



May 22, 2024

Robert Miller  
Spic and Span  
108 West Miller Drive  
Mequon, WI 53092-6188  
{sent electronically only [rmiller@spicandspan.com](mailto:rmiller@spicandspan.com)}

Subject: Response to Remedial Action Design Report  
Spic and Span, Inc. (FMR)  
4301 N. Richards Street, Milwaukee, WI  
DNR BRRTS # 02-41-585636 / FID # 241040690

Dear Mr. Miller:

The Wisconsin Department of Natural Resources (DNR) reviewed the *Remedial Design Report* and the updated Hazardous Waste Determination, dated March 27, 2024 (Report) for the case identified above. The Report was prepared and submitted on your behalf by your consultant, Ramboll Group (Ramboll). The Report was submitted with the applicable technical assistance fee for providing review and response as required under ch. NR 749, Wis. Admin. Code.

The Report details proposed remedial actions to address chlorinated volatile organic compounds (CVOCs) identified in soil, groundwater, and vapor beneath the former Spic and Span facility (Site). Proposed remedial actions consist of excavation of impacted soil and installation and operation of a Sub-Slab Depressurization System (SSDS).

Based on the information submitted to date, the DNR has determined that the proposed remedial action design is not adequate for the site conditions. The DNR provides the following comments which should be addressed prior to performing any of the proposed remedial actions:

**Hazardous Waste Determination Ramboll notes in blue.**

Based on available information regarding site activities and records, and analytical results from site investigations, CVOC contaminated soil and groundwater are determined to be the result of a discharge of spent halogenated solvents. The department concurs with the determination that soil and groundwater at the site were contaminated with a listed waste (F002).

Characteristic hazardous waste determinations are based on analytical results. Total constituent concentrations can be compared to twenty times the TCLP standards to determine if they have the potential to exhibit a toxicity characteristic. Any samples that exceed twenty times the TCLP standard must be analyzed using SW846 Method 1311 to confirm whether they exhibit the toxicity characteristic.

Analytical data for limited intervals from eight soil borings (SB-1, 2, 3, 4, 5, 7, 12 and 21) was used to determine whether soil in the three proposed excavation areas shown in Figure #3d:

1. contain the listed waste F027,
2. exhibit the toxicity characteristic for PCE (D039) and TCE (D040), and/or
3. are below the land disposal restriction standards.

The department cannot concur with conclusions made regarding the listed and characteristic hazardous waste determination for the following reasons:

- Insufficient data has been provided. Representative samples for soil proposed for excavation and disposal must be collected to make an accurate waste determination. For example,
  - Soil from outside the targeted excavation areas was included to support the waste determination. Sample locations SB-2 and SB-3 are not representative of the mass of soil proposed for excavation in the vicinity of SB-1. At a minimum, it is reasonable to include at least one of the two samples from each of SB-2 and SB-3 as representative because they are adjacent to the excavation. This would provide a total of four samples for roughly 325 cubic yards.
  - Only the 2-4' and 8-10' bgs intervals from boring SB-1 were analyzed for total constituent concentrations to support a listed waste determination. The 2-4' bgs interval was screened using the twenty times rule to make a characteristic hazardous waste determination. The 8-10' bgs interval had a total constituent concentration that exceeds the twenty times value however no TCLP analysis was performed. This limited information is not considered representative of the mass of soil proposed for excavation in this area. It is true that the sample from SB-1 may not be exactly the same soil type as the soil collected from SB-7. However, the sample from SB-7 had a PCE concentration of 19.4 mg/kg and a TCLP result of < 0.01 mg/L which is 1/70 of the TCLP limit. Conditions could be more conducive to leaching in the sample from SB-1; however, it is not likely that a lower total PCE concentration of 17.7 mg/kg in the sample from SB-1 would yield a TCLP result that is 70 times higher than the TCLP result for the sample from SB-7.
  - Only soil from the 4-6' bgs interval of boring SB-7 was analyzed for both total constituent concentrations and TCLP. This interval is not representative of the mass of soil proposed for excavation in this area. This sample was from the center of the proposed excavation volume and is representative of the proposed excavation volume of roughly 175 cubic yards.
  - Only soil from the 0-2' bgs interval in boring SB-4, the 2-4' bgs interval in SB-5, and 7.5-10' bgs interval in SB-21 have total constituent concentrations that support a listed waste determination and were screened using the twenty times rule to make a characteristic waste determination. Two samples from the 6-8' bgs interval in SB-4 and SB-5 were analyzed for total constituent concentrations however both exceeded the twenty times screening value, and neither was analyzed for TCLP. For SB-4, the same reasoning applies as described for SB-1 in the paragraph above. For SB-5, it was stated in the Hazardous Waste Determination that this area would be sampled once the slab was removed and the soils exposed. The single sample collected from boring SB-12 at the 5-7' interval was analyzed for TCLP however no total constituent concentration was obtained to support a listed waste determination. This limited set of samples and analyses from different intervals in different borings are not representative of the mass of soil proposed for excavation. Although totals were not run on the sample, the sample is from a volume that would be excavated and is representative of this volume.
- Ramboll states that the sample with the highest total PCE concentration was analyzed for TCLP and found to be less than the D039 standard of 0.7 mg/L. Due to soil heterogeneity and contaminant properties, a single TCLP analysis for the highest total concentration cannot be used to demonstrate that all other samples will meet the TCLP standards. If one sample from each of SB-2 and SB-3 is included, a total of nine samples were analyzed for total CVOCs and two samples for TCLP to represent 1,000 cubic yards of soil proposed to be excavated. Overall, 42 soil samples and a total of 87 samples for all media (soil, water, and sub-slab vapor) were collected from within an area of less than ½ acre. It is reasonable to assume that this data is representative of the conditions on site and the soils to be excavated.
- Estimated depths of excavation in each of the three areas is not shown on Figure 3d as stated. This was provided on drawing Exc. 1 of the Remedial Design Report and is attached for reference.

### **Sub-Slab Depressurization System and Indoor Air Samples**

The anticipated SSDS radius of influence provided in the Report does not include all areas where sub-slab vapor

concentrations exceed the small commercial VRSL. **The SSDS should be designed to influence all areas identified with impacts greater than the small commercial VRSLs, including, but not limited to,** areas of excavation, in the vicinity of soil boring SB-11, SB-11 is within the area shown for Pressure Field Extension Testing, in the vicinity of sub-slab sample SSV#17, The area around SSV#17 is at the western edge of the contaminant plumes. It is cut off from sources to the west by the sub-slab depressurization sump, is close to the exterior wall, and is located in an open area. As such it is not likely to be a significant long-term source of interior PCE and TCE vapors. and west of sub-slab SSV#6 (west of the solvent-based cleaning room). The sub-slab vapor impacts did not extend into this area and there is no indication that a system should extend into this area; however, over time the field of influence for the proposed sub-slab depressurization system will likely begin to reduce sub-slab pressure in this area as well. A new figure, Figure 7, is attached for reference that includes the soil borings with the influence areas.

VMS commissioning activities such as indoor air sampling and pressure field extension testing will be necessary to demonstrate that the VMS is adequately depressurizing the entire area of small commercial VRSL exceedances and effectively mitigating the vapor intrusion pathway.

In addition to the proposed indoor air sample locations, indoor air samples should also be collected from the basement, An indoor air sample location was proposed in the basement (see attached Figure 6). office space, This is above the basement and is not needed. the solvent-based cleaning room, An indoor air sample location was proposed in the solvent based cleaning room (see attached Figure 6). and west of the solvent-based cleaning room. There is no indication that vapor impacts extend into this area and the seven indoor air samples proposed in conjunction with the pressure field extension testing are considered to be more than adequate for the area of concern.

**Next Steps**

Resubmit updated remedial action design plans and specifications that comply with Wis. Admin. Code ch. NR 724.

**Conclusion**

If you have any questions regarding the information in this letter or would like to schedule a meeting to discuss this case, please contact me at 414-316-0208 or [linda.stanek@wisconsin.gov](mailto:linda.stanek@wisconsin.gov)

The DNR appreciates your efforts to restore the environment at this site.

Sincerely,

A handwritten signature in cursive script that reads "Linda Stanek".

Linda Stanek  
Senior Hydrogeologist, Southeast Region  
Remediation & Redevelopment Program

cc: Brian Schneider, Ramboll Group, [bschneider@ramboll.com](mailto:bschneider@ramboll.com)

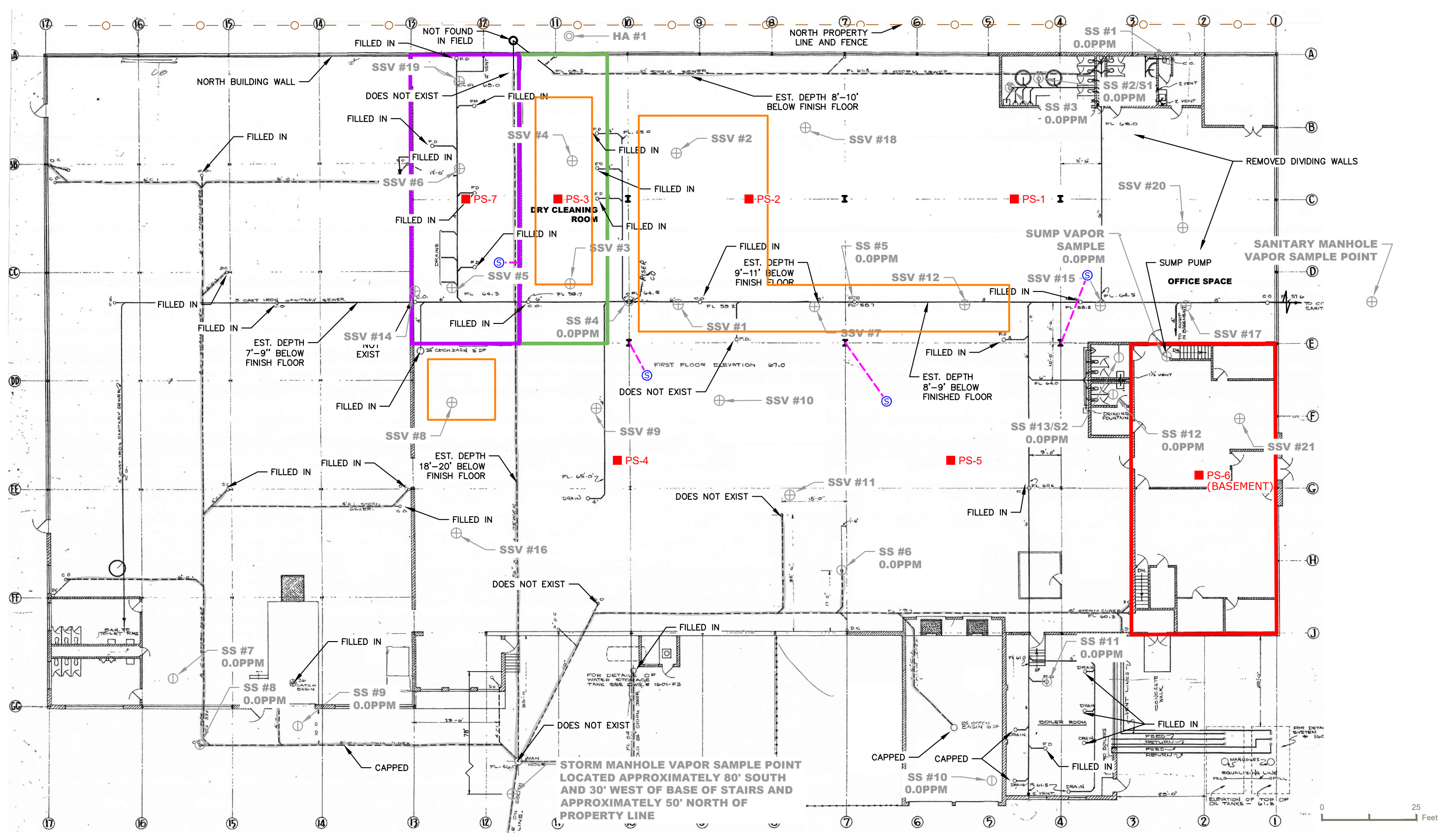
[Attachments:](#)

[Exc. 1](#)

[Figure 6 \(from April 4 submittal\)](#)

[Figure 7](#)





- ⊙ SEWER SAMPLE
- ⊕ SUB SLAB VAPOR POINT
- ⊙ HAND AUGER BORING
- ⊙ PROPOSED SUB-SLAB DEPRESSURIZATION SUMP
- - - - SUB-SLAB DEPRESSURIZATION PIPING
- ▭ PROPOSED EXCAVATION AREA
- PROPOSED POST-REMEDIATION PASSIVE VAPOR SAMPLE LOCATION

**POST-REMEDIATION PASSIVE VAPOR SAMPLE LOCATIONS**

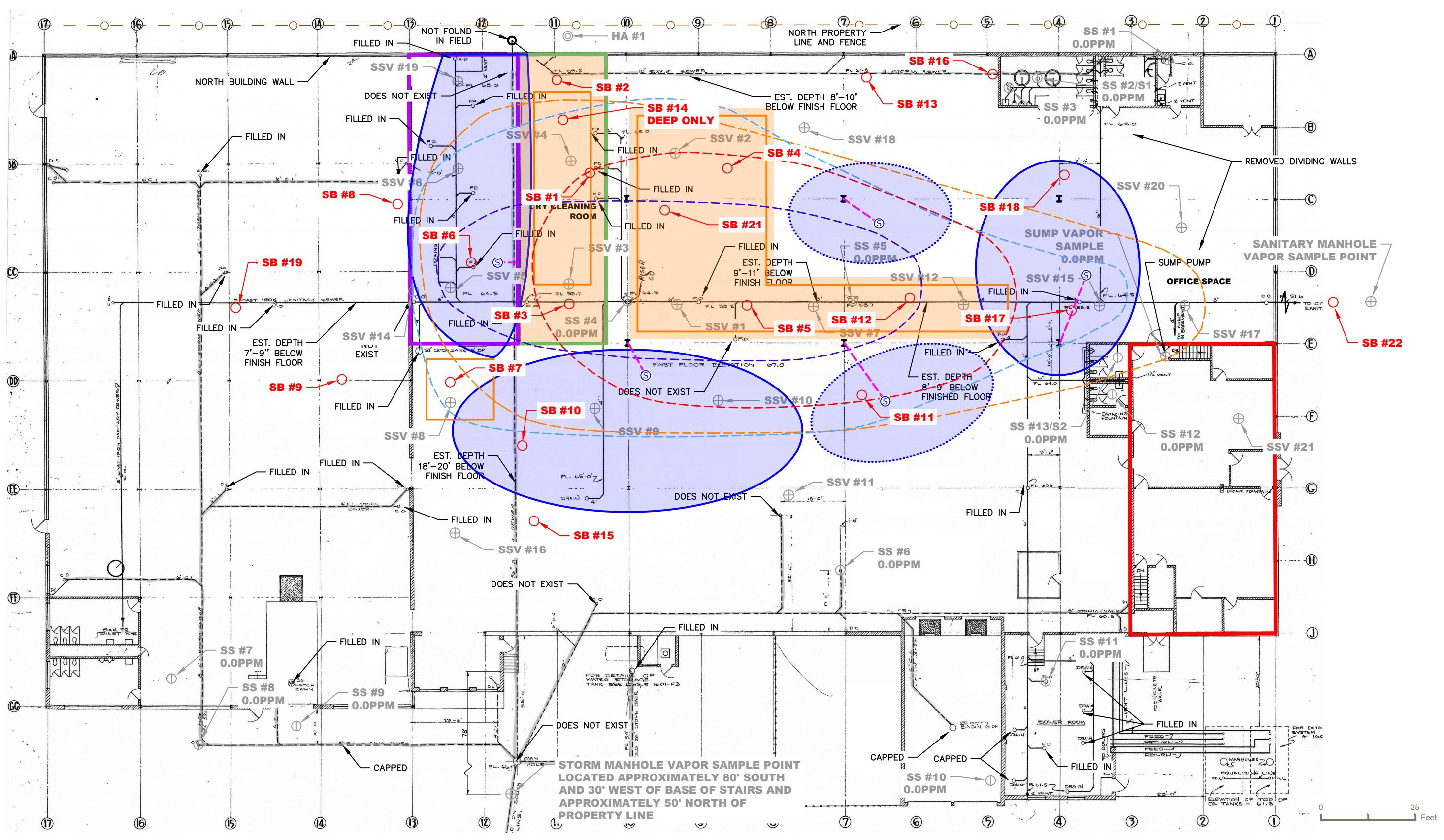
**FIGURE 6-REVISED**

**SPIC AND SPAN, INC.**  
 4301 NORTH RICHARDS STREET  
 MILWAUKEE, WISCONSIN

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC.  
 A RAMBOLL COMPANY







STORM MANHOLE VAPOR SAMPLE POINT  
 LOCATED APPROXIMATELY 80' SOUTH  
 AND 30' WEST OF BASE OF STAIRS AND  
 APPROXIMATELY 50' NORTH OF  
 PROPERTY LINE

- ⊙ SEWER SAMPLE
- ⊕ SUB SLAB VAPOR POINT
- ⊙ HAND AUGER BORING
- ⊙ PROPOSED SUB-SLAB DEPRESSURIZATION SUMP
- SUB-SLAB DEPRESSURIZATION PIPING
- VACUUM TEST RADIUS (LESS THAN -0.004 INCHES WATER PRESSURE)
- ESTIMATED VACCUM RADIUS (NOT TESTED - ESTIMATED)
- EXCEEDS LARGE COMMERCIAL SUB-SLAB VRSL FOR PCE
- EXCEEDS SMALL COMMERCIAL SUB-SLAB VRSL FOR PCE
- EXCEEDS LARGE COMMERCIAL SUB-SLAB VRSL FOR TCE
- EXCEEDS SMALL COMMERCIAL SUB-SLAB VRSL FOR TCE
- PROPOSED EXCAVATION AREA
- LOW FLOW/HIGH VACUUM
- HIGH FLOW/LOW VACUUM (ESTIMATED)

**PRESSURE EXTENSION TESTING RESULTS,  
 PROPOSED SSDS EXTRACTION SUMP LOCATIONS,  
 AND PROPOSED EXCAVATION LIMITS**

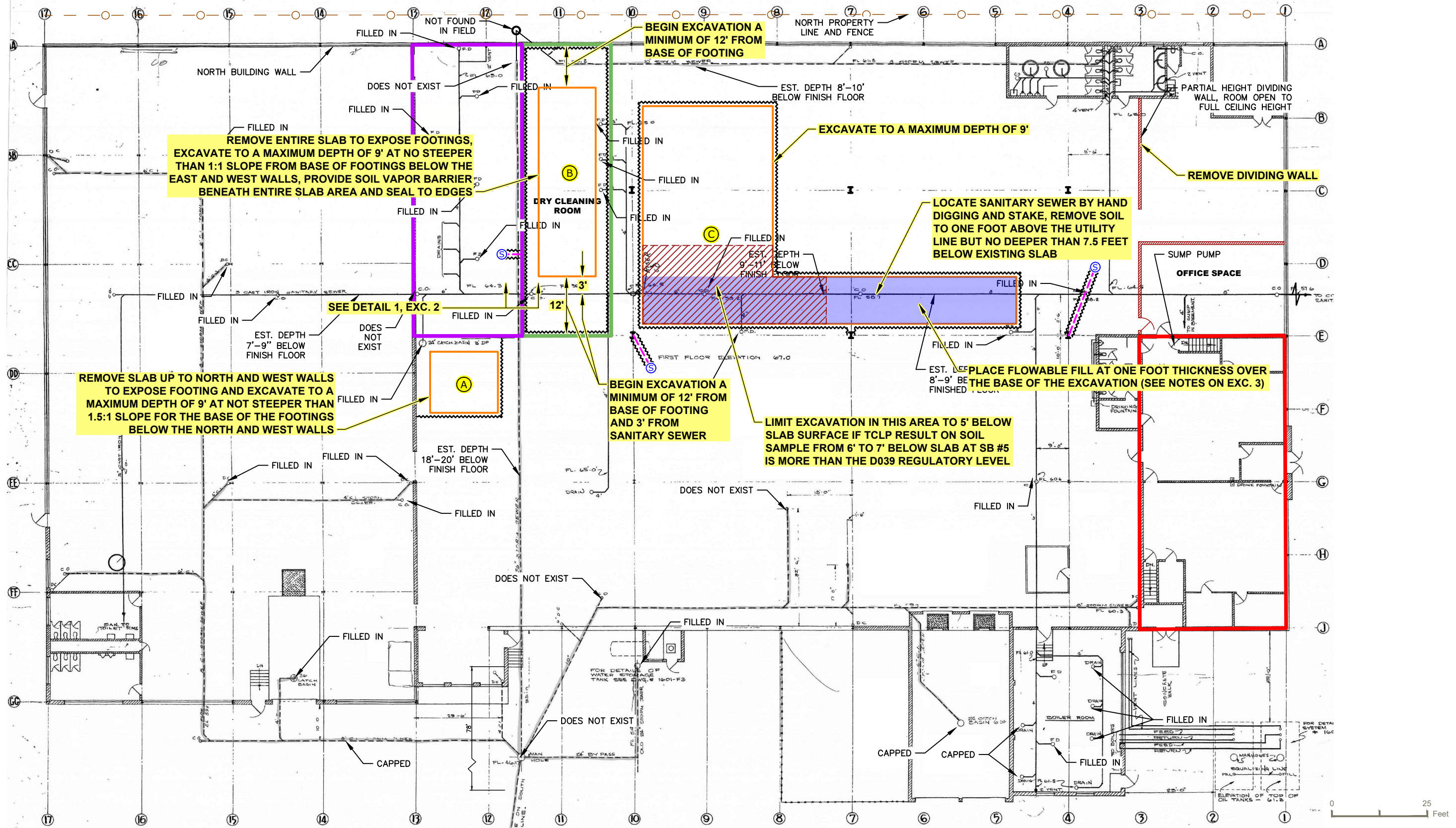
**SPIC AND SPAN, INC.**  
 4301 NORTH RICHARDS STREET  
 MILWAUKEE, WISCONSIN

**FIGURE 7-EXHIBIT  
 FOR DISCUSSION**

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC.  
 A RAMBOLL COMPANY







- Ⓢ PROPOSED SUB-SLAB DEPRESSURIZATION SUMP
- SUB-SLAB DEPRESSURIZATION PIPING
- ~~~~~ CONCRETE SAWING
- PROPOSED EXCAVATION AREA
- FLOWABLE FILL

**Notes:**

1. Perform work in accordance with the Remedial Design Report.
2. All excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local, and/or state regulations. Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations.
3. Assume an average depth of 9', and a total of 1,600 tons of soil and 100 cubic yards of concrete for excavations.
4. Contractor shall remove and dispose of concrete.
5. Excavation contractor shall sawcut and remove concrete for sub-slab depressurization trenches. Trench locations shall be marked by others.

**PROPOSED EXCAVATION AND NOTES**

**EXC. 1**

**SPIC AND SPAN, INC.**  
4301 NORTH RICHARDS STREET  
MILWAUKEE, WISCONSIN

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.  
A RAMBOLL COMPANY

