEM

NOTES:

1. BASE MAP DEVELOPED FROM AN AERIAL PHOTOGRAPH MAP DATED 2010, AND ENW FIELD NOTES.
2. SYSTEM CONVERTED FROM ACTIVE SUB-SLAB DEPRESSURIZATION SYSTEM (SSD) TO PASSIVE SUB-SLAB VENTILATION SYSTEM (SSV) ON JANUARY 24, 2023.

SSV SYSTEM CROSS SECTION IN FLOOR



APPROXIMATE SCALE



PO BOX 14488, PORTLAND, OREGON 97293
 T. (503) 452-5561 E. ENW@EVREN-NW.com

FIGURE 3

SUB-SLAB VENTILATION SYSTEM (SSV) LAYOUT

UNION CLEANERS II
 1220 S MAIN STREET
 LEBANON, OREGON

Appendix A

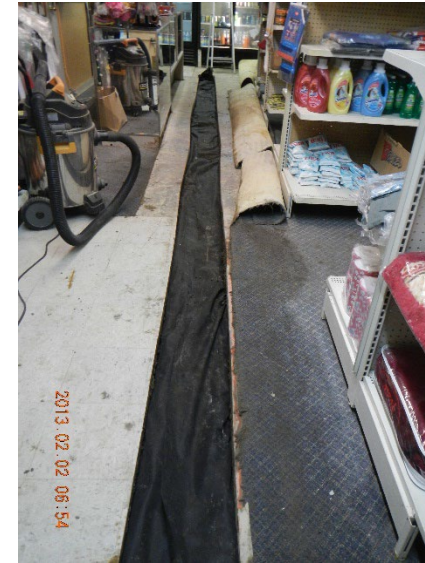
SSV System Photographs



West SSV leg during installation – perforated 4-inch PVC bedded on gravel in a fabric-lined trench – view south.



East SSV leg during installation – covered with gravel in a fabric-lined trench – view south.



East SSV leg during installation – wrapped in fabric – view north.



Collector line during installation. 1st valve (foreground) controls the east leg, 2nd valve (left of center) unused – view west.



Former Union Cleaners II
1220 Main Street
Lebanon, Oregon

SSV System Photographs

Project No.
724-10001-05E

Appendix
A



East leg after concrete pour – view north. Previous tenant.



East leg valve box

Collector line and valve boxes after pouring concrete – view southwest.



West leg valve box

West leg after pouring concrete – view south.



Interior view of SSV riser at southwest corner of suite 1220.



Former Union Cleaners II
1220 Main Street
Lebanon, Oregon

**SSV System
Photographs**

Project No.
724-10001-05E

Appendix
A



Wind-driven turbine on top of SSV riser above roof level – view facing south.



Former Union Cleaners II
1220 Main Street
Lebanon, Oregon

SSV System Photographs

Project No.
724-10001-05E

Appendix
A

Appendix B

SSV Annual Monitoring Form

SSV Annual Monitoring Form

Date of Monitoring (by 6/30): _____

Monitored by (Name): _____

Weather: _____

Page 1 of 2

Observations and maintenance to ensure continued operation of the SSV system to **protect individuals** from exposure to contaminated sub-slab soil vapors is an ongoing responsibility. *At a minimum, the SSV system will be inspected annually by June 30th of each year.* Such inspections include monitoring that each SSV component is undamaged and correctly operating to ventilate the sub-slab environment to reduce the potential for intrusion of CVOC vapors. More frequent inspections are encouraged and should also be documented with this form.

Persons performing the inspection must have a thorough understanding of the SSV system and the Contaminated Media Management Plan (CMMP).⁸ Operations of all interior and exterior components of the SSV system identified in Section 2 are to be verified as described in Section 3 of this O&M Plan as outlined below.

SSV Riser and Wind-Driven Turbine

Evaluate exterior and interior portions of the SSV riser and the wind-driven turbine for correct operation.

From the exterior roof level, is the SSV riser obstructed? Y / N

If yes, immediately take steps to clear the obstruction, e.g., nesting debris.

Are the exterior or interior portions of the riser bent, broken, or otherwise damaged? Y / N

If yes, immediately take steps to repair or replace the damaged section of riser pipe.

Is the wind-driven turbine binding, i.e., not free-spinning? Y / N

If yes, troubleshoot and correct the cause, i.e., inspect for damage or corrosion, lubricate, and free any obstructions. Replace wind turbine if condition is not correctable.

If the answer is yes to any of these questions, please document the conditions by 1) taking photographs, and 2) describing condition and the measures taken to remedy the situation. Documentation should be kept with this form and submitted with the Annual Report.

West and East SSV Legs Valve Boxes

Open west and east leg valve boxes to confirm that the valve is open and allows airflow from the perforated vent leg to the collector line and to the vent riser.

Are the valves controlling the west or east SSV legs closed, broken, or otherwise restricting air flow? Y / N

If yes, immediately open the valve to restore air flow. If the valve is stuck closed or air flow is restricted due to damage, take steps to replace the damaged valve.

If the answer is yes to this question, please document the conditions by 1) taking photographs, and 2) describing condition and the measures taken to remedy the situation. Documentation should be kept with this form and submitted with the Annual Report.

⁸ ENW, June 8, 2020. *Contaminated Media Management Plan*, Former Union Cleaners II Facility, 1220 S Main Street, Lebanon, Oregon: Prepared for HUI Inc., Attn: William Rauch, 884 Park Street, Lebanon, Oregon 97335.

**SSV Annual
Monitoring Form**

Date of Monitoring (by 6/30): _____

Monitored by (Name): _____

Weather: _____

Page 2 of 2

Concrete Trench Patches in Building Floor

Evaluate the condition of the concrete patches over the collector, west leg, and east leg trenches.

Are there gaps, cracks, or other entryways \geq 1/8-inch in the concrete patches? Y / N

If yes, immediately take steps to seal any gaps \geq 1/8-inch with self-leveling polyurethane sealant.

Do any of the concrete patches show any signs of cracking, fracturing, breakage, or settlement? Y / N

If yes, immediately take steps to repair or replace the damaged section of concrete, which would include exposing and inspecting the SSV pipe if the damage or settlements are severe.

If the concrete patch is covered by flooring, is there evidence of settling or damage such as linear depressions or broken segments of flooring that mimic the trench edges or outline? Y / N

If yes, take steps to remove or pull back the flooring to further investigate and repair the damage as outline above.

If the answer is yes to any of these questions, please document the conditions by 1) taking photographs, and 2) describing condition and the measures taken to remedy the situation. Documentation should be kept with this form and submitted with the Annual Report.

ACTION OR ADDITIONAL DOCUMENTATION REQUIRED?

SIGNATURE OF PERSON PERFORMING INSPECTION:

Note: A copy of this completed form is to be maintained by HUI Inc.

Appendix C

Acknowledgement Signature Form

