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VIA E-Mail

February 23, 2017

New York State Department of Environmental Conservation
Division of Environmental Remediation
Hunters Point Plaza
47-40 21st Street
Long Island City, New York 11101-5401

Attn: Mr. Manfred Magloire

RE: 2016 Offsite Sub-Slab Depressurization Systems Annual Inspection Report
DeWalt Service Center, 56-15 Queens Boulevard in Woodside, New York
BCP Site No. C241129

Dear Mr. Magloire:

This report documents the annual inspection of offsite sub-slab depressurization (SSD) systems installed in connection with the above referenced site. At the request of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH), SSD systems have been installed at the following six offsite properties to mitigate risks associated with volatile organic compounds (VOCs) in soil vapor:

- 43-22 57th Street (residence)
- 43-26 57th Street (residence)
- 43-29 57th Street (multi-family residence)
- 43-30 57th Street (multi-family residence)
- 43-31 57th Street (multi-family residence)
- 56-01 Queens Boulevard (church)

The property locations listed above are shown on Figure 1.

1.0 BACKGROUND

This Annual Inspection Report describes the general construction of each system, as well as a summary of observations made during inspections conducted in 2016. Inspections were performed pursuant to the NYSDEC approved *Site Management Plan* dated August 2015.

2.0 OVERVIEW OF SSD SYSTEM CONSTRUCTION

Loureiro and its subcontractors, US Radon Management, Inc. and WPB Enterprises, Inc., installed SSD systems at six properties in accordance with the above referenced work plan. The construction of each system was similar and is described in the paragraph below. Due to the size

and foundation construction of the church building at 56-01 Queens Boulevard, three separate SSD systems were installed. The remaining five properties, all of which are residential buildings, only required the installation of a single SSD system.

Each SSD system is operated using a 4-inch diameter polyvinyl chloride (PVC) vacuum point installed through the concrete slab. Each vacuum point is connected to a solid PVC pipe that extends through the foundation wall to a "radon-type" fan at the exterior of the building. Emissions from the fan are discharged through a three-inch by four-inch vinyl downspout that is affixed to the exterior wall and terminates just above the roof line. One of the SSD systems installed at the church property utilizes a fan that is installed on the roof of the building. Figures 2 through 7 show the layout of the SSD system(s) for each property.

3.0 SUMMARY OF INSPECTIONS

This section summarizes the inspection activities conducted for each property. Any follow-up actions that were required as a result of the inspection are described herein.

3.1 Residence at 43-22 57th Street, Woodside, New York

The residence located at 43-22 57th Street is approximately 200 feet north of the DeWalt Service Center on the east side of 57th Street. The SSD system was installed at this property on June 9, 2011. The layout of the SSD system is shown on Figure 2.

2016 Inspection

An inspection of the SSD system was performed on December 20, 2016. The manometer located on the PVC vacuum pipe indicated that the system was adequately pressurized. Penetration seals at the vacuum points and foundation wall were observed to be in good condition with no evidence of leakage. All PVC pipe joints were noted to be tightly sealed. The exterior fan was on and functioning properly. The exhaust pipe was in good condition and was not obstructed. No new air intakes were identified in the vicinity of the SSD system exhaust pipe.

3.2 Residence at 43-26 57th Street, Woodside, New York

The residence located at 43-26 57th Street is approximately 150 feet north of the DeWalt Service Center on the east side of 57th Street. The SSD system was installed at this property on April 11, 2011. The layout of the SSD system is shown on Figure 3.

2016 Inspection

An inspection of the SSD system was performed on April 13, 2016. The manometer located on the PVC vacuum pipe indicated that the system was adequately pressurized. Penetration seals at the vacuum points and foundation wall were observed to be in good condition. All PVC pipe joints were noted to be tightly sealed. The exterior fan was on and functioning properly. The

exhaust pipe was in good condition and was not obstructed. No new air intakes were identified in the vicinity of the exhaust pipe.

The SSD system was found to be in good condition, operating properly, and did not require any repairs.

3.3 Multi-Family Residence at 43-29 57th Street, Woodside, New York

The multi-family residence located at 43-29 57th Street is approximately 150 feet north of the DeWalt Service Center on the west side of 57th Street. The SSD system was installed at this property on April 11, 2011. The layout of the SSD system is shown on Figure 4.

2016 Inspection

An inspection of the SSD system was performed on April 13, 2016. The manometer located on the PVC vacuum pipe indicated that the system was adequately pressurized. Seals observed at the vacuum point and at the foundation wall were noted to be in good condition. All PVC pipe joints were noted to be tightly sealed. The exterior fan was on and functioning properly. The exhaust pipe was in good condition and was not obstructed. No new air intakes were identified in the vicinity of the exhaust pipe.

The SSD system was found to be in good condition, operating properly, and did not require any repairs.

3.4 Multi-Family Residence at 43-30 57th Street, Woodside, New York

The multi-family residence located at 43-30 57th Street is directly north of the DeWalt Service Center on the west side of 57th Street. The SSD system was installed at this property on March 25, 2014. The layout of the SSD system is shown on Figure 5.

2016 Inspection

Accessible portions of the SSD system were inspected on April 13, 2016. The manometer is located within an area leased as tenant space and was not accessible by property owner. The fan was in operation and appeared to be functioning properly. All visible pipe joints were noted to be tightly sealed. The exhaust pipe was observed to be in good condition and was not obstructed. No new air intakes were identified in the vicinity of the exhaust pipe.

Accessible portions of the SSD system were found to be in good condition, operating properly, and did not require any repairs.

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3.5 Multi-Family Residence at 43-31 57th Street, Woodside, New York

The multi-family residence located at 43-31 57th Street is approximately 100 feet north of the DeWalt Service Center on the west side of 57th Street. The SSD system was installed at this property on March 27, 2014. The layout of the SSD system is shown on Figure 6.

2016 Inspection

An inspection of the SSD system was performed on April 14, 2016. The manometer located on the PVC vacuum pipe indicated that the system was adequately pressurized. Seals observed at the vacuum point and at the foundation wall were noted to be in good condition. All PVC pipe joints were noted to be tightly sealed. The exterior fan was on and functioning properly. The exhaust pipe was in good condition and was not obstructed. No new air intakes were identified in the vicinity of the SSD system exhaust pipe.

The SSD system was found to be in good condition, operating properly, and did not require any repairs.

3.6 Church at 56-01 Queens Boulevard Street, Woodside, New York

The church located at 56-01 Queens Boulevard is directly west of the DeWalt Service Center on the north side of Queens Boulevard. Two SSD systems were installed at this property on April 12, 2011 and a third SSD system was installed on June 9, 2011. A third vacuum point was installed to enhance the third system on October 9, 2014. The layout of the SSD systems is shown on Figure 7.

2016 Inspection

An inspection of the three SSD systems was performed on April 13, 2016. The manometers for SSD Systems 1, 2, and 3 indicated that the systems were adequately pressurized. Penetration seals at the foundation walls and vacuum points were noted to be in good condition. The exterior fans for Systems 1, 2, and 3 were on and functioning properly. The exhaust pipes were in good condition and were not obstructed. No new air intakes were identified in the vicinity of the SSD system exhaust pipes.

The SSD systems were found to be in good condition, operating properly, and did not require any repairs.

4.0 FUTURE INSPECTIONS

The next round of inspections is tentatively scheduled for April 2017. The inspections will continue on an annual basis in accordance with the NYSDEC approved *Site Management Plan*. Results of the 2017 annual inspections will be documented in the first *Periodic Review Report* due in November 2017.

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Should you have any questions regarding the information contained in this report, please feel free to contact me at (860) 410-2904.

Sincerely,

LOUREIRO ENGINEERING ASSOCIATES, INC.

Kevin J. Bitjeman, L.E.P.
Senior Project Manager

CC: Kathryn Hinckley, Stanley Black & Decker

Attachments

FIGURES

43–20
56th ST

43–22
56th ST

43–26
56th ST

55–11 QUEENS BLVD
(ISLAMIC INSTITUTE OF
NEW YORK MOSQUE)

56TH STREET

43–19
56th ST

43–21
56th ST

43–25
56th ST.

43–25
56th ST

DRIVEWAY

43–18
57th ST

43–20
57th ST

**43–22
57th ST
(RESIDENTIAL)**

43–24
57th ST

**43–26
57th ST
(RESIDENTIAL)**

43–28
57th ST

**43–30
57th ST
(RESIDENTIAL)**

57TH STREET

43–21
57th ST

43–25
57th ST

43–27
57th ST

**43–29
57th ST
(RESIDENTIAL)**

**43–31
57th ST
(RESIDENTIAL)**

57–07
QUEENS BLVD.

SIDEWALK

**56–01
QUEENS
BLVD.
(CHURCH)**

**56–15 QUEEN BLVD
(DEWALT SERVICE CENTER)**

SIDEWALK

QUEENS BOULEVARD

LEGEND

PROPERTIES WITH SUB–SLAB DEPRESSURIZATION SYSTEMS INSTALLED

BUILDING

PROPERTY LINE FOR THE SITE

15 0 15 30 45

SCALE IN FEET (APPROXIMATE)

BLACK AND DECKER (U.S.), INC.
PROPERTIES WITH
SUB-SLAB DEPRESSURIZATION SYSTEMS
WOODSIDE, NY

Comm.No.
07MD012

FIGURE 1

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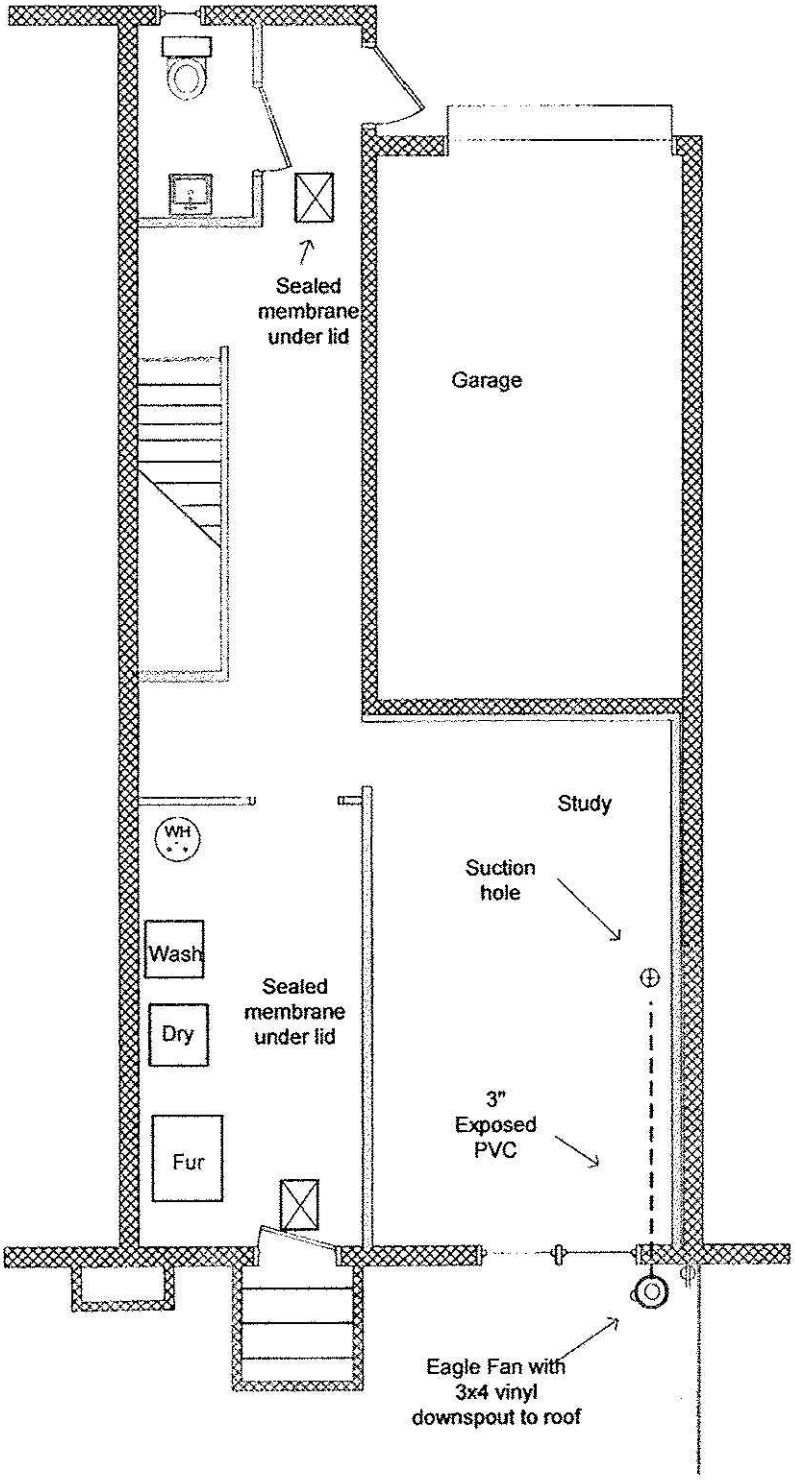
G:\AUTOCAD\PROJECTS\07MD012\TASK008 REMEDIAL INVESTIGATION\07MD012 SSD-4SITES-11X17.DWG Tab: F1 Saved: 3/13/2015 10:17 AM Plotted: 3/13/2015 10:18 AM

43-22 57th St.
Queens, NY

Front



BLACK AND DECKER (U.S.), INC.
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT
43-22 57TH STREET
WOODSIDE, NY

NOT TO SCALE

Comm.No. 07MD012

FIGURE 2

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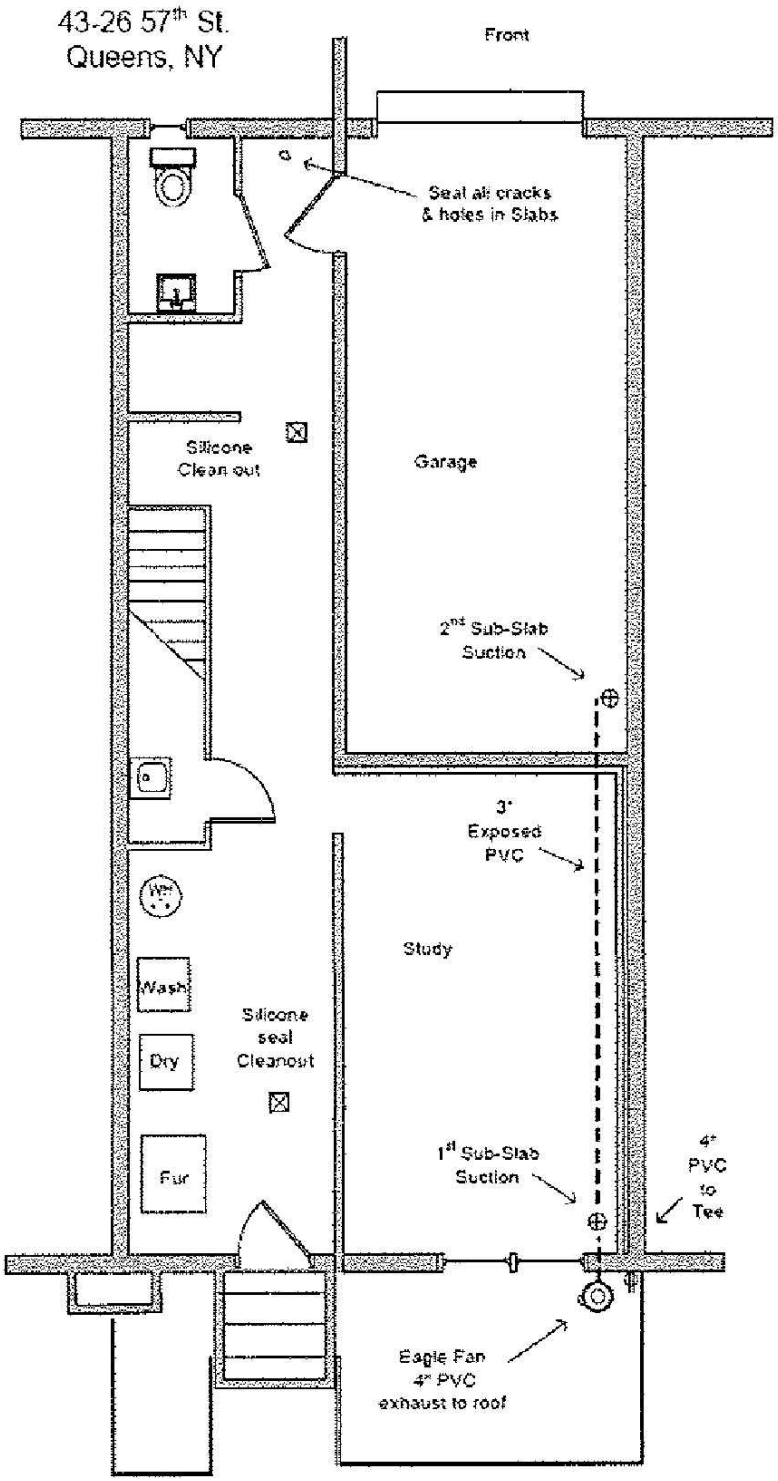

BLACK AND DECKER (U.S.), INC.
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT
43-26 57TH STREET
WOODSIDE, NY

NOT TO SCALE

Comm.No.	FIGURE 3	Loureiro
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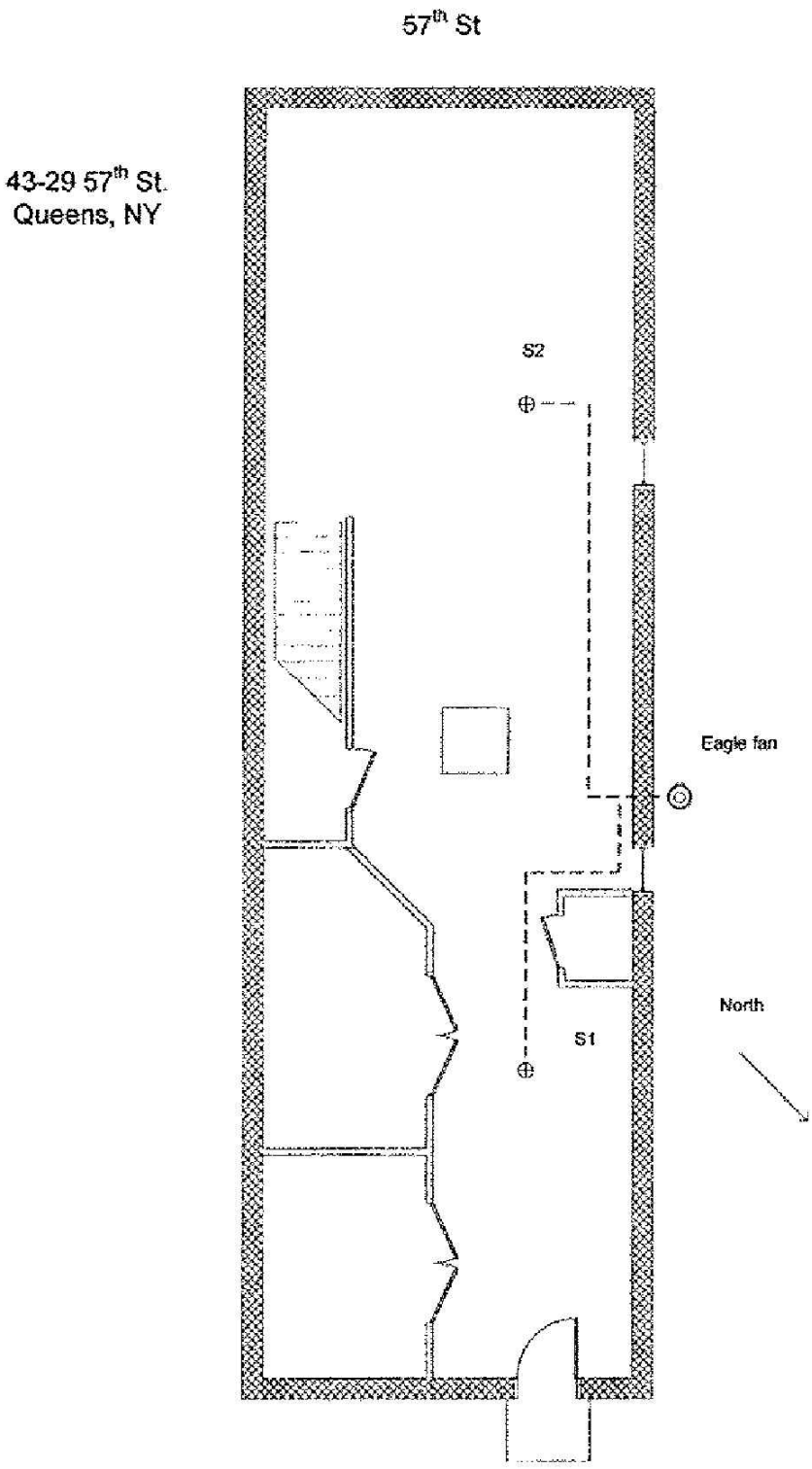

BLACK AND DECKER (U.S.), INC.
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT
43-29 57TH STREET
WOODSIDE, NY

Comm.No.	FIGURE 4	Loureiro
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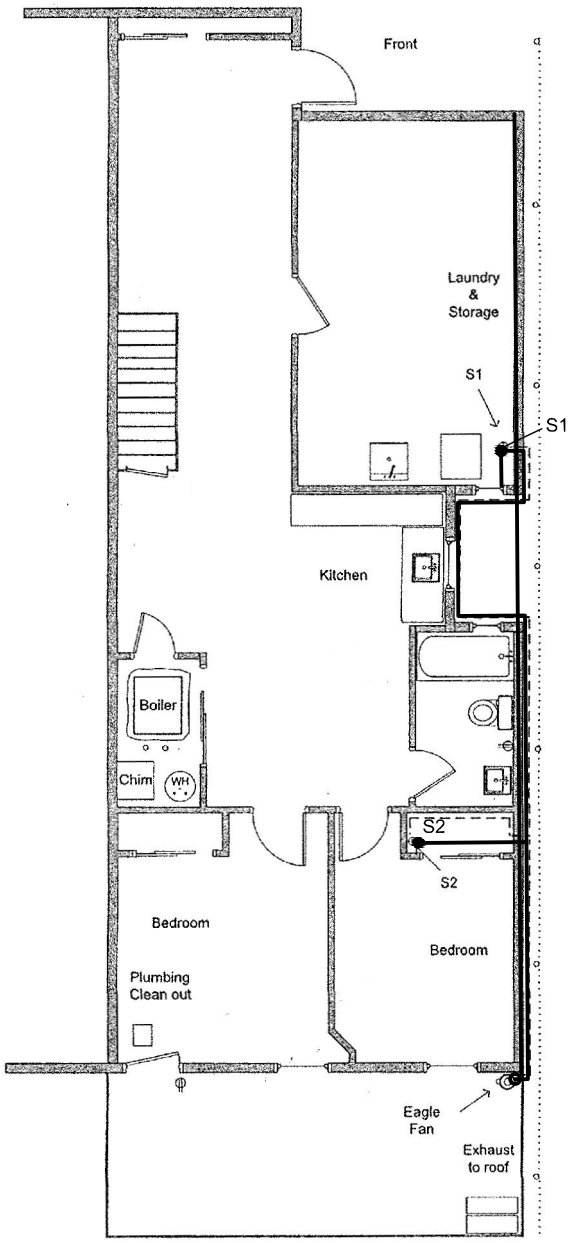
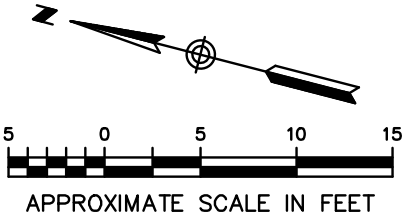
NOT TO SCALE





APPROXIMATE SCALE IN FEET

LEGEND

- BUILDING
- BUILDING INTERIOR
- 3" SCH-40 PVC PIPE
- S1 SUCTION POINT

BLACK AND DECKER (U.S.), INC.
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT
43-30 57TH STREET
WOODSIDE, NEW YORK

Comm.No.	FIGURE 5	Loureiro
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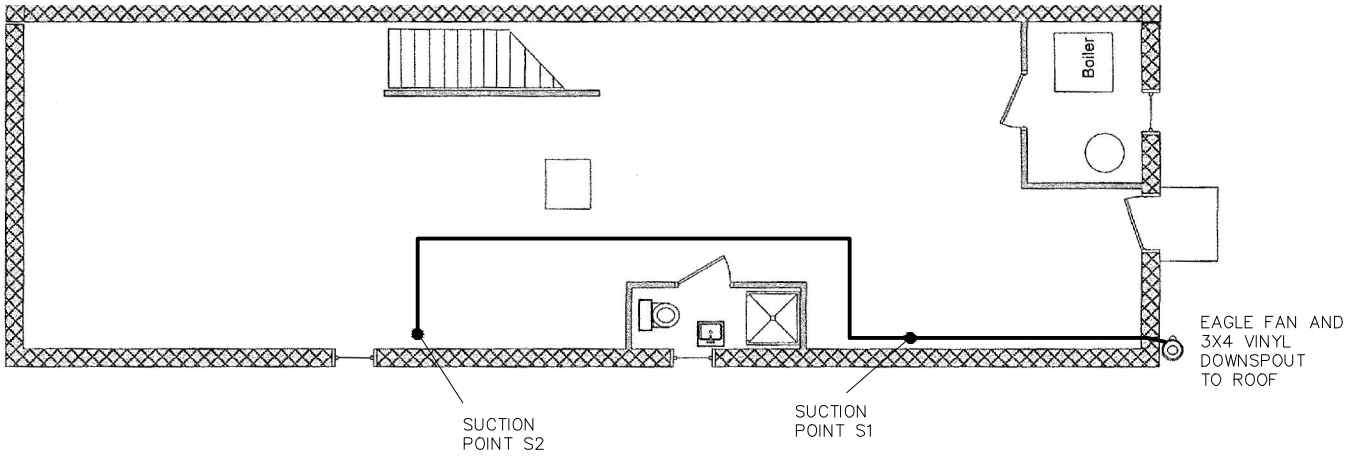

LEGEND

- BUILDING
- BUILDING INTERIOR
- 3" SCH–40 PVC PIPE
- S1 SUCTION POINT

5 0 5 10 15

SCALE IN FEET

BLACK AND DECKER (U.S.), INC.
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT
43-31 57TH STREET
WOODSIDE, NEW YORK

Comm.No.
07MD012

FIGURE 6

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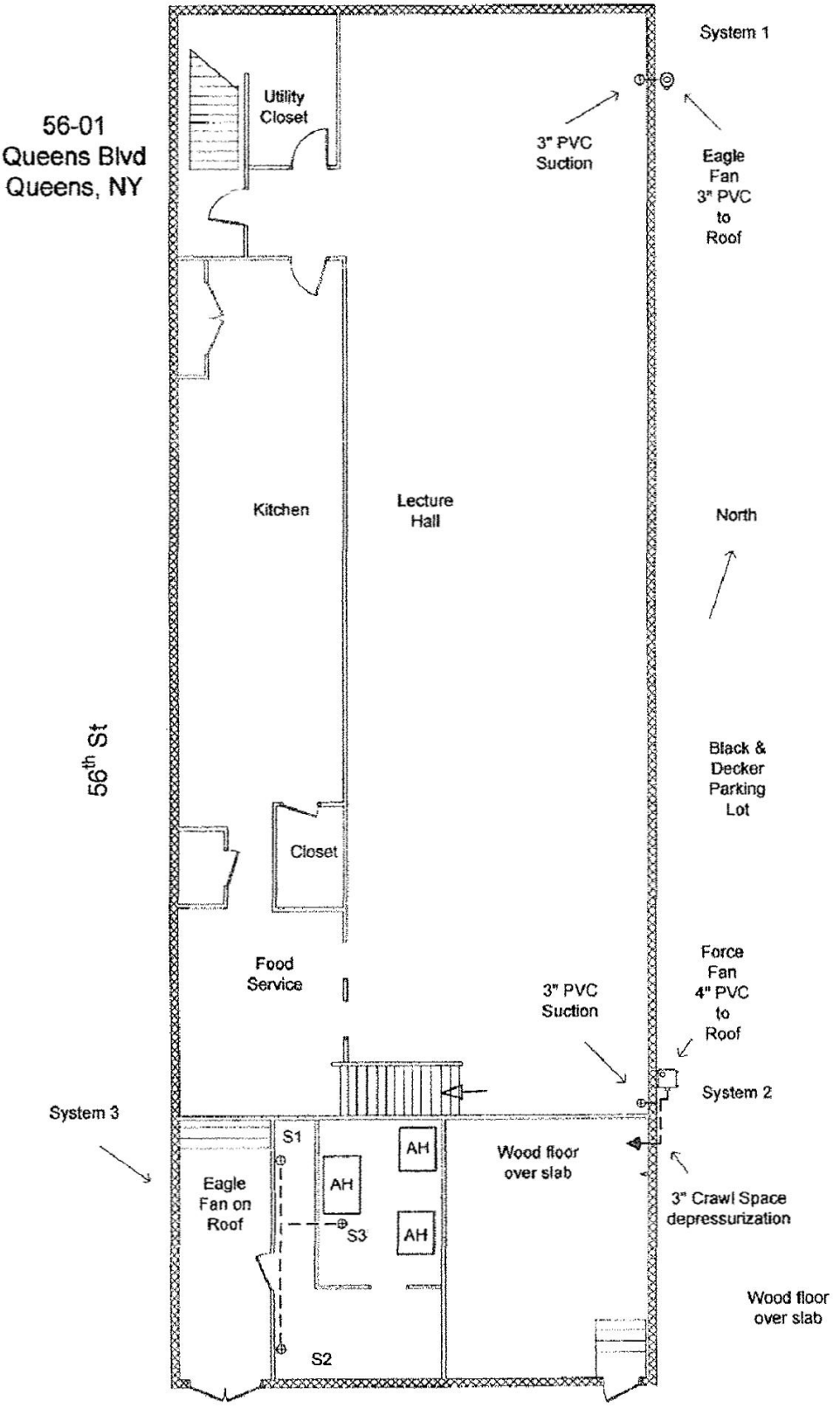
G:\AUTOCAD\PROJECTS\07MD803\43-2931TH 57 STEET\07MD803-43-31TH 57TH ST_ASBUILT.DWG Tab: F6 Saved: 3/13/2015 11:10 AM Plotted: 3/13/2015 11:10 AM



BLACK AND DECKER (U.S.), INC.
SUB-SLAB DEPRESSURIZATION SYSTEM LAYOUT
56-01 QUEENS BLVD
WOODSIDE, NY

NOT TO SCALE

Comm.No.
07MD012

FIGURE 7

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