CA RICH
ENVIRONMENTAL SPECIALISTS

August 16, 2007

Janet Brown, PE
New York State Department of
Environmental Conservation
Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, NY 12561

Re: Results of SSD Pilot Testing
Flamingo Cleaners, BCP ID C360078
New Rochelle, NY

Dear Ms. Brown:

As agreed during our recent conference call, CA RICH performed a pilot test to determine the feasibility of installing a sub-slab depressurization (SSD) system at the above-captioned site.

On July 31, 2007, CA RICH mobilized our portable SVE blower, along with the associated control panel, generator and carbon treatment vessel. The blower used has a variable speed drive which can be used to achieve a desired subsusrface vacuum as measured with an in-line magnehelic gauge. The blower was connected to existing monitoring well MW-2 and the connection sealed at the basement floor to maintain a vacuum within the subsusrface vadose zone. The blower exhaust was then attached to a portable granulated activated carbon vessel. It is noted that, at the time of the test, the depth to groundwater underlying the basement slab was approximately 3 inches.

Once the blower was attached and operating, the flow rate was adjusted to achieve a sub-slab vacuum of 2 inches (water) as measured with the inline magnehelic gauge, thereby duplicating the conditions that would be achieved through the use of a typical SSD fan. Sub-slab vacuum measurements were then recorded at each of the four existing 2 inch-deep, ¼ inch-diameter sub-slab vapor monitoring wells (SS-1 thru SS-4).

Vacuum readings ranged from 0.0275 inches in SS-1 (located a distance of 8.5 feet from MW-2) to 0.0025 inches as measured in SS-4 (located a distance of 58 feet from MW-2). Vacuum readings in each of the SS wells were plotted versus distance and detailed on Figure 1 (attached). The locations of MW-2 and all of the wells are illustrated on Figure 2.

Based upon the results of this pilot study it appears that there is sufficient horizontal communication to maintain a vacuum in the relatively small sub-slab vadose zone underlying the building's basement floor slab and installation of an SSD system is feasible.

We recommend that a Sub-Slab Depressurization System be incorporated in the IRM to control vapor intrusion into the Building. We propose that the system utilize two – 4" diameter SSD duct fans connected to vacuum pits. The proposed locations for the vacuum pits are in the central portion of the former dry cleaner basement and adjacent to the north wall of the adjacent "vacant" basement. This spacing should provide sufficient vacuum to maintain communication beneath the entire building without further drawing contaminated sub-slab vapors toward the northern end of the property. The SSD fans will be piped up the respective walls and manifold together overhead. The will then be exhausted up to the roof via an existing stack located along the southern wall of the building.

We trust you find this approach acceptable. If you have any questions, please do not hesitate to contact the undersigned.

Very truly yours,

CA RICH CONSULTANTS, INC.

Stephen J. Osmundsen, P.E.
Senior Engineer

Richard J. Izzo, CPG
Associate

cc:
Jo-Anne Latino
Susan Kettner, Esq.
Debbie Kettner
Kevin Ryan, Esq.
Becky Mitchell
Rosalie Rusinko

files/projects/flamingo/pm/progress reports/SSD pilot study

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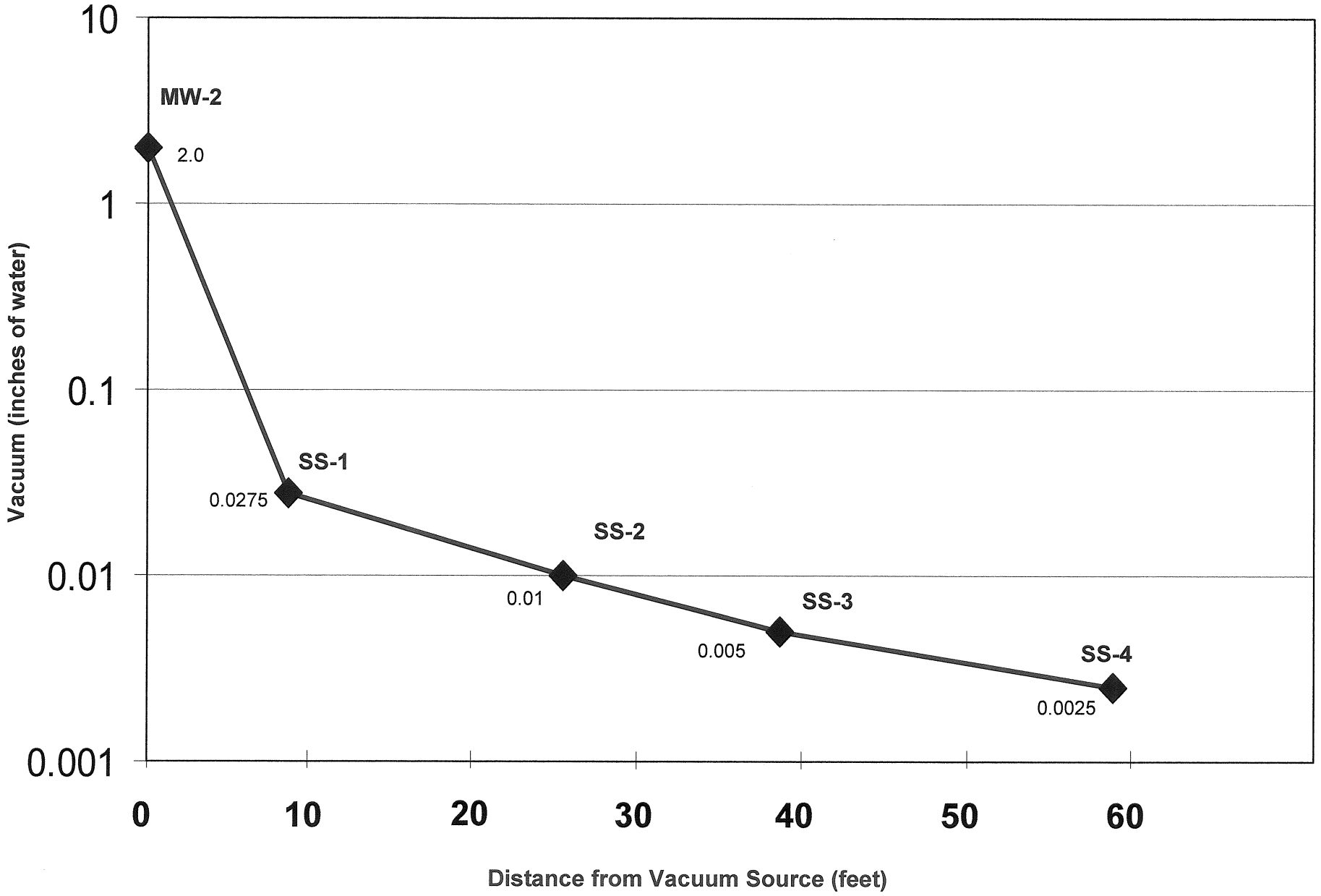
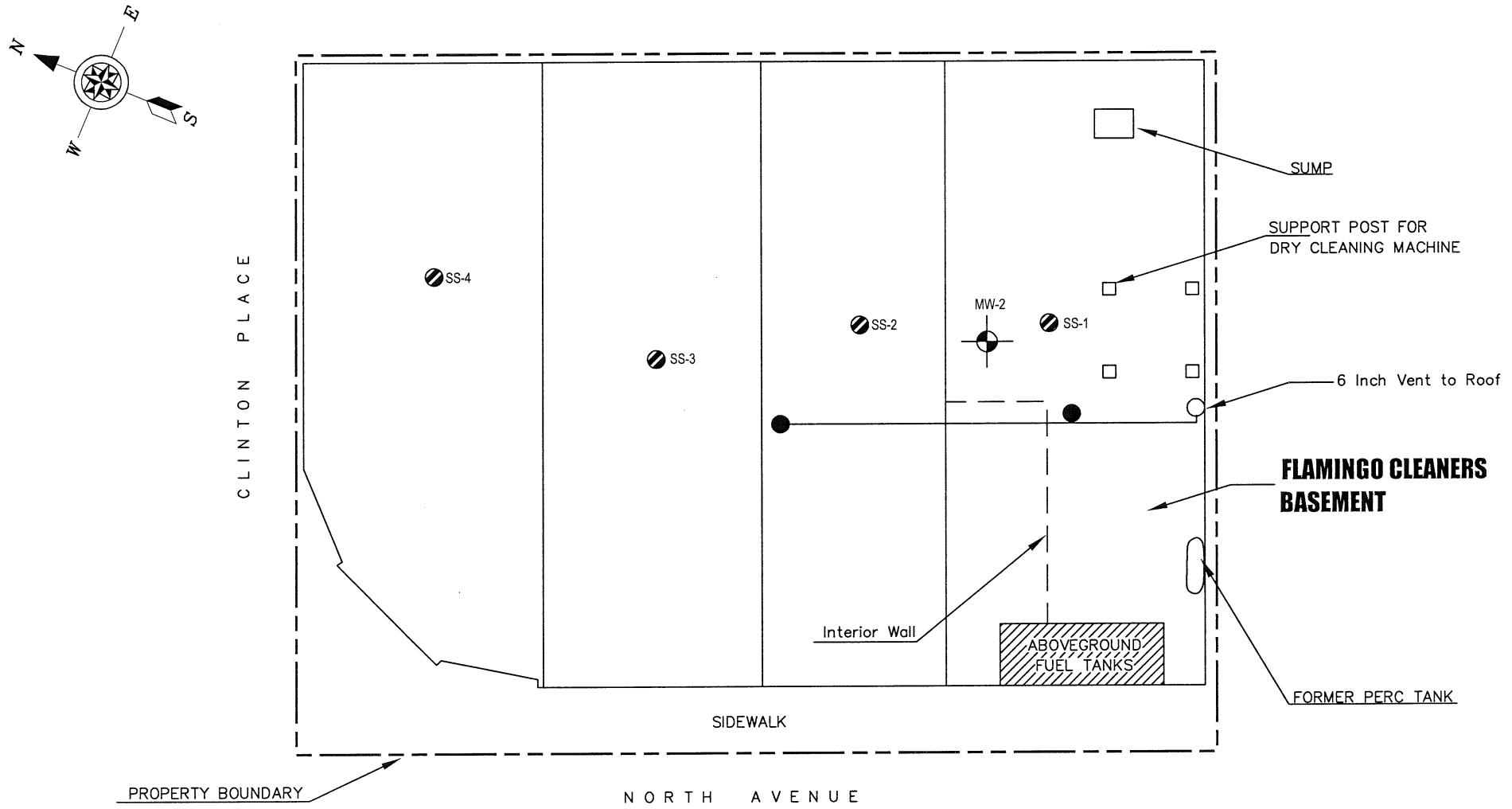
Figure 1
Flamingo Cleaners SSD Pilot Test Results
July 31, 2007





Legend

- Groundwater Monitoring Well
- Proposed SSD Fan
- Sub Slab Vapor Well

0 10 20 30 40 50

GRAPHIC SCALE IN FEET

CA RICH CONSULTANTS, INC.

Certified Ground–Water and Environmental Specialists
17 Dupont Street, Plainview, New York

TITLE: SSD PILOT TEST LOCATIONS and PROPOSED SYSTEM		DATE: 8/17/2007
		SCALE: AS SHOWN
FIGURE: 2	FLAMINGO CLEANERS 149–155 NORTH AVENUE NEW ROCHELLE, NY	DRAWN BY: S.T.M.
DRAWING NO: 2007–1		APPR. BY: R.J.I.