

# **LETTER REPORT**

**RE: WESTCHESTER COUNTY AIRPORT  
HANGAR B SEPTIC SITE, #V 00611-3**

## **PREPARED BY:**

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FEBRUARY 21, 2006**



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February 21, 2006

Ms. Michelle Tipple  
New York State Department of  
Environmental Conservation  
21 South Putt Corners Road  
New Paltz, NY 12561-1696

RE: Westchester County Airport  
Hangar B Septic Site, #V 00611-3

Dear Ms. Tipple:

The Interim Remedial Measure (IRM) for the former Hangar B Septic Field Site at the Westchester County Airport, has been completed. The IRM was conducted in accordance with our Site Investigation/Interim Remedial Measures Work Plan for the former Hangar B site, dated January 2003. Below is a summary of the field activities and results of the confirmation sampling. Figure 1 is a site plan for the airport showing the location of the former Hangar B site.

#### IRM SUMMARY

The Hangar B IRM consisted of the excavation of residually contaminated soil, associated with a septic system that served the former Hangar B (figure 2). The septic system and approximately 200 cubic yards of contaminated soil were removed previously, after being discovered during construction of the now adjacent Taxiway L. At that time it was determined that an investigation of the former septic field site would be required, before any further remediation could take place. As part of the site investigation work plan, LBG proposed an IRM to address the remaining contaminated soil, which was expected to be minimal. A complete history of the Hangar B site is included in the Investigation Work Plan.

#### Initial Excavation and Sampling

The Hangar B IRM was completed over the course of four days between April and July 2005. All field activities were conducted in accordance with the work plan noted above. Initial

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soil excavation began on April 4, 2005. At the end of that day, all obviously contaminated soil had been excavated and was stockpiled onsite pending disposal. In addition 14 confirmation soil samples were collected, 10 from the sidewalls and four from the excavation bottom. The sampling locations are shown on figure 3.

The confirmation samples were submitted for the analysis of volatile organics by EPA Method 8260 and semivolatile organics by EPA Method 8270, with ASP Category B deliverables. Table 1 is a summary of the detected compounds. Laboratory data sheets are attached in Appendix I, along with the Data Usability Summary Report (DUSR) from an independent data validator. As shown on table 1, several semivolatile compounds were detected above the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) 4046, Recommended Soil Cleanup Objectives (RSCO) in three of the four samples from the east sidewall.

#### **Follow Up Excavation and Sampling**

Based on the April 4, 2005 confirmation sampling results, additional excavation along the east sidewall was required. On April 26, 2005 the second round of excavation began. As the excavation progressed, access to the east sidewall became limited due to the excavated soil that was being stockpiled adjacent to the excavation. As a result, disposal of the stockpiled soil was required before any further excavation could take place. On May 24, 2005, the stockpiled soil was removed from the site and transported to Clean Earth, Inc. of Philadelphia, Pennsylvania for treatment by low temperature thermal desorption.

On June 1, 2005 the excavation was extended to its final limits (figure 2). The final excavation dimensions were 100 feet long, 43-45 feet wide and approximately 10 feet deep. Final confirmation samples were collected on April 26 and June 1, 2005, from the locations shown on figure 3. The samples were submitted for the analysis of volatile organics by EPA Method 8260 and semivolatile organics by EPA Method 8270, with ASP Category B deliverables. Laboratory data sheets are attached in Appendices II and III along with the DUSRs from an independent data validator. The sampling results are summarized on table 1, which shows that one semivolatile compound, benzo(a)pyrene, was detected above the TAGM RSCO of 61 ug/kg (micrograms per kilogram) in three samples from the east sidewall. The detected concentrations ranged between 91 and 100 ug/kg, and were significantly lower than the concentrations detected in the first round samples collected on April 4, 2005 (table 1).

The excavated soil was removed from the site on June 2 and 3, 2005 and transported to Clean Earth, Inc. for treatment. Disposal manifests are attached in Appendix IV. A total of 510.10 tons of soil were removed from the site, including what was removed on May 24.

#### **Excavation Closure**

The soil excavated from the site on June 1, was removed from the site on June 2 and 3, 2005 and transported to Clean Earth, Inc. for treatment. A total of 510.10 tons of soil were removed from the site, including what was removed on May 24. Disposal manifests for all of the soil removed from the site are attached in Appendix IV.

On July 5, 2005 the confirmation sampling results were submitted to the NYSDEC and New York State Department of Health (NYSDOH) for review. On July 8, 2005 the NYSDEC issued a letter to the airport approving closure of the excavation. A copy of this letter is attached in Appendix V. On July 20, 2005 the excavation was backfilled and the area was graded.

The material used for backfill had been excavated from another area of the site and stockpiled near the Hangar B site. This material was generated during the construction of a Run-Up Pad for Taxiway C, which was completed in the summer of 2004. The construction site was an area of grass adjacent to the taxiway, which is approximately 1,100 feet east of the former Hangar B site in the airport infield. There were never any structures in this area or any record of a spill. On July 18, 2005 LBG inspected the soil stockpile, found no indication of contamination and deemed it acceptable for use as backfill. This information was documented in a letter from the airport to the NYSDEC dated July 19, 2005, which is included in Appendix V.

#### **Backfill Sampling**

On October 5, 2005 a Draft Closure Report for the Hangar B site was submitted to the NYSDEC and NYSDOH for their review. On November 10, 2005 the NYSDOH issued a comment letter requesting sampling of the backfill material to verify that its quality was consistent with the State Guidelines for the protection of human health and the environment. A copy of this letter is included in Appendix V.

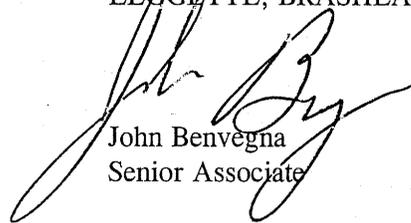
On December 22, 2005 the requested samples were collected and submitted for analysis. On January 27, 2006 the sampling results were submitted by letter to the NYSDEC and

NYSDOH; a copy of this letter with the analytical results is attached in Appendix VI. On February 9, 2006 the NYSDEC verbally confirmed to LBG that the backfill sampling results were satisfactory and requested submission of a final closure report for the Hangar B site.

In consideration of the above information, and on behalf of the Westchester County Airport, we are requesting closure of the former Hangar B Septic Field Site, NYSDEC Site #V 00611-3, and termination of the associated Voluntary Cleanup Agreement, Index #W3-0937-02-09.

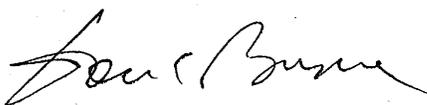
Very truly yours,

LEGGETTE, BRASHEARS & GRAHAM, INC.



John Benvegna  
Senior Associate

Reviewed By:



Dan C. Buzea, CPG  
Vice President

JB:dmd

cc: R. Funicello  
M. Parletta

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**TABLE**

TABLE 1

FORMER HANGER B SITE IRM  
WESTCHESTER COUNTY AIRPORT  
WHITE PLAINS, NEW YORK

Summary Of Confirmation Sampling Results  
(All results are in micrograms per kilogram)

Sample Location	SW-N	SW-N1	SW-N2	SW-W1	SW-W2	SW-W3	SW-W4	SW-S	SW-E1	SW-E1A	SW-E2	SW-E2A	SW-E3	SW-E3A	SW-E4	B-1	B-2	B-3	B-4	RSCO
Sample Date	4/4/05	6/1/05	6/1/05	4/4/05	4/4/05	4/4/05	4/4/05	4/4/05	4/4/05	6/1/05	4/4/05	4/26/05	4/4/05	4/26/05	4/4/05	4/4/05	4/4/05	4/4/05	4/4/05	
Parameter																				
Acetone	ND	2.2 J	ND	ND	5.1 J	ND	4.8 J	ND	ND	7.1 J	ND	6.5 J	3.9 J B	ND	5.8 J B	ND	ND	ND	ND	200
Methylene chloride	4.7 J B	4.7 J B	7.3 J B	4.8 J B	5.6 J B	5.2 J B	5.5 J	4.4 J	6.4 J	6.2 J B	5.0 J	12 J B	5.5 J B	8.1 J B	7.0 J B	6.4 J	7.9 J	6.5 J	7.2 J	100
MTBE	ND	ND	1.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	200 J	ND	ND	13,000
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150 J	ND	ND	36,400
Acenaphthylene	ND	ND	49 J	ND	ND	ND	ND	ND	770	60 J	140 J	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Phenanthrene	ND	ND	45 J	ND	ND	ND	ND	ND	520	ND	120 J	55 J	150 J	ND	ND	ND	ND	ND	ND	50,000
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	580	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Fluoranthene	ND	ND	58 J	ND	ND	ND	ND	ND	1,300	120 J	610	140 J	380 J	100 J	ND	ND	ND	ND	ND	50,000
Pyrene	ND	ND	100 J	ND	ND	ND	ND	ND	2,200	170 J	610	170 J	330 J	140 J	ND	ND	ND	ND	ND	50,000
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	<b>800</b>	83 J	<b>360 J</b>	82 J	170 J	66 J	ND	ND	ND	ND	ND	224
Chrysene	ND	ND	70 J	ND	ND	ND	ND	ND	<b>1,400</b>	110 J	<b>440</b>	120 J	240 J	95 J	ND	ND	ND	ND	ND	400
Bis(2-ethylhexyl)phthalate	ND	55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50,000
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	<b>780</b>	ND	<b>360 J</b>	ND	ND	ND	ND	ND	ND	ND	ND	220
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	<b>770</b>	51 J	<b>330 J</b>	110 J	<b>220 J</b>	68 J	ND	ND	ND	ND	ND	220
Benzo(a)pyrene	ND	ND	54 J	ND	ND	ND	ND	ND	<b>1,200</b>	<b>100 J</b>	<b>430</b>	<b>100 J</b>	<b>250 J</b>	<b>91 J</b>	ND	ND	ND	ND	ND	61
Indeno(1 2 3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	600	60 J	230 J	63 J	150 J	61 J	ND	ND	ND	ND	ND	3,200
Dibenzo(a h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	<b>280 J</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14
Benzo(ghi)perylene	ND	ND	ND	ND	ND	ND	ND	ND	900	80 J	260 J	91 J	180 J	89 J	ND	ND	ND	ND	ND	50,000

NOTES

See Figure 3 for sample locations.

ND - Not Detected.

B - Compound was found in the method blank.

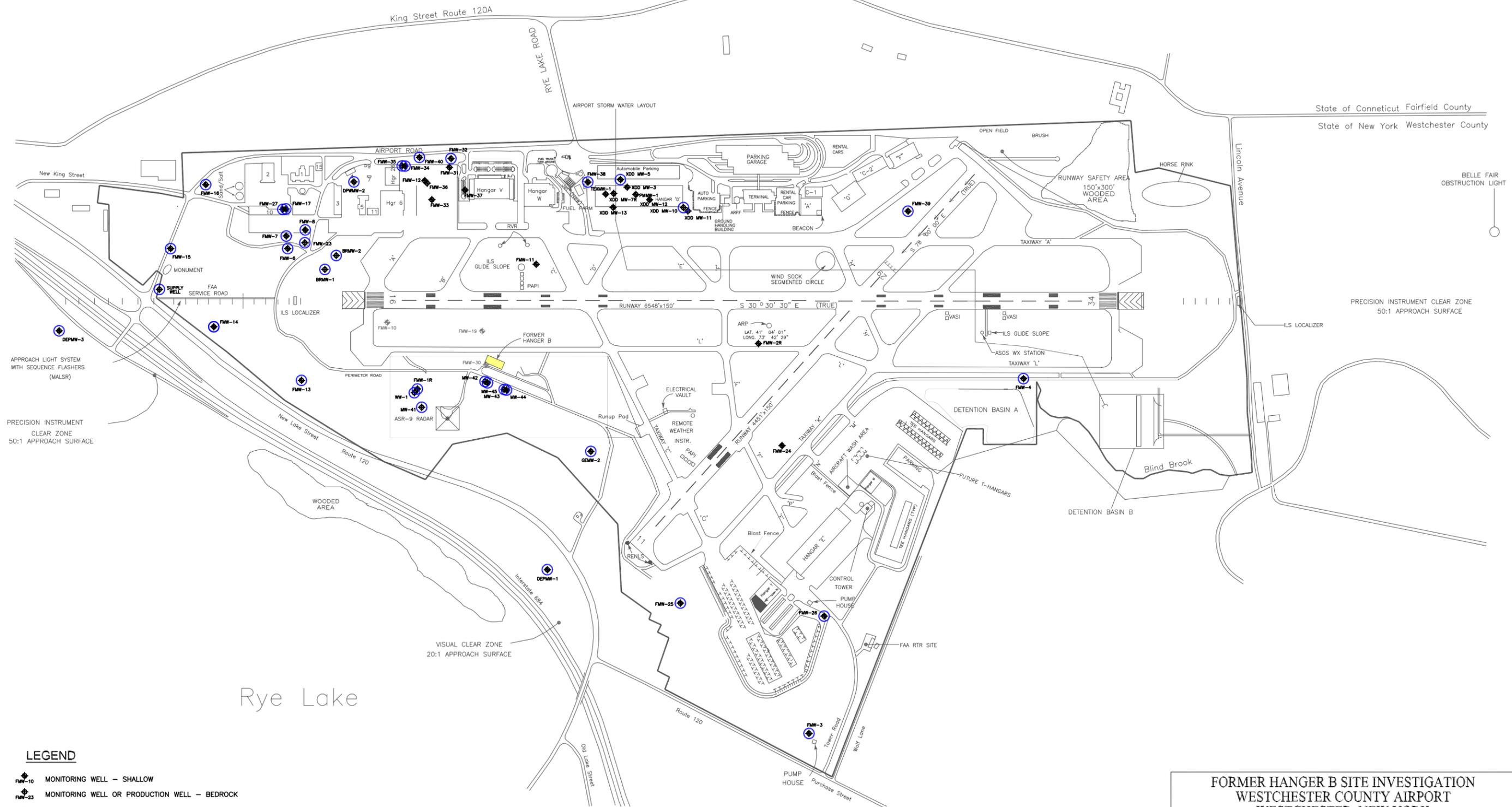
J - The result is an estimated value below the reporting limit

RSCO - Recommended Soil Cleanup Objective per Technical and Administrative Guidance Memorandum (TAGM) 4046.

**Bold** text indicates exceedence of the RSCO

## **FIGURES**

T.N.  
M.N.  
var.12.7 W  
(1884)



**LEGEND**

- MONITORING WELL - SHALLOW
- MONITORING WELL OR PRODUCTION WELL - BEDROCK
- SENTINEL MONITORING WELL

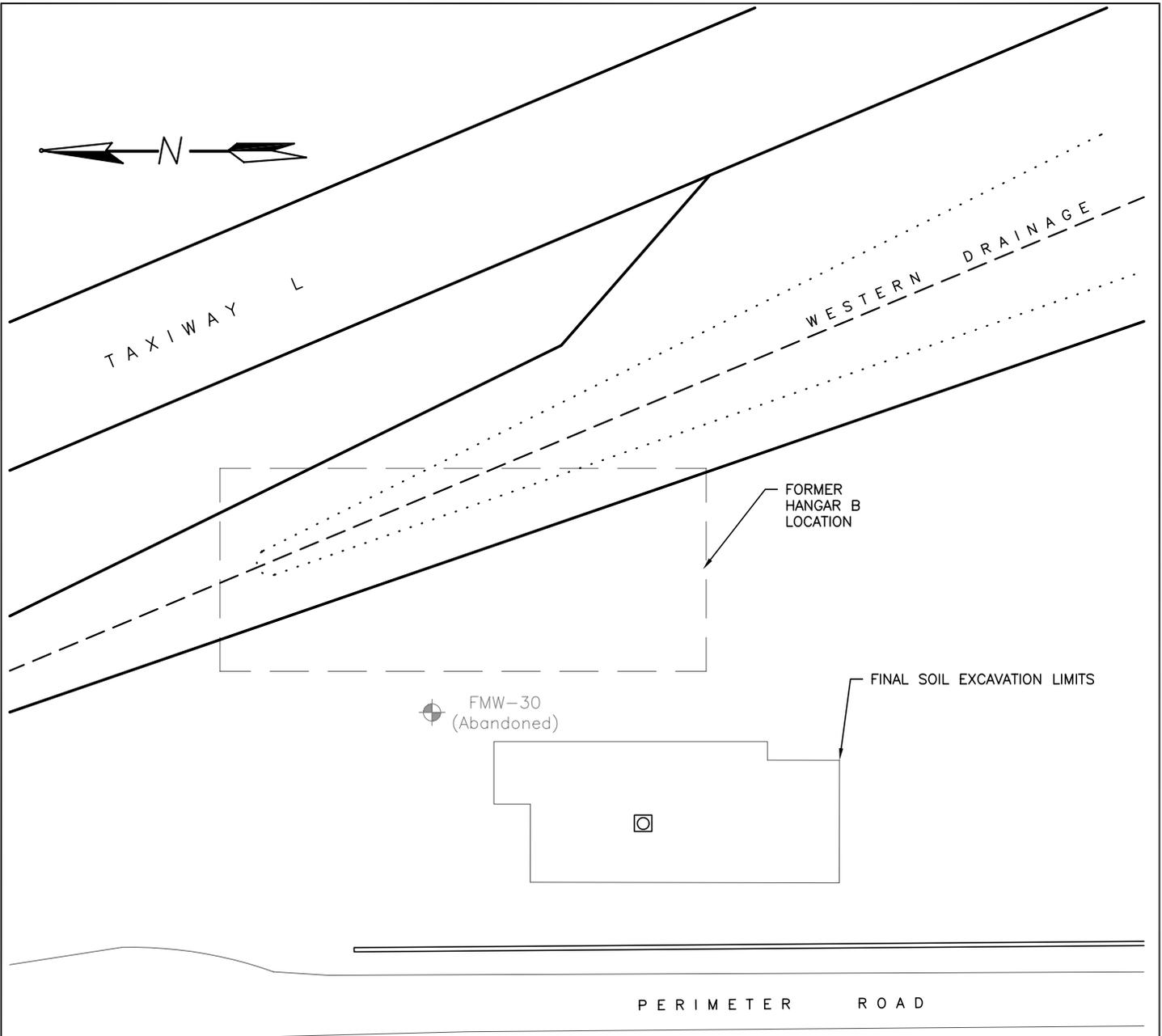
**NOTE:**  
BASE MAP TAKEN FROM FIRST ENVIRONMENT REPORT "SITE INVESTIGATION REPORT AND GROUND-WATER MONITORING PROGRAM, WESTCHESTER COUNTY AIRPORT, FEBRUARY 2001."  
MONITOR WELLS FMW-10, FMW-19 AND FMW-30 DESTROYED DURING CONSTRUCTION ACTIVITIES.

**FORMER HANGER B SITE INVESTIGATION  
WESTCHESTER COUNTY AIRPORT  
WESTCHESTER, NEW YORK**

**SITE LOCATION MAP**

DATE	REVISED	PREPARED BY:
		LEGGETTE, BRASHEARS & GRAHAM, INC. Professional Ground-Water and Environmental Engineering Services 110 Corporate Park Drive Suite 112 White Plains, NY 10604 (914) 694-5711
DRAWN:	MRV	CHECKED: ED
DATE:	1/17/03	FIGURE: 1

0 400  
SCALE IN FEET



**LEGEND**

-  FORMER SEPTIC TANK
-  EXISTING SHALLOW OVERBURDEN WELL
-  EXISTING BEDROCK WELL



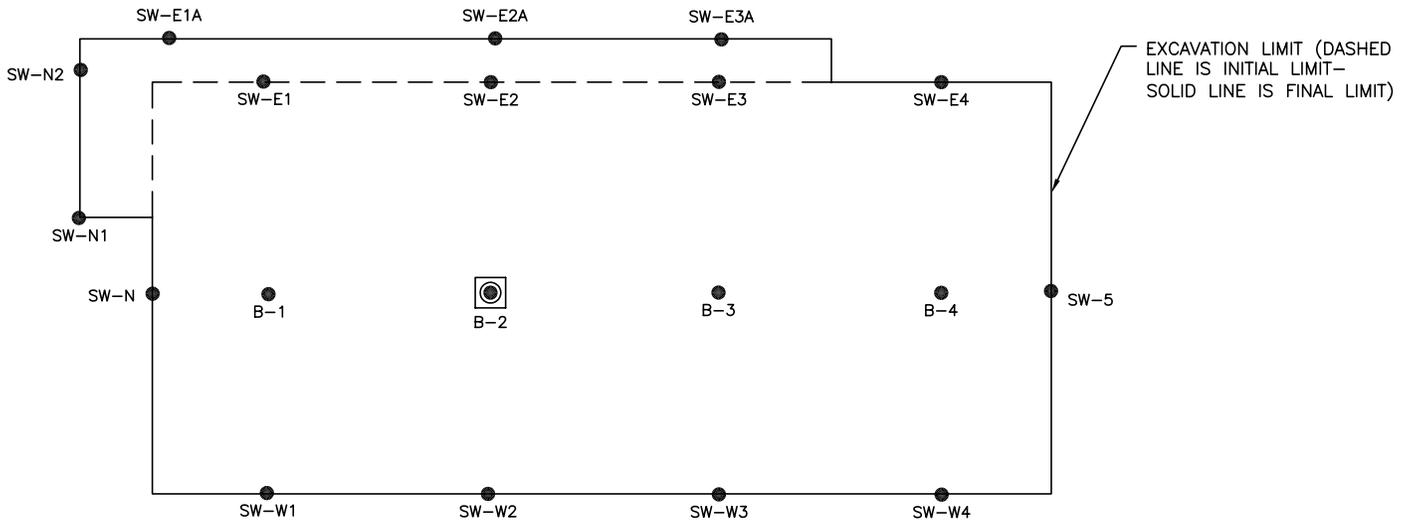
**FORMER HANGAR B SITE IRM  
WESTCHESTER COUNTY AIRPORT  
WESTCHESTER, NEW YORK**

**FINAL EXCAVATION LIMITS**

DATE	REVISED	PREPARED BY:
		LEGGETTE, BRASHEARS & GRAHAM, INC.
		Professional Ground-Water and Environmental Engineering Services
		110 Corporate Park Drive
		Suite 112
		White Plains, NY 10604
		(914) 694-5711
<b>DRAWN:</b>	CP	<b>CHECKED:</b> JB
		<b>DATE:</b> 10/5/05
		<b>FIGURE:</b> 2



FORMER HANGER B



**LEGEND**

-  FORMER SEPTIC TANK
-  SOIL SAMPLE LOCATION
- SW SIDE WALL SAMPLE
- B BOTTOM SAMPLE



**FORMER HANGAR B SITE IRM  
WESTCHESTER COUNTY AIRPORT  
WESTCHESTER, NEW YORK**

**CONFIRMATION SAMPLE LOCATIONS**

DATE	REVISED	PREPARED BY:
		<b>LEGGETTE, BRASHEARS &amp; GRAHAM, INC.</b> Professional Ground-Water and Environmental Engineering Services 110 Corporate Park Drive Suite 112 White Plains, NY 10604 (914) 694-5711
<b>DRAWN:</b>	CP	<b>CHECKED:</b> JB
<b>DATE:</b>	10/4/05	<b>FIGURE:</b> 3

