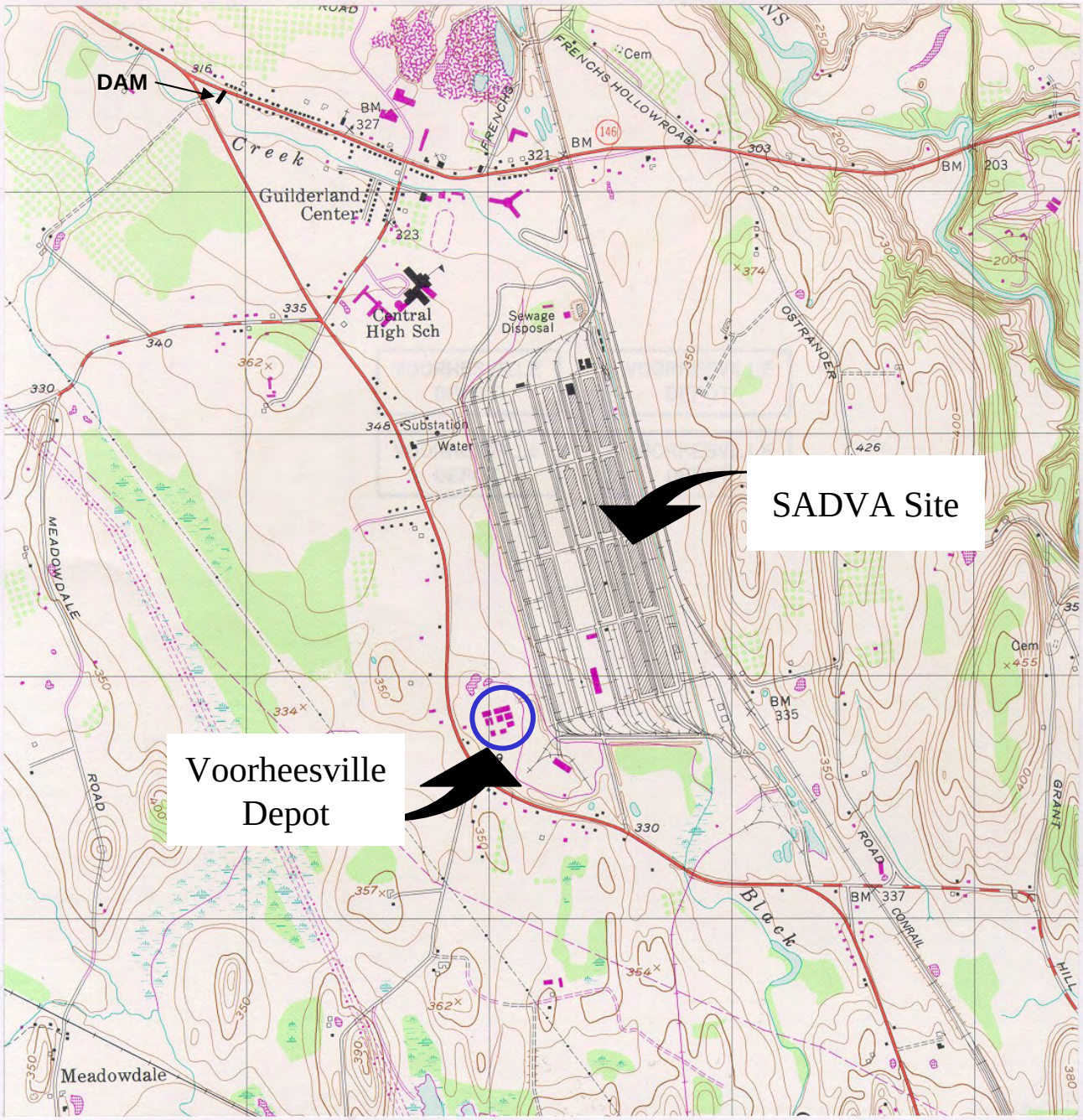


New York Quadrangle

N

LATITUDE: N42° 15' 20"
LONGITUDE: W75° 14' 38"

0 1000 2000

Approximate Scale in Feet

FIGURE 1.1

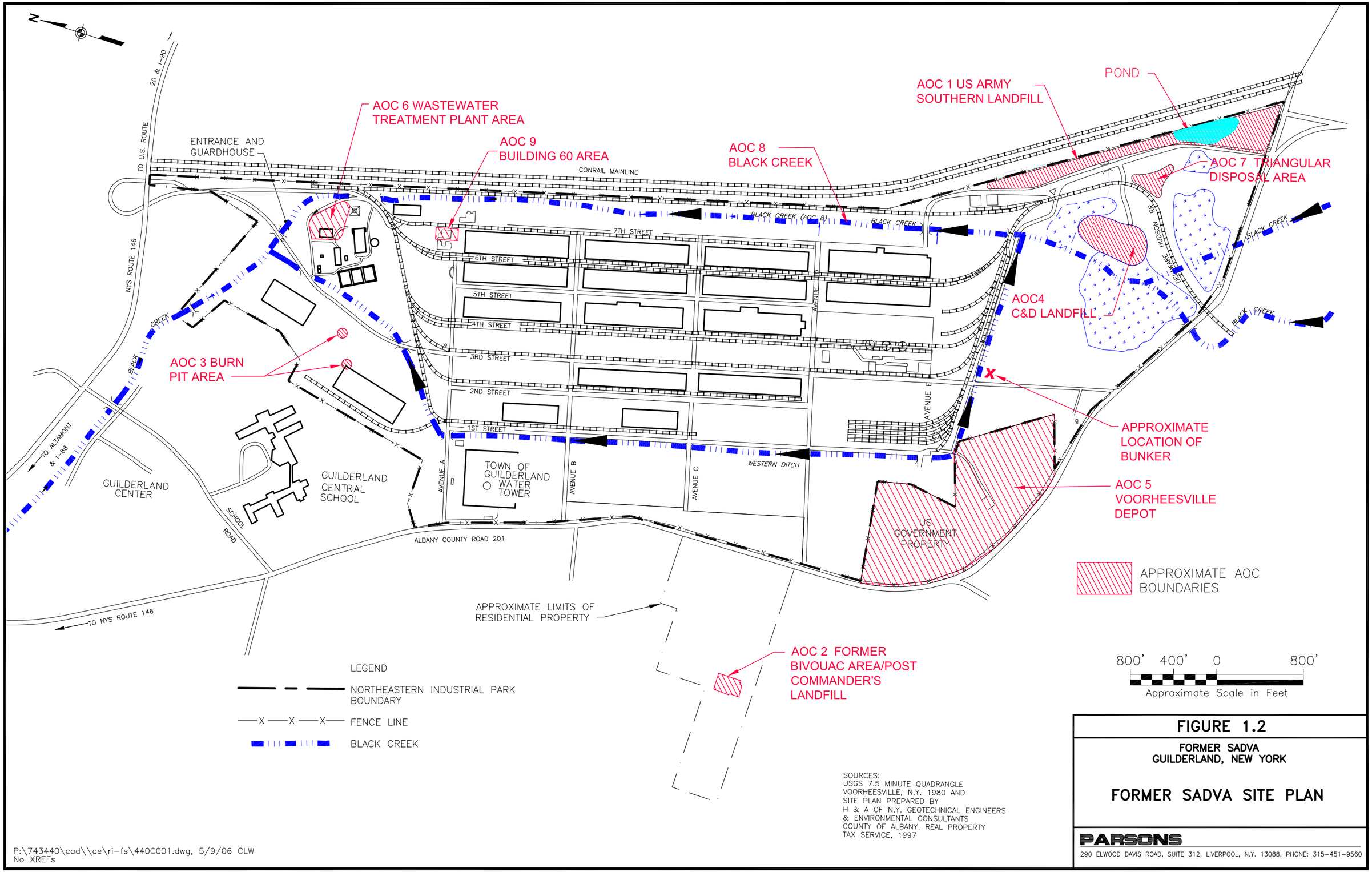
SADVA
GUILDERLAND, NEW YORK

SITE VICINITY MAP

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088 PHONE: (315) 451-9560

P:\736741\GRAPHICS\figure1.1.PPT




SOURCES:
USGS 7.5 MINUTE QUADRANGLE
VOORHEESVILLE, N.Y. 1980 AND
SITE PLAN PREPARED BY
H & A OF N.Y. GEOTECHNICAL ENGINEERS
& ENVIRONMENTAL CONSULTANTS
COUNTY OF ALBANY, REAL PROPERTY
TAX SERVICE, 1997

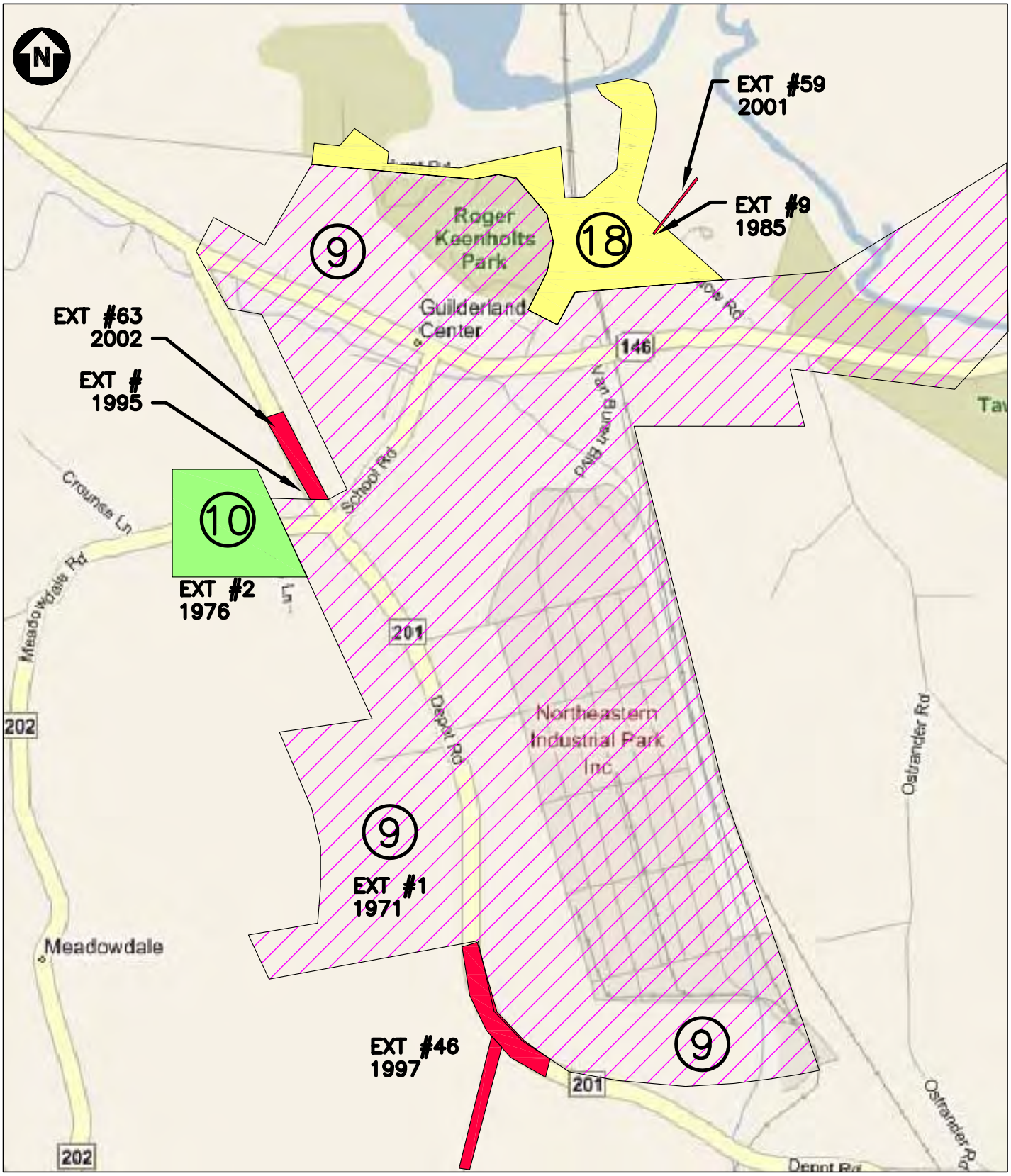
P:\743440\cad\\ce\ri-fs\440C001.dwg, 5/9/06 CLW
No XREFs

**FIGURE 1.2**

**FORMER SADVA**
**GUILDERLAND, NEW YORK**

**FORMER SADVA SITE PLAN**

**PARSONS**
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




NOT TO SCALE

FIGURE 2.1

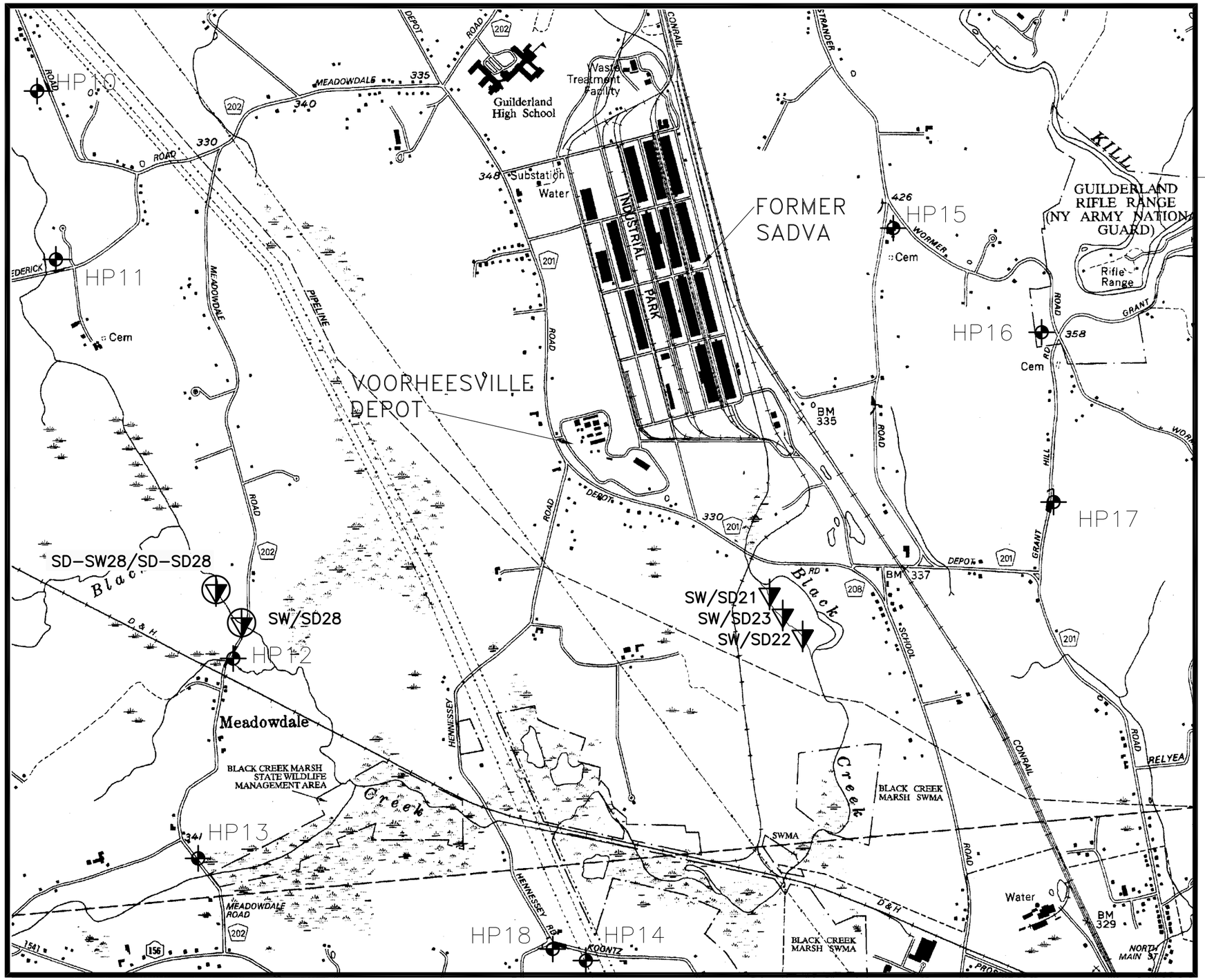
FORMER SADVA
GUILDERLAND, NEW YORK

GUILDERLAND WATER SYSTEM COVERAGE

PARSON

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

No XREFs
P:\743440\CAD\CE\FIGURE 2.1.DWG; 2/5/07; CLW




## LEGEND

| | |
|---|---|
| SW/SD21 | SURFACE WATER/SEDIMENT SAMPLE LOCATION (COLLECTED AUGUST AND OCTOBER 2000) |
| SW/SD28 | SURFACE WATER/SEDIMENT SAMPLE LOCATION (COLLECTED OCTOBER 2002 OR JULY 2004) |
| —X—X—X— | FENCING |
| HP14 | BACKGROUND SURFACE SOIL SAMPLE LOCATION (COLLECTED OCTOBER 2000) |
| SADVA | SCHENECTADY ARMY DEPOT VOORHEESVILLE AREA |

1000 500 0 1000 2000

Approximate Scale in Feet

FIGURE 3.1

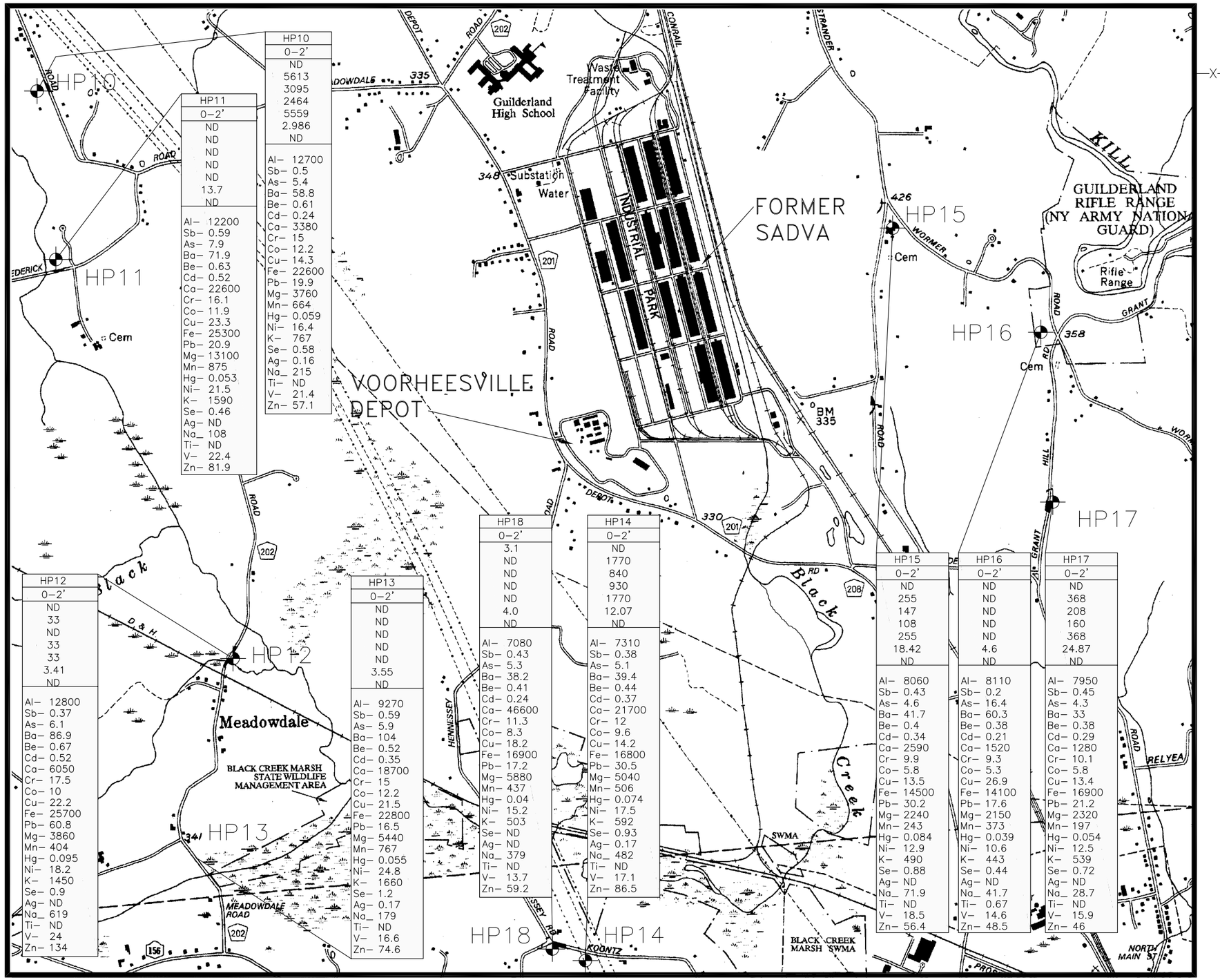
FORMER SADVA
GUILDERLAND, NEW YORK

**BACKGROUND SAMPLE LOCATION MAP**

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (SADVA)\CAD\CE\RI-FS\440C003.DWG 2/5/07 CLW
No XREFs




| HP10 |
|---|
| 0–2' |
| ND |
| 5613 |
| 3095 |
| 2464 |
| 5559 |
| 2.986 |
| ND |
| Al– 12700 |
| Sb– 0.5 |
| As– 5.4 |
| Ba– 58.8 |
| Be– 0.61 |
| Cd– 0.24 |
| Ca– 3380 |
| Cr– 15 |
| Co– 12.2 |
| Cu– 14.3 |
| Fe– 22600 |
| Pb– 19.9 |
| Mg– 3760 |
| Mn– 664 |
| Hg– 0.059 |
| Ni– 16.4 |
| K– 767 |
| Se– 0.58 |
| Ag– 0.16 |
| Na_ 215 |
| Ti– ND |
| V– 21.4 |
| Zn– 57.1 |

| HP11 |
|---|
| 0–2' |
| ND |
| ND |
| ND |
| ND |
| ND |
| 13.7 |
| ND |
| Al– 12200 |
| Sb– 0.59 |
| As– 7.9 |
| Ba– 71.9 |
| Be– 0.63 |
| Cd– 0.52 |
| Ca– 22600 |
| Cr– 16.1 |
| Co– 11.9 |
| Cu– 23.3 |
| Fe– 25300 |
| Pb– 20.9 |
| Mg– 13100 |
| Mn– 875 |
| Hg– 0.053 |
| Ni– 21.5 |
| K– 1590 |
| Se– 0.46 |
| Ag– ND |
| Na_ 108 |
| Ti– ND |
| V– 22.4 |
| Zn– 81.9 |

| HP12 |
|---|
| 0–2' |
| ND |
| 33 |
| ND |
| 33 |
| 33 |
| 3.41 |
| ND |
| Al– 12800 |
| Sb– 0.37 |
| As– 6.1 |
| Ba– 86.9 |
| Be– 0.67 |
| Cd– 0.52 |
| Ca– 6050 |
| Cr– 17.5 |
| Co– 10 |
| Cu– 22.2 |
| Fe– 25700 |
| Pb– 60.8 |
| Mg– 3860 |
| Mn– 404 |
| Hg– 0.095 |
| Ni– 18.2 |
| K– 1450 |
| Se– 0.9 |
| Ag– ND |
| Na_ 619 |
| Ti– ND |
| V– 24 |
| Zn– 134 |

| HP13 |
|---|
| 0–2' |
| ND |
| ND |
| ND |
| ND |
| ND |
| 3.55 |
| ND |
| Al– 9270 |
| Sb– 0.59 |
| As– 5.9 |
| Ba– 104 |
| Be– 0.52 |
| Cd– 0.35 |
| Ca– 18700 |
| Cr– 15 |
| Co– 12.2 |
| Cu– 21.5 |
| Fe– 22800 |
| Pb– 16.5 |
| Mg– 5440 |
| Mn– 767 |
| Hg– 0.055 |
| Ni– 24.8 |
| K– 1660 |
| Se– 1.2 |
| Ag– 0.17 |
| Na_ 179 |
| Ti– ND |
| V– 16.6 |
| Zn– 74.6 |

| HP18 |
|---|
| 0–2' |
| 3.1 |
| ND |
| ND |
| ND |
| ND |
| 4.0 |
| ND |
| Al– 7080 |
| Sb– 0.43 |
| As– 5.3 |
| Ba– 38.2 |
| Be– 0.41 |
| Cd– 0.24 |
| Ca– 46600 |
| Cr– 11.3 |
| Co– 8.3 |
| Cu– 18.2 |
| Fe– 16900 |
| Pb– 17.2 |
| Mg– 5880 |
| Mn– 437 |
| Hg– 0.04 |
| Ni– 15.2 |
| K– 503 |
| Se– ND |
| Ag– ND |
| Na_ 379 |
| Ti– ND |
| V– 13.7 |
| Zn– 59.2 |

| HP14 |
|---|
| 0–2' |
| ND |
| 1770 |
| 840 |
| 930 |
| 1770 |
| 12.07 |
| ND |
| Al– 7310 |
| Sb– 0.38 |
| As– 5.1 |
| Ba– 39.4 |
| Be– 0.44 |
| Cd– 0.37 |
| Ca– 21700 |
| Cr– 12 |
| Co– 9.6 |
| Cu– 14.2 |
| Fe– 16800 |
| Pb– 30.5 |
| Mg– 5040 |
| Mn– 506 |
| Hg– 0.074 |
| Ni– 17.5 |
| K– 592 |
| Se– 0.93 |
| Ag– 0.17 |
| Na_ 482 |
| Ti– ND |
| V– 17.1 |
| Zn– 86.5 |

| HP15 |
|---|
| 0–2' |
| ND |
| 255 |
| 147 |
| 108 |
| 255 |
| 18.42 |
| ND |
| Al– 8060 |
| Sb– 0.43 |
| As– 4.6 |
| Ba– 41.7 |
| Be– 0.4 |
| Cd– 0.34 |
| Ca– 2590 |
| Cr– 9.9 |
| Co– 5.8 |
| Cu– 13.5 |
| Fe– 14500 |
| Pb– 30.2 |
| Mg– 2240 |
| Mn– 243 |
| Hg– 0.084 |
| Ni– 12.9 |
| K– 490 |
| Se– 0.88 |
| Ag– ND |
| Na_ 71.9 |
| Ti– ND |
| V– 18.5 |
| Zn– 56.4 |

| HP16 |
|---|
| 0–2' |
| ND |
| ND |
| ND |
| ND |
| ND |
| 4.6 |
| ND |
| Al– 8110 |
| Sb– 0.2 |
| As– 16.4 |
| Ba– 60.3 |
| Be– 0.38 |
| Cd– 0.21 |
| Ca– 1520 |
| Cr– 9.3 |
| Co– 5.3 |
| Cu– 26.9 |
| Fe– 14100 |
| Pb– 17.6 |
| Mg– 2150 |
| Mn– 373 |
| Hg– 0.039 |
| Ni– 10.6 |
| K– 443 |
| Se– 0.44 |
| Ag– ND |
| Na_ 41.7 |
| Ti– 0.67 |
| V– 14.6 |
| Zn– 48.5 |

| HP17 |
|---|
| 0–2' |
| ND |
| 368 |
| 208 |
| 160 |
| 368 |
| 24.87 |
| ND |
| Al– 7950 |
| Sb– 0.45 |
| As– 4.3 |
| Ba– 33 |
| Be– 0.38 |
| Cd– 0.29 |
| Ca– 1280 |
| Cr– 10.1 |
| Co– 5.8 |
| Cu– 13.4 |
| Fe– 16900 |
| Pb– 21.2 |
| Mg– 2320 |
| Mn– 197 |
| Hg– 0.054 |
| Ni– 12.5 |
| K– 539 |
| Se– 0.72 |
| Ag– ND |
| Na_ 28.7 |
| Ti– ND |
| V– 15.9 |
| Zn– 46 |

## LEGEND

—X—X—X— FENCING

HP14 ✛ BACKGROUND SURFACE SOIL SAMPLE LOCATION (COLLECTED OCTOBER 2000)

SADVA SCHENECTADY ARMY DEPOT VOORHEESVILLE AREA

| | |
|---|---|
| HP10 | SAMPLE ID |
| 0–2' | DEPTH (FEET) |
| ND | TOTAL VOCs (ug/kg) |
| 5613 | TOTAL SVOCs (ug/kg) |
| 3095 | TOTAL CPAHs (ug/kg) |
| 2464 | TOTAL NPAHs (ug/kg) |
| 5559 | TOTAL PAHs (ug/kg) |
| 2.986 | TOTAL PESTICIDES (ug/kg) |
| ND | TOTAL PCBs (ug/kg) |
| | METALS (mg/kg) |
| Al– 12700 | Al– ALUMINUM |
| Sb– 0.5 | Sb– ANTIMONY |
| As– 5.4 | As– ARSENIC |
| Ba– 58.8 | Ba– BARIUM |
| Be– 0.61 | Be– BERYLLIUM |
| Cd– 0.29 | Cd– CADMIUM |
| Ca– 3380 | Ca– CALCIUM |
| Cr– 15 | Cr– CHROMIUM |
| Co– 12.2 | Co– COBALT |
| Cu– 14.3 | Cu– COPPER |
| Fe– 22600 | Fe– IRON |
| Pb– 19.9 | Pb– LEAD |
| Mg– 3760 | Mg– MAGNESIUM |
| Mn– 664 | Mn– MANGANESE |
| Hg– 0.059 | Hg– MERCURY |
| Ni– 16.4 | Ni– NICKEL |
| K– 767 | K– POTASSIUM |
| Se– 0.58 | Se– SELENIUM |
| Ag– 0.16 | Ag– SILVER |
| Na_ 215 | Na– SODIUM |
| Ti– ND | Ti– THALLIUM |
| V– 21.4 | V– VANADIUM |
| Zn– 57.1 | Zn– ZINC |

*– DUPLICATE SAMPLE COLLECTED, HIGHEST CONCENTRATION SHOWN.

1000 500 0 1000 2000

Approximate Scale in Feet

# FIGURE 3.2

FORMER SADVA
GUILDERLAND, NEW YORK

**BACKGROUND SOIL SAMPLE RESULTS**

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315–451–9560

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No XREFs

AREA OF REGRADED SOIL

APPROXIMATE FILL BOUNDARY OF AOC 1

AOC 4

SW05/SD05

SEASONAL SURFACE WATER

ACE-5

C&D LANDFILL

2BMW-9

V-19 NYSDEC FRESHWATER WETLAND

GW14

AOC 7 TRIANGULAR DISPOSAL AREA

GW13

2AMW-8

2AMW-7

SW06/SD06

2AMW-6

DELAWARE HUDSON RR

V-19 NYSDEC FRESHWATER WETLAND

SW07/SD07

GW-11R

ACE-6

STANDING SURFACE WATER

SW04/SD04

AMW-1

AMW-3

ACE-2

AMW-2

AMW-4

GW12

APPROXIMATE AREA OF GROUNDWATER CONTAMINATED WITH VOCs

BLACK CREEK

BLACK CREEK

LEGEND

GW12 SHALLOW WELL LOCATIONS (INSTALLED NOVEMBER 2004)

EXISTING MONITORING WELLS

GW-11R EXISTING DEEP BEDROCK WELL

SEDIMENT SAMPLE LOCATION

AREA OF REGRADED SOIL

SITE BOUNDARY

APPROXIMATE FILL BOUNDARY OF AOC 1

300 150 0 300 600

Approximate Scale in Feet

MAP SOURCE: MALCOLM PIRNIE, 1997

P:\743440 (SADVA)\cad\CE\RI-FS\AOC1-C001.dwg, 2/5/07
XREFs: SITEBASE.DWG

**FIGURE 3.3**

FORMER SADVA
GUILDERLAND, NEW YORK

**AOC 1**
**U.S. ARMY**
**SOUTHERN LANDFILL SITE PLAN**

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

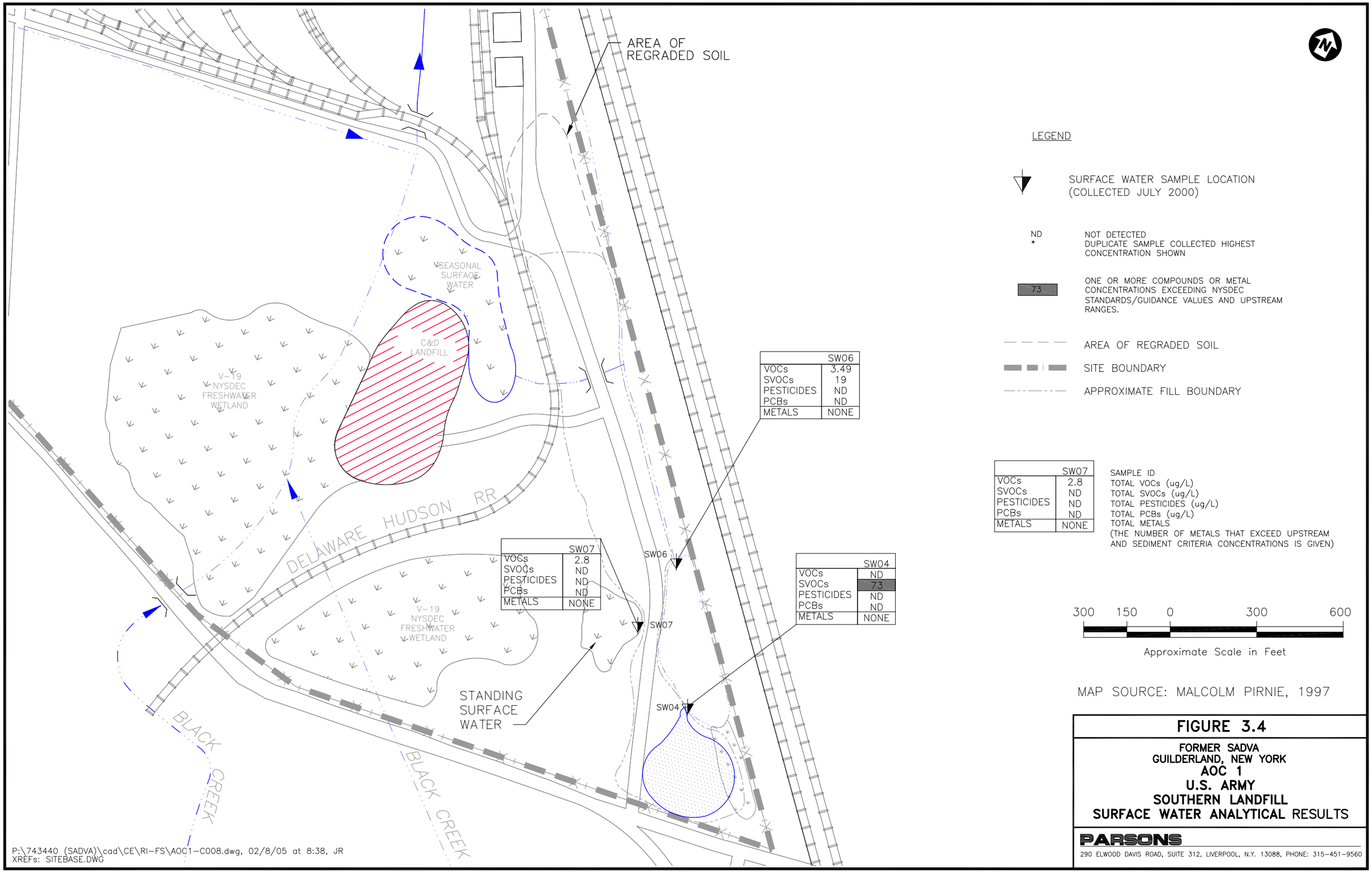
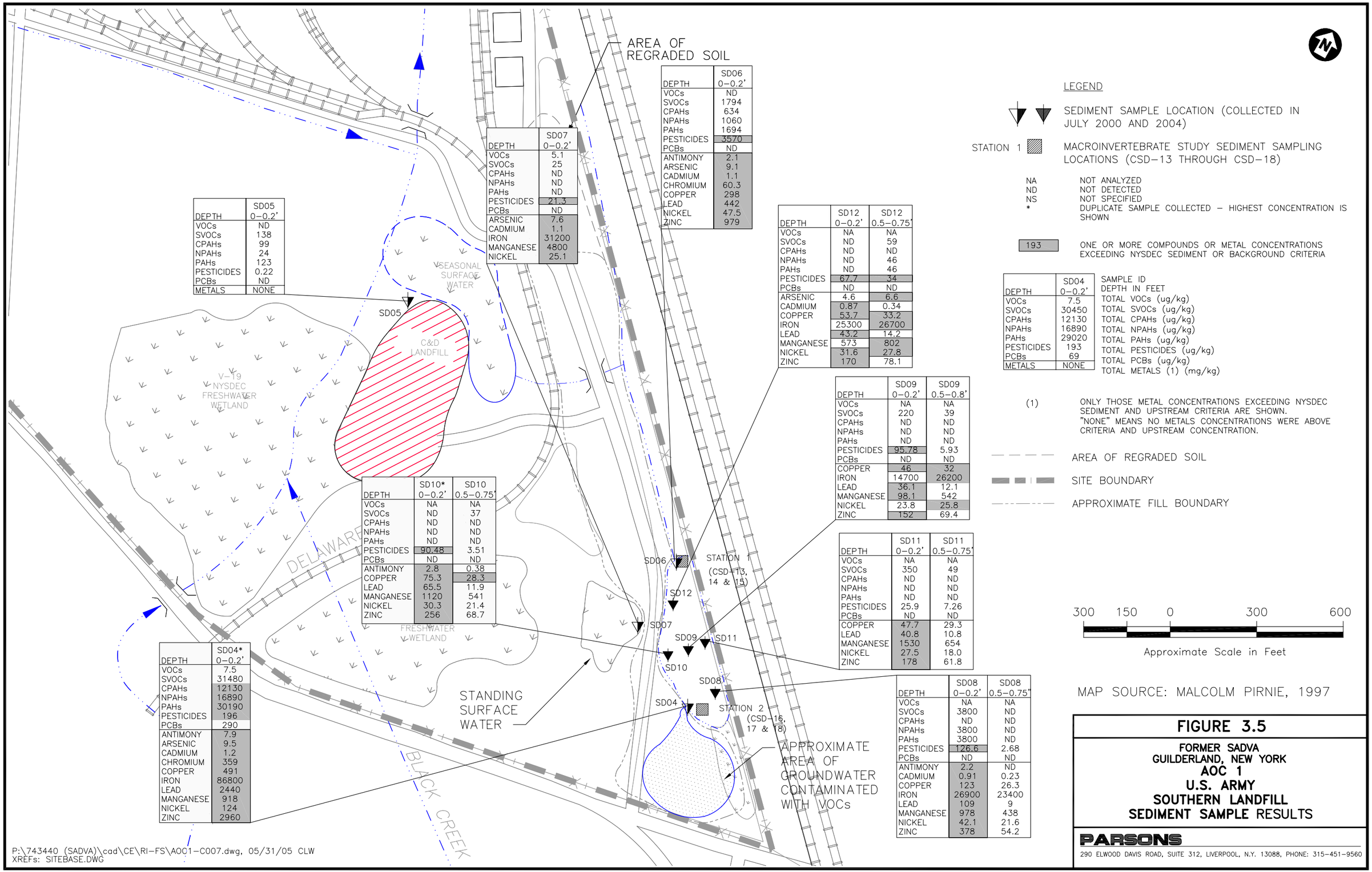



**FIGURE 3.4**

**FORMER SADVA**
**GUILDERLAND, NEW YORK**
**AOC 1**
**U.S. ARMY**
**SOUTHERN LANDFILL**
**SURFACE WATER ANALYTICAL RESULTS**

**PARSONS**

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




| DEPTH | SD05 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 138 |
| CPAHs | 99 |
| NPAHs | 24 |
| PAHs | 123 |
| PESTICIDES | 0.22 |
| PCBs | ND |
| METALS | NONE |

| DEPTH | SD07 0–0.2' |
|---|---|
| VOCs | 5.1 |
| SVOCs | 25 |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | 21.3 |
| PCBs | ND |
| ARSENIC | 7.6 |
| CADMIUM | 1.1 |
| IRON | 31200 |
| MANGANESE | 4800 |
| NICKEL | 25.1 |

| DEPTH | SD06 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 1794 |
| CPAHs | 634 |
| NPAHs | 1060 |
| PAHs | 1694 |
| PESTICIDES | 3570 |
| PCBs | ND |
| ANTIMONY | 2.1 |
| ARSENIC | 9.1 |
| CADMIUM | 1.1 |
| CHROMIUM | 60.3 |
| COPPER | 298 |
| LEAD | 442 |
| NICKEL | 47.5 |
| ZINC | 979 |

| DEPTH | SD12 0–0.2' | SD12 0.5–0.75' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | ND | 59 |
| CPAHs | ND | ND |
| NPAHs | ND | 46 |
| PAHs | ND | 46 |
| PESTICIDES | 67.7 | 34 |
| PCBs | ND | ND |
| ARSENIC | 4.6 | 6.6 |
| CADMIUM | 0.87 | 0.34 |
| COPPER | 53.7 | 33.2 |
| IRON | 25300 | 26700 |
| LEAD | 43.2 | 14.2 |
| MANGANESE | 573 | 802 |
| NICKEL | 31.6 | 27.8 |
| ZINC | 170 | 78.1 |

| DEPTH | SD09 0–0.2' | SD09 0.5–0.8' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 220 | 39 |
| CPAHs | ND | ND |
| NPAHs | ND | ND |
| PAHs | ND | ND |
| PESTICIDES | 95.78 | 5.93 |
| PCBs | ND | ND |
| COPPER | 46 | 32 |
| IRON | 14700 | 26200 |
| LEAD | 36.1 | 12.1 |
| MANGANESE | 98.1 | 542 |
| NICKEL | 23.8 | 25.8 |
| ZINC | 152 | 69.4 |

| DEPTH | SD10* 0–0.2' | SD10 0.5–0.75' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | ND | 37 |
| CPAHs | ND | ND |
| NPAHs | ND | ND |
| PAHs | ND | ND |
| PESTICIDES | 90.48 | 3.51 |
| PCBs | ND | ND |
| ANTIMONY | 2.8 | 0.38 |
| COPPER | 75.3 | 28.3 |
| LEAD | 65.5 | 11.9 |
| MANGANESE | 1120 | 541 |
| NICKEL | 30.3 | 21.4 |
| ZINC | 256 | 68.7 |

| DEPTH | SD11 0–0.2' | SD11 0.5–0.75' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 350 | 49 |
| CPAHs | ND | ND |
| NPAHs | ND | ND |
| PAHs | ND | ND |
| PESTICIDES | 25.9 | 7.26 |
| PCBs | ND | ND |
| COPPER | 47.7 | 29.3 |
| LEAD | 40.8 | 10.8 |
| MANGANESE | 1530 | 654 |
| NICKEL | 27.5 | 18.0 |
| ZINC | 178 | 61.8 |

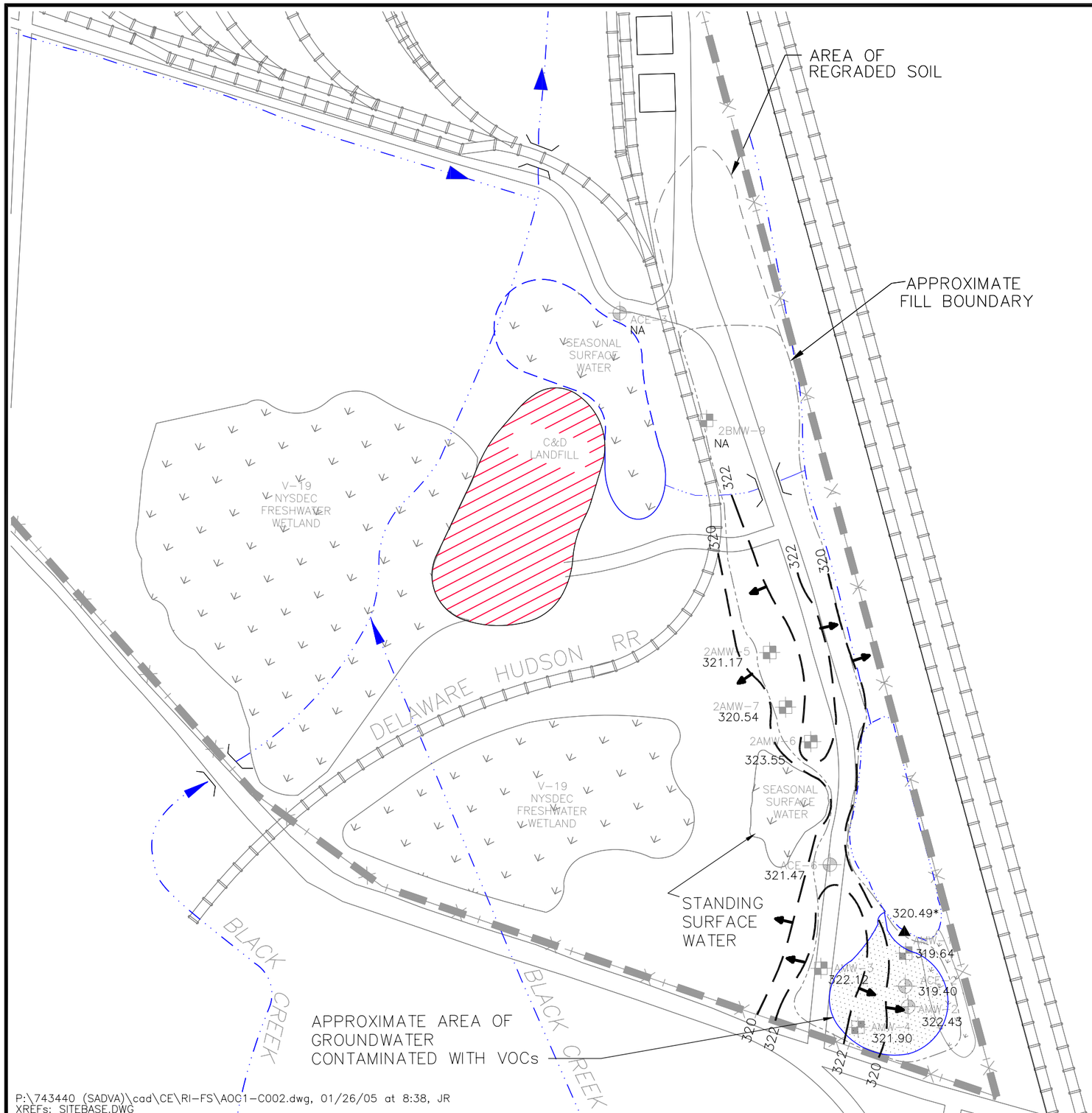
| DEPTH | SD04* 0–0.2' |
|---|---|
| VOCs | 7.5 |
| SVOCs | 31480 |
| CPAHs | 12130 |
| NPAHs | 16890 |
| PAHs | 30190 |
| PESTICIDES | 196 |
| PCBs | 290 |
| ANTIMONY | 7.9 |
| ARSENIC | 9.5 |
| CADMIUM | 1.2 |
| CHROMIUM | 359 |
| COPPER | 491 |
| IRON | 86800 |
| LEAD | 2440 |
| MANGANESE | 918 |
| NICKEL | 124 |
| ZINC | 2960 |

| DEPTH | SD08 0–0.2' | SD08 0.5–0.75' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 3800 | ND |
| CPAHs | ND | ND |
| NPAHs | 3800 | ND |
| PAHs | 3800 | ND |
| PESTICIDES | 126.6 | 2.68 |
| PCBs | ND | ND |
| ANTIMONY | 2.2 | ND |
| CADMIUM | 0.91 | 0.23 |
| COPPER | 123 | 26.3 |
| IRON | 26900 | 23400 |
| LEAD | 109 | 9 |
| MANGANESE | 978 | 438 |
| NICKEL | 42.1 | 21.6 |
| ZINC | 378 | 54.2 |

# FIGURE 3.5

**FORMER SADVA**
**GUILDERLAND, NEW YORK**
**AOC 1**
**U.S. ARMY**
**SOUTHERN LANDFILL**
**SEDIMENT SAMPLE RESULTS**

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




LEGEND

- WELL LOCATIONS
- 322 GROUNDWATER CONTOUR
- 322 INFERRED GROUNDWATER CONTOUR
- 321.32 GROUNDWATER ELEVATION (ELEVATIONS MEASURED ON JUNE 29, 2000)
- GROUNDWATER FLOW DIRECTION
- NA ELEVATION NOT AVAILABLE
- STAFF GAUGE
- * STAFF GAUGE SURVEYED IN JULY, 2000. ELEVATION OF WATER LEVEL IN POND.
- AREA OF REGRADED SOIL
- SITE BOUNDARY
- APPROXIMATE FILL BOUNDARY

300 150 0 300 600

Approximate Scale in Feet

MAP SOURCE: MALCOLM PIRNIE, 1997

**FIGURE 3.6A**

**FORMER SADVA**
**GUILDERLAND, NEW YORK**

**AOC 1**
**GROUNDWATER ELEVATIONS**
**JUNE 29, 2000**

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (SADVA)\cad\CE\RI-FS\AOC1-C002.dwg, 01/26/05 at 8:38, JR
XREFs: SITEBASE.DWG

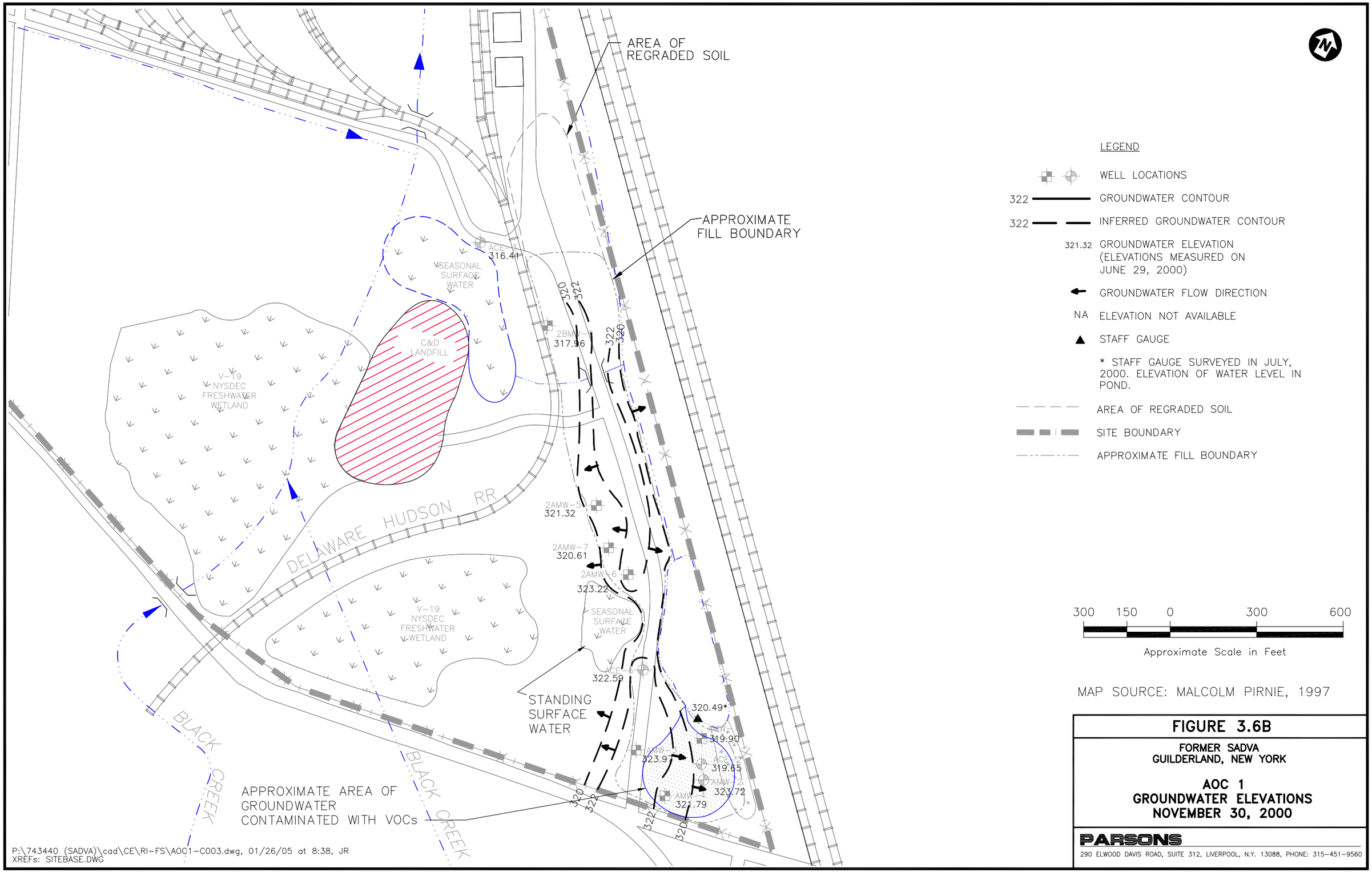


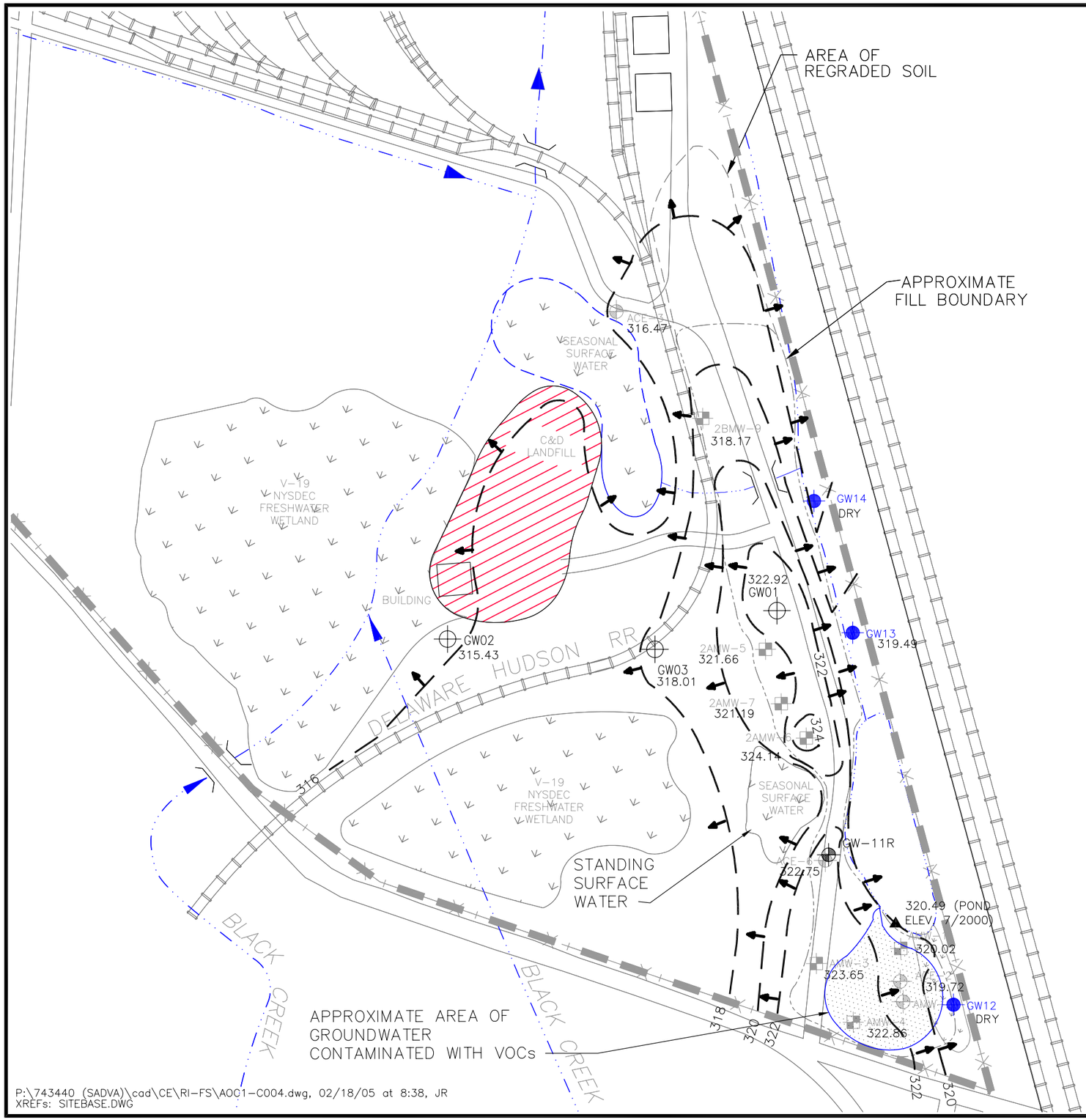

**FIGURE 3.6B**

**FORMER SADVA**
**GUILDERLAND, NEW YORK**

**AOC 1**
**GROUNDWATER ELEVATIONS**
**NOVEMBER 30, 2000**

**PARSONS**

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




LEGEND

- WELL LOCATIONS
- 322 GROUNDWATER CONTOUR
- 322 INFERRED GROUNDWATER CONTOUR
- 321.32 GROUNDWATER ELEVATION (ELEVATIONS MEASURED ON DECEMBER 7, 2004)
- GROUNDWATER FLOW DIRECTION
- NA ELEVATION NOT AVAILABLE
- STAFF GAUGE
- * STAFF GAUGE SURVEYED JULY, 2000. ELEVATION OF WATER LEVEL IN POND.
- AREA OF REGRADED SOIL
- SITE BOUNDARY
- APPROXIMATE FILL BOUNDARY

300 150 0 300 600

Approximate Scale in Feet

MAP SOURCE: MALCOLM PIRNIE, 1997

**FIGURE 3.6C**

**FORMER SADVA**
**GUILDERLAND, NEW YORK**

**AOC 1**
**GROUNDWATER ELEVATIONS**
**DECEMBER 7, 2004**

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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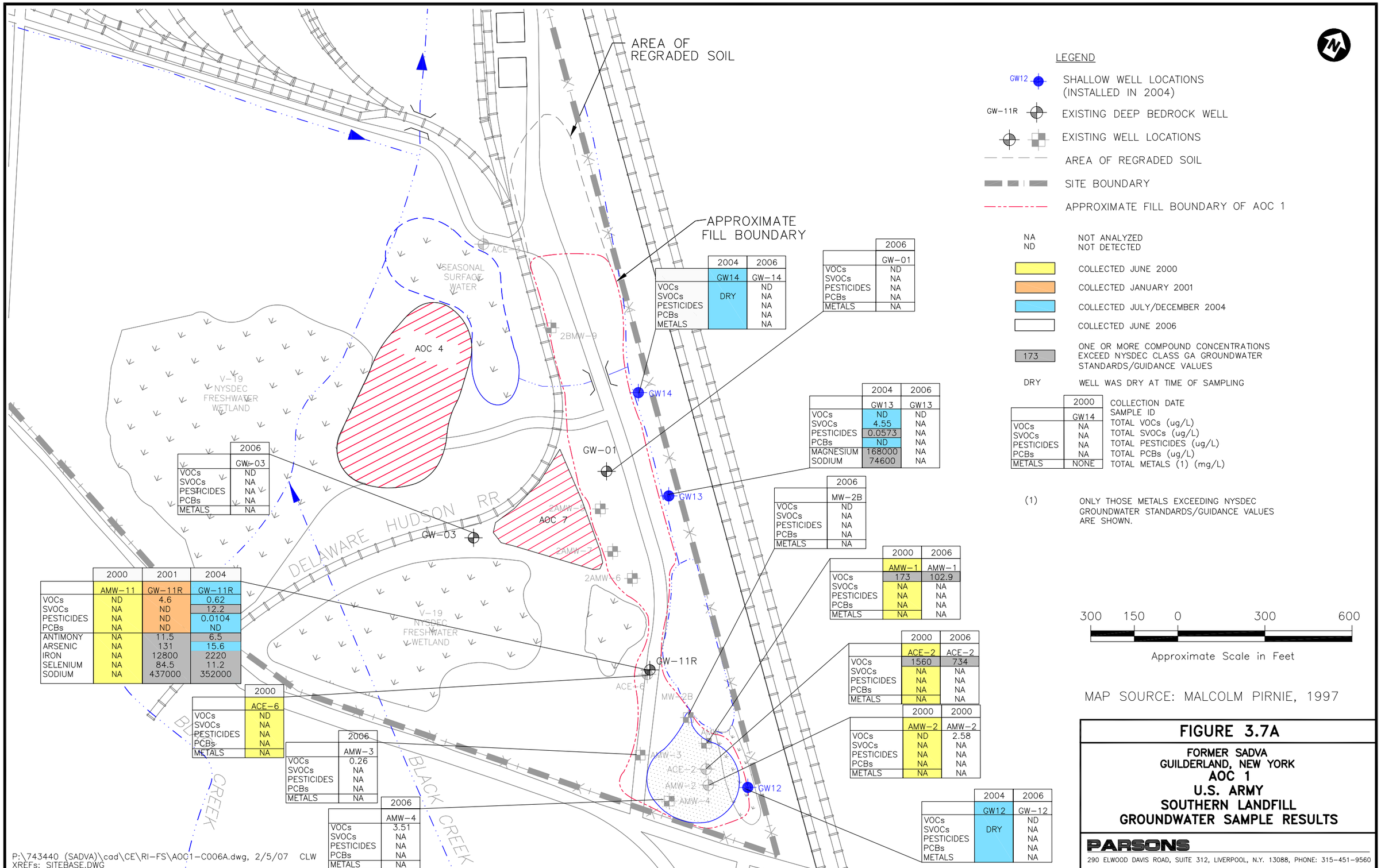



| | 2004 | 2006 |
|---|---|---|
| | GW14 | GW-14 |
| VOCs | DRY | ND |
| SVOCs | | NA |
| PESTICIDES | | NA |
| PCBs | | NA |
| METALS | | NA |

| | 2006 |
|---|---|
| | GW-01 |
| VOCs | ND |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NA |

| | 2004 | 2006 |
|---|---|---|
| | GW13 | GW13 |
| VOCs | ND | ND |
| SVOCs | 4.55 | NA |
| PESTICIDES | 0.0573 | NA |
| PCBs | ND | NA |
| MAGNESIUM | 168000 | NA |
| SODIUM | 74600 | NA |

| | 2006 |
|---|---|
| | GW-03 |
| VOCs | ND |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NA |

| | 2006 |
|---|---|
| | MW-2B |
| VOCs | ND |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NA |

| | 2000 | 2001 | 2004 |
|---|---|---|---|
| | AMW-11 | GW-11R | GW-11R |
| VOCs | ND | 4.6 | 0.62 |
| SVOCs | NA | ND | 12.2 |
| PESTICIDES | NA | ND | 0.0104 |
| PCBs | NA | ND | ND |
| ANTIMONY | NA | 11.5 | 6.5 |
| ARSENIC | NA | 131 | 15.6 |
| IRON | NA | 12800 | 2220 |
| SELENIUM | NA | 84.5 | 11.2 |
| SODIUM | NA | 437000 | 352000 |

| | 2000 | 2006 |
|---|---|---|
| | AMW-1 | AMW-1 |
| VOCs | 173 | 102.9 |
| SVOCs | NA | NA |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NA | NA |

| | 2000 | 2006 |
|---|---|---|
| | ACE-2 | ACE-2 |
| VOCs | 1560 | 734 |
| SVOCs | NA | NA |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NA | NA |

| | 2000 |
|---|---|
| | ACE-6 |
| VOCs | ND |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NA |

| | 2006 |
|---|---|
| | AMW-3 |
| VOCs | 0.26 |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NA |

| | 2006 |
|---|---|
| | AMW-4 |
| VOCs | 3.51 |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NA |

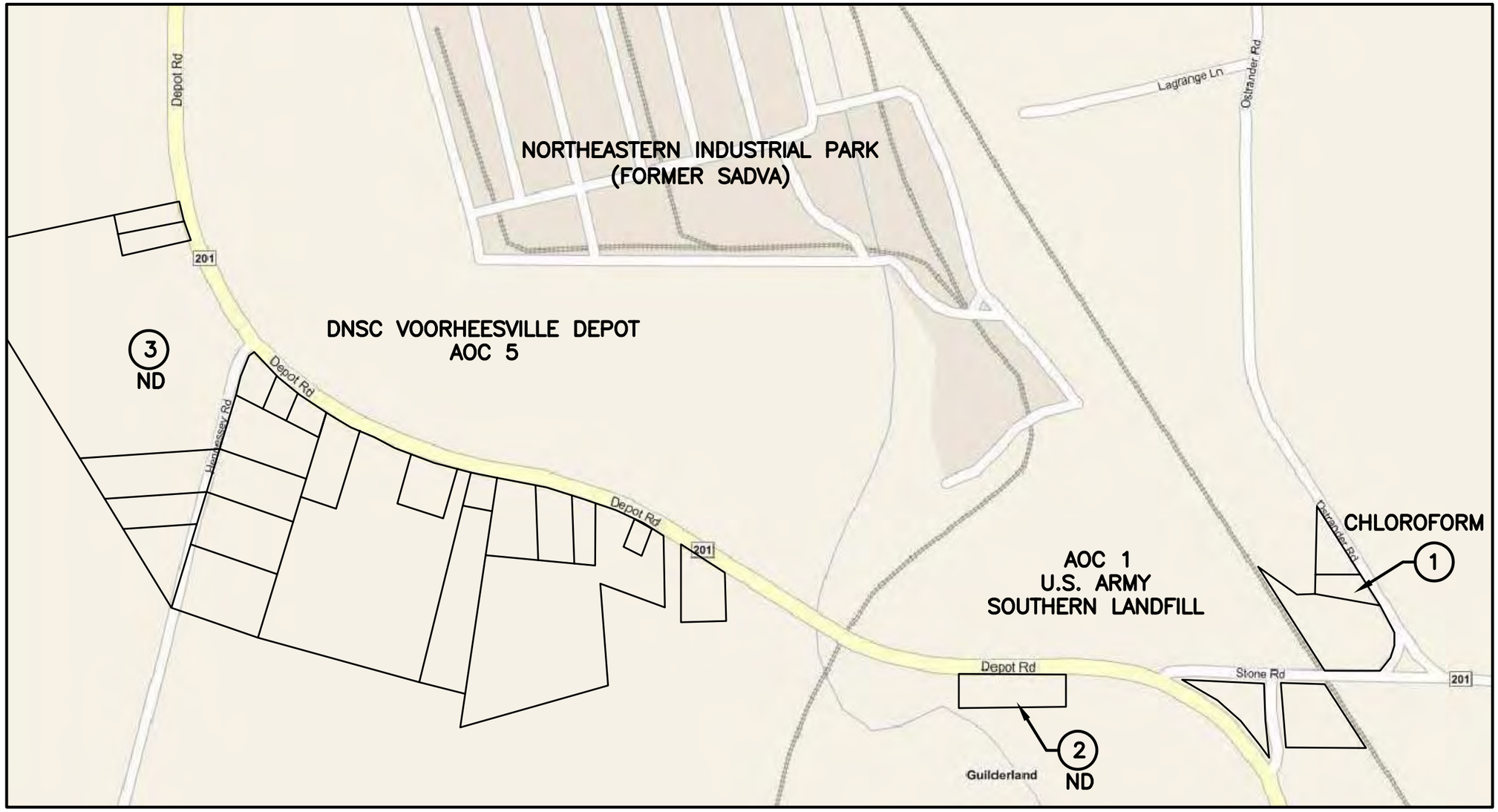
| | 2000 | 2000 |
|---|---|---|
| | AMW-2 | AMW-2 |
| VOCs | ND | 2.58 |
| SVOCs | NA | NA |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NA | NA |

| | 2004 | 2006 |
|---|---|---|
| | GW12 | GW-12 |
| VOCs | DRY | ND |
| SVOCs | | NA |
| PESTICIDES | | NA |
| PCBs | | NA |
| METALS | | NA |

# FIGURE 3.7A

**FORMER SADVA**
**GUILDERLAND, NEW YORK**
**AOC 1**
**U.S. ARMY**
**SOUTHERN LANDFILL**
**GROUNDWATER SAMPLE RESULTS**

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




0 1000 FT

APPROXIMATE SCALE

(1) RESIDENTIAL WELL LOCATION

**ND** NO CONCENTRATIONS DETECTED ABOVE DETECTION LIMITS

**CHLOROFORM** CONCENTRATION DETECTED AT 2µg/L

DATA SOURCE:
ALBANY COUNTY HEALTH DEPARTMENT

**FIGURE 3.7B**

FORMER SADVA
GUILDERLAND, NEW YORK

**RESIDENTIAL WELL SAMPLING RESULTS (1990)**

PARSON

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

No XREFs
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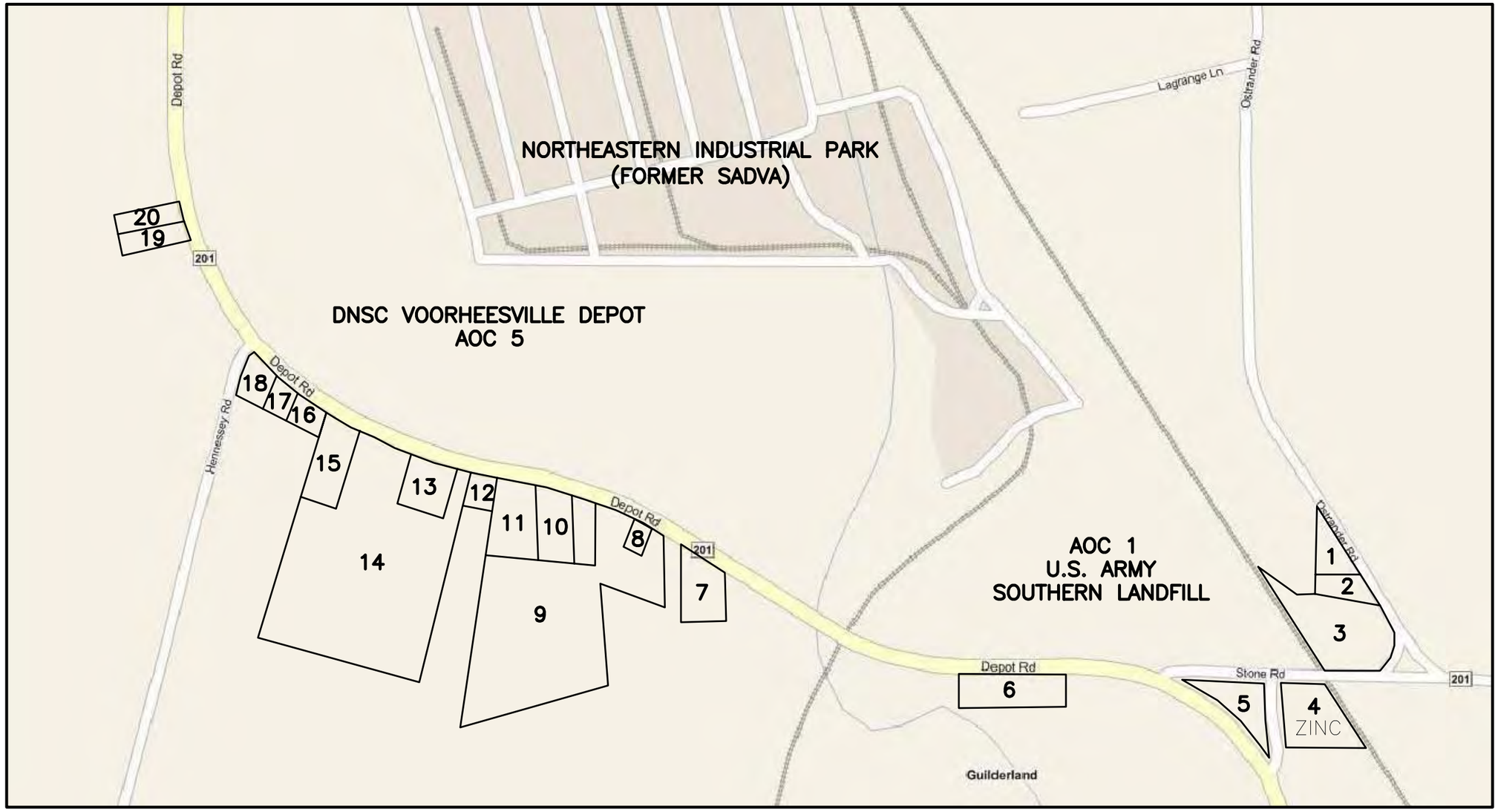


0 1000 FT

APPROXIMATE SCALE

**6** RESIDENTIAL WELL LOCATION

ZINC CONCENTRATION EXCEEDS SCREENING CRITERION

DATA SOURCE:
FINAL ARCHIVAL SEARCH REPORT (EAEST, 2003)

**FIGURE 3.7C**

FORMER SADVA
GUILDERLAND, NEW YORK

**RESIDENTIAL WELL SAMPLING RESULTS (1991)**

PARSON
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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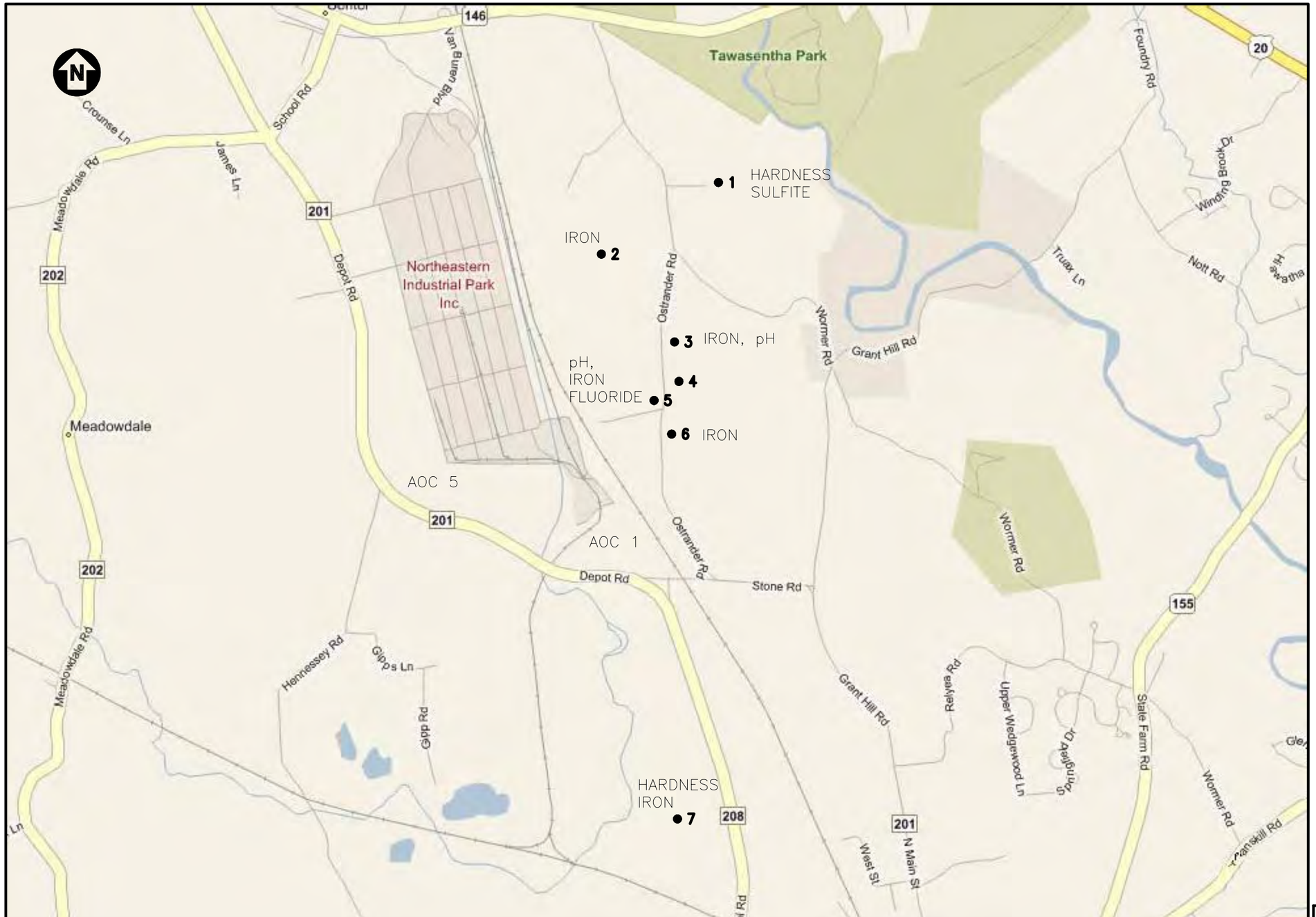


● 1 RESIDENTIAL WELL SAMPLE LOCATION

IRON ANALYTE CONCENTRATION THAT EXCEEDS THE ACCEPTABLE RANGE REFERENCED ON THE ANALYTICAL REPORT PROVIDED BY ACHD

0 1000 FT

APPROXIMATE SCALE

DATA SOURCE:
ALBANY COUNTY HEALTH DEPARTMENT

**FIGURE 3.7D**

FORMER SADVA
GUILDERLAND, NEW YORK

**RESIDENTIAL WELL SAMPLING RESULTS (1991 – 2004)**

PARSON
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

No XREFs
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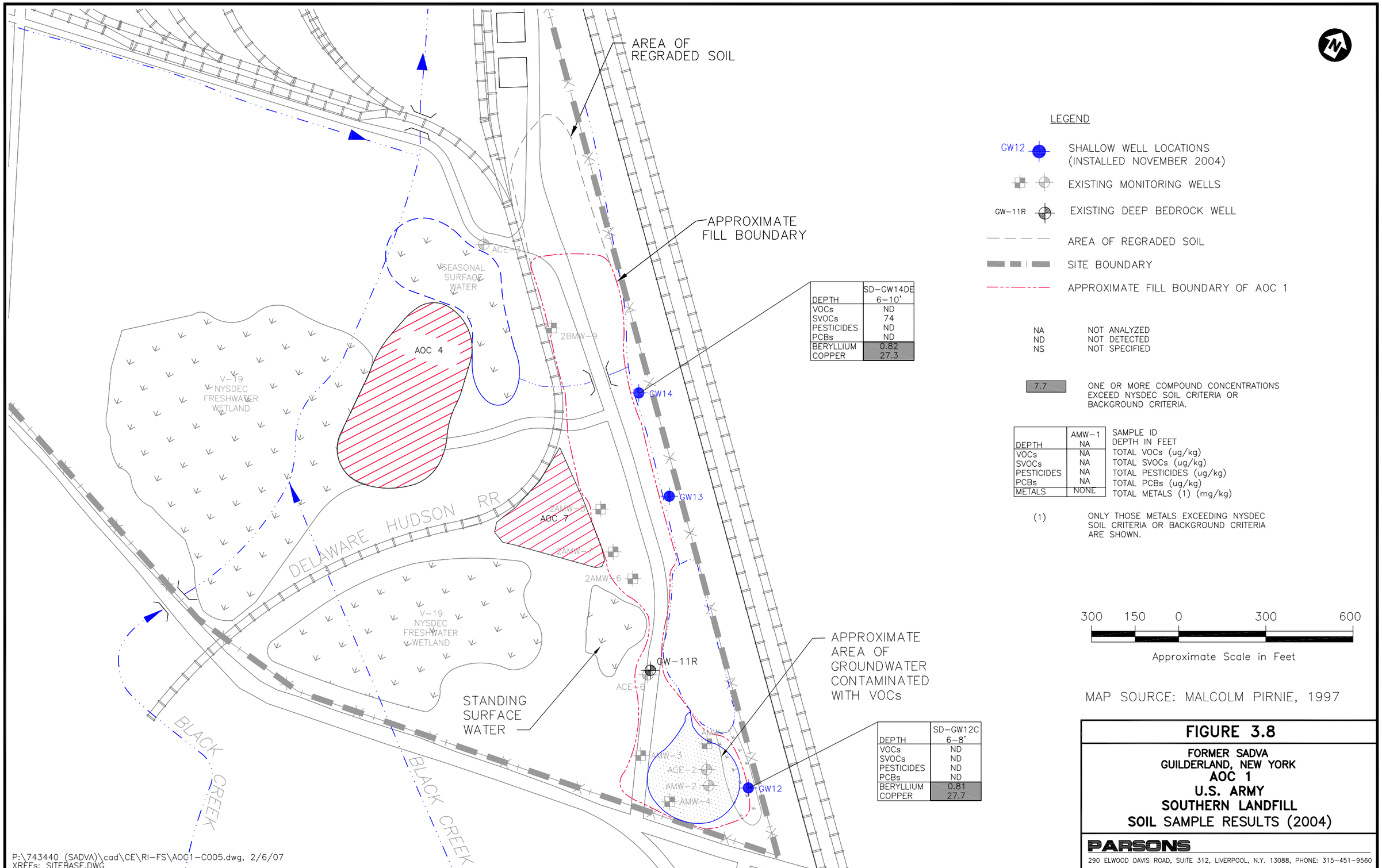


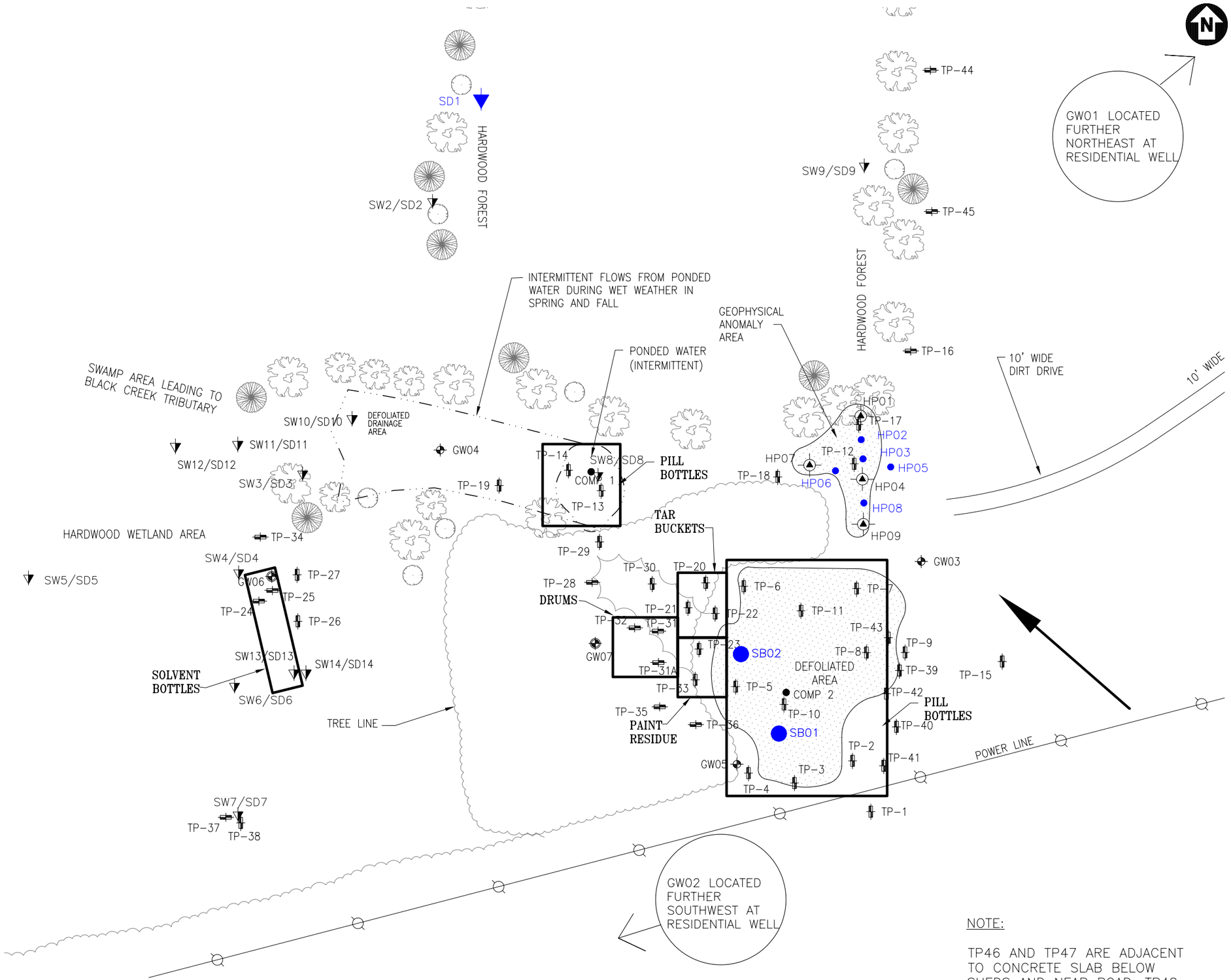

| DEPTH | SD-GW14DE 6-10' |
|---|---|
| VOCs | ND |
| SVOCs | 74 |
| PESTICIDES | ND |
| PCBs | ND |
| BERYLLIUM | 0.82 |
| COPPER | 27.3 |

| DEPTH | SD-GW12C 6-8' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| BERYLLIUM | 0.81 |
| COPPER | 27.7 |

**FIGURE 3.8**

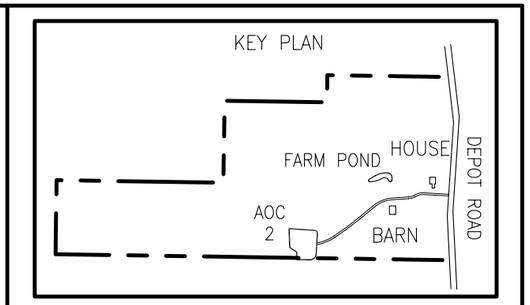
**FORMER SADVA**
**GUILDERLAND, NEW YORK**
**AOC 1**
**U.S. ARMY**
**SOUTHERN LANDFILL**
**SOIL SAMPLE RESULTS (2004)**

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




NOTE:

TP46 AND TP47 ARE ADJACENT TO CONCRETE SLAB BELOW SHEDS AND NEAR ROAD. TP48, TP49, AND TP50 ARE NEAR CURRENT BARN.




| | |
|---|---|
| TP-2 | TEST PIT LOCATION |
| GW03 | EXISTING MONITORING WELL LOCATION |
| GW07 | MONITORING WELL LOCATION (INSTALLED NOVEMBER 2004) |
| COMP 1 | SOIL SAMPLE PERFORMED FOR WASTE CHARACTERIZATION |
| HP02 | HYDROPUNCH™ SOIL BORING |
| SB01 | SOIL BORING |
| HP03 | HYDROPUNCH™ GROUNDWATER SAMPLE |
| SW4/SD4 | SURFACE WATER AND SEDIMENT SAMPLE LOCATION |
| SD1 | SEDIMENT SAMPLE LOCATION |
| | APPROXIMATE LIMITS OF WASTE SOURCES |
| | DIRECTION OF SHALLOW GROUNDWATER FLOW |

60 30 0 60 120

Approximate Scale in Feet

MAP SOURCE: USACE, 1999.

FIGURE 3.9

FORMER SADVA
GUILDERLAND, NEW YORK

AOC 2 – FORMER BIVOUAC AREA/
POST COMMANDER'S LANDFILL
SITE PLAN

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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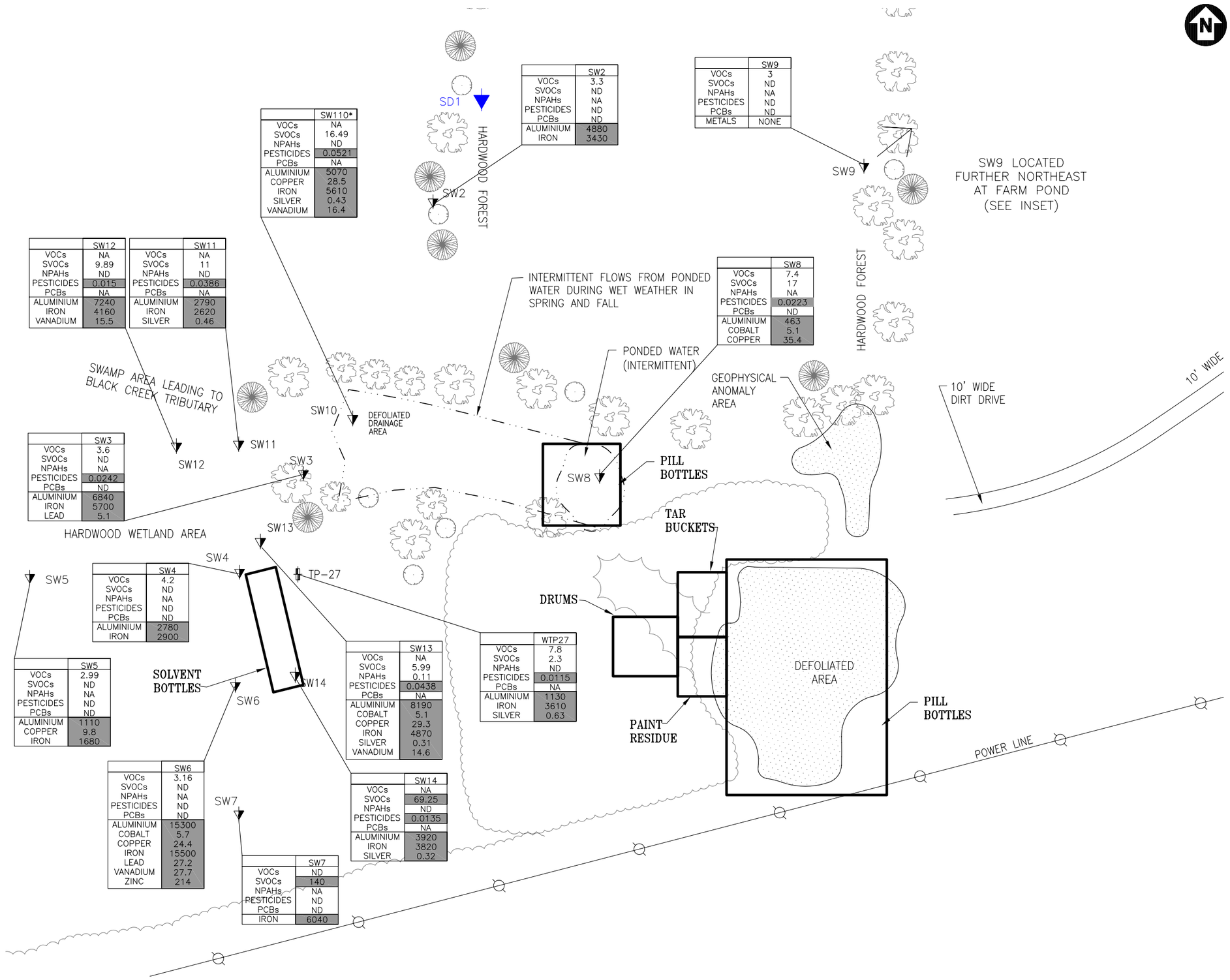
XREFs: NONE




| | SW2 |
|---|---|
| VOCs | 3.3 |
| SVOCs | ND |
| NPAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| ALUMINIUM | 4880 |
| IRON | 3430 |

| | SW9 |
|---|---|
| VOCs | 3 |
| SVOCs | ND |
| NPAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | NONE |

| | SW110* |
|---|---|
| VOCs | NA |
| SVOCs | 16.49 |
| NPAHs | ND |
| PESTICIDES | 0.0521 |
| PCBs | NA |
| ALUMINIUM | 5070 |
| COPPER | 28.5 |
| IRON | 5610 |
| SILVER | 0.43 |
| VANADIUM | 16.4 |

| | SW12 |
|---|---|
| VOCs | NA |
| SVOCs | 9.89 |
| NPAHs | ND |
| PESTICIDES | 0.015 |
| PCBs | NA |
| ALUMINIUM | 7240 |
| IRON | 4160 |
| VANADIUM | 15.5 |

| | SW11 |
|---|---|
| VOCs | NA |
| SVOCs | 11 |
| NPAHs | ND |
| PESTICIDES | 0.0386 |
| PCBs | NA |
| ALUMINIUM | 2790 |
| IRON | 2620 |
| SILVER | 0.46 |

| | SW8 |
|---|---|
| VOCs | 7.4 |
| SVOCs | 17 |
| NPAHs | NA |
| PESTICIDES | 0.0223 |
| PCBs | ND |
| ALUMINIUM | 463 |
| COBALT | 5.1 |
| COPPER | 35.4 |

| | SW3 |
|---|---|
| VOCs | 3.6 |
| SVOCs | ND |
| NPAHs | NA |
| PESTICIDES | 0.0242 |
| PCBs | ND |
| ALUMINIUM | 6840 |
| IRON | 5700 |
| LEAD | 5.1 |

| | SW4 |
|---|---|
| VOCs | 4.2 |
| SVOCs | ND |
| NPAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| ALUMINIUM | 2780 |
| IRON | 2900 |

| | SW5 |
|---|---|
| VOCs | 2.99 |
| SVOCs | ND |
| NPAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| ALUMINIUM | 1110 |
| COPPER | 9.8 |
| IRON | 1680 |

| | SW13 |
|---|---|
| VOCs | NA |
| SVOCs | 5.99 |
| NPAHs | 0.11 |
| PESTICIDES | 0.0438 |
| PCBs | NA |
| ALUMINIUM | 8190 |
| COBALT | 5.1 |
| COPPER | 29.3 |
| IRON | 4870 |
| SILVER | 0.31 |
| VANADIUM | 14.6 |

| | WTP27 |
|---|---|
| VOCs | 7.8 |
| SVOCs | 2.3 |
| NPAHs | ND |
| PESTICIDES | 0.0115 |
| PCBs | NA |
| ALUMINIUM | 1130 |
| IRON | 3610 |
| SILVER | 0.63 |

| | SW6 |
|---|---|
| VOCs | 3.16 |
| SVOCs | ND |
| NPAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| ALUMINIUM | 15300 |
| COBALT | 5.7 |
| COPPER | 24.4 |
| IRON | 15500 |
| LEAD | 27.2 |
| VANADIUM | 27.7 |
| ZINC | 214 |

| | SW14 |
|---|---|
| VOCs | NA |
| SVOCs | 69.25 |
| NPAHs | ND |
| PESTICIDES | 0.0135 |
| PCBs | NA |
| ALUMINIUM | 3920 |
| IRON | 3820 |
| SILVER | 0.32 |

| | SW7 |
|---|---|
| VOCs | ND |
| SVOCs | 140 |
| NPAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 6040 |

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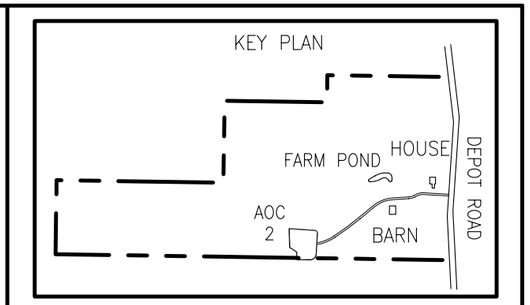



SW10 SURFACE WATER SAMPLE

NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE

0.0409 ONE OR MORE COMPOUNDS CONCENTRATIONS EXCEED NYSDEC SURFACE WATER STANDARDS/GUIDANCE VALUES

(1) ONLY THOSE METALS EXCEEDING NYSDEC SURFACE WATER STANDARDS/GUIDANCE VALUES ARE SHOWN.

| | SW9 | |
|---|---|---|
| | | SAMPLE ID |
| VOCs | 3 | TOTAL VOCs (ug/L) |
| SVOCs | ND | TOTAL SVOCs (ug/L) |
| NPAHs | NA | TOTAL NPAHs (ug/L) |
| PESTICIDES | ND | TOTAL PESTICIDES (ug/L) |
| PCBs | ND | TOTAL PCBs (ug/L) |
| METALS | NONE | METALS (1) (ug/L) |

APPROXIMATE LIMITS OF WASTE SOURCES

60 30 0 60 120

Approximate Scale in Feet

MAP SOURCE: USACE, 1999.

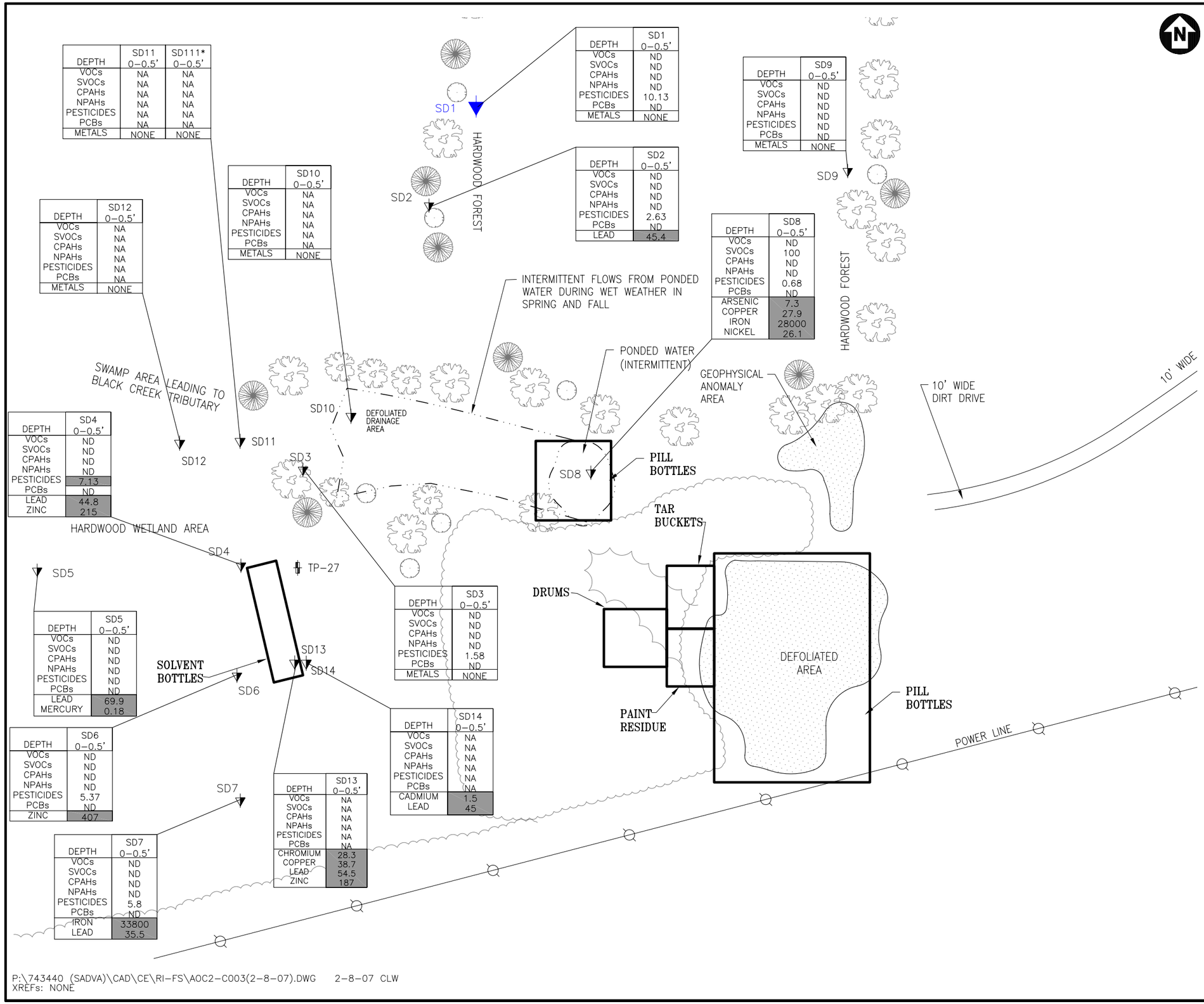
FIGURE 3.10

FORMER SADVA
GUILDERLAND, NEW YORK

AOC 2 – FORMER BIVOUAC AREA/
POST COMMANDER'S LANDFILL
SURFACE WATER SAMPLE RESULTS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




| DEPTH | SD11 0–0.5' | SD111* 0–0.5' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | NA | NA |
| CPAHs | NA | NA |
| NPAHs | NA | NA |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NONE | NONE |

| DEPTH | SD1 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | 10.13 |
| PCBs | ND |
| METALS | NONE |

| DEPTH | SD2 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | 2.63 |
| PCBs | ND |
| LEAD | 45.4 |

| DEPTH | SD9 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | NONE |

| DEPTH | SD10 0–0.5' |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NONE |

| DEPTH | SD12 0–0.5' |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NONE |

| DEPTH | SD8 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | 100 |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | 0.68 |
| PCBs | ND |
| ARSENIC | 7.3 |
| COPPER | 27.9 |
| IRON | 28000 |
| NICKEL | 26.1 |

| DEPTH | SD4 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | 7.13 |
| PCBs | ND |
| LEAD | 44.8 |
| ZINC | 215 |

| DEPTH | SD5 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| LEAD | 69.9 |
| MERCURY | 0.18 |

| DEPTH | SD3 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | 1.58 |
| PCBs | ND |
| METALS | NONE |

| DEPTH | SD6 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | 5.37 |
| PCBs | ND |
| ZINC | 407 |

| DEPTH | SD14 0–0.5' |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| CADMIUM | 1.5 |
| LEAD | 45 |

| DEPTH | SD13 0–0.5' |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| CHROMIUM | 28.3 |
| COPPER | 38.7 |
| LEAD | 54.5 |
| ZINC | 187 |

| DEPTH | SD7 0–0.5' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | 5.8 |
| PCBs | ND |
| IRON | 33800 |
| LEAD | 35.5 |

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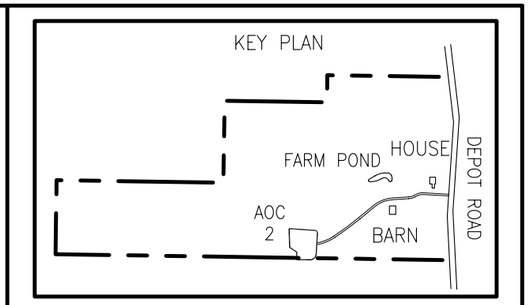
XREFs: NONE




SD10 SEDIMENT SAMPLE

NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE

0.0409 ONE OR MORE COMPOUNDS CONCENTRATIONS EXCEED NYSDEC SEDIMENT GUIDELINES

(1) ONLY THOSE METALS EXCEEDING NYSDEC SEDIMENT GUIDELINES ARE SHOWN

| DEPTH | SD9 0–0.5' | |
|---|---|---|
| | | SAMPLE ID |
| | | DEPTH IN FEET |
| VOCs | ND | TOTAL VOCs (ug/kg) |
| SVOCs | ND | TOTAL SVOCs (ug/kg) |
| CPAHs | ND | TOTAL CPAHs (ug/kg) |
| NPAHs | ND | TOTAL NPAHs (ug/kg) |
| PESTICIDES | ND | TOTAL PESTICIDES (ug/kg) |
| PCBs | ND | TOTAL PCBs (ug/kg) |
| METALS | NONE | METALS (1) (mg/kg) |

APPROXIMATE LIMITS OF WASTE SOURCES

60 30 0 60 120

Approximate Scale in Feet

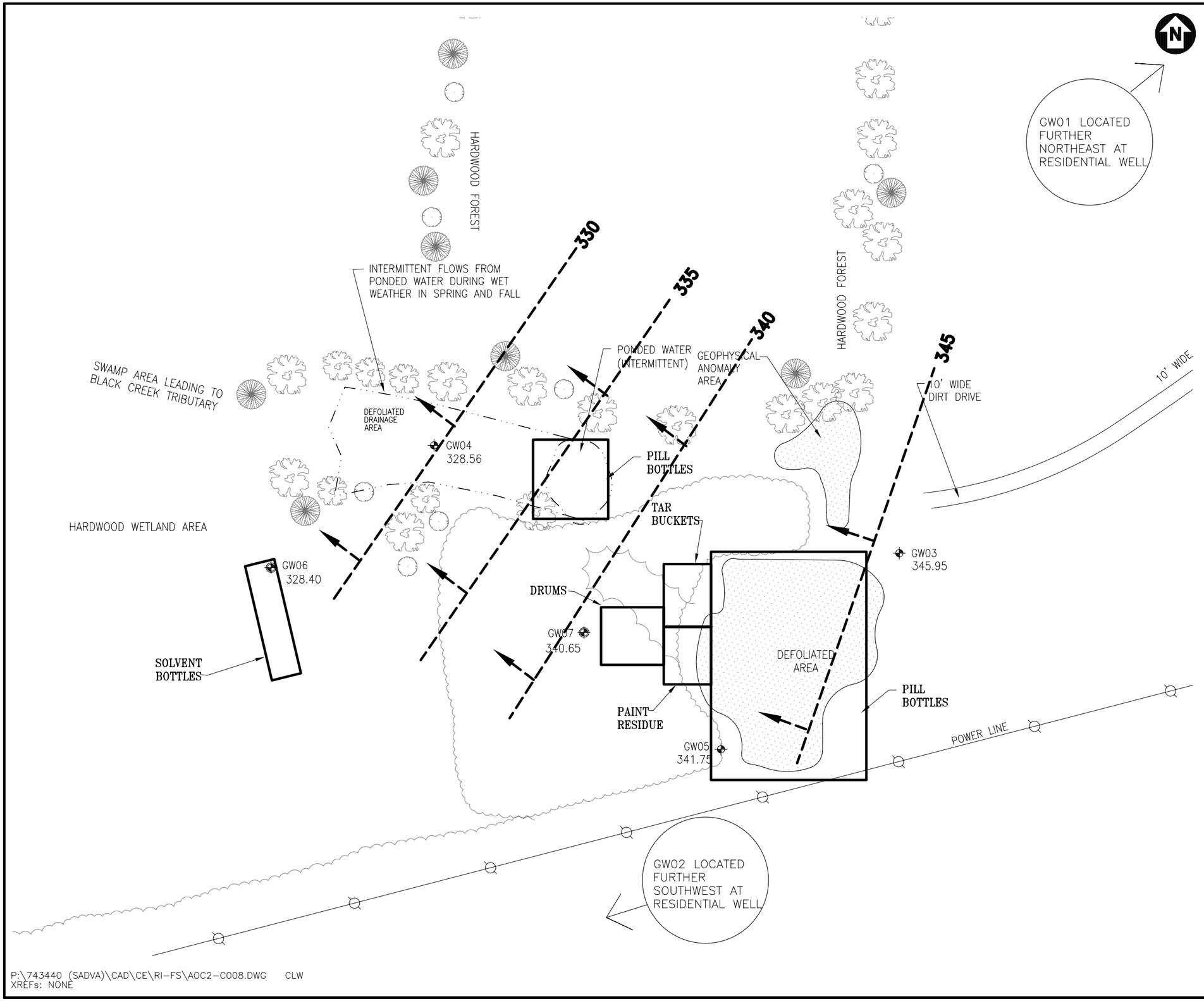
MAP SOURCE: USACE, 1999.

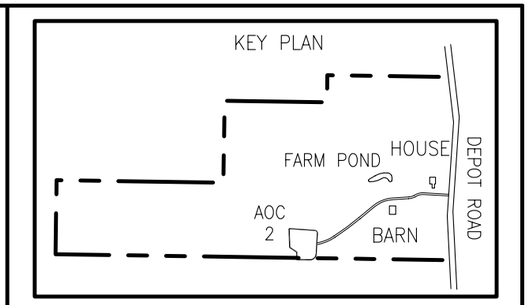
# FIGURE 3.11

FORMER SADVA
GUILDERLAND, NEW YORK

AOC 2 – FORMER BIVOUAC AREA/
POST COMMANDER'S LANDFILL
SEDIMENT SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




GW03 EXISTING MONITORING WELL LOCATION

GW07 MONITORING WELL LOCATION (INSTALLED NOVEMBER 2004)

328.40 GROUNDWATER ELEVATION

GROUNDWATER CONTOURS

GROUNDWATER FLOW DIRECTION

APPROXIMATE LIMITS OF WASTE SOURCES

60 30 0 60 120

Approximate Scale in Feet

MAP SOURCE: USACE, 1999.

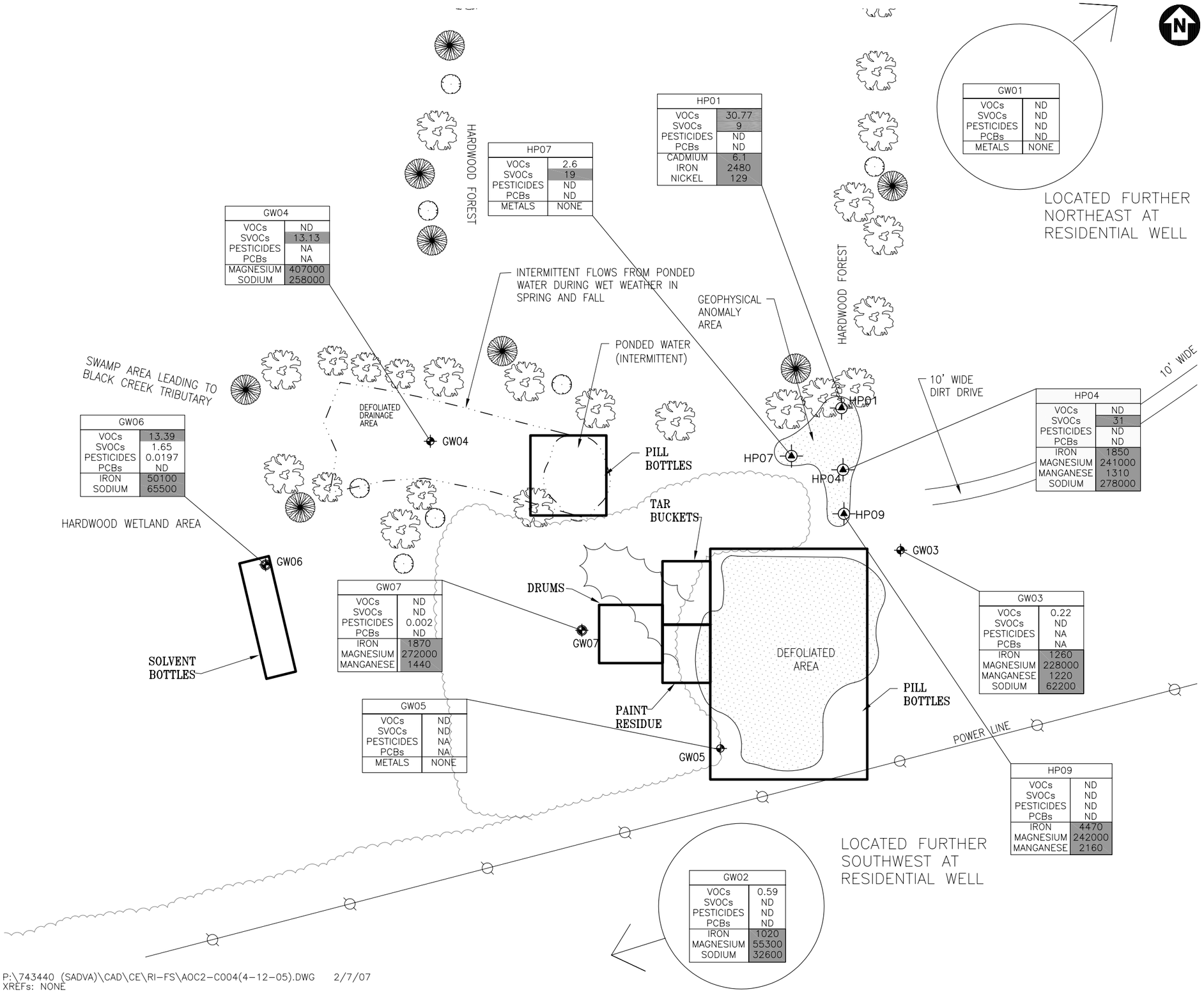
FIGURE 3.12

FORMER SADVA
GUILDERLAND, NEW YORK
AOC 2 – FORMER BIVOUAC AREA/
POST COMMANDER'S LANDFILL
GROUNDWATER ELEVATIONS 12/6/04

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (SADVA)\CAD\CE\RI-FS\AOC2-C008.DWG CLW
XREFs: NONE




| GW04 | |
|---|---|
| VOCs | ND |
| SVOCs | 13.13 |
| PESTICIDES | NA |
| PCBs | NA |
| MAGNESIUM | 407000 |
| SODIUM | 258000 |

| HP07 | |
|---|---|
| VOCs | 2.6 |
| SVOCs | 19 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | NONE |

| HP01 | |
|---|---|
| VOCs | 30.77 |
| SVOCs | 9 |
| PESTICIDES | ND |
| PCBs | ND |
| CADMIUM | 6.1 |
| IRON | 2480 |
| NICKEL | 129 |

| GW01 | |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | NONE |

| GW06 | |
|---|---|
| VOCs | 13.39 |
| SVOCs | 1.65 |
| PESTICIDES | 0.0197 |
| PCBs | ND |
| IRON | 50100 |
| SODIUM | 65500 |

| HP04 | |
|---|---|
| VOCs | ND |
| SVOCs | 31 |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 1850 |
| MAGNESIUM | 241000 |
| MANGANESE | 1310 |
| SODIUM | 278000 |

| GW07 | |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | 0.002 |
| PCBs | ND |
| IRON | 1870 |
| MAGNESIUM | 272000 |
| MANGANESE | 1440 |

| GW03 | |
|---|---|
| VOCs | 0.22 |
| SVOCs | ND |
| PESTICIDES | NA |
| PCBs | NA |
| IRON | 1260 |
| MAGNESIUM | 228000 |
| MANGANESE | 1220 |
| SODIUM | 62200 |

| GW05 | |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NONE |

| HP09 | |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 4470 |
| MAGNESIUM | 242000 |
| MANGANESE | 2160 |

| GW02 | |
|---|---|
| VOCs | 0.59 |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 1020 |
| MAGNESIUM | 55300 |
| SODIUM | 32600 |

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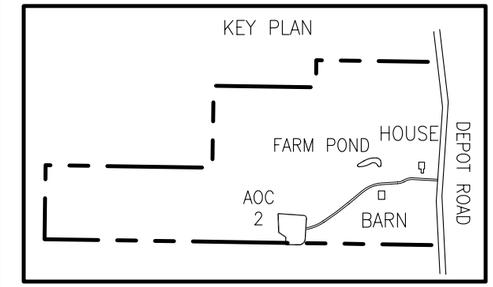
XREFs: NONE




GW03 EXISTING MONITORING WELL LOCATION

GW07 MONITORING WELL LOCATION (INSTALLED NOVEMBER 2004)

HP03 HYDROPUNCH™ GROUNDWATER SAMPLE (1)

NA NOT ANALYZED
ND NOT DETECTED

1.1 ONE OR MORE COMPOUNDS CONCENTRATIONS EXCEED NYSDEC GROUNDWATER STANDARDS/GUIDANCE VALUES

ONLY THOSE METALS EXCEEDING NYSDEC GROUNDWATER STANDARDS/GUIDANCE VALUES ARE SHOWN

| GW01 | SAMPLE ID |
|---|---|
| ND | TOTAL VOCs (ug/L) |
| ND | TOTAL SVOCs (ug/L) |
| ND | TOTAL PESTICIDES (ug/L) |
| ND | TOTAL PCBs (ug/L) |
| NONE | METALS (ug/L) |

(1) "HP" GROUNDWATER SAMPLES WERE COLLECTED FROM TEMPORARY HYDROPUNCH™ WELLS.

APPROXIMATE LIMITS OF WASTE SOURCES

60 30 0 60 120

Approximate Scale in Feet

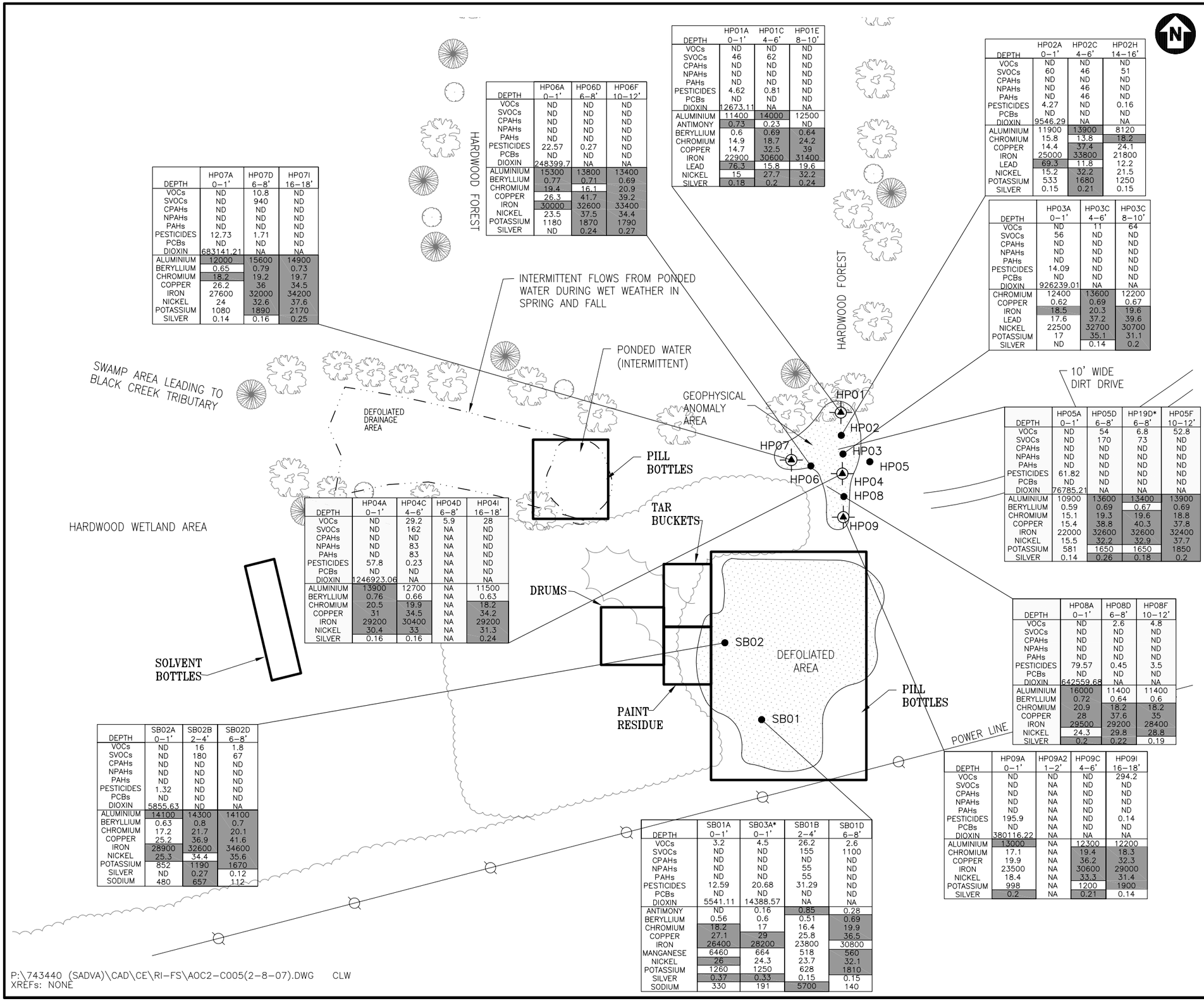
MAP SOURCE: USACE, 1999.

# FIGURE 3.13

FORMER SADVA
GUILDERLAND, NEW YORK

AOC 2 – FORMER BIVOUAC AREA/
POST COMMANDER'S LANDFILL
GROUNDWATER SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




| DEPTH | HP01A 0–1' | HP01C 4–6' | HP01E 8–10' |
|---|---|---|---|
| VOCs | ND | ND | ND |
| SVOCs | 46 | 62 | ND |
| CPAHs | ND | ND | ND |
| NPAHs | ND | ND | ND |
| PAHs | ND | ND | ND |
| PESTICIDES | 4.62 | 0.81 | ND |
| PCBs | ND | ND | ND |
| DIOXIN | 12673.11 | NA | NA |
| ALUMINIUM | 11400 | 14000 | 12500 |
| ANTIMONY | 0.73 | 0.23 | ND |
| BERYLLIUM | 0.6 | 0.69 | 0.64 |
| CHROMIUM | 14.9 | 18.7 | 24.2 |
| COPPER | 14.7 | 32.5 | 39 |
| IRON | 22900 | 30600 | 31400 |
| LEAD | 76.3 | 15.8 | 19.6 |
| NICKEL | 15 | 27.7 | 32.2 |
| SILVER | 0.18 | 0.2 | 0.24 |

| DEPTH | HP06A 0–1' | HP06D 6–8' | HP06F 10–12' |
|---|---|---|---|
| VOCs | ND | ND | ND |
| SVOCs | ND | ND | ND |
| CPAHs | ND | ND | ND |
| NPAHs | ND | ND | ND |
| PAHs | ND | ND | ND |
| PESTICIDES | 22.57 | 0.27 | ND |
| PCBs | ND | ND | ND |
| DIOXIN | 248399.7 | NA | NA |
| ALUMINIUM | 15300 | 13800 | 13400 |
| BERYLLIUM | 0.77 | 0.71 | 0.69 |
| CHROMIUM | 19.4 | 16.1 | 20.9 |
| COPPER | 26.3 | 41.7 | 39.2 |
| IRON | 30000 | 32600 | 33400 |
| NICKEL | 23.5 | 37.5 | 34.4 |
| POTASSIUM | 1180 | 1870 | 1790 |
| SILVER | ND | 0.24 | 0.27 |

| DEPTH | HP07A 0–1' | HP07D 6–8' | HP07I 16–18' |
|---|---|---|---|
| VOCs | ND | 10.8 | ND |
| SVOCs | ND | 940 | ND |
| CPAHs | ND | ND | ND |
| NPAHs | ND | ND | ND |
| PAHs | ND | ND | ND |
| PESTICIDES | 12.73 | 1.71 | ND |
| PCBs | ND | ND | ND |
| DIOXIN | 683141.21 | NA | NA |
| ALUMINIUM | 12000 | 15600 | 14900 |
| BERYLLIUM | 0.65 | 0.79 | 0.73 |
| CHROMIUM | 18.2 | 19.2 | 19.7 |
| COPPER | 26.2 | 36 | 34.5 |
| IRON | 27600 | 32000 | 34200 |
| NICKEL | 24 | 32.6 | 37.6 |
| POTASSIUM | 1080 | 1890 | 2170 |
| SILVER | 0.14 | 0.16 | 0.25 |

| DEPTH | HP02A 0–1' | HP02C 4–6' | HP02H 14–16' |
|---|---|---|---|
| VOCs | ND | ND | ND |
| SVOCs | 60 | 46 | 51 |
| CPAHs | ND | ND | ND |
| NPAHs | ND | 46 | ND |
| PAHs | ND | 46 | ND |
| PESTICIDES | 4.27 | ND | 0.16 |
| PCBs | ND | ND | ND |
| DIOXIN | 9546.29 | NA | NA |
| ALUMINIUM | 11900 | 13900 | 8120 |
| CHROMIUM | 15.8 | 13.8 | 18.2 |
| COPPER | 14.4 | 37.4 | 24.1 |
| IRON | 25000 | 33800 | 21800 |
| LEAD | 69.3 | 11.8 | 12.2 |
| NICKEL | 15.2 | 32.2 | 21.5 |
| POTASSIUM | 533 | 1680 | 1250 |
| SILVER | 0.15 | 0.21 | 0.15 |

| DEPTH | HP03A 0–1' | HP03C 4–6' | HP03C 8–10' |
|---|---|---|---|
| VOCs | ND | 11 | 64 |
| SVOCs | 56 | ND | ND |
| CPAHs | ND | ND | ND |
| NPAHs | ND | ND | ND |
| PAHs | ND | ND | ND |
| PESTICIDES | 14.09 | ND | ND |
| PCBs | ND | ND | ND |
| DIOXIN | 926239.01 | NA | NA |
| CHROMIUM | 12400 | 13600 | 12200 |
| COPPER | 0.62 | 0.69 | 0.67 |
| IRON | 18.5 | 20.3 | 19.6 |
| LEAD | 17.6 | 37.2 | 39.6 |
| NICKEL | 22500 | 32700 | 30700 |
| POTASSIUM | 17 | 35.1 | 31.1 |
| SILVER | ND | 0.14 | 0.2 |

| DEPTH | HP05A 0–1' | HP05D 6–8' | HP19D* 6–8' | HP05F 10–12' |
|---|---|---|---|---|
| VOCs | ND | 54 | 6.8 | 52.8 |
| SVOCs | ND | 170 | 73 | ND |
| CPAHs | ND | ND | ND | ND |
| NPAHs | ND | ND | ND | ND |
| PAHs | ND | ND | ND | ND |
| PESTICIDES | 61.82 | ND | ND | ND |
| PCBs | ND | ND | ND | ND |
| DIOXIN | 76785.21 | NA | NA | NA |
| ALUMINIUM | 10900 | 13600 | 13400 | 13900 |
| BERYLLIUM | 0.59 | 0.69 | 0.67 | 0.69 |
| CHROMIUM | 15.1 | 19.3 | 19.6 | 18.8 |
| COPPER | 15.4 | 38.8 | 40.3 | 37.8 |
| IRON | 22000 | 32600 | 32600 | 32400 |
| NICKEL | 15.5 | 32.2 | 32.9 | 37.7 |
| POTASSIUM | 581 | 1650 | 1650 | 1850 |
| SILVER | 0.14 | 0.26 | 0.18 | 0.2 |

| DEPTH | HP04A 0–1' | HP04C 4–6' | HP04D 6–8' | HP04I 16–18' |
|---|---|---|---|---|
| VOCs | ND | 29.2 | 5.9 | 28 |
| SVOCs | ND | 162 | NA | ND |
| CPAHs | ND | ND | NA | ND |
| NPAHs | ND | 83 | NA | ND |
| PAHs | ND | 83 | NA | ND |
| PESTICIDES | 57.8 | 0.23 | NA | ND |
| PCBs | ND | ND | NA | ND |
| DIOXIN | 1246923.06 | NA | NA | NA |
| ALUMINIUM | 13900 | 12700 | NA | 11500 |
| BERYLLIUM | 0.76 | 0.66 | NA | 0.63 |
| CHROMIUM | 20.5 | 19.9 | NA | 18.2 |
| COPPER | 31 | 34.5 | NA | 34.2 |
| IRON | 29200 | 30400 | NA | 29200 |
| NICKEL | 30.4 | 33 | NA | 31.3 |
| SILVER | 0.16 | 0.16 | NA | 0.24 |

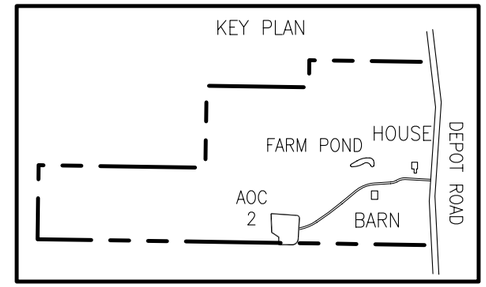
| DEPTH | HP08A 0–1' | HP08D 6–8' | HP08F 10–12' |
|---|---|---|---|
| VOCs | ND | 2.6 | 4.8 |
| SVOCs | ND | ND | ND |
| CPAHs | ND | ND | ND |
| NPAHs | ND | ND | ND |
| PAHs | ND | ND | ND |
| PESTICIDES | 79.57 | 0.45 | 3.5 |
| PCBs | ND | ND | ND |
| DIOXIN | 642559.68 | NA | NA |
| ALUMINIUM | 16000 | 11400 | 11400 |
| BERYLLIUM | 0.72 | 0.64 | 0.6 |
| CHROMIUM | 20.9 | 18.2 | 18.2 |
| COPPER | 28 | 37.6 | 35 |
| IRON | 29500 | 29200 | 28400 |
| NICKEL | 24.3 | 29.8 | 28.8 |
| SILVER | 0.2 | 0.22 | 0.19 |

| DEPTH | SB02A 0–1' | SB02B 2–4' | SB02D 6–8' |
|---|---|---|---|
| VOCs | ND | 16 | 1.8 |
| SVOCs | ND | 180 | 67 |
| CPAHs | ND | ND | ND |
| NPAHs | ND | ND | ND |
| PAHs | ND | ND | ND |
| PESTICIDES | 1.32 | ND | ND |
| PCBs | ND | ND | ND |
| DIOXIN | 5855.63 | ND | NA |
| ALUMINIUM | 14100 | 14300 | 14100 |
| BERYLLIUM | 0.63 | 0.8 | 0.7 |
| CHROMIUM | 17.2 | 21.7 | 20.1 |
| COPPER | 25.2 | 36.9 | 41.6 |
| IRON | 28900 | 32600 | 34600 |
| NICKEL | 25.3 | 34.4 | 35.6 |
| POTASSIUM | 852 | 1190 | 1670 |
| SILVER | ND | 0.27 | 0.12 |
| SODIUM | 480 | 657 | 112 |

| DEPTH | SB01A 0–1' | SB03A* 0–1' | SB01B 2–4' | SB01D 6–8' |
|---|---|---|---|---|
| VOCs | 3.2 | 4.5 | 26.2 | 2.6 |
| SVOCs | ND | ND | 155 | 1100 |
| CPAHs | ND | ND | ND | ND |
| NPAHs | ND | ND | 55 | ND |
| PAHs | ND | ND | 55 | ND |
| PESTICIDES | 12.59 | 20.68 | 31.29 | ND |
| PCBs | ND | ND | ND | ND |
| DIOXIN | 5541.11 | 14388.57 | NA | NA |
| ANTIMONY | ND | 0.16 | 0.85 | 0.28 |
| BERYLLIUM | 0.56 | 0.6 | 0.51 | 0.69 |
| CHROMIUM | 18.2 | 17 | 16.4 | 19.9 |
| COPPER | 27.1 | 29 | 25.8 | 36.5 |
| IRON | 26400 | 28200 | 23800 | 30800 |
| MANGANESE | 6460 | 664 | 518 | 560 |
| NICKEL | 26 | 24.3 | 23.7 | 32.1 |
| POTASSIUM | 1260 | 1250 | 628 | 1810 |
| SILVER | 0.37 | 0.33 | 0.15 | 0.15 |
| SODIUM | 330 | 191 | 5700 | 140 |

| DEPTH | HP09A 0–1' | HP09A2 1–2' | HP09C 4–6' | HP09I 16–18' |
|---|---|---|---|---|
| VOCs | ND | ND | ND | 294.2 |
| SVOCs | ND | NA | ND | ND |
| CPAHs | ND | NA | ND | ND |
| NPAHs | ND | NA | ND | ND |
| PAHs | ND | NA | ND | ND |
| PESTICIDES | 195.9 | NA | ND | 0.14 |
| PCBs | ND | NA | ND | ND |
| DIOXIN | 380116.22 | NA | NA | NA |
| ALUMINIUM | 13000 | NA | 12300 | 12200 |
| CHROMIUM | 17.1 | NA | 19.4 | 18.3 |
| COPPER | 19.9 | NA | 36.2 | 32.3 |
| IRON | 23500 | NA | 30600 | 29000 |
| NICKEL | 18.4 | NA | 33.3 | 31.4 |
| POTASSIUM | 998 | NA | 1200 | 1900 |
| SILVER | 0.2 | NA | 0.21 | 0.14 |

KEY PLAN




HP02 ● HYDROPUNCH™ SOIL BORING

SB01 ● SOIL BORING

HP03 HYDROPUNCH™ GROUNDWATER SAMPLE/SOIL BORING

NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE

0.73 ONE OR MORE COMPOUNDS CONCENTRATIONS EXCEED STATEWIDE NYSDEC TAGM 4046 SOIL CLEANUP OBJECTIVES

(1) ONLY THOSE METALS EXCEEDING NYSDEC SOIL CLEANUP OBJECTIVES ARE SHOWN

| HP03A 0–1' | |
|---|---|
| | SAMPLE ID |
| | DEPTH IN FEET |
| ND | TOTAL VOCs (ug/kg) |
| 56 | TOTAL SVOCs (ug/kg) |
| ND | TOTAL CPAHs (ug/kg) |
| ND | TOTAL NPAHs (ug/kg) |
| ND | TOTAL PAHs (ug/kg) |
| 14.09 | TOTAL PESTICIDES (ug/kg) |
| ND | TOTAL PCBs (ug/kg) |
| 926239.01 | TOTAL DIOXINS (pg/g) |
| NONE | METALS (1) (mg/kg) |

APPROXIMATE LIMITS OF WASTE SOURCES

60 30 0 60 120

Approximate Scale in Feet

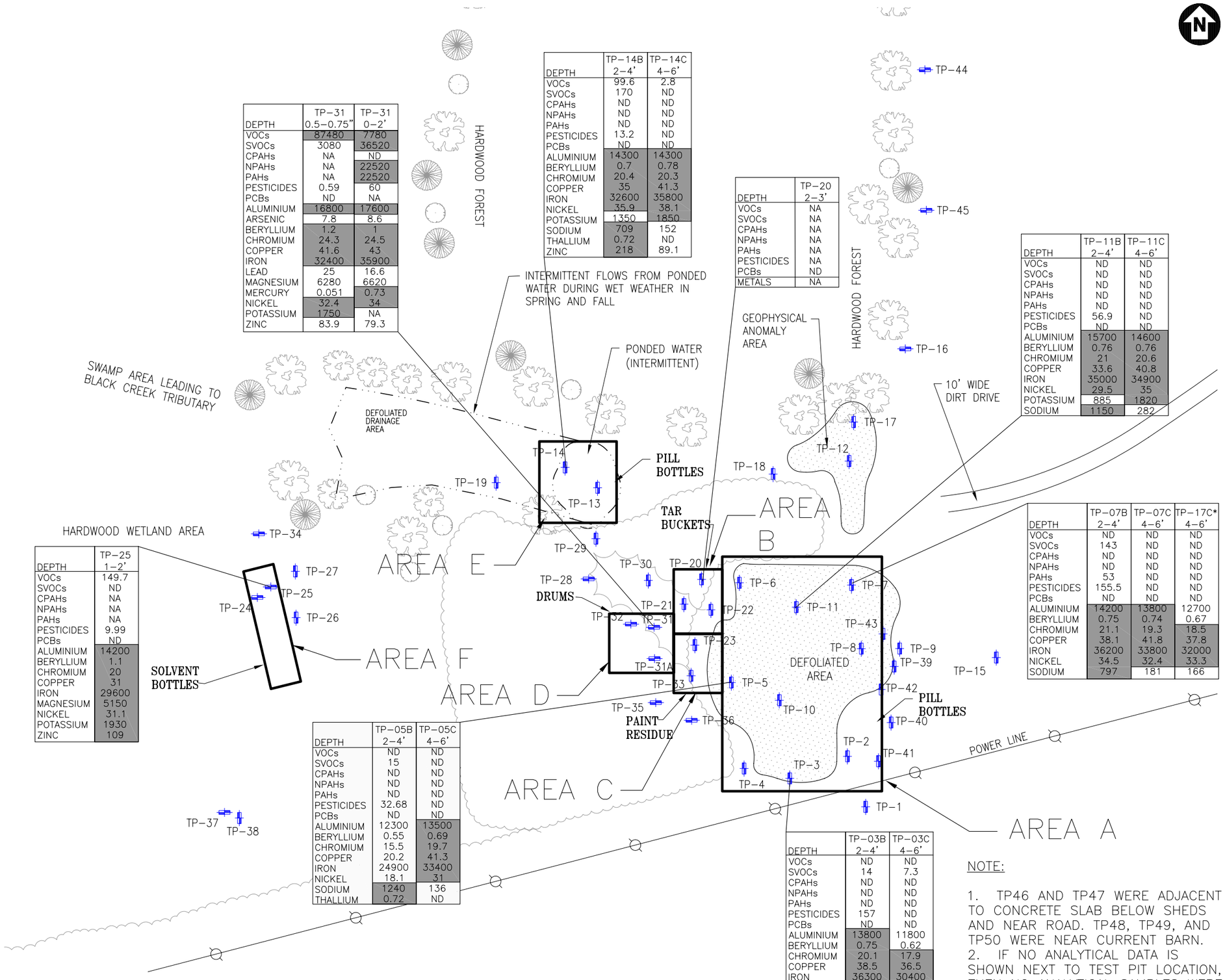
MAP SOURCE: USACE, 1999.

# FIGURE 3.14

FORMER SADVA
GUILDERLAND, NEW YORK
AOC 2 – FORMER BIVOUAC AREA/
POST COMMANDER'S LANDFILL
SURFACE AND SUBSURFACE
SOIL SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (SADVA)\CAD\CE\RI-FS\AOC2-C005(2-8-07).DWG CLW
XREFs: NONE




| DEPTH | TP-31 0.5-0.75" | TP-31 0-2' |
|---|---|---|
| VOCs | 87480 | 7780 |
| SVOCs | 3080 | 36520 |
| CPAHs | NA | ND |
| NPAHs | NA | 22520 |
| PAHs | NA | 22520 |
| PESTICIDES | 0.59 | 60 |
| PCBs | ND | NA |
| ALUMINIUM | 16800 | 17600 |
| ARSENIC | 7.8 | 8.6 |
| BERYLLIUM | 1.2 | 1 |
| CHROMIUM | 24.3 | 24.5 |
| COPPER | 41.6 | 43 |
| IRON | 32400 | 35900 |
| LEAD | 25 | 16.6 |
| MAGNESIUM | 6280 | 6620 |
| MERCURY | 0.051 | 0.73 |
| NICKEL | 32.4 | 34 |
| POTASSIUM | 1750 | NA |
| ZINC | 83.9 | 79.3 |

| DEPTH | TP-14B 2-4' | TP-14C 4-6' |
|---|---|---|
| VOCs | 99.6 | 2.8 |
| SVOCs | 170 | ND |
| CPAHs | ND | ND |
| NPAHs | ND | ND |
| PAHs | ND | ND |
| PESTICIDES | 13.2 | ND |
| PCBs | ND | ND |
| ALUMINIUM | 14300 | 14300 |
| BERYLLIUM | 0.7 | 0.78 |
| CHROMIUM | 20.4 | 20.3 |
| COPPER | 35 | 41.3 |
| IRON | 32600 | 35800 |
| NICKEL | 35.9 | 38.1 |
| POTASSIUM | 1350 | 1850 |
| SODIUM | 709 | 152 |
| THALLIUM | 0.72 | ND |
| ZINC | 218 | 89.1 |

| DEPTH | TP-20 2-3' |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | NA |
| PCBs | ND |
| METALS | NA |

| DEPTH | TP-11B 2-4' | TP-11C 4-6' |
|---|---|---|
| VOCs | ND | ND |
| SVOCs | ND | ND |
| CPAHs | ND | ND |
| NPAHs | ND | ND |
| PAHs | ND | ND |
| PESTICIDES | 56.9 | ND |
| PCBs | ND | ND |
| ALUMINIUM | 15700 | 14600 |
| BERYLLIUM | 0.76 | 0.76 |
| CHROMIUM | 21 | 20.6 |
| COPPER | 33.6 | 40.8 |
| IRON | 35000 | 34900 |
| NICKEL | 29.5 | 35 |
| POTASSIUM | 885 | 1820 |
| SODIUM | 1150 | 282 |

| DEPTH | TP-07B 2-4' | TP-07C 4-6' | TP-17C* 4-6' |
|---|---|---|---|
| VOCs | ND | ND | ND |
| SVOCs | 143 | ND | ND |
| CPAHs | ND | ND | ND |
| NPAHs | ND | ND | ND |
| PAHs | 53 | ND | ND |
| PESTICIDES | 155.5 | ND | ND |
| PCBs | ND | ND | ND |
| ALUMINIUM | 14200 | 13800 | 12700 |
| BERYLLIUM | 0.75 | 0.74 | 0.67 |
| CHROMIUM | 21.1 | 19.3 | 18.5 |
| COPPER | 38.1 | 41.8 | 37.8 |
| IRON | 36200 | 33800 | 32000 |
| NICKEL | 34.5 | 32.4 | 33.3 |
| SODIUM | 797 | 181 | 166 |

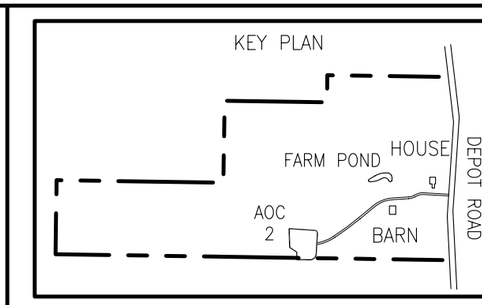
| DEPTH | TP-25 1-2' |
|---|---|
| VOCs | 149.7 |
| SVOCs | ND |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | 9.99 |
| PCBs | ND |
| ALUMINIUM | 14200 |
| BERYLLIUM | 1.1 |
| CHROMIUM | 20 |
| COPPER | 31 |
| IRON | 29600 |
| MAGNESIUM | 5150 |
| NICKEL | 31.1 |
| POTASSIUM | 1930 |
| ZINC | 109 |

| DEPTH | TP-05B 2-4' | TP-05C 4-6' |
|---|---|---|
| VOCs | ND | ND |
| SVOCs | 15 | ND |
| CPAHs | ND | ND |
| NPAHs | ND | ND |
| PAHs | ND | ND |
| PESTICIDES | 32.68 | ND |
| PCBs | ND | ND |
| ALUMINIUM | 12300 | 13500 |
| BERYLLIUM | 0.55 | 0.69 |
| CHROMIUM | 15.5 | 19.7 |
| COPPER | 20.2 | 41.3 |
| IRON | 24900 | 33400 |
| NICKEL | 18.1 | 31 |
| SODIUM | 1240 | 136 |
| THALLIUM | 0.72 | ND |

| DEPTH | TP-03B 2-4' | TP-03C 4-6' |
|---|---|---|
| VOCs | ND | ND |
| SVOCs | 14 | 7.3 |
| CPAHs | ND | ND |
| NPAHs | ND | ND |
| PAHs | ND | ND |
| PESTICIDES | 157 | ND |
| PCBs | ND | ND |
| ALUMINIUM | 13800 | 11800 |
| BERYLLIUM | 0.75 | 0.62 |
| CHROMIUM | 20.1 | 17.9 |
| COPPER | 38.5 | 36.5 |
| IRON | 36300 | 30400 |
| MANGANESE | 1150 | 672 |
| NICKEL | 28.1 | 33.2 |

NOTE:

1. TP46 AND TP47 WERE ADJACENT TO CONCRETE SLAB BELOW SHEDS AND NEAR ROAD. TP48, TP49, AND TP50 WERE NEAR CURRENT BARN.
2. IF NO ANALYTICAL DATA IS SHOWN NEXT TO TEST PIT LOCATION, THEN NO ANALYTICAL SAMPLES WERE COLLECTED FROM THE TEST PIT.




TP-2 TEST PIT

NA NOT ANALYZED
ND NOT DETECTED
NS NOT SPECIFIED
* DUPLICATE SAMPLE

0.73 ONE OR MORE COMPOUNDS CONCENTRATIONS EXCEED STATEWIDE NYSDEC TAGM 4046 SOIL CLEANUP OBJECTIVES

(1) ONLY THOSE METALS EXCEEDING NYSDEC SOIL CRITERIA ARE LISTED

| DEPTH | TP-20 2-3' |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | NA |
| PCBs | ND |
| METALS | NA |

SAMPLE ID
DEPTH IN FEET
TOTAL VOCs (ug/kg)
TOTAL SVOCs (ug/kg)
TOTAL CPAHs (ug/kg)
TOTAL NPAHs (ug/kg)
TOTAL PAHs (ug/kg)
TOTAL PESTICIDES (ug/kg)
TOTAL PCBs (ug/kg)
METALS (1) (mg/kg)

APPROXIMATE LIMITS OF WASTE SOURCES

60 30 0 60 120

Approximate Scale in Feet

MAP SOURCE: USACE, 1999.

FIGURE 3.15

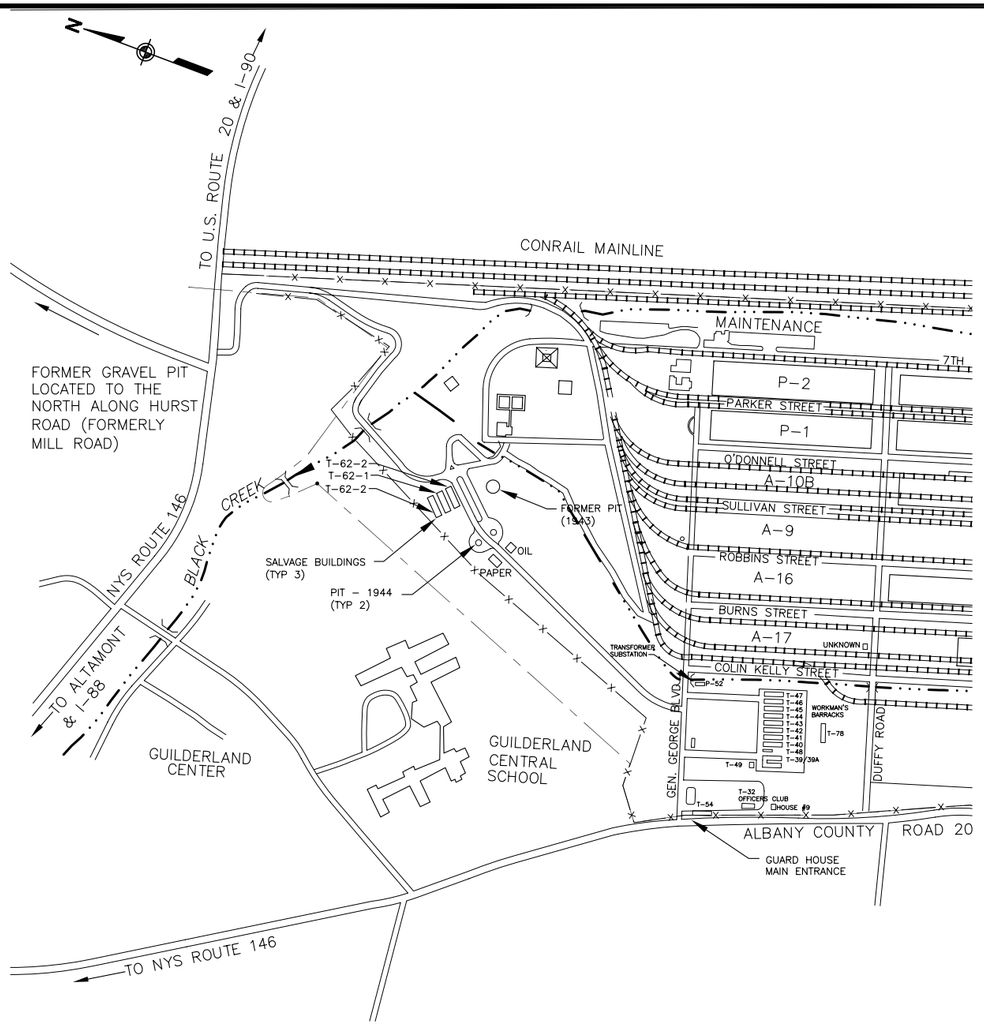
FORMER SADVA
GUILDERLAND, NEW YORK

AOC 2 – FORMER BIVOUAC AREA/
POST COMMANDER'S LANDFILL
TEST PIT SOIL RESULTS

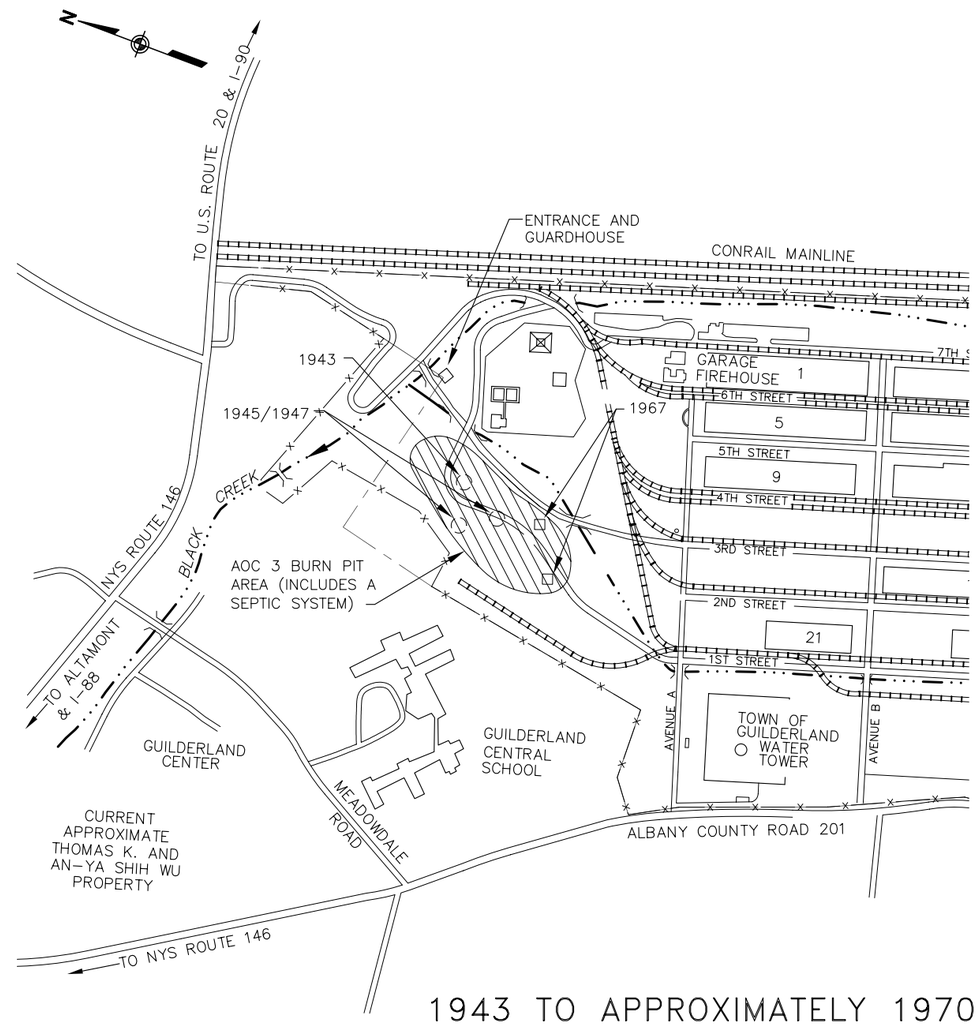
PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (SADVA)\CAD\CE\RI-FS\AOC2-C006(2-8-07).DWG CLW
XREFs: NONE




1943-1945




1943 TO APPROXIMATELY 1970

LEGEND:

- SITE BOUNDARY
- CREEKS/ DRAINAGE DITCH
- T-82 TEMPORARY BUILDING/ STRUCTURE
- P-4 PERMANENT BUILDING/ STRUCTURE
- A-11 OPEN STORAGE AREA
- RAILROAD TRACKS
- FENCING

900 450 0 900 1800

SCALE: 1"=900'

LEGEND:

- APPROXIMATE AOC BOUNDARIES
- CREEKS/ DRAINAGE DITCH
- NORTHEASTERN INDUSTRIAL PARK BOUNDARY
- PART OF THE FORMER SCHENECTADY ARMY DEPOT, VOORHEESVILLE AREA
- 2 BUILDING NUMBER
- A-11 OPEN STORAGE AREA
- RAILROAD TRACKS
- FENCING

900 450 0 900 1800

Approximate Scale in Feet

**FIGURE 3.16**

**SADVA**
**GUILDERLAND, NEW YORK**

**AOC 3 HISTORICAL SITE LAYOUT**

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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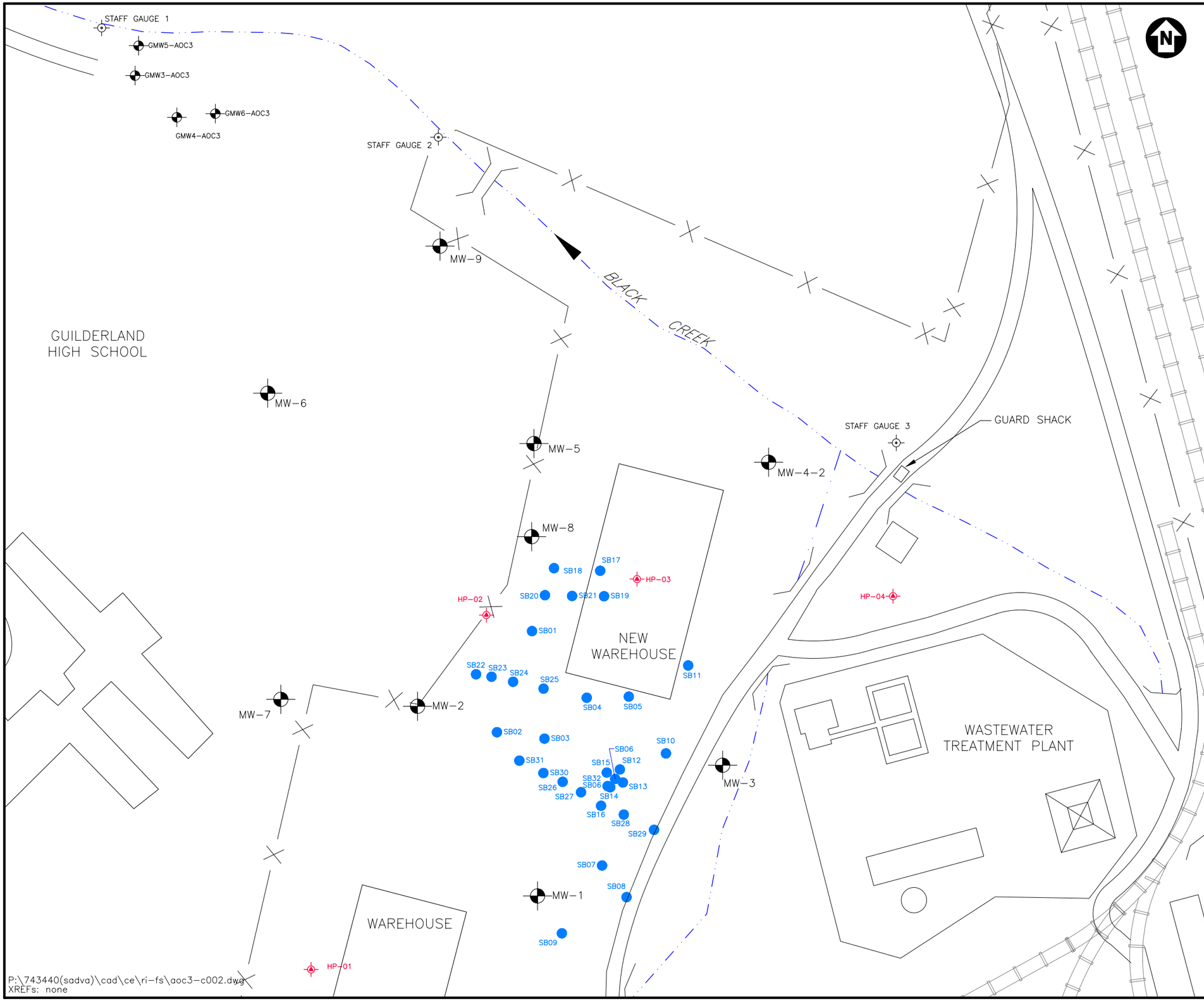
No XREFs




LEGEND

- FORMER ROAD LOCATION
- SB04 — SOIL BORING
- HP-03 — HYDROPUNCH GROUNDWATER SAMPLE
- STAFF GAUGE 3 — STAFF GAUGE LOCATION
- MW-9 — MONITORING WELL
- GMW3-AOC3 — GUILDERLAND SCHOOL BUS GARAGE MONITORING WELL
- CREEKS/ DRAINAGE DITCH
- RAILROAD TRACKS
- FENCING

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.17

SADVA
GUILDERLAND, NEW YORK

AOC 3
SITE PLAN

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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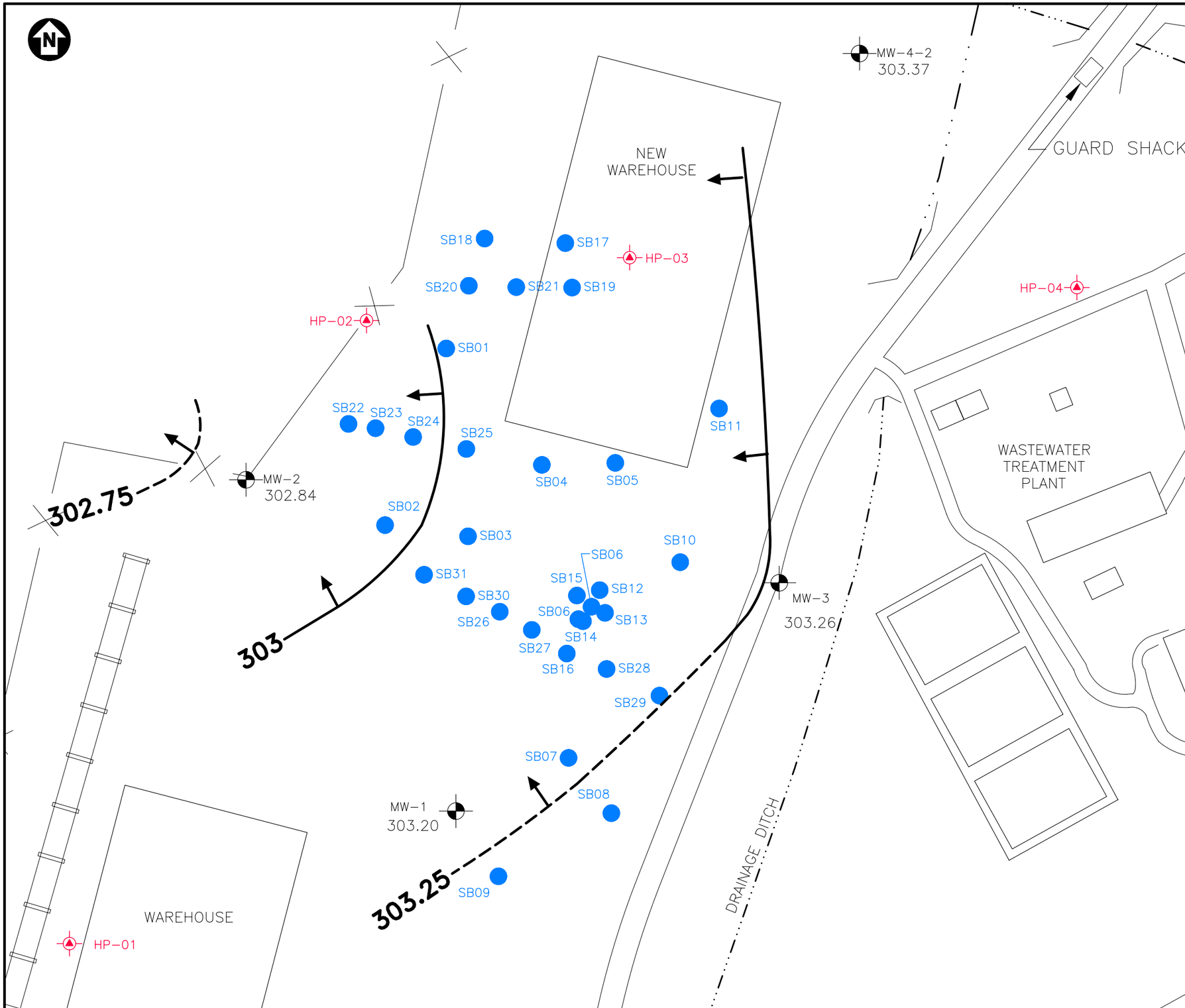


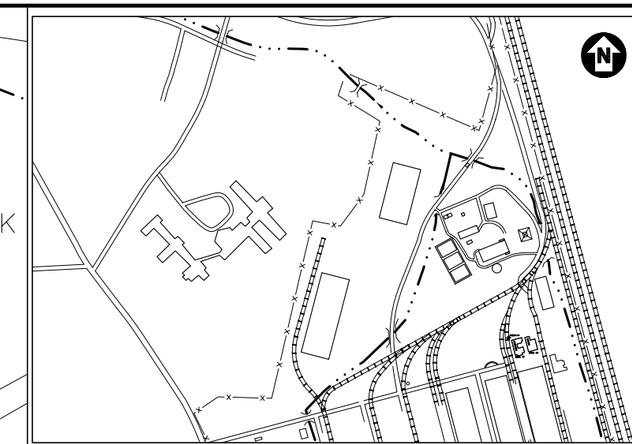

LEGEND

SB04 SOIL BORING

HP-03 HYDROPUNCH GROUNDWATER SAMPLE

MW-2 MONITORING WELL

CREEKS/ DRAINAGE DITCH

RAILROAD TRACKS

FENCING

GROUNDWATER ELEVATION CONTOUR

INFERRED GROUNDWATER CONTOUR ELEVATION

GROUNDWATER FLOW DIRECTION

WATER TABLE ELEVATIONS MEASURED ON NOVEMBER 30, 2000

WATER TABLE ELEVATIONS MEASURED IN FEET BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

120 60 0 120 240

Approximate Scale in Feet

MAP SOURCE: USACE, 1999.

FIGURE 3.18A

SADVA
GUILDERLAND, NEW YORK

AOC 3 GROUNDWATER ELEVATION MAP
OCTOBER 31, 2000

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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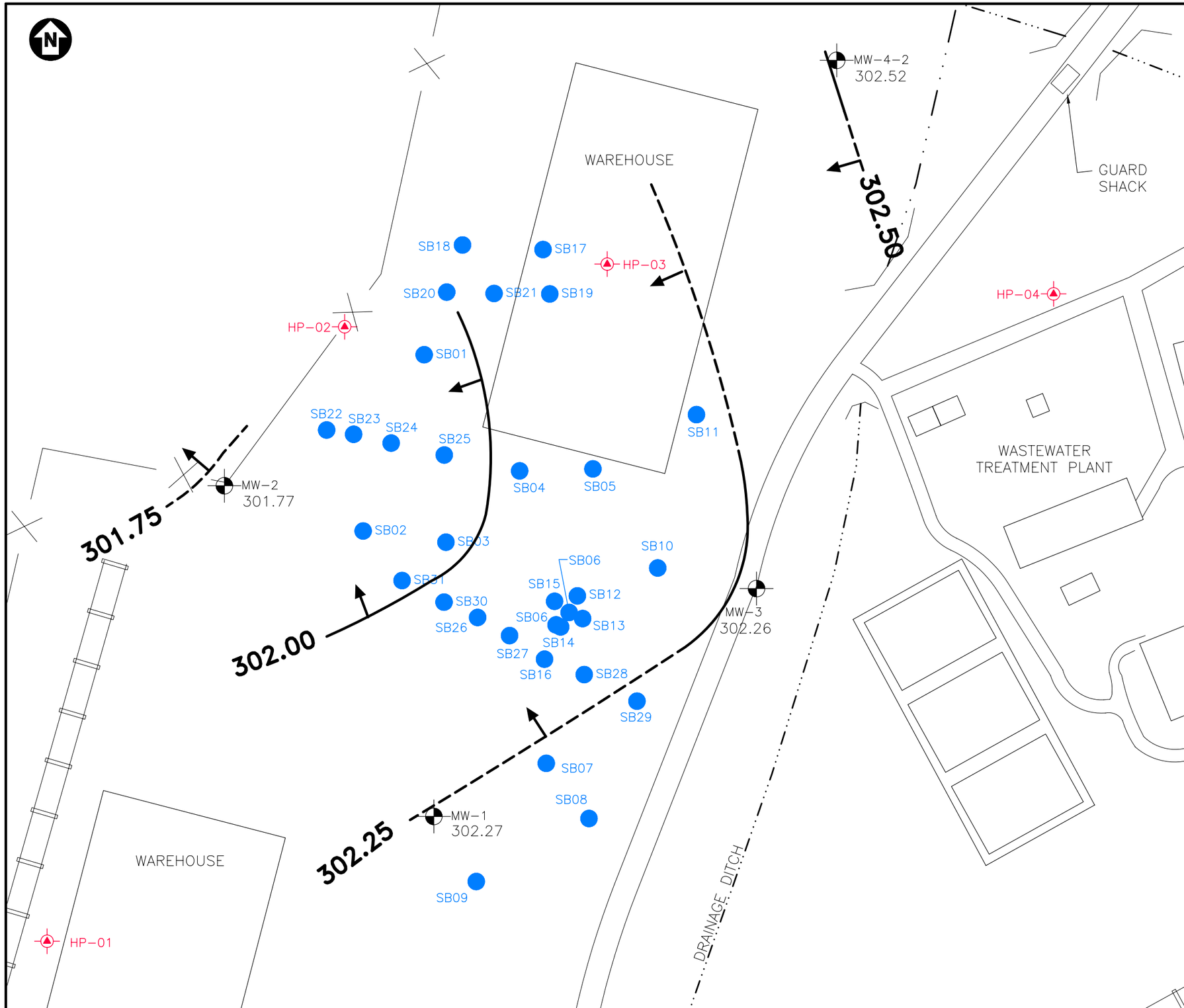
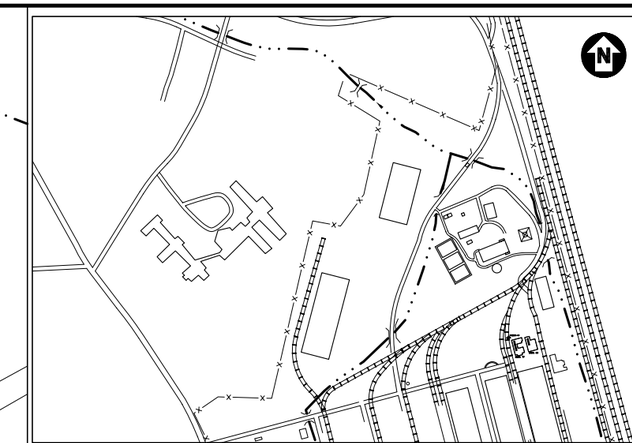


LEGEND

SB04 SOIL BORING

HP-03 HYDROPUNCH GROUNDWATER SAMPLE

MW-2 MONITORING WELL

CREEKS/ DRAINAGE DITCH

RAILROAD TRACKS

FENCING

GROUNDWATER ELEVATION CONTOUR

INFERRED GROUNDWATER CONTOUR ELEVATION

GROUNDWATER FLOW DIRECTION

WATER TABLE ELEVATIONS MEASURED ON NOVEMBER 30, 2000

WATER TABLE ELEVATIONS MEASURED IN FEET BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

120 60 0 120 240

Approximate Scale in Feet

MAP SOURCE: USACE, 1999.

FIGURE 3.18B

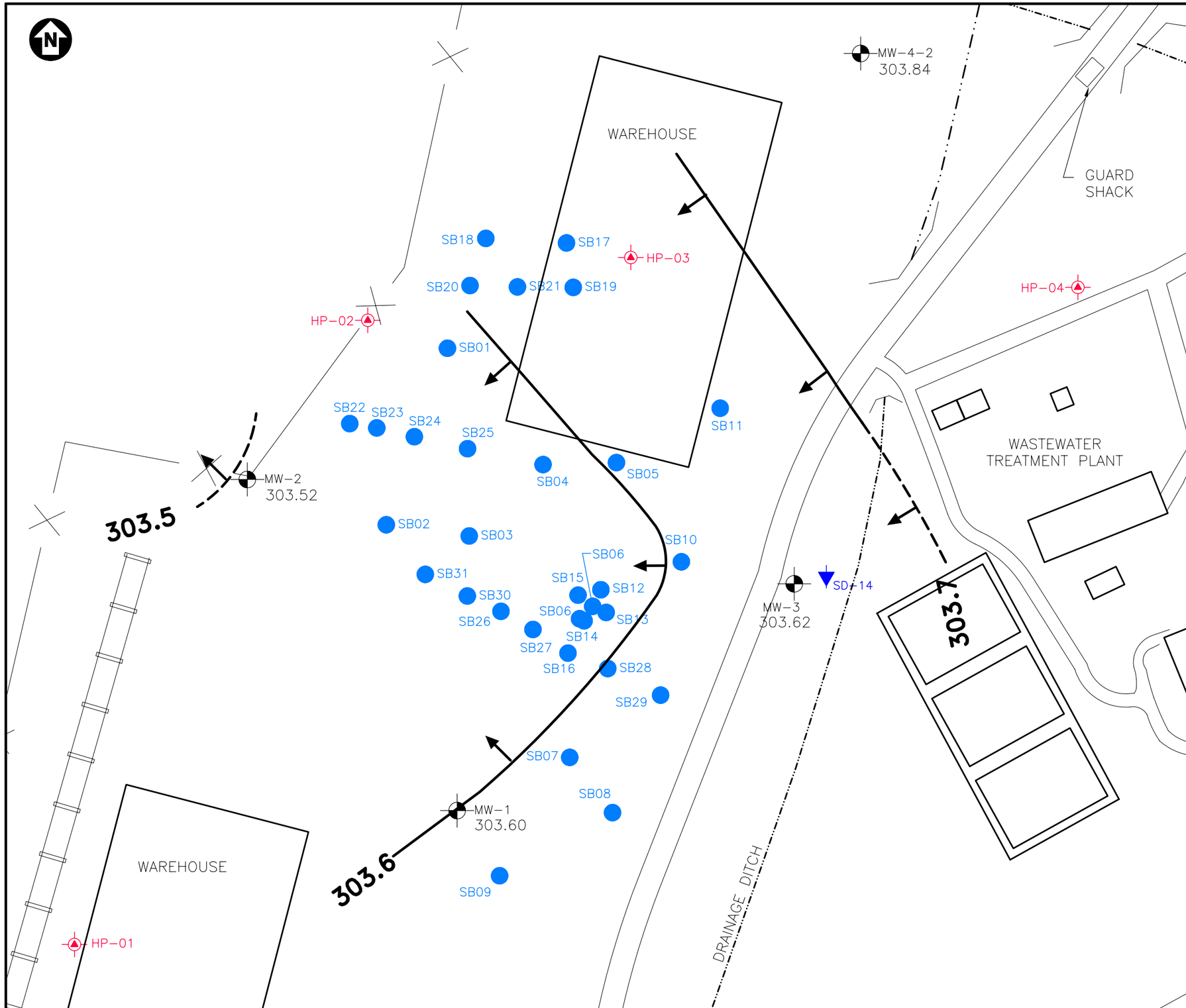
SADVA
GUILDERLAND, NEW YORK

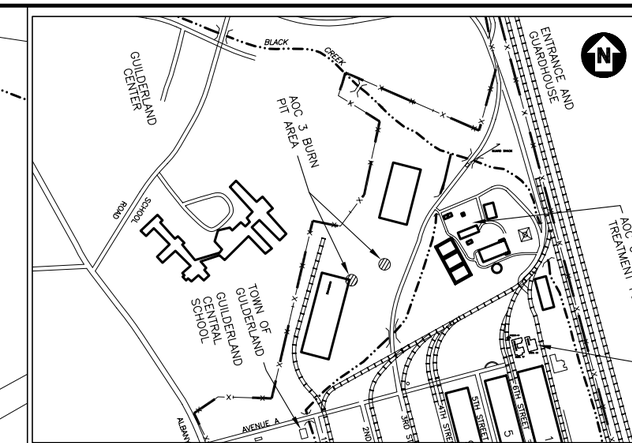
AOC 3 GROUNDWATER ELEVATION MAP
NOVEMBER 30, 2000

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (sadva)\cad\ce\ri-fs\aoc3-c007.dwg 2/9/05 jr




LEGEND

- SB04 — SOIL BORING
- HP-03 — HYDROPUNCH GROUNDWATER SAMPLE
- MW-2 — MONITORING WELL
- CREEKS/ DRAINAGE DITCH
- RAILROAD TRACKS
- FENCING
- GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER CONTOUR ELEVATION
- GROUNDWATER FLOW DIRECTION

WATER TABLE ELEVATIONS MEASURED ON JANUARY 10, 2001

WATER TABLE ELEVATIONS MEASURED IN FEET BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

120 60 0 120 240

Approximate Scale in Feet

MAP SOURCE: USACE, 1999.

FIGURE 3.18C

SADVA
GUILDERLAND, NEW YORK

**AOC 3 GROUNDWATER ELEVATION MAP**
JANUARY 10, 2001

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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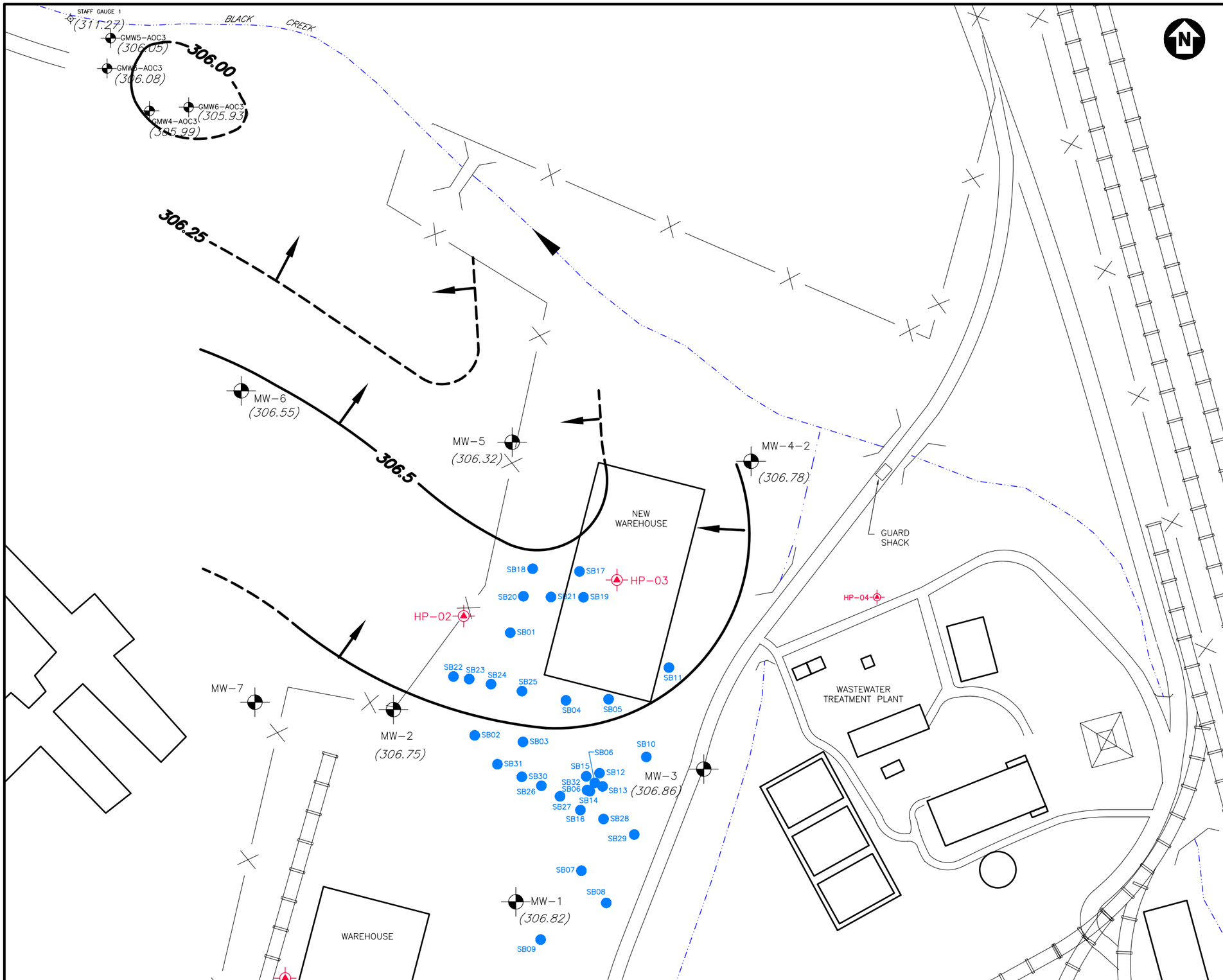


LEGEND

- FORMER ROAD LOCATION
- SB04 — SOIL BORING
- HP-03 — HYDROPUNCH GROUNDWATER SAMPLE
- MW-2 — MONITORING WELL
- GMW3-AOC3 — EXISTING GUILDERLAND SCHOOL BUS GARAGE MONITORING WELL
- STAFF GAUGE
- CREEKS/ DRAINAGE DITCH
- RAILROAD TRACKS
- FENCING
- GROUNDWATER ELEVATION CONTOUR
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- (306.78) GROUNDWATER ELEVATION

WATER TABLE ELEVATIONS MEASURED ON MAY 21, 2001.

WATER TABLE ELEVATIONS MEASURED IN FEET BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.18D

SADVA
GUILDERLAND, NEW YORK

**AOC 3 GROUNDWATER ELEVATION MAP**
**MAY 21, 2001**

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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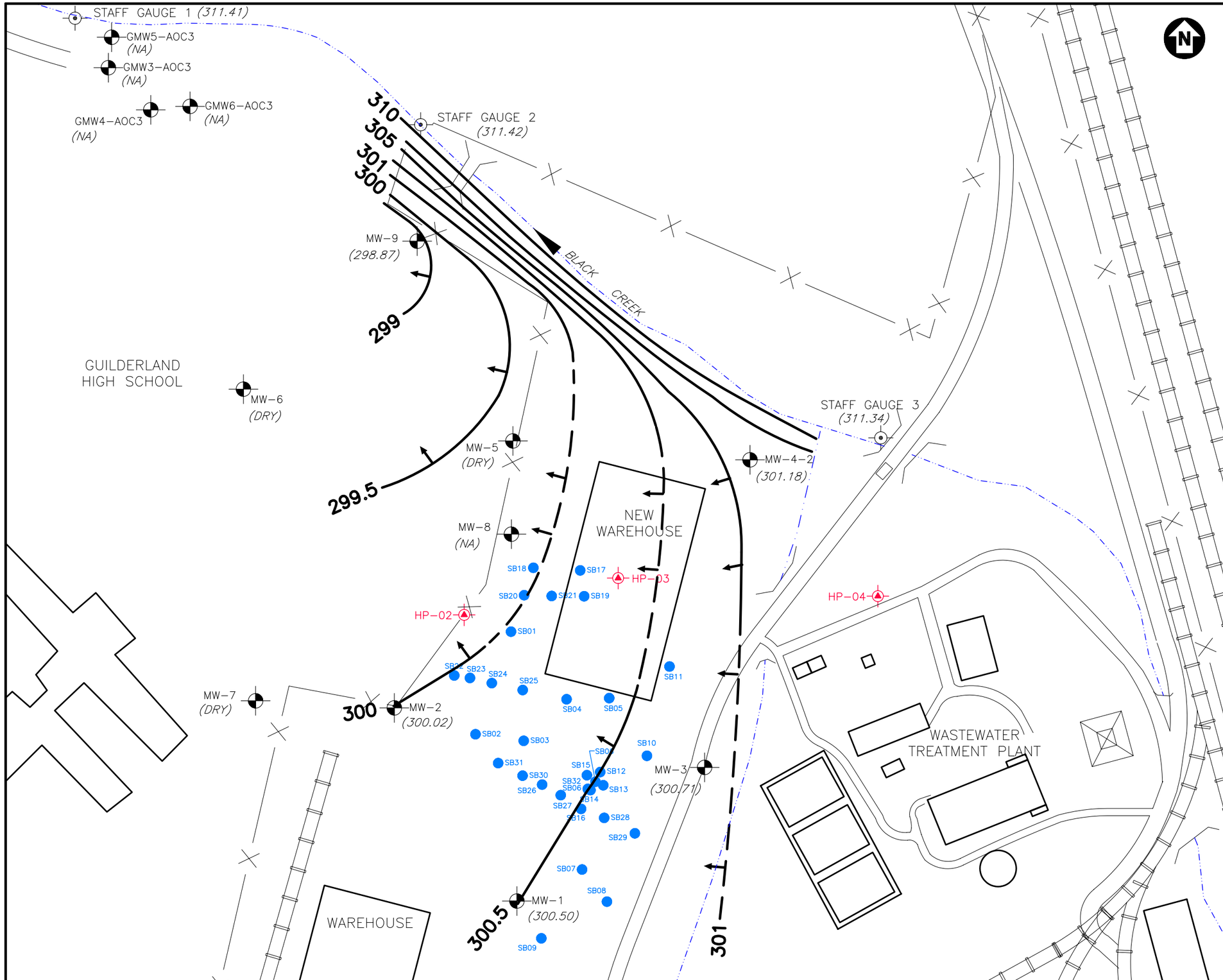



LEGEND

- FORMER ROAD LOCATION
- SB04 SOIL BORING
- HP-03 HYDROPUNCH GROUNDWATER SAMPLE
- MW-2 MONITORING WELL
- GMW3-AOC3 EXISTING GUILDERLAND SCHOOL BUS GARAGE MONITORING WELLS
- STAFF GAUGE
- CREEKS/ DRAINAGE DITCH
- RAILROAD TRACKS
- FENCING
- NA NOT AVAILABLE

WATER TABLE ELEVATIONS MEASURED ON NOVEMBER 7, 2001.

WATER TABLE ELEVATIONS MEASURED IN FEET BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929.

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.18E

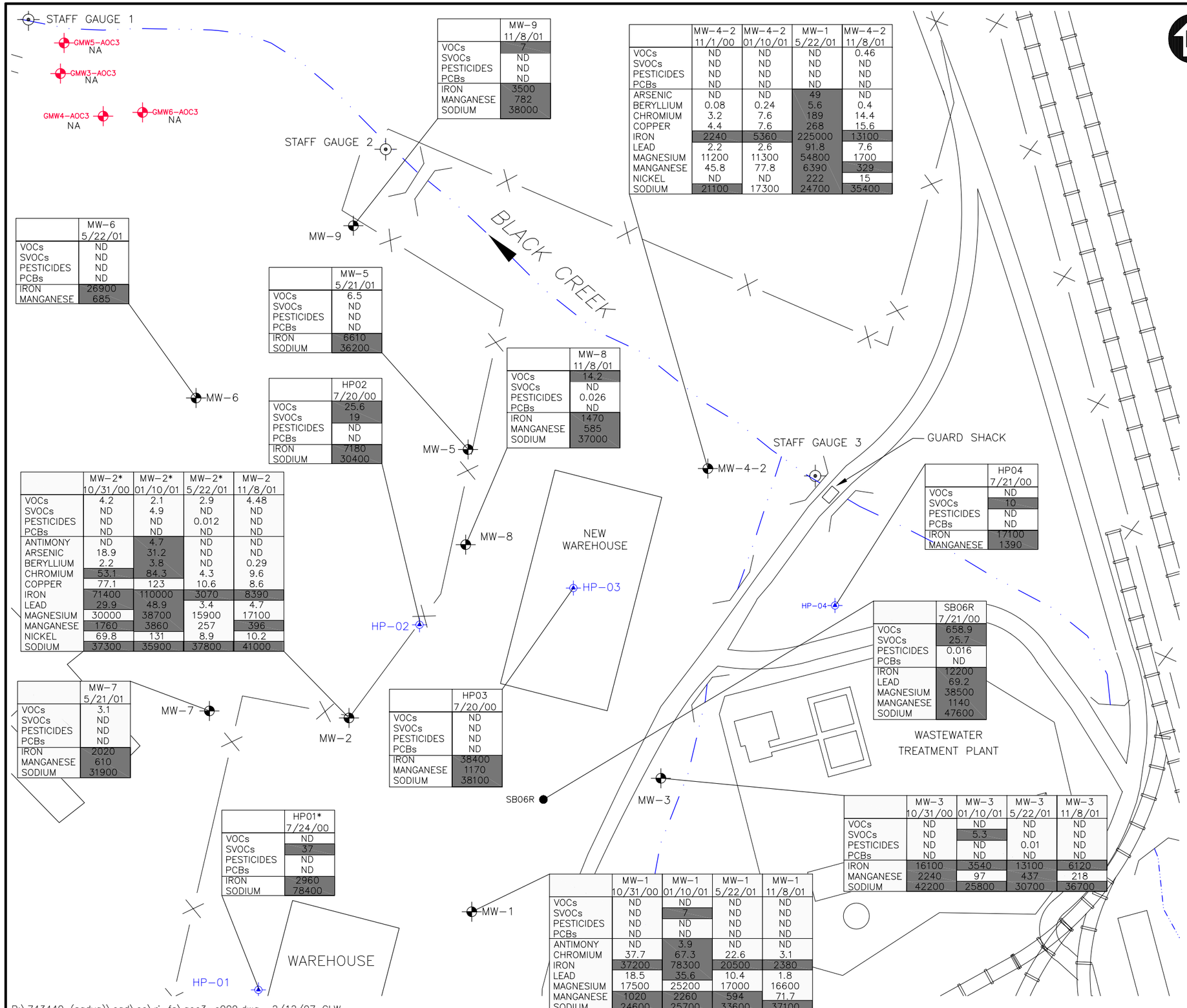
SADVA
GUILDERLAND, NEW YORK

**AOC 3 GROUNDWATER ELEVATION MAP**
NOVEMBER 7, 2001

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (sadva)\cad\ce\ri-fs\aoc3-c006.dwg 2/11/07 CLW




| | MW-9 11/8/01 |
|---|---|
| VOCs | 7 |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 3500 |
| MANGANESE | 782 |
| SODIUM | 38000 |

| | MW-4-2 11/1/00 | MW-4-2 01/10/01 | MW-1 5/22/01 | MW-4-2 11/8/01 |
|---|---|---|---|---|
| VOCs | ND | ND | ND | 0.46 |
| SVOCs | ND | ND | ND | ND |
| PESTICIDES | ND | ND | ND | ND |
| PCBs | ND | ND | ND | ND |
| ARSENIC | ND | ND | 49 | ND |
| BERYLLIUM | 0.08 | 0.24 | 5.6 | 0.4 |
| CHROMIUM | 3.2 | 7.6 | 189 | 14.4 |
| COPPER | 4.4 | 7.6 | 268 | 15.6 |
| IRON | 2240 | 5360 | 225000 | 13100 |
| LEAD | 2.2 | 2.6 | 91.8 | 7.6 |
| MAGNESIUM | 11200 | 11300 | 54800 | 1700 |
| MANGANESE | 45.8 | 77.8 | 6390 | 329 |
| NICKEL | ND | ND | 222 | 15 |
| SODIUM | 21100 | 17300 | 24700 | 35400 |

| | MW-6 5/22/01 |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 26900 |
| MANGANESE | 685 |

| | MW-5 5/21/01 |
|---|---|
| VOCs | 6.5 |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 6610 |
| SODIUM | 36200 |

| | HP02 7/20/00 |
|---|---|
| VOCs | 25.6 |
| SVOCs | 19 |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 7180 |
| SODIUM | 30400 |

| | MW-8 11/8/01 |
|---|---|
| VOCs | 14.2 |
| SVOCs | ND |
| PESTICIDES | 0.026 |
| PCBs | ND |
| IRON | 1470 |
| MANGANESE | 585 |
| SODIUM | 37000 |

| | MW-2* 10/31/00 | MW-2* 01/10/01 | MW-2* 5/22/01 | MW-2 11/8/01 |
|---|---|---|---|---|
| VOCs | 4.2 | 2.1 | 2.9 | 4.48 |
| SVOCs | ND | 4.9 | ND | ND |
| PESTICIDES | ND | ND | 0.012 | ND |
| PCBs | ND | ND | ND | ND |
| ANTIMONY | ND | 4.7 | ND | ND |
| ARSENIC | 18.9 | 31.2 | ND | ND |
| BERYLLIUM | 2.2 | 3.8 | ND | 0.29 |
| CHROMIUM | 53.1 | 84.3 | 4.3 | 9.6 |
| COPPER | 77.1 | 123 | 10.6 | 8.6 |
| IRON | 71400 | 110000 | 3070 | 8390 |
| LEAD | 29.9 | 48.9 | 3.4 | 4.7 |
| MAGNESIUM | 30000 | 38700 | 15900 | 17100 |
| MANGANESE | 1760 | 3860 | 257 | 396 |
| NICKEL | 69.8 | 131 | 8.9 | 10.2 |
| SODIUM | 37300 | 35900 | 37800 | 41000 |

| | HP04 7/21/00 |
|---|---|
| VOCs | ND |
| SVOCs | 10 |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 17100 |
| MANGANESE | 1390 |

| | SB06R 7/21/00 |
|---|---|
| VOCs | 658.9 |
| SVOCs | 25.7 |
| PESTICIDES | 0.016 |
| PCBs | ND |
| IRON | 12200 |
| LEAD | 69.2 |
| MAGNESIUM | 38500 |
| MANGANESE | 1140 |
| SODIUM | 47600 |

| | MW-7 5/21/01 |
|---|---|
| VOCs | 3.1 |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 2020 |
| MANGANESE | 610 |
| SODIUM | 31900 |

| | HP03 7/20/00 |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 38400 |
| MANGANESE | 1170 |
| SODIUM | 38100 |

| | HP01* 7/24/00 |
|---|---|
| VOCs | ND |
| SVOCs | 37 |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 2960 |
| SODIUM | 78400 |

| | MW-1 10/31/00 | MW-1 01/10/01 | MW-1 5/22/01 | MW-1 11/8/01 |
|---|---|---|---|---|
| VOCs | ND | ND | ND | ND |
| SVOCs | ND | 7 | ND | ND |
| PESTICIDES | ND | ND | ND | ND |
| PCBs | ND | ND | ND | ND |
| ANTIMONY | ND | 3.9 | ND | ND |
| CHROMIUM | 37.7 | 67.3 | 22.6 | 3.1 |
| IRON | 37200 | 78300 | 20500 | 2380 |
| LEAD | 18.5 | 35.6 | 10.4 | 1.8 |
| MAGNESIUM | 17500 | 25200 | 17000 | 16600 |
| MANGANESE | 1020 | 2260 | 594 | 71.7 |
| SODIUM | 24600 | 25700 | 33600 | 37100 |

| | MW-3 10/31/00 | MW-3 01/10/01 | MW-3 5/22/01 | MW-3 11/8/01 |
|---|---|---|---|---|
| VOCs | ND | ND | ND | ND |
| SVOCs | ND | 5.3 | ND | ND |
| PESTICIDES | ND | ND | 0.01 | ND |
| PCBs | ND | ND | ND | ND |
| IRON | 16100 | 3540 | 13100 | 6120 |
| MANGANESE | 2240 | 97 | 437 | 218 |
| SODIUM | 42200 | 25800 | 30700 | 36700 |

LEGEND

HP-03 HYDROPUNCH

MW-2 MONITORING WELL

GMW3-AOC3 GUILDERLAND BUS GARAGE MONITORING WELL

SB06R SOIL BORING IN WHICH GROUNDWATER SAMPLE COLLECTED

STAFF GAUGE LOCATION

CREEKS/ DRAINAGE DITCH

RAILROAD TRACKS

FENCING

| | HP04 7/21/00 |
|---|---|
| VOCs | ND |
| SVOCs | 10 |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 17100 |
| MANGANESE | 1390 |

SAMPLE ID
SAMPLE DATE
TOTAL VOCs (ug/L)
TOTAL SVOCs (ug/L)
TOTAL PESTICIDES (ug/L
TOTAL PCBs (ug/L)
TOTAL METALS (1) (ug/L)

NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE TAKEN (HIGHER CONCENTRATION REPORTED)

396 ONE OR MORE COMPOUNDS OR CONCENTRATIONS EXCEEDING NYSDEC GROUNDWATER STANDARDS/GUIDANCE VALUE OR BACKGROUND CRITERIA.

(1) ONLY METALS EXCEEDING NYSDEC GROUNDWATER STANDARDS/GUIDANCE VALUES OR BACKGROUND CRITERIA SHOWN

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

# FIGURE 3.19

**SADVA**
**GUILDERLAND, NEW YORK**

## AOC 3 GROUNDWATER SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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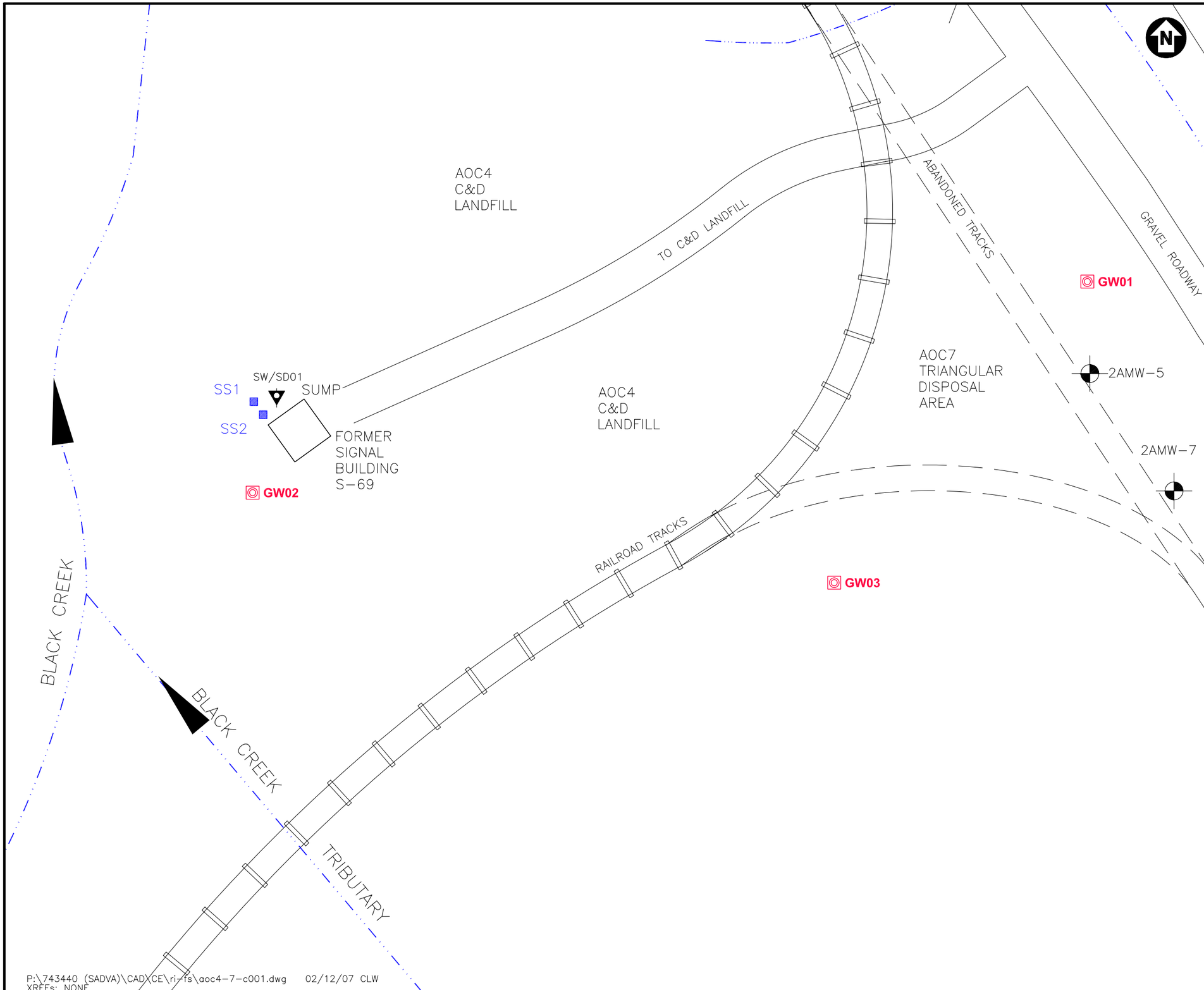


LEGEND

- FORMER ROAD LOCATION
- WATER
- RAILROAD TRACKS
- FENCING
- GW01 — MONITORING WELL LOCATION (INSTALLED JUNE 2004)
- 2AMWA-5 — EXISTING MONITORING WELL LOCATION
- SS1 — SURFACE SOIL SAMPLE LOCATION
- SW/SD01 — SURFACE WATER/SEDIMENT PRIOR SAMPLE LOCATION

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.20

SADVA
GUILDERLAND, NEW YORK

AOC 4
C & D LANDFILL
SITE PLAN

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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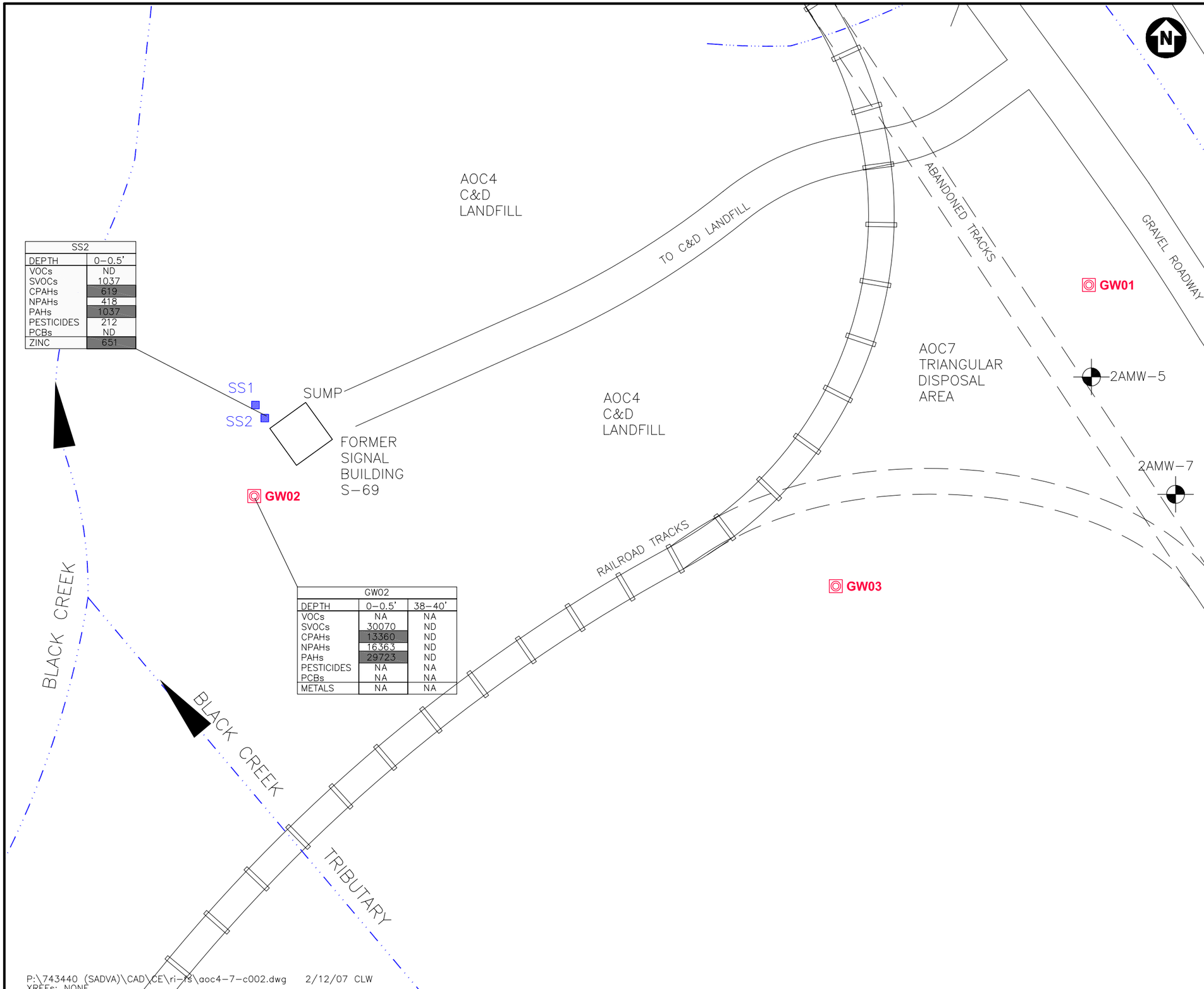
XREFs: NONE




| SS2 | |
|---|---|
| DEPTH | 0-0.5' |
| VOCs | ND |
| SVOCs | 1037 |
| CPAHs | 619 |
| NPAHs | 418 |
| PAHs | 1037 |
| PESTICIDES | 212 |
| PCBs | ND |
| ZINC | 651 |

| GW02 | | |
|---|---|---|
| DEPTH | 0-0.5' | 38-40' |
| VOCs | NA | NA |
| SVOCs | 30070 | ND |
| CPAHs | 13360 | ND |
| NPAHs | 16363 | ND |
| PAHs | 29723 | ND |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NA | NA |

LEGEND

- FORMER ROAD LOCATION
- WATER
- RAILROAD TRACKS
- FENCING
- GW01 — MONITORING WELL LOCATION (INSTALLED JUNE 2004)
- 2AMW-5 — EXISTING MONITORING WELL LOCATION
- SS1 — SOIL SAMPLE LOCATION
- SW/SD01 — SURFACE WATER/SEDIMENT SAMPLE LOCATION

NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE ANALYZED, HIGHEST CONCENTRATION SHOWN

0.73 ONE OR MORE COMPOUNDS CONCENTRATIONS EXCEED NYSDEC SOIL CRITERIA OR BACKGROUND CRITERIA.

ONLY METALS EXCEEDING NYSDEC SOIL CRITERIA OR BACKGROUND CRITERIA SHOWN.

| SS2 | | |
|---|---|---|
| DEPTH | 0-0.5' | SAMPLE ID<br>DEPTH IN FEET |
| VOCs | ND | TOTAL VOCs (ug/kg) |
| SVOCs | 1037 | TOTAL SVOCs (ug/kg) |
| CPAHs | 619 | TOTAL CPAHs (ug/kg) |
| NPAHs | 418 | TOTAL NPAHs (ug/kg) |
| PAHs | 1037 | TOTAL PAHs (ug/kg) |
| PESTICIDES | 212 | TOTAL PESTICIDES (ug/kg) |
| PCBs | ND | TOTAL PCBs (ug/kg) |
| ZINC | 651 | TOTAL METALS (1) (mg/kg) |

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

# FIGURE 3.21

SADVA
GUILDERLAND, NEW YORK

AOC 4 AND
C & D LANDFILL
SOIL SAMPLE RESULTS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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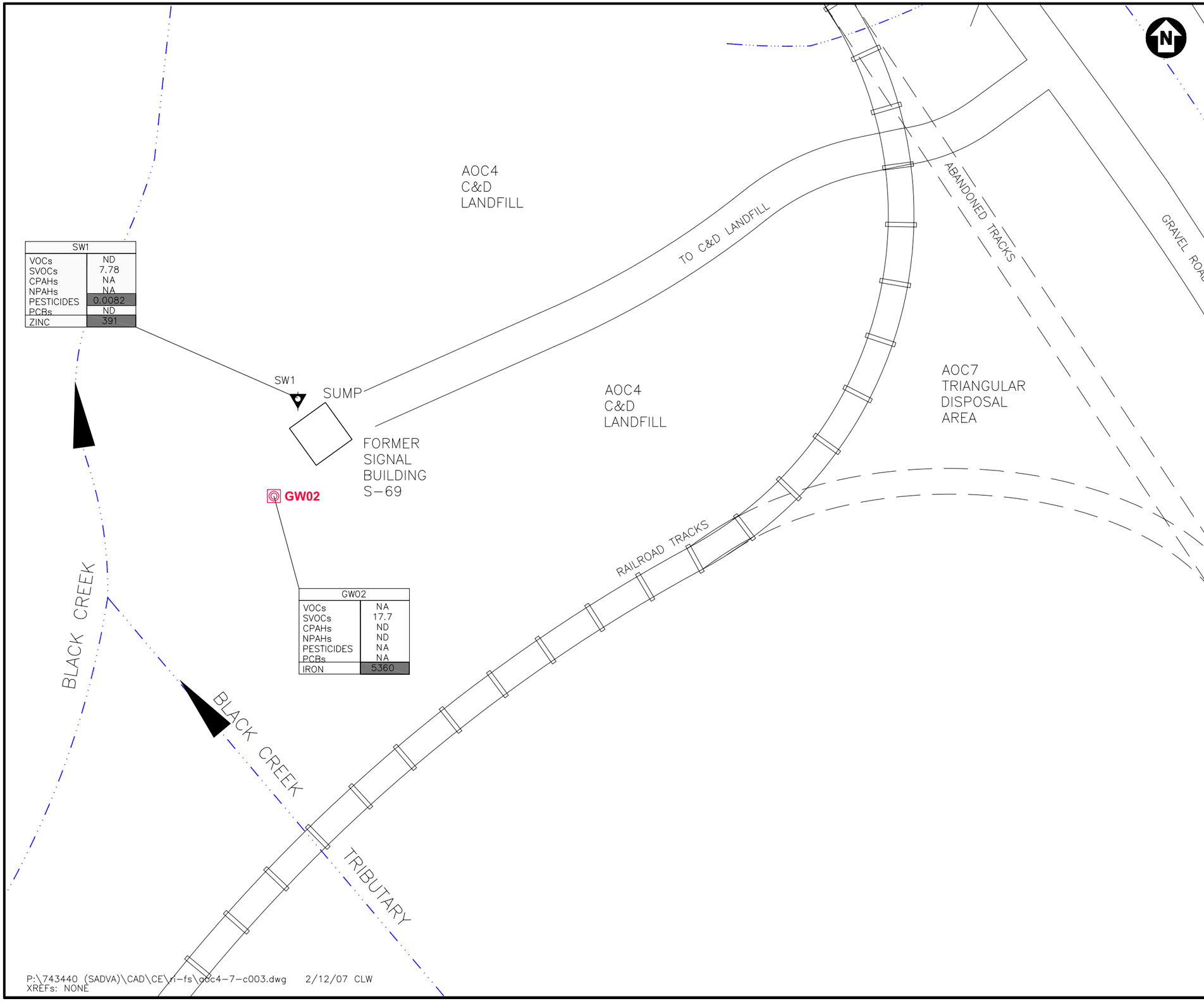
XREFs: NONE




| SW1 | |
|---|---|
| VOCs | ND |
| SVOCs | 7.78 |
| CPAHs | NA |
| NPAHs | NA |
| PESTICIDES | 0.0082 |
| PCBs | ND |
| ZINC | 391 |

| GW02 | |
|---|---|
| VOCs | NA |
| SVOCs | 17.7 |
| CPAHs | ND |
| NPAHs | ND |
| PESTICIDES | NA |
| PCBs | NA |
| IRON | 5360 |

LEGEND

- FORMER ROAD LOCATION
- WATER
- RAILROAD TRACKS
- FENCING
- GW01 — MONITORING WELL LOCATION (INSTALLED JUNE 2004)
- 2AMW-5 — EXISTING MONITORING WELL LOCATION
- SW1 — SURFACE WATER SAMPLE LOCATION

NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE ANALYZED, HIGHEST CONCENTRATION SHOWN

3100 ONE OR MORE COMPOUNDS CONCENTRATIONS EXCEED NYSDEC GROUNDWATER STANDARDS/GUIDANCE VALUE OR BACKGROUND CRITERIA.

ONLY METALS EXCEEDING NYSDEC GROUNDWATER STANDARDS/GUIDANCE VALUE OR BACKGROUND CRITERIA SHOWN.

| SW-1 | | |
|---|---|---|
| | | SAMPLE ID |
| VOCs | ND | TOTAL VOCs (ug/L) |
| SVOCs | 7.78 | TOTAL SVOCs (ug/L) |
| CPAHs | NA | TOTAL NPAHs (ug/L) |
| NPAHs | NA | TOTAL PAHs (ug/L) |
| PESTICIDES | 0.0082 | TOTAL PESTICIDES (ug/L) |
| PCBs | ND | TOTAL PCBs (ug/L) |
| ZINC | 391 | TOTAL METALS (1) (ug/L) |

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.22

SADVA
GUILDERLAND, NEW YORK

AOC 4
C & D LANDFILL
SURFACE WATER AND GROUNDWATER
SAMPLE RESULTS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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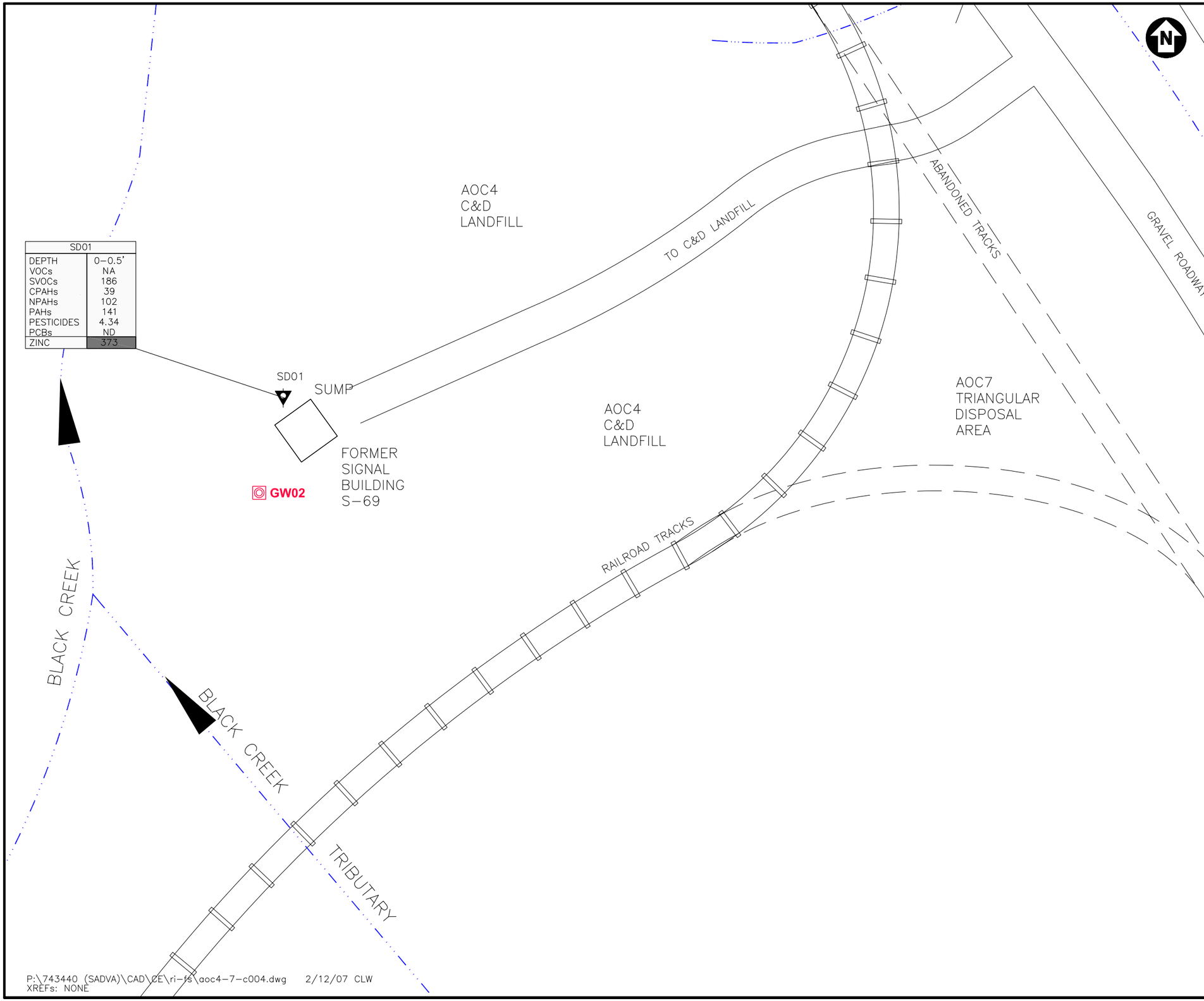
XREFs: NONE

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XREFs: NONE

LEGEND

- FORMER ROAD LOCATION
- WATER
- RAILROAD TRACKS
- FENCING
- GW01 — MONITORING WELL LOCATION (INSTALLED JUNE 2004)
- 2AMW–5 — EXISTING MONITORING WELL LOCATION
- SD01 — SURFACE SEDIMENT SAMPLE LOCATION
- SS1 — SURFACE SOIL SAMPLE LOCATION

NA NOT ANALYZED
ND NOT DETECTED

ONLY METALS EXCEEDING NYSDEC TAGM SEDIMENT CRITERIA OR BACKGROUND CRITERIA SHOWN

373 — ONE OR MORE COMPOUNDS ABOVE NYSDEC SEDIMENT CRITERIA AND BACKGROUND

| SD01 | |
|---|---|
| DEPTH | 0–0.5' |
| VOCs | NA |
| SVOCs | 186 |
| CPAHs | 39 |
| NPAHs | 102 |
| PAHs | 141 |
| PESTICIDES | 4.34 |
| PCBs | ND |
| ZINC | 373 |

SAMPLE ID
DEPTH IN FEET
TOTAL VOCs (ug/kg)
TOTAL SVOCs (ug/kg)
TOTAL CPAHs (ug/kg)
TOTAL NPAHs (ug/kg)
TOTAL PAHs (ug/kg)
TOTAL PESTICIDES (ug/kg)
TOTAL PCBs (ug/kg)
TOTAL METALS (1)(mg/kg)

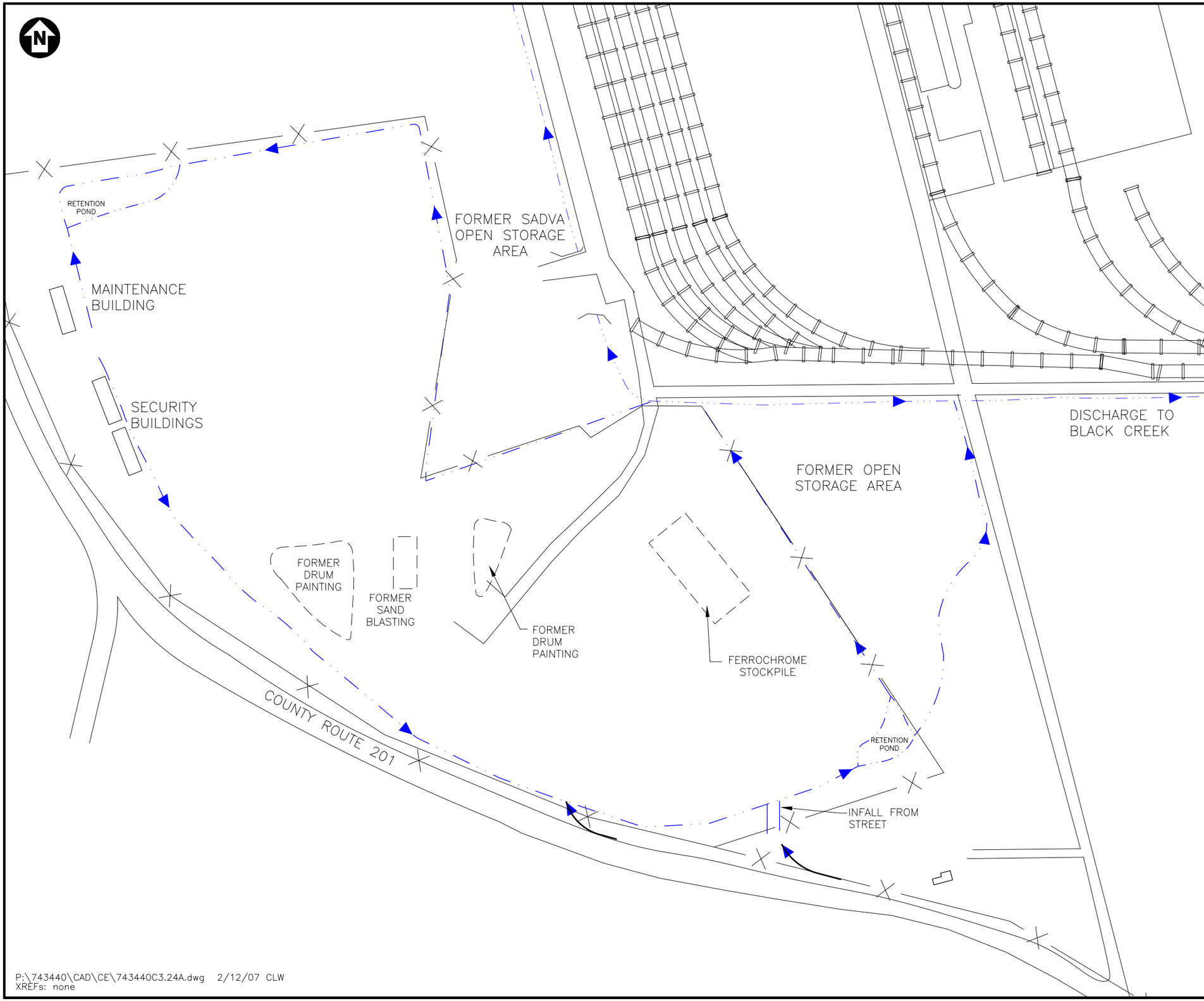
100 50 0 100 200
Approximate Scale in Feet
SOURCE: USACE, 1999.

FIGURE 3.23

SADVA
GUILDERLAND, NEW YORK

AOC 4
C & D LANDFILL
SEDIMENT SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315–451–9560




LEGEND

DRAINAGE DITCH

SURFACE WATER FLOW PATH

FENCE/PROPERTY BOUNDARY

NOTE:

THIS FIGURE PRESENTS SITE CONDITIONS EXISTING AT THE TIME OF THE RI SAMPLING EVENTS. IN LATE 2004, SEVERAL STORMWATER DETENTION BASINS WERE CONSTRUCTED AT VOORHEESVILLE DEPOT. THOSE BASINS ARE NOT REFLECTED ON THIS FIGURE.

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.24A

SADVA
GUILDERLAND, NEW YORK

AOC 5 SITE PLAN
(CIRCA 2000)

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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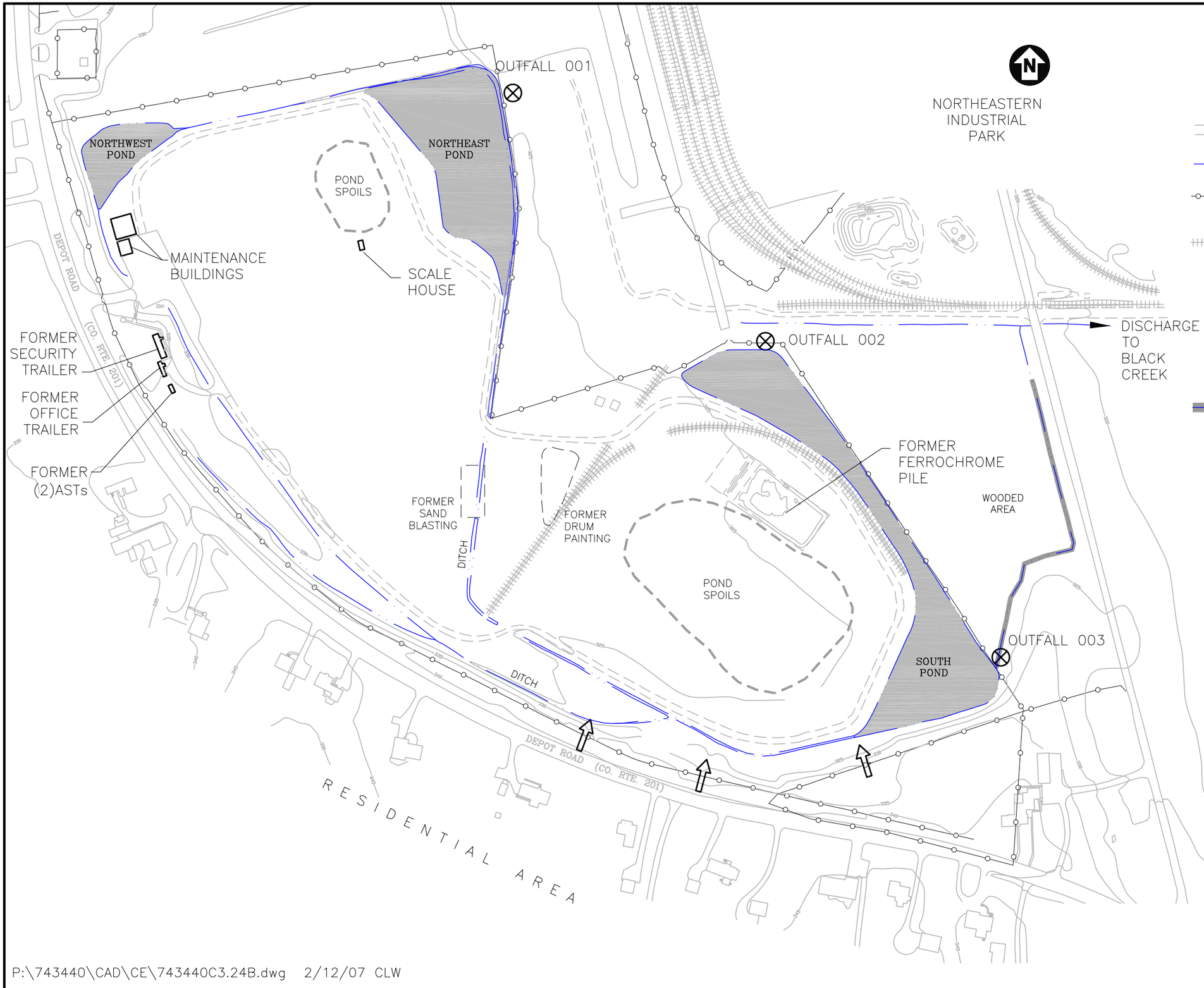



LEGEND:

- DIRT ROAD
- DRAINAGE DITCH/WATER
- FENCE/PROPERTY BOUNDARY
- RAILROAD
- OUTFALL
- INFALL CONDUIT
- POND SPOILS AREA
- EXISTING DRAINAGE SWALE EXCAVATED TO 4 INCHES TO REMOVE SOIL DURING POND MODIFICATIONS IN 2004

200 100 0 200 400

APPROXIMATE SCALE IN FEET

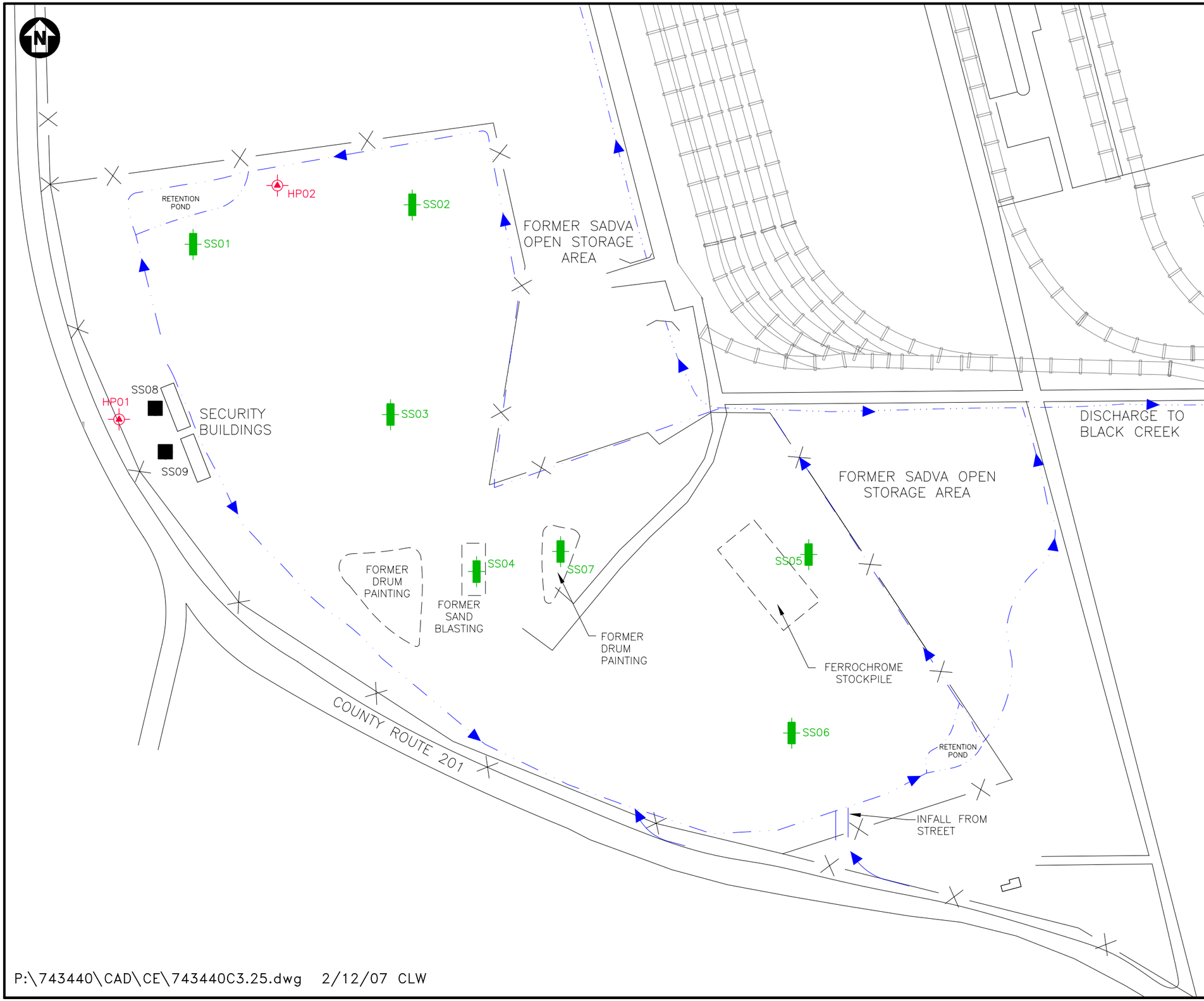
FIGURE 3.24B

SADVA
GUILDERLAND, NEW YORK

AOC 5
CURRENT SITE PLAN

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440\CAD\CE\743440C3.24B.dwg 2/12/07 CLW




LEGEND

- HP/03 — HYDROPUNCH SOIL SAMPLE
- SS02 — TEST PIT LOCATION
- SS08 — BACKGROUND SURFACE SOIL SAMPLE LOCATION
- DRAINAGE DITCH
- SURFACE WATER FLOW PATH
- FENCE/PROPERTY BOUNDARY

NOTE:

THIS FIGURE PRESENTS SITE CONDITIONS EXISTING AT THE TIME OF THE RI SAMPLING EVENTS. IN LATE 2004, SEVERAL STORMWATER DETENTION BASINS WERE CONSTRUCTED AT VOORHEESVILLE DEPOT. THOSE BASINS ARE NOT REFLECTED ON THIS FIGURE.

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.25

SADVA
GUILDERLAND, NEW YORK
AOC 5 SOIL SAMPLE LOCATIONS (2000)

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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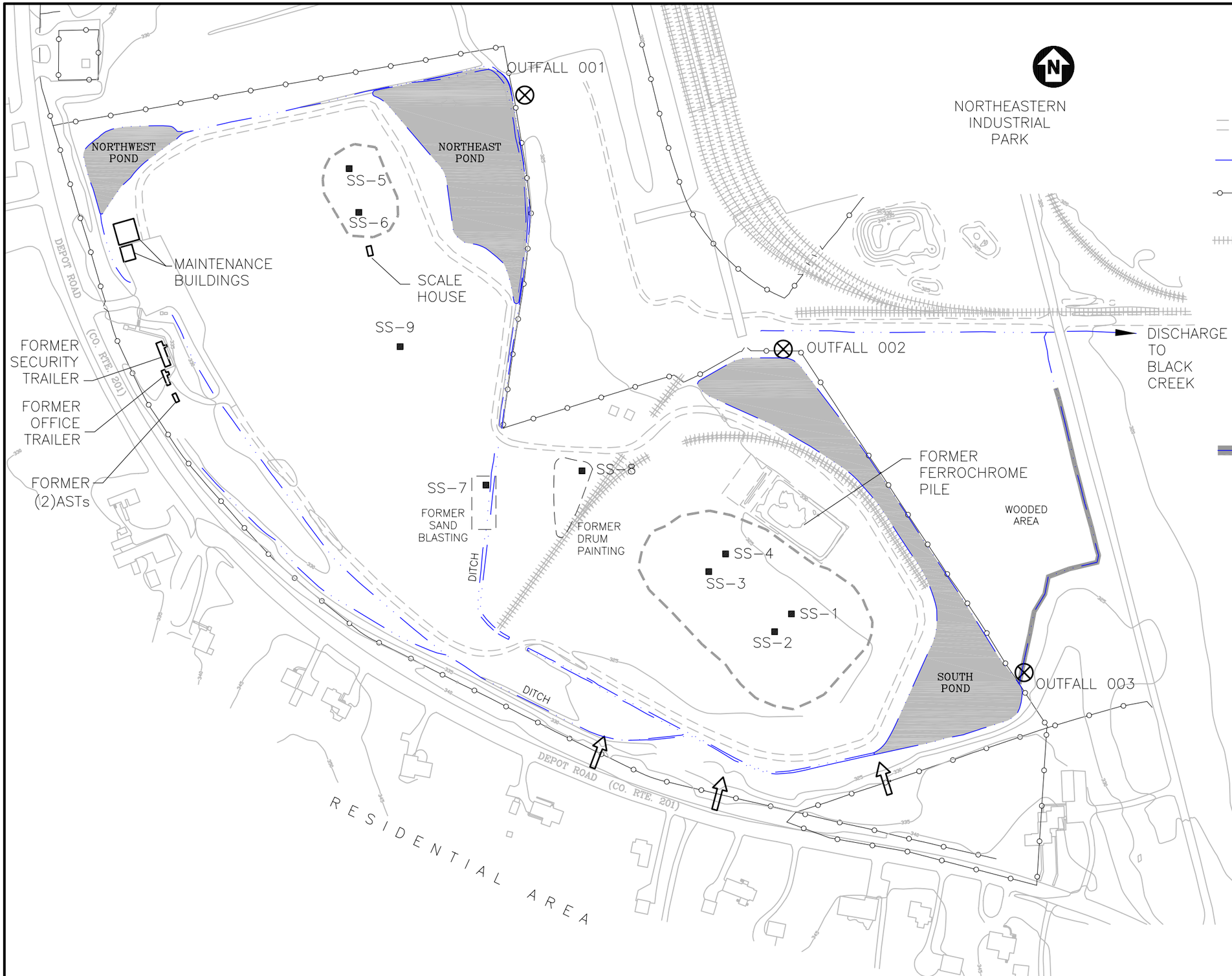



LEGEND:

- DIRT ROAD
- DRAINAGE DITCH/WATER
- FENCE/PROPERTY BOUNDARY
- RAILROAD
- OUTFALL
- INFALL CONDUIT
- POND SPOILS AREA
- SS-1 SURFACE SOIL SAMPLE (JUNE 2006)
- EXISTING DRAINAGE SWALE EXCAVATED TO 4 INCHES TO REMOVE SOIL DURING POND MODIFICATIONS IN 2004

200 100 0 200 400

APPROXIMATE SCALE IN FEET

FIGURE 3.26

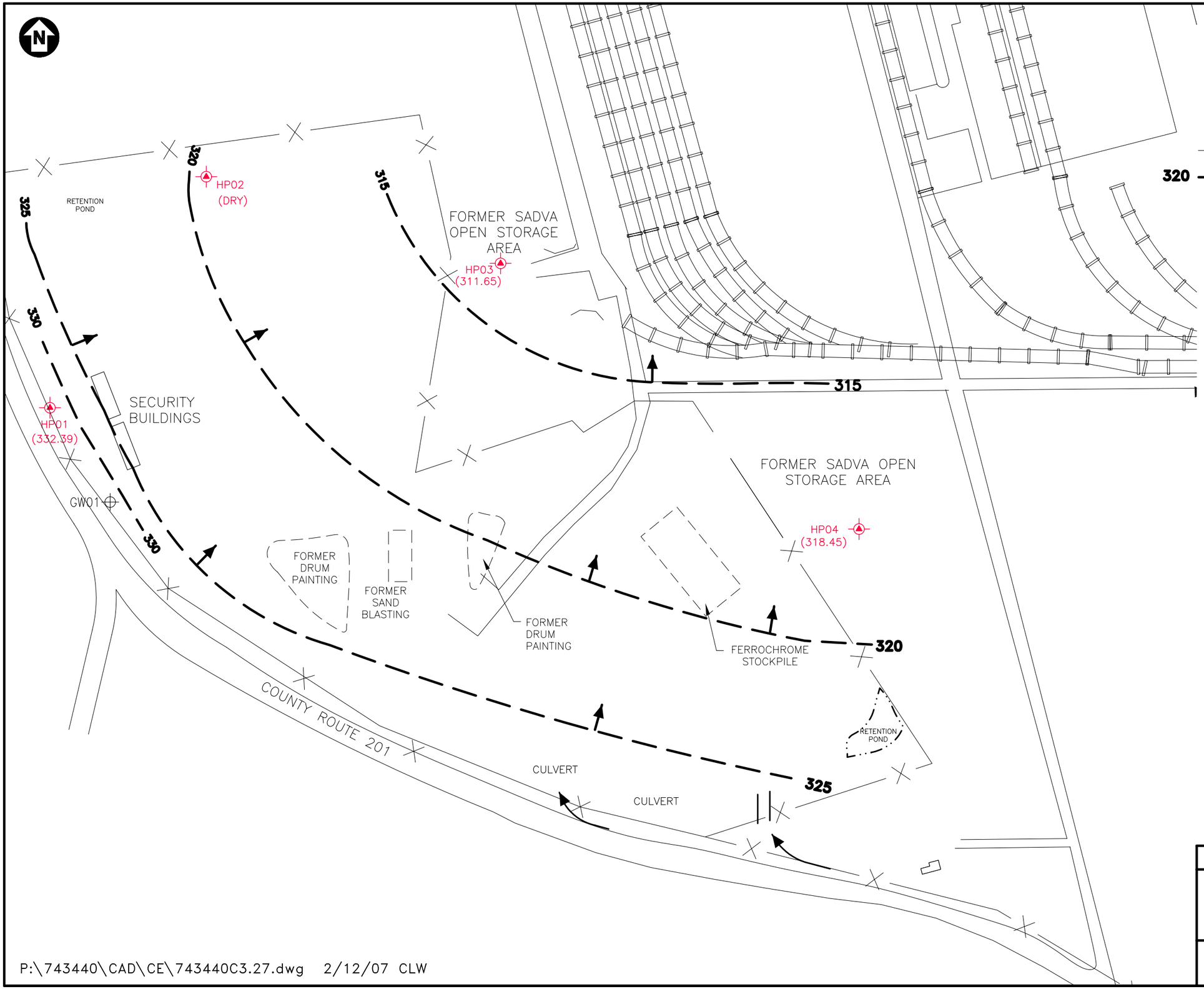
SADVA
GUILDERLAND, NEW YORK

AOC 5 SUPPLEMENTAL SOIL SAMPLE LOCATIONS (2006)

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440\CAD\CE\743440C3.26.dwg 2/12/07 CLW




LEGEND

GW01 GROUNDWATER WELL

HP/03 HYDROPUNCH GROUNDWATER SAMPLE

FENCE/PROPERTY BOUNDARY

320 INFERRED GROUNDWATER CONTOUR IN FEET ABOVE MEAN SEA LEVEL AS MEASURED ON AUGUST 2–3, 2000.

GROUNDWATER FLOW DIRECTION

NOTE:

THIS FIGURE PRESENTS SITE CONDITIONS EXISTING AT THE TIME OF THE RI SAMPLING EVENTS. IN LATE 2004, SEVERAL STORMWATER DETENTION BASINS WERE CONSTRUCTED AT VOORHEESVILLE DEPOT. THOSE BASINS ARE NOT REFLECTED ON THIS FIGURE.

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.27

SADVA
GUILDERLAND, NEW YORK

AOC 5 GROUNDWATER ELEVATION MAP

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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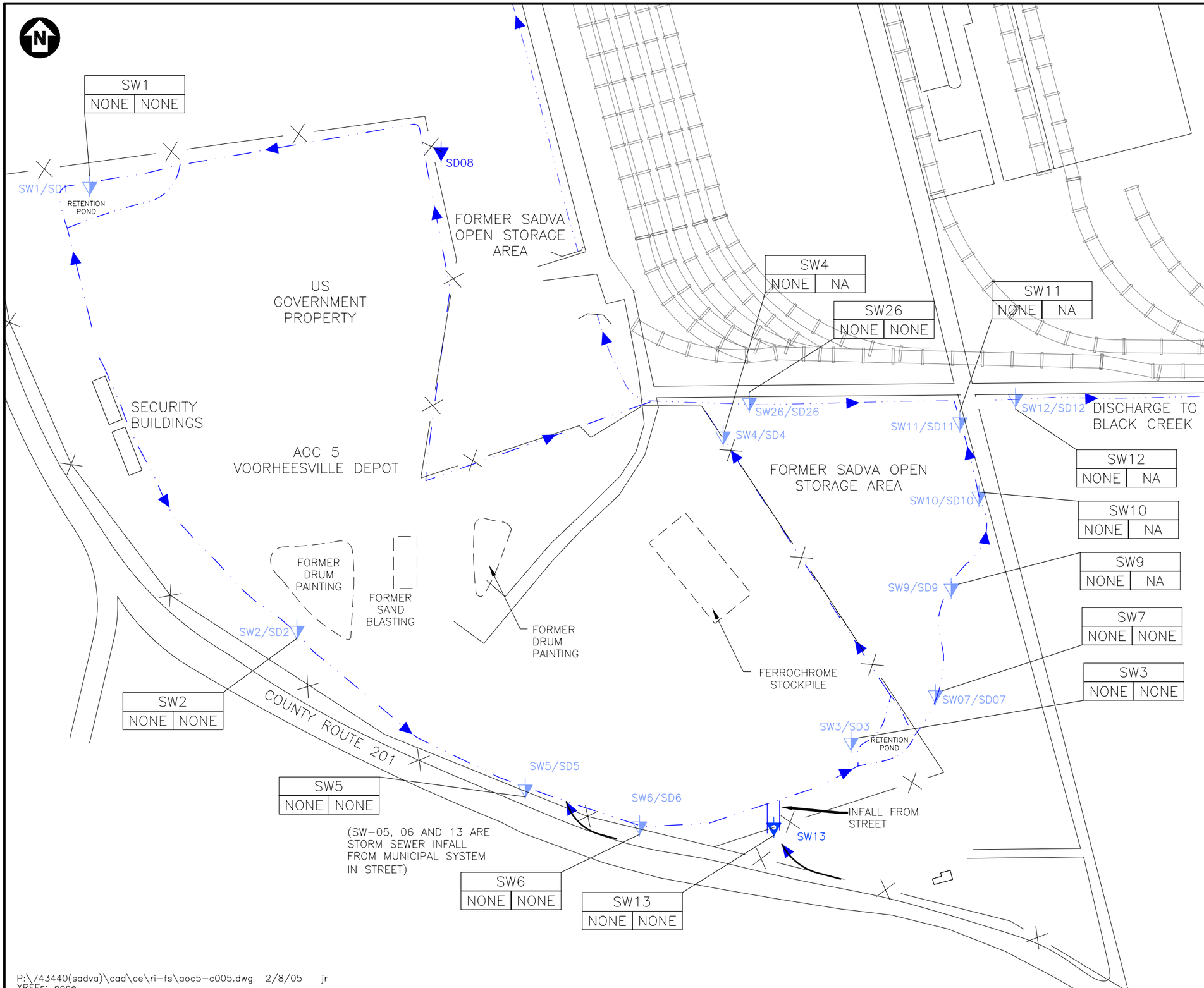


LEGEND

| | |
|---|---|
| SW04/SD04 | SURFACE WATER/SEDIMENT SAMPLE LOCATION |
| SD08 | SEDIMENT SAMPLE LOCATION |
| SW13 | SURFACE WATER SAMPLE LOCATION |
| | DRAINAGE DITCH |
| | SURFACE WATER FLOW PATH |
| | FENCE |

| SAMPLE ID | |
|---|---|
| TOTAL METALS | DISSOLVED METALS |

NA NO ANALYSIS

NONE NO METALS ABOVE NYSDEC CLASS C SURFACE WATER STANDARDS AND SITE BACKGROUND (INFALLS)

NOTE:

THIS FIGURE PRESENTS SITE CONDITIONS EXISTING AT THE TIME OF THE RI SAMPLING EVENTS. IN LATE 2004, SEVERAL STORMWATER DETENTION BASINS WERE CONSTRUCTED AT VOORHEESVILLE DEPOT. THOSE BASINS ARE NOT REFLECTED ON THIS FIGURE.

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.28

SADVA
GUILDERLAND, NEW YORK

AOC 5 SURFACE WATER SAMPLE RESULTS & DRAINAGE PATTERNS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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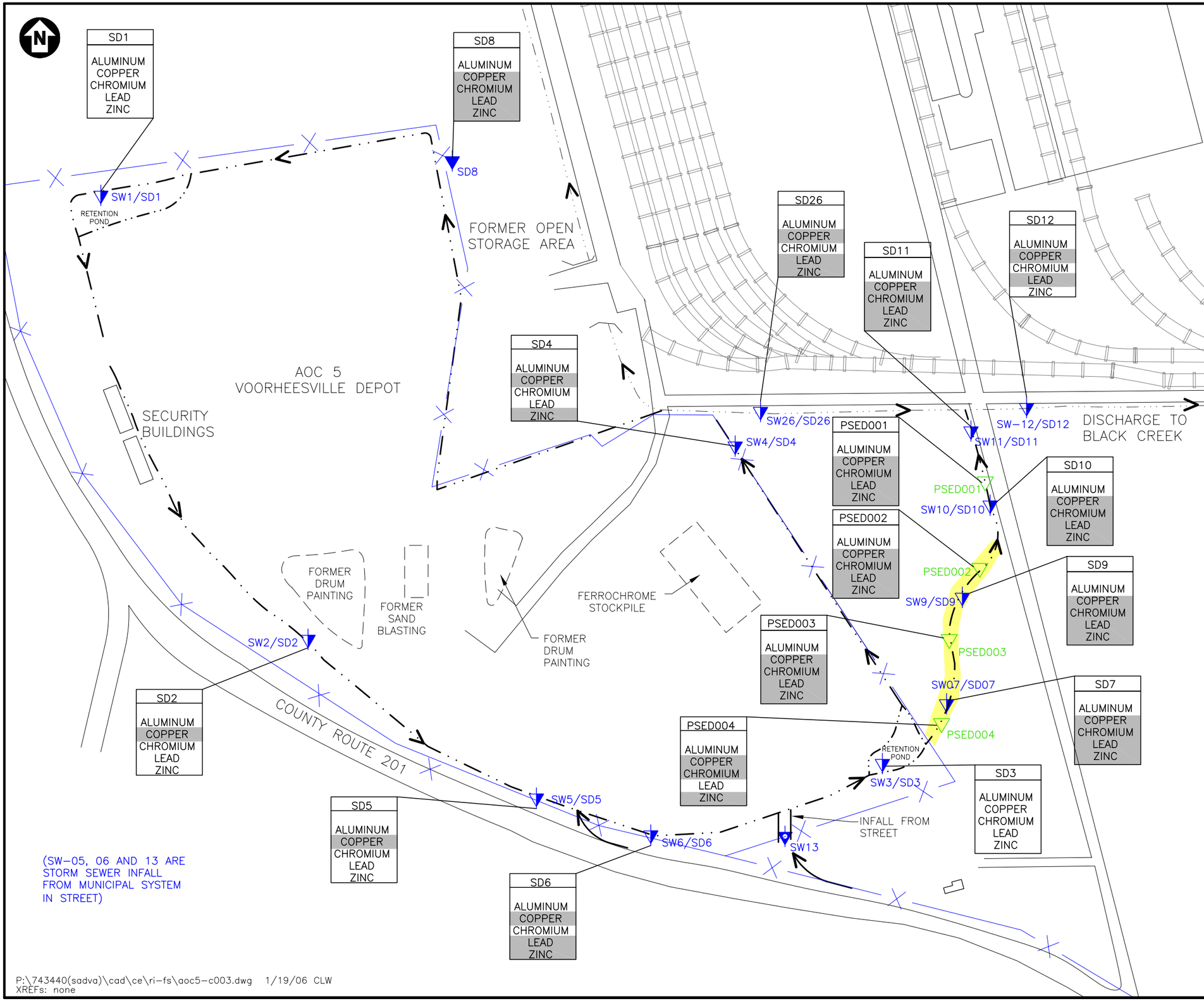


LEGEND

SW04/SD04 — SURFACE WATER/SEDIMENT SAMPLE LOCATION (2000)

SD08 — SEDIMENT SAMPLE LOCATION (2000)

SW13 — SURFACE WATER SAMPLE LOCATION (2000)

PSED001 — SEDIMENT SAMPLE COLLECTED IN 2005 AFTER DITCH WAS OVER-EXCAVATED IN 2004

DRAINAGE DITCH

SURFACE WATER FLOW PATH

FENCE

PORTION OF DITCH OVER-EXCAVATED IN 2004

SS01A2 — SAMPLE ID

ALUMINUM COPPER CHROMIUM LEAD ZINC — COMMODITIES STORED ONSITE NOW OR HISTORICALLY

ALUMINUM — SHADED BOXES INDICATE CONCENTRATIONS ABOVE SOIL CRITERIA AND SITE BACKGROUND

NOTE:

THIS FIGURE PRESENTS SITE CONDITIONS EXISTING AT THE TIME OF THE RI SAMPLING EVENTS IN 2000. IN LATE 2004, SEVERAL STORMWATER DETENTION BASINS WERE CONSTRUCTED AT VOORHEESVILLE DEPOT. THOSE BASINS ARE NOT SHOWN ON THIS FIGURE.

200 100 0 200 400

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.29

SADVA
GUILDERLAND, NEW YORK

AOC 5
SEDIMENT SAMPLE RESULTS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440(sadva)\cad\ce\ri-fs\aoc5-c003.dwg 1/19/06 CLW
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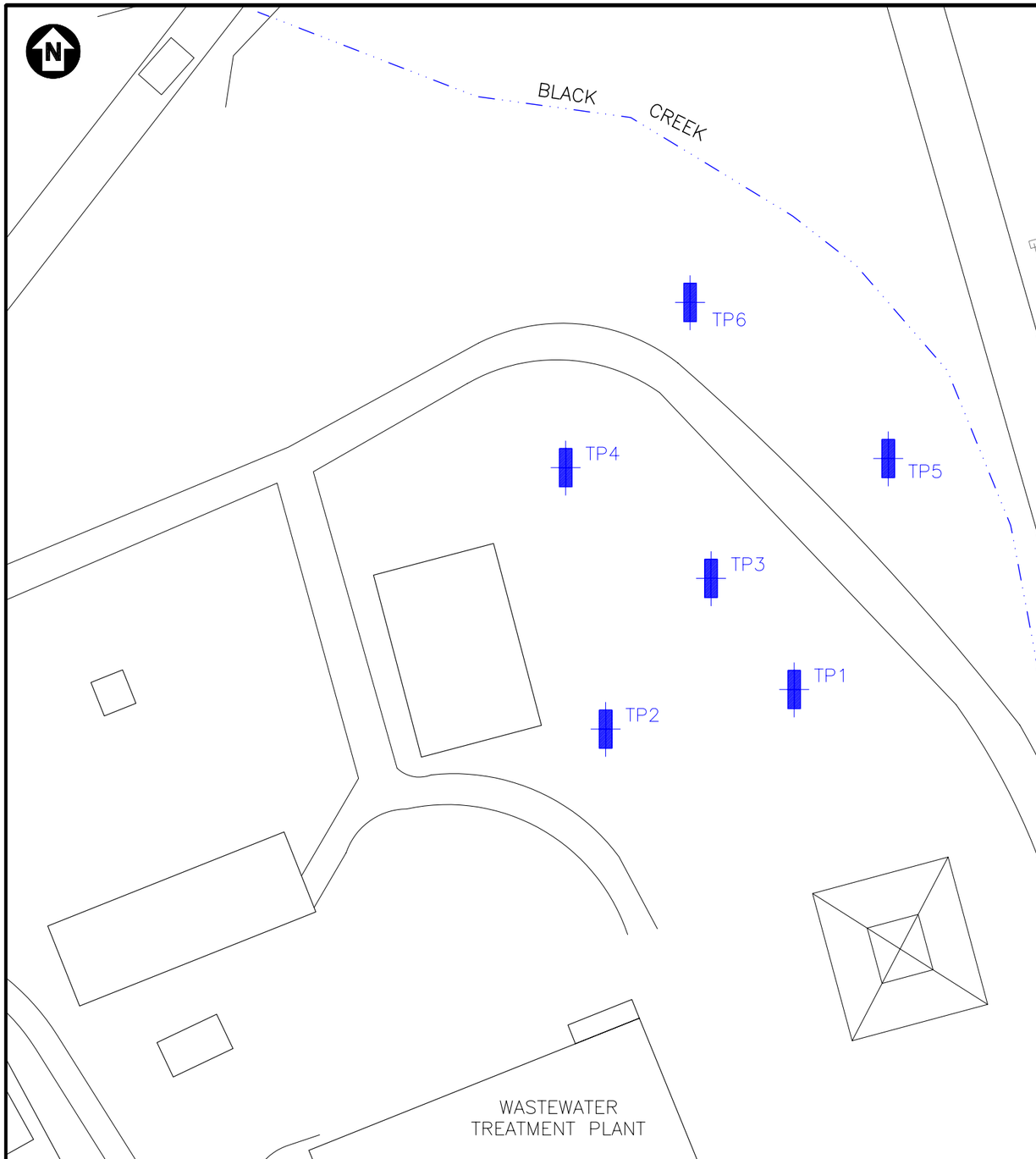


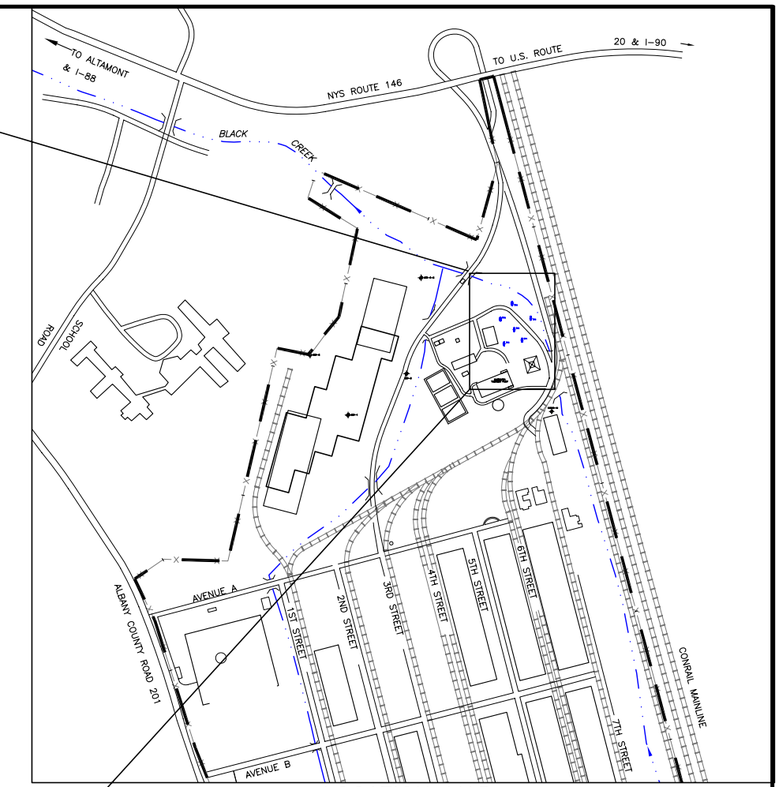


LOCATION MAP
1"=1000'

LEGEND

TP-1 TEST PIT LOCATION

DRAINAGE DITCH

FENCE

RAILROAD TRACKS

80 40 0 80 160

Approximate Scale in Feet

FIGURE 3.30

SADVA
GUILDERLAND, NEW YORK

AOC 6
SITE PLAN

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

SOURCE: USACE, 1999.

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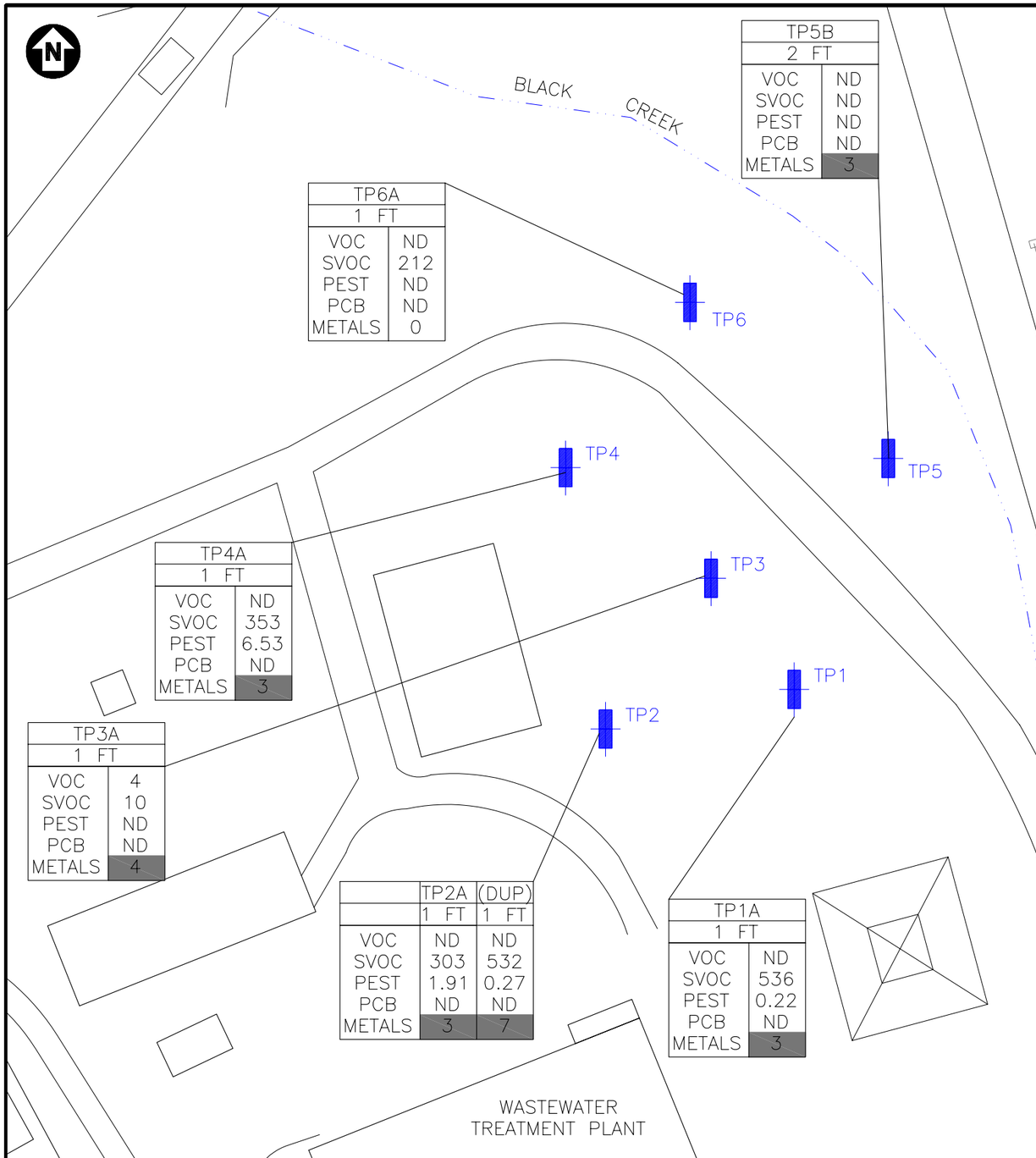


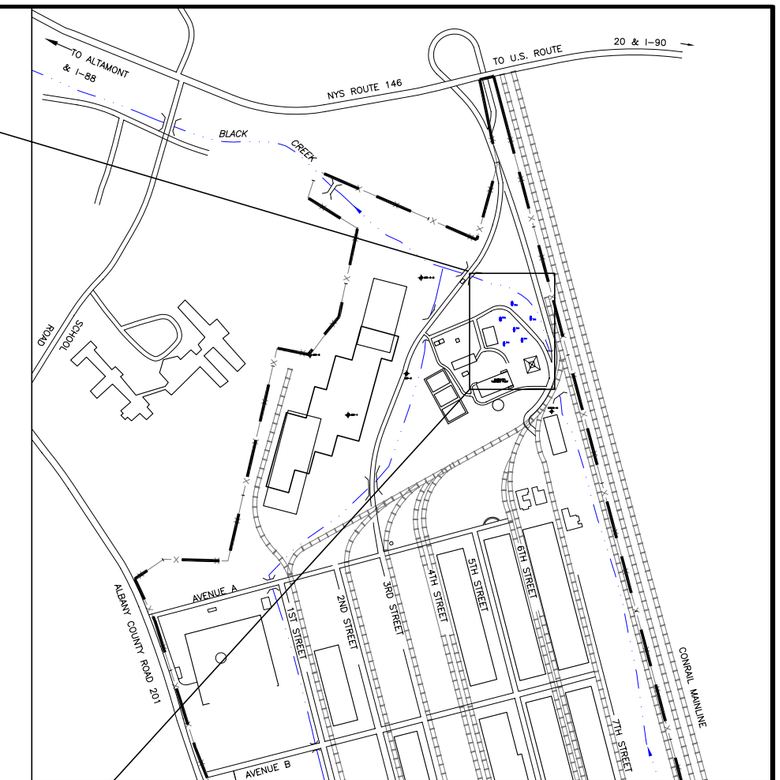


LOCATION MAP
1"=1000'

LEGEND

TP-1 TEST PIT LOCATION

DRAINAGE DITCH

FENCE

RAILROAD TRACKS

| TP04A | |
|---|---|
| 1 FT | |
| VOC | ND |
| SVOC | 303 |
| PEST | 1.91 |
| PCB | ND |
| METALS | 7 |

SAMPLE ID
SAMPLE DEPTH
TOTAL VOC (ug/kg)
TOTAL SVOC (ug/kg)
TOTAL PESTICIDES (ug/kg)
TOTAL PCBs (ug/kg)
NUMBER OF METALS WITH CONCENTRATIONS ABOVE THE NYSDEC SOIL CRITERIA (INCLUDES BACKGROUND)

ND NOT DETECTED

80 40 0 80 160

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.31

SADVA
GUILDERLAND, NEW YORK

AOC 6 SOIL SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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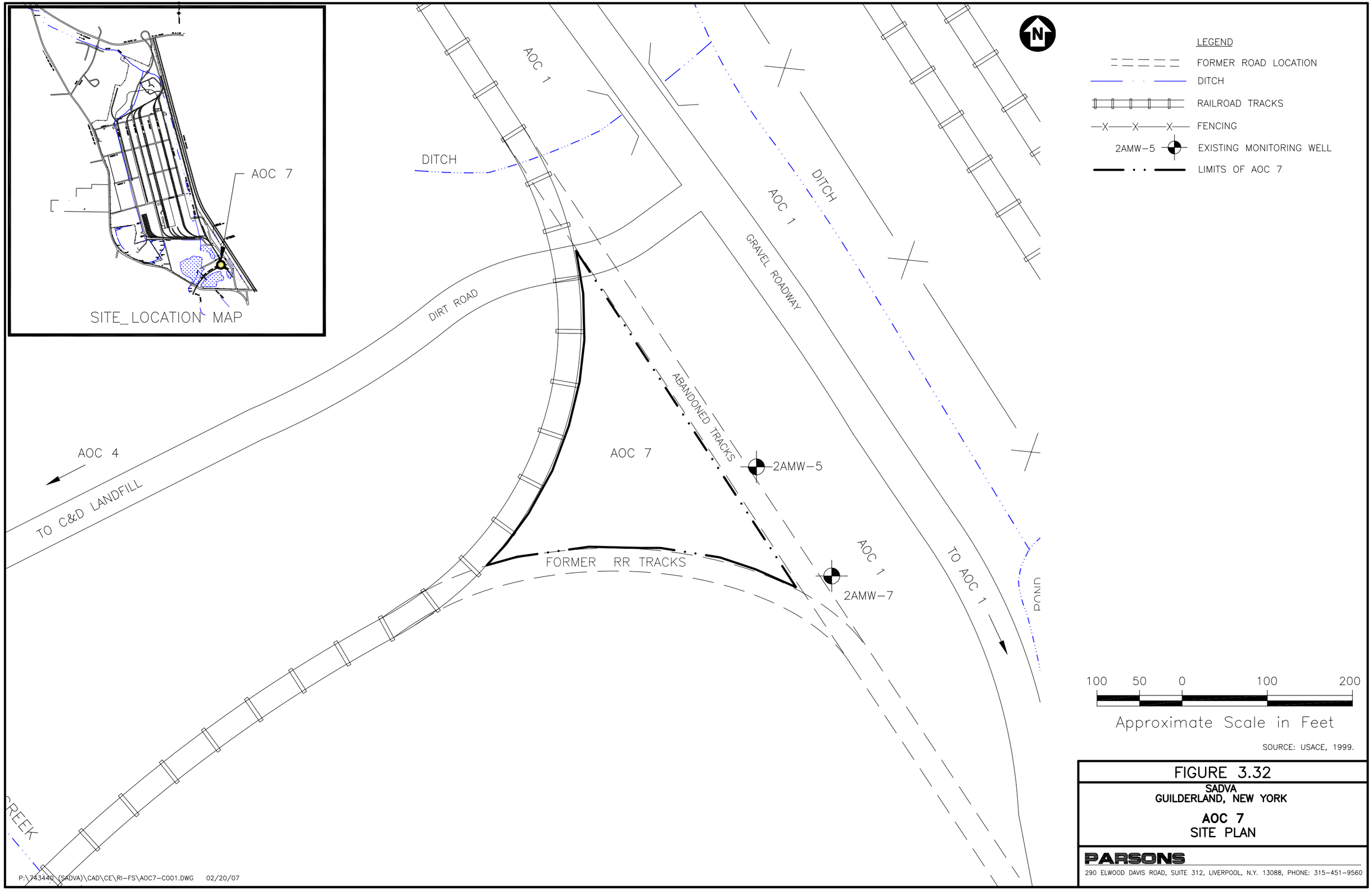
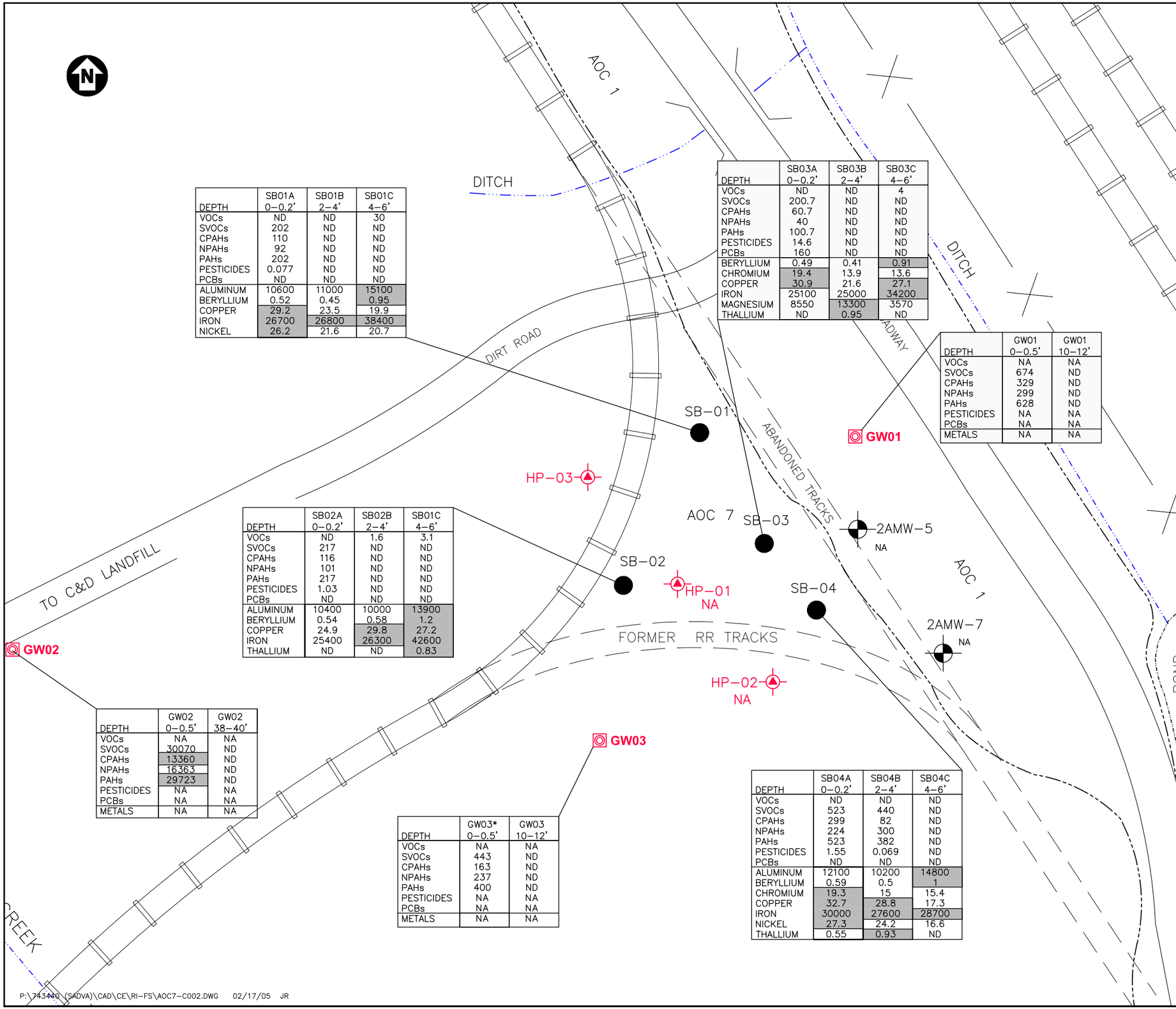



FIGURE 3.32

SADVA
GUILDERLAND, NEW YORK

**AOC 7**
SITE PLAN

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560




| DEPTH | SB01A 0–0.2' | SB01B 2–4' | SB01C 4–6' |
|---|---|---|---|
| VOCs | ND | ND | 30 |
| SVOCs | 202 | ND | ND |
| CPAHs | 110 | ND | ND |
| NPAHs | 92 | ND | ND |
| PAHs | 202 | ND | ND |
| PESTICIDES | 0.077 | ND | ND |
| PCBs | ND | ND | ND |
| ALUMINUM | 10600 | 11000 | 15100 |
| BERYLLIUM | 0.52 | 0.45 | 0.95 |
| COPPER | 29.2 | 23.5 | 19.9 |
| IRON | 26700 | 26800 | 38400 |
| NICKEL | 26.2 | 21.6 | 20.7 |

| DEPTH | SB03A 0–0.2' | SB03B 2–4' | SB03C 4–6' |
|---|---|---|---|
| VOCs | ND | ND | 4 |
| SVOCs | 200.7 | ND | ND |
| CPAHs | 60.7 | ND | ND |
| NPAHs | 40 | ND | ND |
| PAHs | 100.7 | ND | ND |
| PESTICIDES | 14.6 | ND | ND |
| PCBs | 160 | ND | ND |
| BERYLLIUM | 0.49 | 0.41 | 0.91 |
| CHROMIUM | 19.4 | 13.9 | 13.6 |
| COPPER | 30.9 | 21.6 | 27.1 |
| IRON | 25100 | 25000 | 34200 |
| MAGNESIUM | 8550 | 13300 | 3570 |
| THALLIUM | ND | 0.95 | ND |

| DEPTH | GW01 0–0.5' | GW01 10–12' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 674 | ND |
| CPAHs | 329 | ND |
| NPAHs | 299 | ND |
| PAHs | 628 | ND |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NA | NA |

| DEPTH | SB02A 0–0.2' | SB02B 2–4' | SB01C 4–6' |
|---|---|---|---|
| VOCs | ND | 1.6 | 3.1 |
| SVOCs | 217 | ND | ND |
| CPAHs | 116 | ND | ND |
| NPAHs | 101 | ND | ND |
| PAHs | 217 | ND | ND |
| PESTICIDES | 1.03 | ND | ND |
| PCBs | ND | ND | ND |
| ALUMINUM | 10400 | 10000 | 13900 |
| BERYLLIUM | 0.54 | 0.58 | 1.2 |
| COPPER | 24.9 | 29.8 | 27.2 |
| IRON | 25400 | 26300 | 42600 |
| THALLIUM | ND | ND | 0.83 |

| DEPTH | GW02 0–0.5' | GW02 38–40' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 30070 | ND |
| CPAHs | 13360 | ND |
| NPAHs | 16363 | ND |
| PAHs | 29723 | ND |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NA | NA |

| DEPTH | GW03* 0–0.5' | GW03 10–12' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 443 | ND |
| CPAHs | 163 | ND |
| NPAHs | 237 | ND |
| PAHs | 400 | ND |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | NA | NA |

| DEPTH | SB04A 0–0.2' | SB04B 2–4' | SB04C 4–6' |
|---|---|---|---|
| VOCs | ND | ND | ND |
| SVOCs | 523 | 440 | ND |
| CPAHs | 299 | 82 | ND |
| NPAHs | 224 | 300 | ND |
| PAHs | 523 | 382 | ND |
| PESTICIDES | 1.55 | 0.069 | ND |
| PCBs | ND | ND | ND |
| ALUMINUM | 12100 | 10200 | 14800 |
| BERYLLIUM | 0.59 | 0.5 | 1 |
| CHROMIUM | 19.3 | 15 | 15.4 |
| COPPER | 32.7 | 28.8 | 17.3 |
| IRON | 30000 | 27600 | 28700 |
| NICKEL | 27.3 | 24.2 | 16.6 |
| THALLIUM | 0.55 | 0.93 | ND |

LEGEND

- FORMER ROAD LOCATION
- DITCH
- RAILROAD TRACKS
- FENCING
- SB–04 SOIL BORING
- HP–03 HYDROPUNCH GROUNDWATER SAMPLE
- GW01 MONITORING WELL LOCATION (INSTALLED FALL 2004)
- 2AMW–5 EXISTING MONITORING WELL

NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE ANALYZED, HIGHEST CONCENTRATION SHOWN

29.2 SAMPLE CONCENTRATIONS EXCEED NYSDEC TAGM SOIL CRITERIA OR BACKGROUND CRITERIA

| DEPTH | GW01 0–0.5' |
|---|---|
| VOCs | NA |
| SVOCs | 674 |
| CPAHs | 329 |
| NPAHs | 299 |
| PAHs | 628 |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NA |

SAMPLE ID
DEPTH IN FEET
TOTAL VOCs (ug/kg)
TOTAL SVOCs (ug/kg)
TOTAL CPAHs (ug/kg)
TOTAL NPAHs (ug/kg)
TOTAL PAHs (ug/kg)
TOTAL PESTICIDES (ug/kg)
TOTAL PCBs (ug/kg)
TOTAL METALS (mg/kg)

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.33

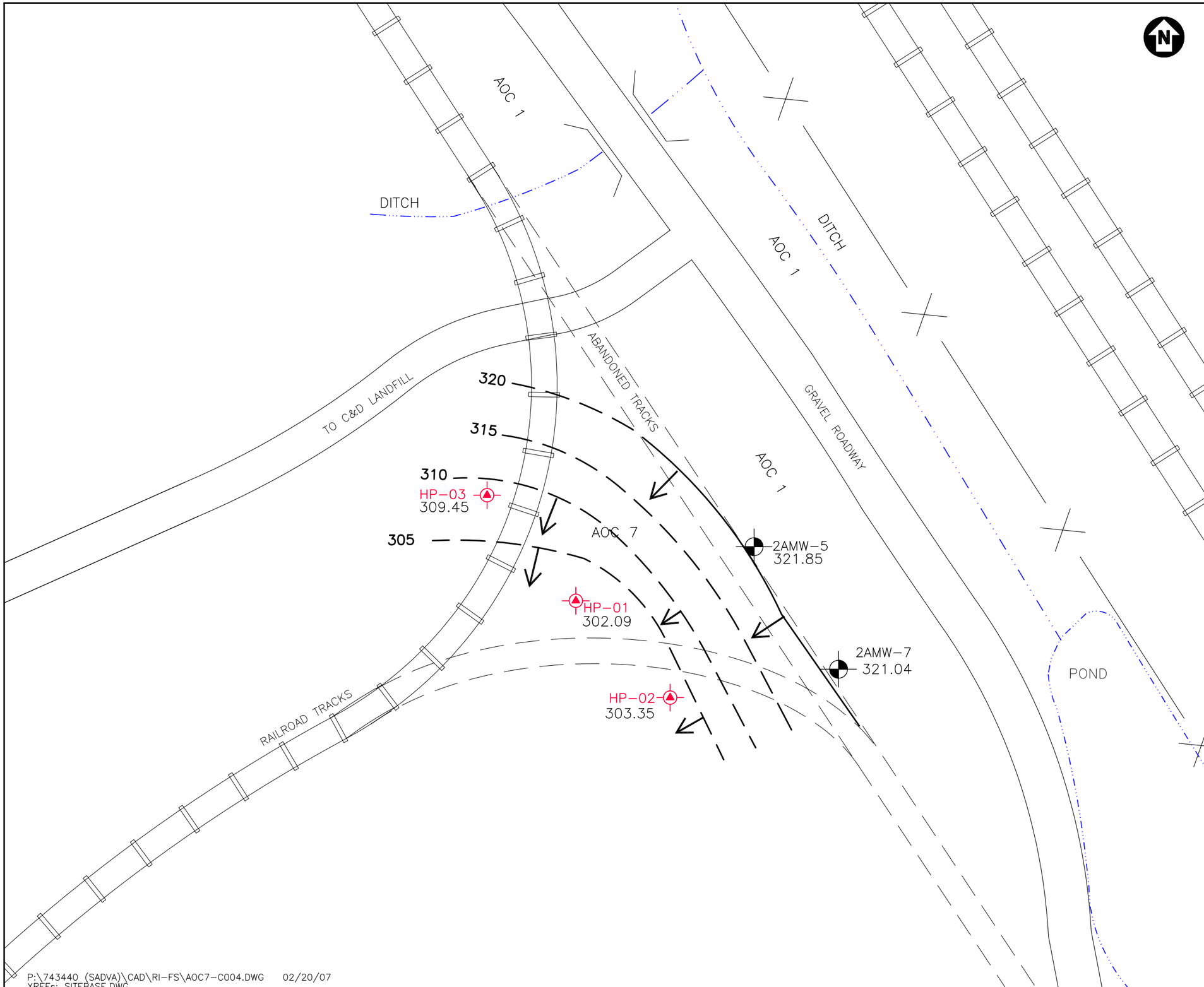
SADVA
GUILDERLAND, NEW YORK

AOC 7
SOIL SAMPLE RESULTS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315–451–9560

P:\743440 (SADVA)\CAD\CE\RI-FS\AOC7-C002.DWG 02/17/05 JR




LEGEND

FORMER ROAD LOCATION

DITCH

RAILROAD TRACKS

FENCING

HP-03 HYDROPUNCH GROUNDWATER SAMPLE

2AMW-5 EXISTING MONITORING WELL

GROUNDWATER ELEVATION CONTOUR

INFERRED GROUNDWATER CONTOUR

302.09 WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL AS MEASURED DURING JULY/AUGUST 2000.

GROUNDWATER FLOW DIRECTION

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

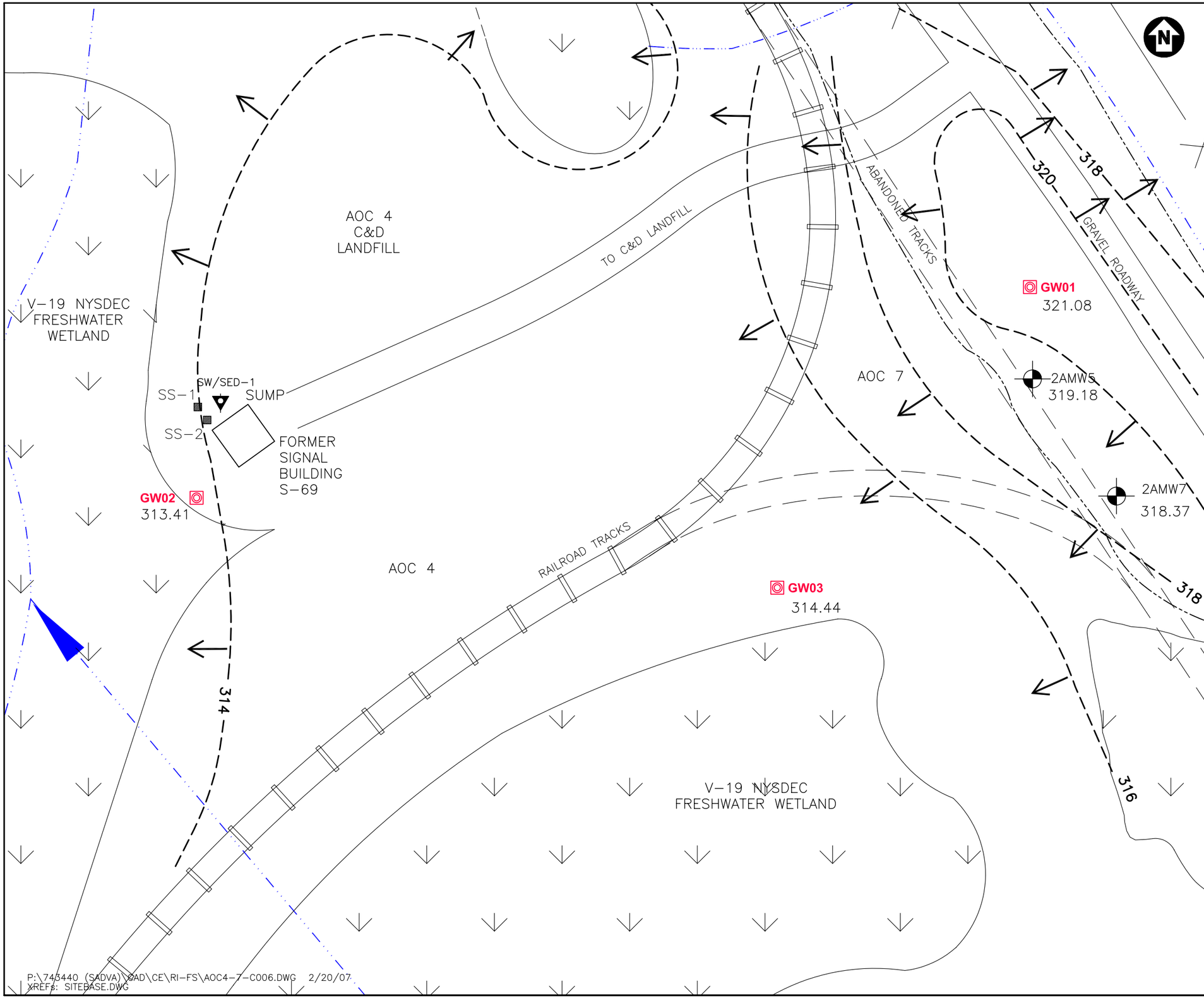
FIGURE 3.34A

SADVA
GUILDERLAND, NEW YORK
AOC 7
GROUNDWATER ELEVATION MAP
JULY/AUGUST 2000

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (SADVA)\CAD\RI-FS\AOC7-C004.DWG 02/20/07
XREFs: SITEBASE.DWG




LEGEND

- FORMER ROAD LOCATION
- DITCH
- RAILROAD TRACKS
- FENCING
- GW01 — MONITORING WELL LOCATION (INSTALLED JUNE 2004)
- 2AMW-5 — EXISTING MONITORING WELL
- SS-1 — RI SURFACE SOIL SAMPLE LOCATION
- SW/SED-1 — RI SURFACE WATER/SEDIMENT PRIOR SAMPLE
- INFERRED GROUNDWATER CONTOUR
- 302.09 — WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER FLOW DIRECTION

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.34B

SADVA
GUILDERLAND, NEW YORK
AOC 7 AND AOC 4
TRIANGULAR DISPOSAL AREA
C & D LANDFILL
GROUNDWATER ELEVATION MAP
JULY 21 & 22, 2004

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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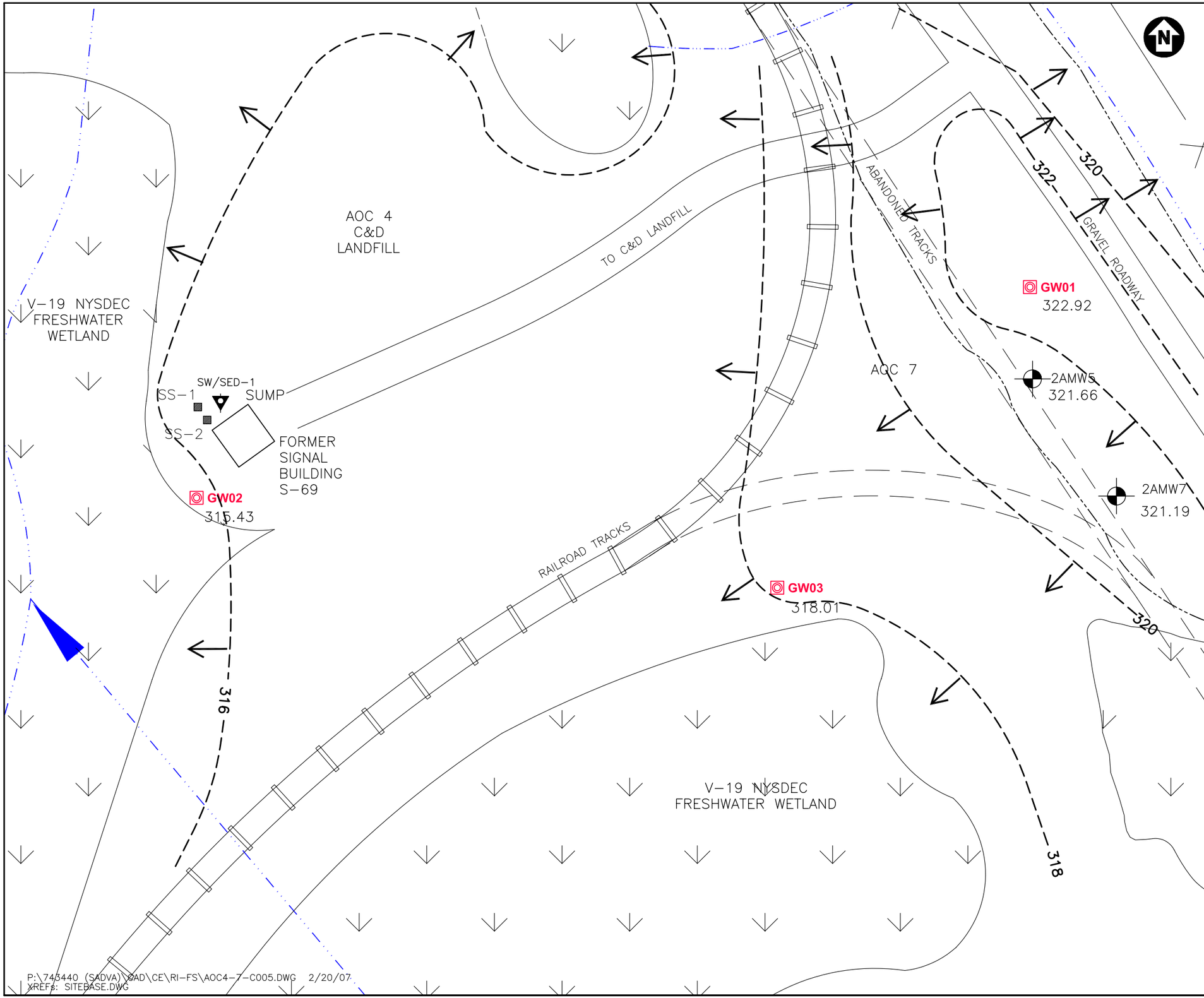


LEGEND

- FORMER ROAD LOCATION
- DITCH
- RAILROAD TRACKS
- FENCING
- GW01 — MONITORING WELL LOCATION (INSTALLED JUNE 2004)
- 2AMW-5 — EXISTING MONITORING WELL
- SS-1 — RI SURFACE SOIL SAMPLE LOCATION
- SW/SED-1 — RI SURFACE WATER/SEDIMENT PRIOR SAMPLE
- INFERRED GROUNDWATER CONTOUR
- 302.09 — WATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER FLOW DIRECTION

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.34C

SADVA
GUILDERLAND, NEW YORK
AOC 4 AND AOC 7
TRIANGULAR DISPOSAL AREA
C & D LANDFILL
GROUNDWATER ELEVATION MAP
DECEMBER 7, 2004

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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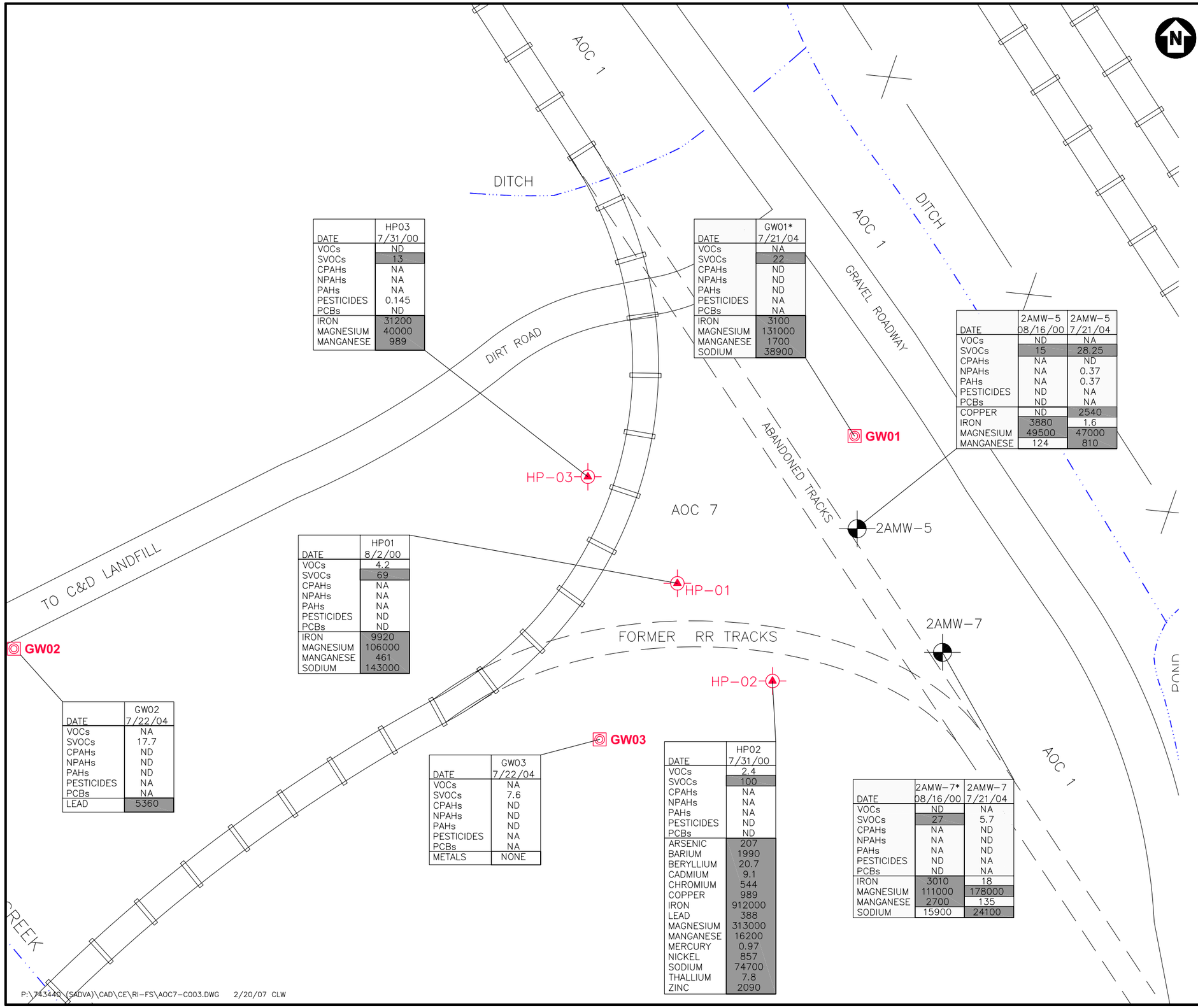


| DATE | HP03 7/31/00 |
|---|---|
| VOCs | ND |
| SVOCs | 13 |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | 0.145 |
| PCBs | ND |
| IRON | 31200 |
| MAGNESIUM | 40000 |
| MANGANESE | 989 |

| DATE | GW01* 7/21/04 |
|---|---|
| VOCs | NA |
| SVOCs | 22 |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | NA |
| PCBs | NA |
| IRON | 3100 |
| MAGNESIUM | 131000 |
| MANGANESE | 1700 |
| SODIUM | 38900 |

| DATE | 2AMW-5 08/16/00 | 2AMW-5 7/21/04 |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | 15 | 28.25 |
| CPAHs | NA | ND |
| NPAHs | NA | 0.37 |
| PAHs | NA | 0.37 |
| PESTICIDES | ND | NA |
| PCBs | ND | NA |
| COPPER | ND | 2540 |
| IRON | 3880 | 1.6 |
| MAGNESIUM | 49500 | 47000 |
| MANGANESE | 124 | 810 |

| DATE | HP01 8/2/00 |
|---|---|
| VOCs | 4.2 |
| SVOCs | 69 |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| IRON | 9920 |
| MAGNESIUM | 106000 |
| MANGANESE | 461 |
| SODIUM | 143000 |

| DATE | GW02 7/22/04 |
|---|---|
| VOCs | NA |
| SVOCs | 17.7 |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | NA |
| PCBs | NA |
| LEAD | 5360 |

| DATE | GW03 7/22/04 |
|---|---|
| VOCs | NA |
| SVOCs | 7.6 |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NONE |

| DATE | HP02 7/31/00 |
|---|---|
| VOCs | 2.4 |
| SVOCs | 100 |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | ND |
| PCBs | ND |
| ARSENIC | 207 |
| BARIUM | 1990 |
| BERYLLIUM | 20.7 |
| CADMIUM | 9.1 |
| CHROMIUM | 544 |
| COPPER | 989 |
| IRON | 912000 |
| LEAD | 388 |
| MAGNESIUM | 313000 |
| MANGANESE | 16200 |
| MERCURY | 0.97 |
| NICKEL | 857 |
| SODIUM | 74700 |
| THALLIUM | 7.8 |
| ZINC | 2090 |

| DATE | 2AMW-7* 08/16/00 | 2AMW-7 7/21/04 |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | 27 | 5.7 |
| CPAHs | NA | ND |
| NPAHs | NA | ND |
| PAHs | NA | ND |
| PESTICIDES | ND | NA |
| PCBs | ND | NA |
| IRON | 3010 | 18 |
| MAGNESIUM | 111000 | 178000 |
| MANGANESE | 2700 | 135 |
| SODIUM | 15900 | 24100 |

LEGEND

FORMER ROAD LOCATION
DITCH
RAILROAD TRACKS
FENCING

HP-03 HYDROPUNCH GROUNDWATER SAMPLE

GW01 MONITORING WELL LOCATION (INSTALLED FALL 2004)

2AMW-5 EXISTING MONITORING WELL

– UNKNOWN
NA NOT ANALYZED
ND NOT DETECTED
* DUPLICATE SAMPLE ANALYZED, HIGHEST CONCENTRATION SHOWN

100 SAMPLE CONCENTRATIONS EXCEED NYSDEC GROUNDWATER/STANDARD VALUES AND UPGRADIENT CONCENTRATIONS

| DATE | GW03 – |
|---|---|
| VOCs | NA |
| SVOCs | 7.6 |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | NONE |

SAMPLE ID
SAMPLE DATE
TOTAL VOCs (ug/L)
TOTAL SVOCs (ug/L)
TOTAL CPAHs (ug/L)
TOTAL NPAHs (ug/L)
TOTAL PAHs (ug/L)
TOTAL PESTICIDES (ug/L)
TOTAL PCBs (ug/L)
TOTAL METALS (ug/L)

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.35

SADVA
GUILDERLAND, NEW YORK

AOC 7
GROUNDWATER SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

P:\743440 (SADVA)\CAD\CE\RI-FS\AOC7-C003.DWG 2/20/07 CLW

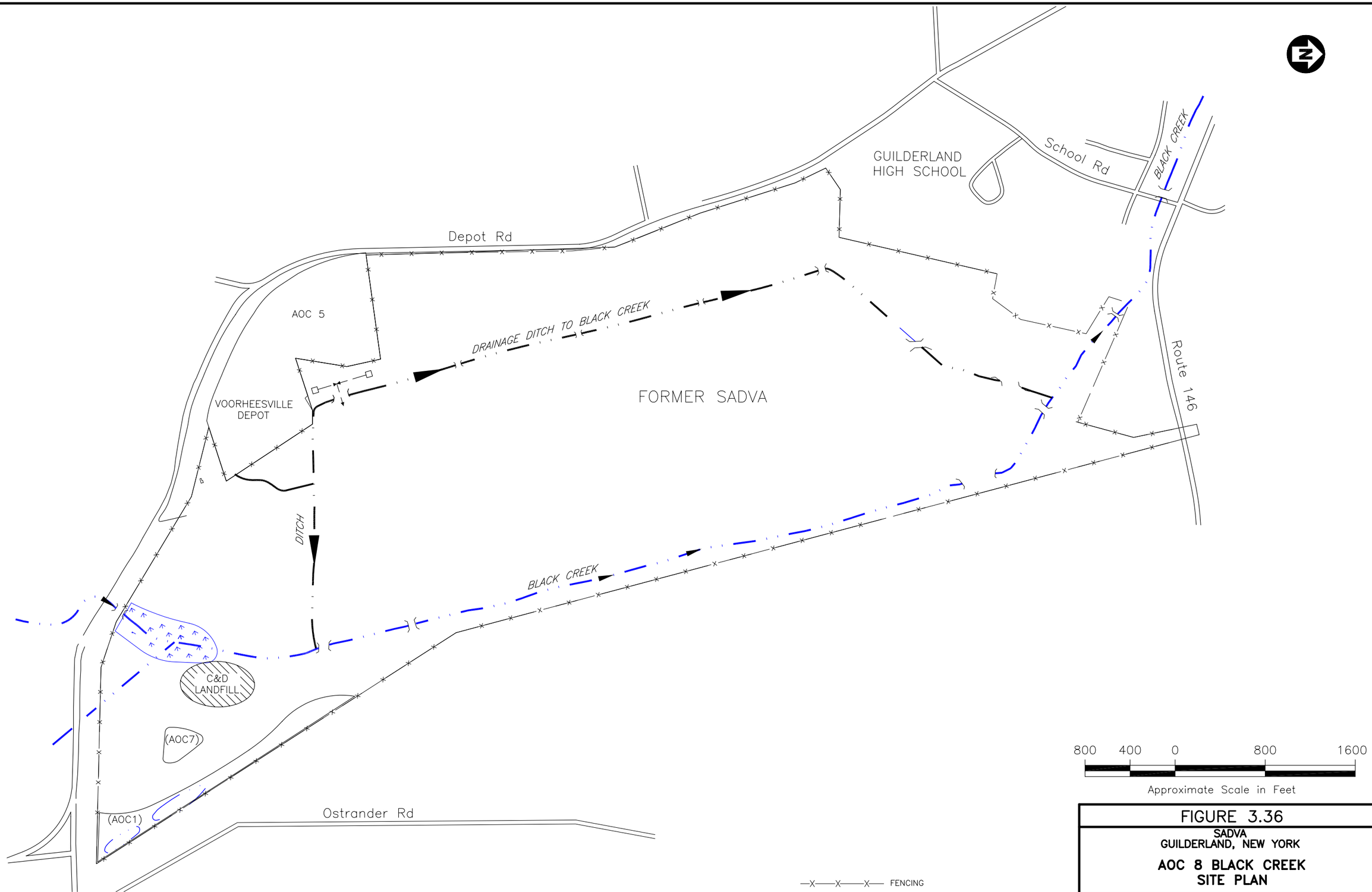


FIGURE 3.36

SADVA
GUILDERLAND, NEW YORK

AOC 8 BLACK CREEK
SITE PLAN

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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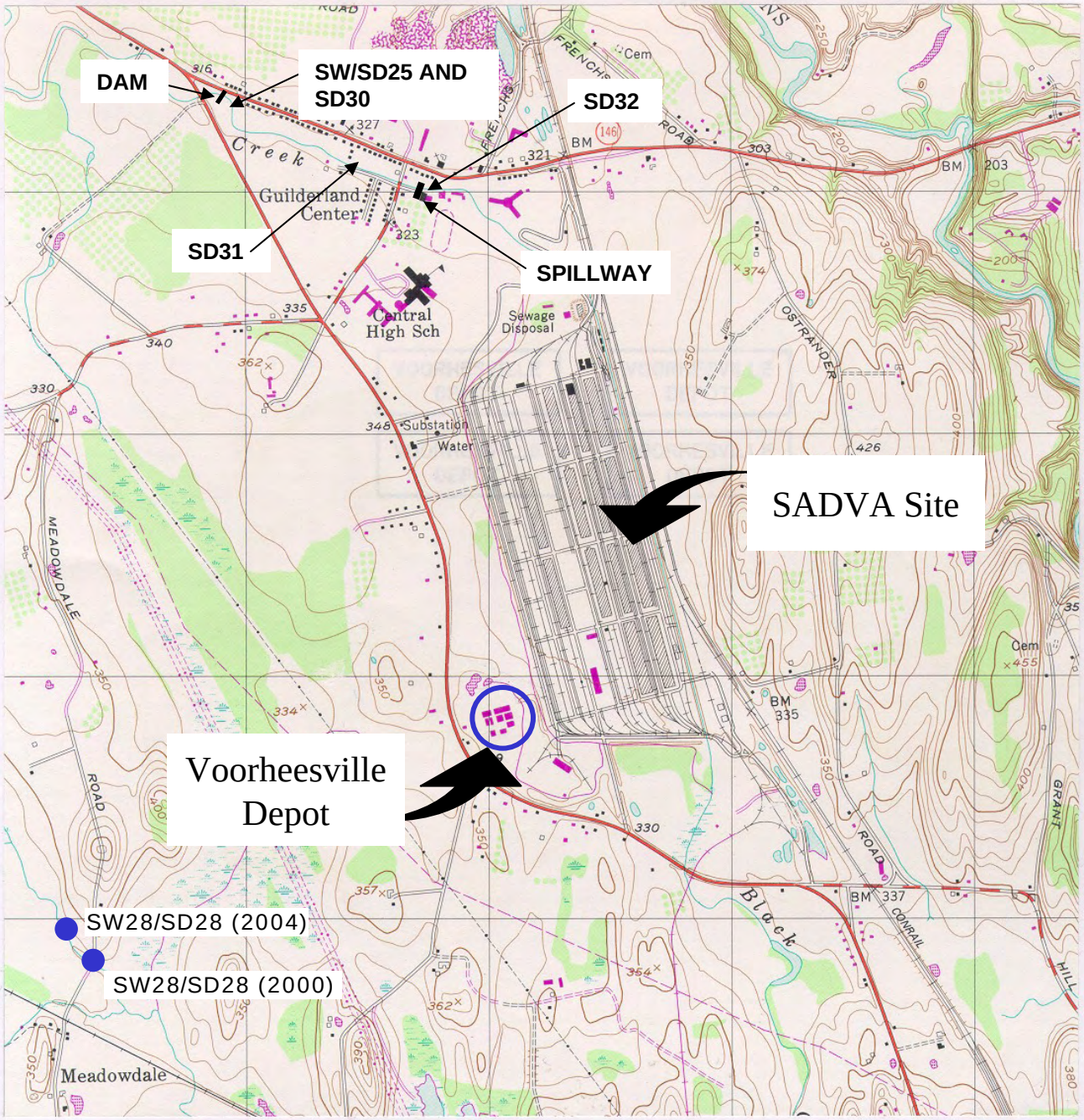

New York Quadrangle

N

LATITUDE: N42° 15' 20"
LONGITUDE: W75° 14' 38"

2000 1000 0

Approximate Scale in Feet

FIGURE 3.37

SADVA
GUILDERLAND, NEW YORK

**AOC 8 BLACK CREEK OFFSITE SURFACE WATER/SEDIMENT SAMPLE LOCATIONS**

**PARSONS**

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088 PHONE: (315) 451-9560

P:\P:\743440 (SADVA)\CAD\CE\RI-FS\AOC8-SLM.PPT 2/18/05

| Surface Water Analyte | SW-10 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Lead, Total | 54 | | ug/L | 25 | ug/L (S) |
| 4,4'DDE | 0.038 | | ug/L | 0.2 | ug/L (S) |
| Acetone | 10 | J | ug/L | 50 | ug/L (G) |
| Carbon Disulfide | 0.26 | J | ug/L | – | ug/L (S) |
| Toluene | 0.52 | J | ug/L | 5 | ug/L (S) |

| Sediment Analyte | SD-10 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.03 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 15500 | ppm | – | ppm | |
| Antimony, Total | ND | ppm | – | ppm | |
| Arsenic, Total | 5.71 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 78 | ppm | – | ppm | |
| Beryllium, Total | 0.469 | ppm | – | ppm | |
| Cadmium, Total | 1.21 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 30900 | ppm | – | ppm | |
| Chromium, Total | 13.6 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 8.27 | ppm | – | ppm | |
| Copper, Total | 20 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 22600 (2.3%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 13.2 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 4320 | ppm | – | ppm | |
| Manganese, Total | 694 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 12.8 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 2960 | ppm | – | ppm | |
| Sodium, Total | 408 | ppm | – | ppm | |
| Thallium, Total | 3.7 | ppm | – | ppm | |
| Vanadium, Total | 24.6 | ppm | – | ppm | |
| Zinc, Total | 144 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-09 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Lead, Total | 11 | | ug/L | 25 | ug/L (S) |
| Chloroform | 1 | | ug/L | 7 | ug/L (S) |
| Ethylbenzene | 0.083 | J | ug/L | 5 / 17 | ug/L (S/G) |
| Methylene Chloride | 0.73 | J | ug/L | 5 | ug/L (S) |

| Sediment Analyte | SD-09 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.027 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 25500 | ppm | – | ppm | |
| Arsenic, Total | 5.61 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 119 | ppm | – | ppm | |
| Beryllium, Total | 0.9 | ppm | – | ppm | |
| Cadmium, Total | 2.12 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 4110 | ppm | – | ppm | |
| Chromium, Total | 32.3 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 14.7 | ppm | – | ppm | |
| Copper, Total | 42 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 37200 (3.7%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 65.1 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 6360 | ppm | – | ppm | |
| Manganese, Total | 338 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 28.1 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 5150 | ppm | – | ppm | |
| Selenium, Total | 1.06 | ppm | – | ppm | |
| Sodium, Total | 146 | ppm | – | ppm | |
| Thallium, Total | 3.7 | ppm | – | ppm | |
| Vanadium, Total | 45.6 | ppm | – | ppm | |
| Zinc, Total | 190 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-11 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Zinc, Total | 33 | | ug/L | 25 | ug/L (S) |
| Acetone | 8.8 | J | ug/L | 50 | ug/L (G) |

| Sediment Analyte | SD-11 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.0278 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 13800 | ppm | – | ppm | |
| Antimony, Total | 0.69 | ppm | – | ppm | |
| Arsenic, Total | 5.67 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 81.5 | ppm | – | ppm | |
| Beryllium, Total | 0.378 | ppm | – | ppm | |
| Cadmium, Total | 1.58 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 61500 | ppm | – | ppm | |
| Chromium, Total | 14.2 | ppm | 26.0 /110.0 | ppm | |
| Cobalt, Total | 6.33 | ppm | – | ppm | |
| Copper, Total | 22 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 20200 (2.0%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 94.5 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 19900 | ppm | – | ppm | |
| Manganese, Total | 182 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 13.8 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 1960 | ppm | – | ppm | |
| Sodium, Total | 192 | ppm | – | ppm | |
| Thallium, Total | 3.09 | ppm | – | ppm | |
| Vanadium, Total | 30.4 | ppm | – | ppm | |
| Zinc, Total | 112 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-12 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Lead, Total | 126 | | ug/L | 25 | ug/L (S) |
| Methylene Chloride | 1.3 | J | ug/L | 5 | ug/L (S) |

| Sediment Analyte | SD-12 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.034 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 24300 | ppm | – | ppm | |
| Arsenic, Total | 5.55 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 114 | ppm | – | ppm | |
| Beryllium, Total | 0.73 | ppm | – | ppm | |
| Cadmium, Total | 1.23 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 3330 | ppm | – | ppm | |
| Chromium, Total | 27 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 9.27 | ppm | – | ppm | |
| Copper, Total | 59.1 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 29300 (2.9%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 37.7 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 5000 | ppm | – | ppm | |
| Manganese, Total | 212 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 20.9 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 4910 | ppm | – | ppm | |
| Selenium, Total | 0.91 | ppm | – | ppm | |
| Sodium, Total | 108 | ppm | – | ppm | |
| Thallium, Total | 2.27 | ppm | – | ppm | |
| Vanadium, Total | 36.8 | ppm | – | ppm | |
| Zinc, Total | 175 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-07 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Lead, Total | 16 | | ug/L | 25 | ug/L (S) |
| Chloroform | 0.53 | J | ug/L | 7 | ug/L (S) |

| Surface Water Analyte | SW-07-2 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Lead, Total | 4 | | ug/L | 25 | ug/L (S) |
| Chloroform | 1.4 | | ug/L | 7 | ug/L (S) |

| Sediment Analyte | SD-07 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.0362 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 14000 | ppm | – | ppm | |
| Arsenic, Total | 3.3 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 58.3 | ppm | – | ppm | |
| Beryllium, Total | 0.75 | ppm | – | ppm | |
| Cadmium, Total | 1.46 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 3800 | ppm | – | ppm | |
| Chromium, Total | 38.4 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 6.29 | ppm | – | ppm | |
| Copper, Total | 61.8 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 13800 (1.4%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 182 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 3480 | ppm | – | ppm | |
| Manganese, Total | 105 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 17.4 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 2510 | ppm | – | ppm | |
| Selenium, Total | 1.07 | ppm | – | ppm | |
| Sodium, Total | 128 | ppm | – | ppm | |
| Thallium, Total | 1.42 | ppm | – | ppm | |
| Vanadium, Total | 29.6 | ppm | – | ppm | |
| Zinc, Total | 196 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-05 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Lead, Total | 8 | | ug/L | 25 | ug/L (S) |
| Acetone | 5.5 | J | ug/L | 50 | ug/L (G) |
| Ethylbenzene | 0.14 | J | ug/L | 5 / 17 | ug/L (S/G) |
| Methylene Chloride | 2.2 | | ug/L | 5 | ug/L (S) |
| Tetrachloroethene | 0.35 | J | ug/L | 5 | ug/L (S) |
| Toluene | 0.56 | J | ug/L | 5 | ug/L (S) |
| Trichloroethene | 0.31 | J | ug/L | 5 | ug/L (S) |
| Xylenes, Total | 1.1 | J | ug/L | 5 | ug/L (S) |

| Sediment Analyte | SD-05 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.026 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 19300 | ppm | – | ppm | |
| Arsenic, Total | 5.63 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 92.7 | ppm | – | ppm | |
| Beryllium, Total | 0.595 | ppm | – | ppm | |
| Cadmium, Total | 1.36 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 31200 | ppm | – | ppm | |
| Chromium, Total | 16.8 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 8.98 | ppm | – | ppm | |
| Copper, Total | 23.8 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 27500 (2.8%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 12.4 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 9050 | ppm | – | ppm | |
| Manganese, Total | 404 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 15.4 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 4360 | ppm | – | ppm | |
| Sodium, Total | 293 | ppm | – | ppm | |
| Thallium, Total | 3.47 | ppm | – | ppm | |
| Vanadium, Total | 30.2 | ppm | – | ppm | |
| Zinc, Total | 61.2 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-04 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Barium, Total | 30 | | ug/L | 1000 | ug/L (S) |
| Calcium, Total | 57,200 | | ug/L | – | ug/L |
| Iron, Total | 420 | | ug/L | 300 | ug/L (S) |
| Lead, Total | 21 | | ug/L | 25 | ug/L (S) |
| Magnesium, Total | 8,500 | | ug/L | 35,000 | ug/L (S/G) |
| Manganese, Total | 8 | | ug/L | 300 | ug/L (S) |
| Potassium, Total | 722 | | ug/L | – | ug/L |
| Sodium, Total | 15,600 | | ug/L | 20,000 | ug/L (S) |
| Zinc, Total | 10 | | ug/L | 2,000 | ug/L (G) |
| 1,4-Dichlorobenzene | 0.14 | J | ug/L | 3 | ug/L (S) |
| Acetone | 7.7 | J | ug/L | 50 | ug/L (G) |
| Methylene Chloride | 0.44 | J | ug/L | 5 | ug/L (S) |

| Sediment Analyte | SD-04 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.017 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 9680 | ppm | – | ppm | |
| Arsenic, Total | 6.17 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 42.5 | ppm | – | ppm | |
| Beryllium, Total | 0.352 | ppm | – | ppm | |
| Cadmium, Total | 1.30 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 4410 | ppm | – | ppm | |
| Chromium, Total | 11.4 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 6.86 | ppm | – | ppm | |
| Copper, Total | 42.5 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 23800 (2.4%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 11.9 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 4030 | ppm | – | ppm | |
| Manganese, Total | 295 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 18.1 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 1550 | ppm | – | ppm | |
| Sodium, Total | 55.7 | ppm | – | ppm | |
| Thallium, Total | 4.06 | ppm | – | ppm | |
| Vanadium, Total | 15.9 | ppm | – | ppm | |
| Zinc, Total | 175 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-03 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Barium, Total | 20 | | ug/L | 1000 | ug/L (S) |
| Calcium, Total | 56,700 | | ug/L | – | ug/L |
| Iron, Total | 370 | | ug/L | 300 | ug/L (S) |
| Lead, Total | 8 | | ug/L | 25 | ug/L (S) |
| Magnesium, Total | 8,360 | | ug/L | 35,000 | ug/L (S/G) |
| Manganese, Total | 72 | | ug/L | 300 | ug/L (S) |
| Potassium, Total | 711 | | ug/L | – | ug/L |
| Sodium, Total | 15,400 | | ug/L | 20,000 | ug/L (S) |
| Zinc, Total | 10 | | ug/L | 2,000 | ug/L (G) |
| 1,1,2,2-Tetrachloroethane | 1.4 | | ug/L | 0.2 | ug/L (G) |
| 1,2-Dichlorobenzene | 0.31 | J | ug/L | 3 | ug/L (S) |
| 1,2-Dichloroethane | 0.53 | J | ug/L | 0.6 | ug/L (S) |
| 1,3-Dichloropropane | 0.70 | J | ug/L | 5 | ug/L (S) |
| 1,4-Dichlorobenzene | 0.23 | J | ug/L | 3 | ug/L (S) |
| 4-Methyl-2-Pentanone | 1.6 | J | ug/L | – | ug/L |
| Acetone | 5.5 | J | ug/L | 50 | ug/L (G) |
| Chlorodibromomethane | 0.42 | J | ug/L | – | ug/L |

| Sediment Analyte | SD-03 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.0137 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 12700 | ppm | – | ppm | |
| Arsenic, Total | 2.95 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 52.4 | ppm | – | ppm | |
| Beryllium, Total | 0.514 | ppm | – | ppm | |
| Cadmium, Total | 0.719 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 2920 | ppm | – | ppm | |
| Chromium, Total | 14.1 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 7.33 | ppm | – | ppm | |
| Copper, Total | 22.3 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 19600 (2.0%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 8.15 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 2720 | ppm | – | ppm | |
| Manganese, Total | 287 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 16.1 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 1700 | ppm | – | ppm | |
| Sodium, Total | 157 | ppm | – | ppm | |
| Thallium, Total | 2.4 | ppm | – | ppm | |
| Vanadium, Total | 25.4 | ppm | – | ppm | |
| Zinc, Total | 51.7 | ppm | 120.0 / 270.0 | ppm | |

| Surface Water Analyte | SW-02 Concentration | | Unfiltered | 20 AUG 98 Standard / Guidance | |
|---|---|---|---|---|---|
| Aluminum, Total | 440 | | ug/L | 100 | ug/L (S) |
| Barium, Total | 30 | | ug/L | 1000 | ug/L (S) |
| Calcium, Total | 56,900 | | ug/L | – | ug/L |
| Iron, Total | 1,670 | | ug/L | 300 | ug/L (S) |
| Lead, Total | 4 | | ug/L | 25 | ug/L (S) |
| Magnesium, Total | 8,780 | | ug/L | 35,000 | ug/L (S/G) |
| Manganese, Total | 136 | | ug/L | 300 | ug/L (S) |
| Potassium, Total | 656 | | ug/L | – | ug/L |
| Sodium, Total | 15,800 | | ug/L | 20,000 | ug/L (S) |
| Zinc, Total | 20 | | ug/L | 2,000 | ug/L (G) |
| 1,1,2,2-Tetrachloroethane | 0.60 | J | ug/L | 0.2 | ug/L (G) |
| 1,2-Dichlorobenzene | 0.23 | J | ug/L | 3 | ug/L (S) |
| 1,4-Dichlorobenzene | 0.24 | J | ug/L | 3 | ug/L (S) |
| 4-Methyl-2-Pentanone | 2.9 | J | ug/L | – | ug/L |
| Acetone | 9.2 | J | ug/L | 50 | ug/L (G) |
| Chlorodibromomethane | 0.27 | J | ug/L | – | ug/L |
| Methylene Chloride | 0.24 | J | ug/L | 5 | ug/L (S) |

| Sediment Analyte | SD-02 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.0162 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 13000 | ppm | – | ppm | |
| Arsenic, Total | 3.57 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 71.1 | ppm | – | ppm | |
| Beryllium, Total | 0.39 | ppm | – | ppm | |
| Cadmium, Total | 0.909 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 17700 | ppm | – | ppm | |
| Chromium, Total | 14.7 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 6.53 | ppm | – | ppm | |
| Copper, Total | 16.9 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 19500 (2.0%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 14.3 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 5160 | ppm | – | ppm | |
| Manganese, Total | 291 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 13.3 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 2000 | ppm | – | ppm | |
| Sodium, Total | 105 | ppm | – | ppm | |
| Thallium, Total | 3.25 | ppm | – | ppm | |
| Vanadium, Total | 23.3 | ppm | – | ppm | |
| Zinc, Total | 67.5 | ppm | 120.0 / 270.0 | ppm | |

| Sediment Analyte | SD-01 Concentration | | Lowest / Severe | 20 AUG 98 Effect Level | |
|---|---|---|---|---|---|
| Mercury, Total | 0.0825 | ppm | 0.15 / 1.3 | ppm | |
| Aluminum, Total | 16400 | ppm | – | ppm | |
| Arsenic, Total | 6.72 | ppm | 6.0 / 33.0 | ppm | |
| Barium, Total | 71.9 | ppm | – | ppm | |
| Beryllium, Total | 0.594 | ppm | – | ppm | |
| Cadmium, Total | 1.69 | ppm | 0.6 / 9.0 | ppm | |
| Calcium, Total | 2830 | ppm | – | ppm | |
| Chromium, Total | 18 | ppm | 26.0 / 110.0 | ppm | |
| Cobalt, Total | 9.25 | ppm | – | ppm | |
| Copper, Total | 29.7 | ppm | 16.0 / 110.0 | ppm | |
| Iron, Total** | 33100 (3.3%) | ppm | 2.0% / 4.0% | ppm | |
| Lead, Total | 24 | ppm | 31.0 / 110.0 | ppm | |
| Magnesium, Total | 5250 | ppm | – | ppm | |
| Manganese, Total | 177 | ppm | 460.0 / 1100.0 | ppm | |
| Nickel, Total | 19.4 | ppm | 16.0 / 50.0 | ppm | |
| Potassium, Total | 2240 | ppm | – | ppm | |
| Sodium, Total | 438 | ppm | – | ppm | |
| Thallium, Total | 3.44 | ppm | – | ppm | |
| Vanadium, Total | 25 | ppm | – | ppm | |
| Zinc, Total | 135 | ppm | 120.0 / 270.0 | ppm | |




NORTHEASTERN INDUSTRIAL PARK BOUNDARY

BLACK CREEK APPROXIMATE

APPROXIMATE BOUNDARIES OF AOCS

SOURCES:
USGS 7.5 MINUTE QUADRANGLE VOORHEESVILLE, N.Y. 1980 AND SITE PLAN PREPARED BY: H & A OF N.Y. GEOTECHNICAL ENGINEERS & ENVIRONMENTAL CONSULTANTS COUNTY OF ALBANY, REAL PROPERTY TAX SERVICE, 1997

800 400 0 800 1600

Approximate Scale in Feet

| Rev | Date | Description | By |
|---|---|---|---|
| | | | |

Job No. 736741
Designed
Drawn JAR
Checked
Reviewed
Approved
Reg. No. XXXX
Date

Issue Certification

NOT FOR BIDDING OR CONSTRUCTION

PARSONS ENGINEERING SCIENCE, INC.

LIVERPOOL, N.Y.
(315) 451-9560

SADVA

SADVA
GUILDERLAND, NEW YORK

AOC 8 BLACK CREEK
PREVIOUS SAMPLING RESULTS
(PRIOR TO REMEDIAL INVESTIGATION)

FIGURE 3.38

REV. 1

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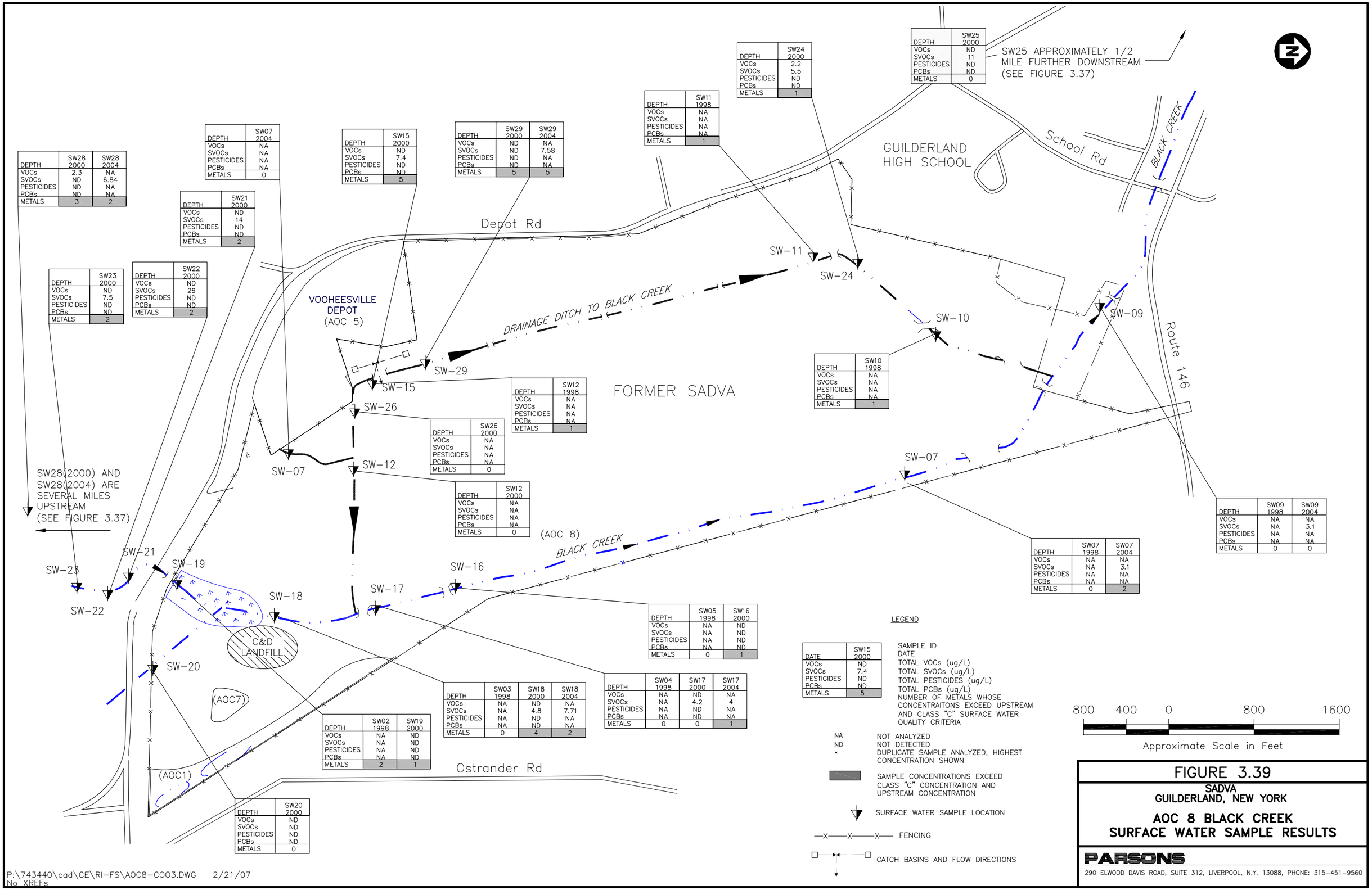


| DATE | SW15 2000 |
|---|---|
| VOCs | ND |
| SVOCs | 7.4 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 5 |

| DEPTH | SW28 2000 | SW28 2004 |
|---|---|---|
| VOCs | 2.3 | NA |
| SVOCs | ND | 6.84 |
| PESTICIDES | ND | NA |
| PCBs | ND | NA |
| METALS | 3 | 2 |

| DEPTH | SW07 2004 |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 0 |

| DEPTH | SW15 2000 |
|---|---|
| VOCs | ND |
| SVOCs | 7.4 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 5 |

| DEPTH | SW29 2000 | SW29 2004 |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | ND | 7.58 |
| PESTICIDES | ND | NA |
| PCBs | ND | NA |
| METALS | 5 | 5 |

| DEPTH | SW11 1998 |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 1 |

| DEPTH | SW24 2000 |
|---|---|
| VOCs | 2.2 |
| SVOCs | 5.5 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 1 |

| DEPTH | SW25 2000 |
|---|---|
| VOCs | ND |
| SVOCs | 11 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 0 |

| DEPTH | SW21 2000 |
|---|---|
| VOCs | ND |
| SVOCs | 14 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SW23 2000 |
|---|---|
| VOCs | ND |
| SVOCs | 7.5 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SW22 2000 |
|---|---|
| VOCs | ND |
| SVOCs | 26 |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SW12 1998 |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 1 |

| DEPTH | SW26 2000 |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 0 |

| DEPTH | SW12 2000 |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 0 |

| DEPTH | SW10 1998 |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 1 |

| DEPTH | SW09 1998 | SW09 2004 |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | NA | 3.1 |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | 0 | 0 |

| DEPTH | SW07 1998 | SW07 2004 |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | NA | 3.1 |
| PESTICIDES | NA | NA |
| PCBs | NA | NA |
| METALS | 0 | 2 |

| DEPTH | SW05 1998 | SW16 2000 |
|---|---|---|
| VOCs | NA | ND |
| SVOCs | NA | ND |
| PESTICIDES | NA | ND |
| PCBs | NA | ND |
| METALS | 0 | 1 |

| DEPTH | SW03 1998 | SW18 2000 | SW18 2004 |
|---|---|---|---|
| VOCs | NA | ND | NA |
| SVOCs | NA | 4.8 | 7.71 |
| PESTICIDES | NA | ND | NA |
| PCBs | NA | ND | NA |
| METALS | 0 | 4 | 2 |

| DEPTH | SW04 1998 | SW17 2000 | SW17 2004 |
|---|---|---|---|
| VOCs | NA | ND | NA |
| SVOCs | NA | 4.2 | 4 |
| PESTICIDES | NA | ND | NA |
| PCBs | NA | ND | NA |
| METALS | 0 | 0 | 1 |

| DEPTH | SW02 1998 | SW19 2000 |
|---|---|---|
| VOCs | NA | ND |
| SVOCs | NA | ND |
| PESTICIDES | NA | ND |
| PCBs | NA | ND |
| METALS | 2 | 1 |

| DEPTH | SW20 2000 |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| PESTICIDES | ND |
| PCBs | ND |
| METALS | 0 |

# FIGURE 3.39

SADVA
GUILDERLAND, NEW YORK

## AOC 8 BLACK CREEK SURFACE WATER SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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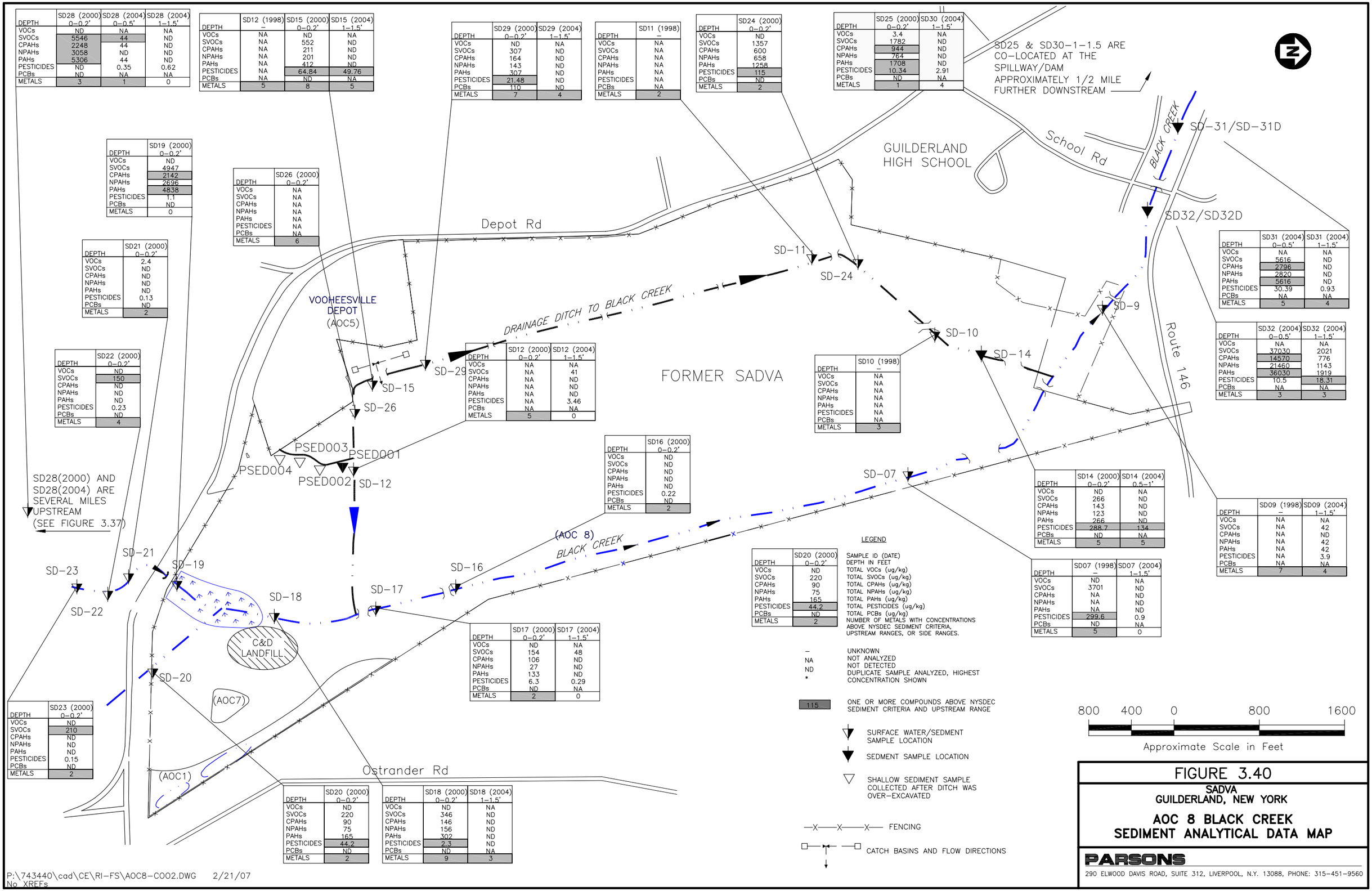


| DEPTH | SD28 (2000) 0–0.2' | SD28 (2004) 0–0.5' | SD28 (2004) 1–1.5' |
|---|---|---|---|
| VOCs | ND | NA | NA |
| SVOCs | 5546 | 44 | ND |
| CPAHs | 2248 | 44 | ND |
| NPAHs | 3058 | ND | ND |
| PAHs | 5306 | 44 | ND |
| PESTICIDES | ND | 0.35 | 0.62 |
| PCBs | ND | NA | NA |
| METALS | 3 | 1 | 0 |

| DEPTH | SD12 (1998) – | SD15 (2000) 0–0.2' | SD15 (2004) 1–1.5' |
|---|---|---|---|
| VOCs | NA | ND | NA |
| SVOCs | NA | 552 | ND |
| CPAHs | NA | 211 | ND |
| NPAHs | NA | 201 | ND |
| PAHs | NA | 412 | ND |
| PESTICIDES | NA | 64.84 | 49.76 |
| PCBs | NA | ND | NA |
| METALS | 5 | 8 | 5 |

| DEPTH | SD29 (2000) 0–0.2' | SD29 (2004) 1–1.5' |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | 307 | ND |
| CPAHs | 164 | ND |
| NPAHs | 143 | ND |
| PAHs | 307 | ND |
| PESTICIDES | 21.48 | ND |
| PCBs | 110 | ND |
| METALS | 7 | 4 |

| DEPTH | SD11 (1998) – |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 2 |

| DEPTH | SD24 (2000) 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 1357 |
| CPAHs | 600 |
| NPAHs | 658 |
| PAHs | 1258 |
| PESTICIDES | 115 |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SD25 (2000) 0–0.2' | SD30 (2004) 1–1.5' |
|---|---|---|
| VOCs | 3.4 | NA |
| SVOCs | 1782 | ND |
| CPAHs | 944 | ND |
| NPAHs | 764 | ND |
| PAHs | 1708 | ND |
| PESTICIDES | 10.34 | 2.91 |
| PCBs | ND | NA |
| METALS | 1 | 4 |

| DEPTH | SD19 (2000) 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 4947 |
| CPAHs | 2142 |
| NPAHs | 2696 |
| PAHs | 4838 |
| PESTICIDES | 1.1 |
| PCBs | ND |
| METALS | 0 |

| DEPTH | SD26 (2000) 0–0.2' |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 6 |

| DEPTH | SD21 (2000) 0–0.2' |
|---|---|
| VOCs | 2.4 |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | 0.13 |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SD22 (2000) 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 150 |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | 0.23 |
| PCBs | ND |
| METALS | 4 |

| DEPTH | SD12 (2000) 0–0.2' | SD12 (2004) 1–1.5' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | NA | 41 |
| CPAHs | NA | ND |
| NPAHs | NA | ND |
| PAHs | NA | ND |
| PESTICIDES | NA | 3.46 |
| PCBs | NA | NA |
| METALS | 5 | 0 |

| DEPTH | SD10 (1998) – |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| CPAHs | NA |
| NPAHs | NA |
| PAHs | NA |
| PESTICIDES | NA |
| PCBs | NA |
| METALS | 3 |

| DEPTH | SD16 (2000) 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | ND |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | 0.22 |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SD31 (2004) 0–0.5' | SD31 (2004) 1–1.5' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 5616 | ND |
| CPAHs | 2796 | ND |
| NPAHs | 2820 | ND |
| PAHs | 5616 | ND |
| PESTICIDES | 30.39 | 0.93 |
| PCBs | NA | NA |
| METALS | 5 | 4 |

| DEPTH | SD32 (2004) 0–0.5' | SD32 (2004) 1–1.5' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | 37030 | 2021 |
| CPAHs | 14570 | 776 |
| NPAHs | 21460 | 1143 |
| PAHs | 36030 | 1919 |
| PESTICIDES | 10.5 | 18.31 |
| PCBs | NA | NA |
| METALS | 3 | 3 |

| DEPTH | SD14 (2000) 0–0.2' | SD14 (2004) 0.5–1' |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | 266 | ND |
| CPAHs | 143 | ND |
| NPAHs | 123 | ND |
| PAHs | 266 | ND |
| PESTICIDES | 288.7 | 134 |
| PCBs | ND | NA |
| METALS | 5 | 5 |

| DEPTH | SD09 (1998) – | SD09 (2004) 1–1.5' |
|---|---|---|
| VOCs | NA | NA |
| SVOCs | NA | 42 |
| CPAHs | NA | ND |
| NPAHs | NA | 42 |
| PAHs | NA | 42 |
| PESTICIDES | NA | 3.9 |
| PCBs | NA | NA |
| METALS | 7 | 4 |

| DEPTH | SD07 (1998) – | SD07 (2004) 1–1.5' |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | 3701 | ND |
| CPAHs | NA | ND |
| NPAHs | NA | ND |
| PAHs | NA | ND |
| PESTICIDES | 299.6 | 0.9 |
| PCBs | ND | NA |
| METALS | 5 | 0 |

| DEPTH | SD20 (2000) 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 220 |
| CPAHs | 90 |
| NPAHs | 75 |
| PAHs | 165 |
| PESTICIDES | 44.2 |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SD17 (2000) 0–0.2' | SD17 (2004) 1–1.5' |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | 154 | 48 |
| CPAHs | 106 | ND |
| NPAHs | 27 | ND |
| PAHs | 133 | ND |
| PESTICIDES | 6.3 | 0.29 |
| PCBs | ND | NA |
| METALS | 2 | 0 |

| DEPTH | SD23 (2000) 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 210 |
| CPAHs | ND |
| NPAHs | ND |
| PAHs | ND |
| PESTICIDES | 0.15 |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SD20 (2000) 0–0.2' |
|---|---|
| VOCs | ND |
| SVOCs | 220 |
| CPAHs | 90 |
| NPAHs | 75 |
| PAHs | 165 |
| PESTICIDES | 44.2 |
| PCBs | ND |
| METALS | 2 |

| DEPTH | SD18 (2000) 0–0.2' | SD18 (2004) 1–1.5' |
|---|---|---|
| VOCs | ND | NA |
| SVOCs | 346 | ND |
| CPAHs | 146 | ND |
| NPAHs | 156 | ND |
| PAHs | 302 | ND |
| PESTICIDES | 2.3 | ND |
| PCBs | ND | NA |
| METALS | 9 | 3 |

LEGEND

| | |
|---|---|
| | SAMPLE ID (DATE) |
| | DEPTH IN FEET |
| | TOTAL VOCs (ug/kg) |
| | TOTAL SVOCs (ug/kg) |
| | TOTAL CPAHs (ug/kg) |
| | TOTAL NPAHs (ug/kg) |
| | TOTAL PAHs (ug/kg) |
| | TOTAL PESTICIDES (ug/kg) |
| | TOTAL PCBs (ug/kg) |
| | NUMBER OF METALS WITH CONCENTRATIONS ABOVE NYSDEC SEDIMENT CRITERIA, UPSTREAM RANGES, OR SIDE RANGES. |
| – | UNKNOWN |
| NA | NOT ANALYZED |
| ND | NOT DETECTED |
| * | DUPLICATE SAMPLE ANALYZED, HIGHEST CONCENTRATION SHOWN |
| 115 | ONE OR MORE COMPOUNDS ABOVE NYSDEC SEDIMENT CRITERIA AND UPSTREAM RANGE |
| ▼ | SURFACE WATER/SEDMENT SAMPLE LOCATION |
| ▼ | SEDMENT SAMPLE LOCATION |
| ▽ | SHALLOW SEDIMENT SAMPLE COLLECTED AFTER DITCH WAS OVER-EXCAVATED |
| —X—X—X— | FENCING |
| □—▲—□ | CATCH BASINS AND FLOW DIRECTIONS |

# FIGURE 3.40

SADVA
GUILDERLAND, NEW YORK

## AOC 8 BLACK CREEK SEDIMENT ANALYTICAL DATA MAP

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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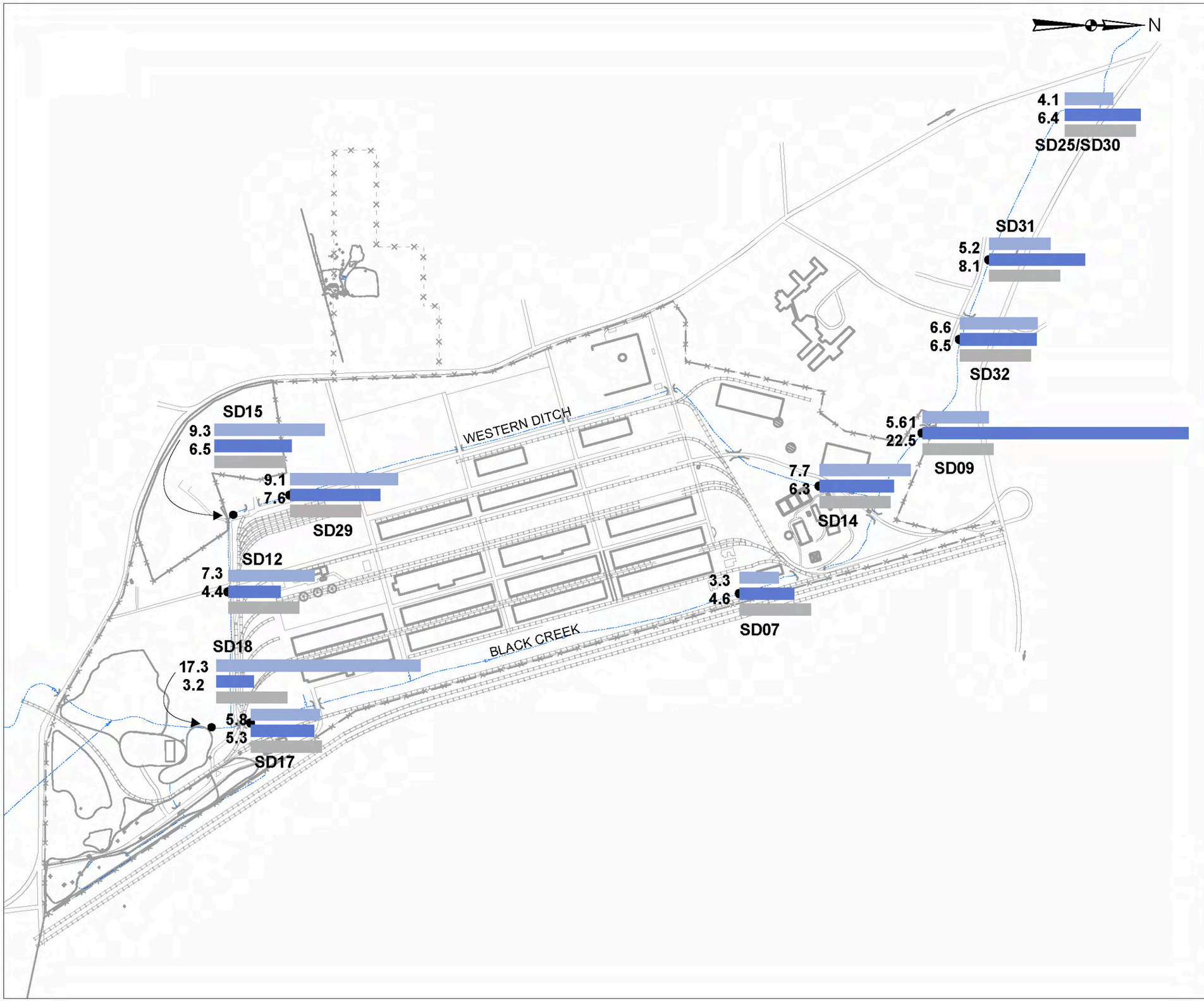


LEGEND

9.3 SHALLOW SAMPLE CONCENTRATION (IN MG/KG)

6.5 DEEP SAMPLE CONCENTRATION (IN MG/KG)

CRITERION (6 MG/KG)

500 0 500 1,000 1,500

SCALE IN FEET

FIGURE – 3.41a

SADVA
GUILDERLAND, NEW YORK
AOC 8 SEDIMENT
SAMPLE RESULTS – ARSENIC

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088, PHONE: 315-451-9560

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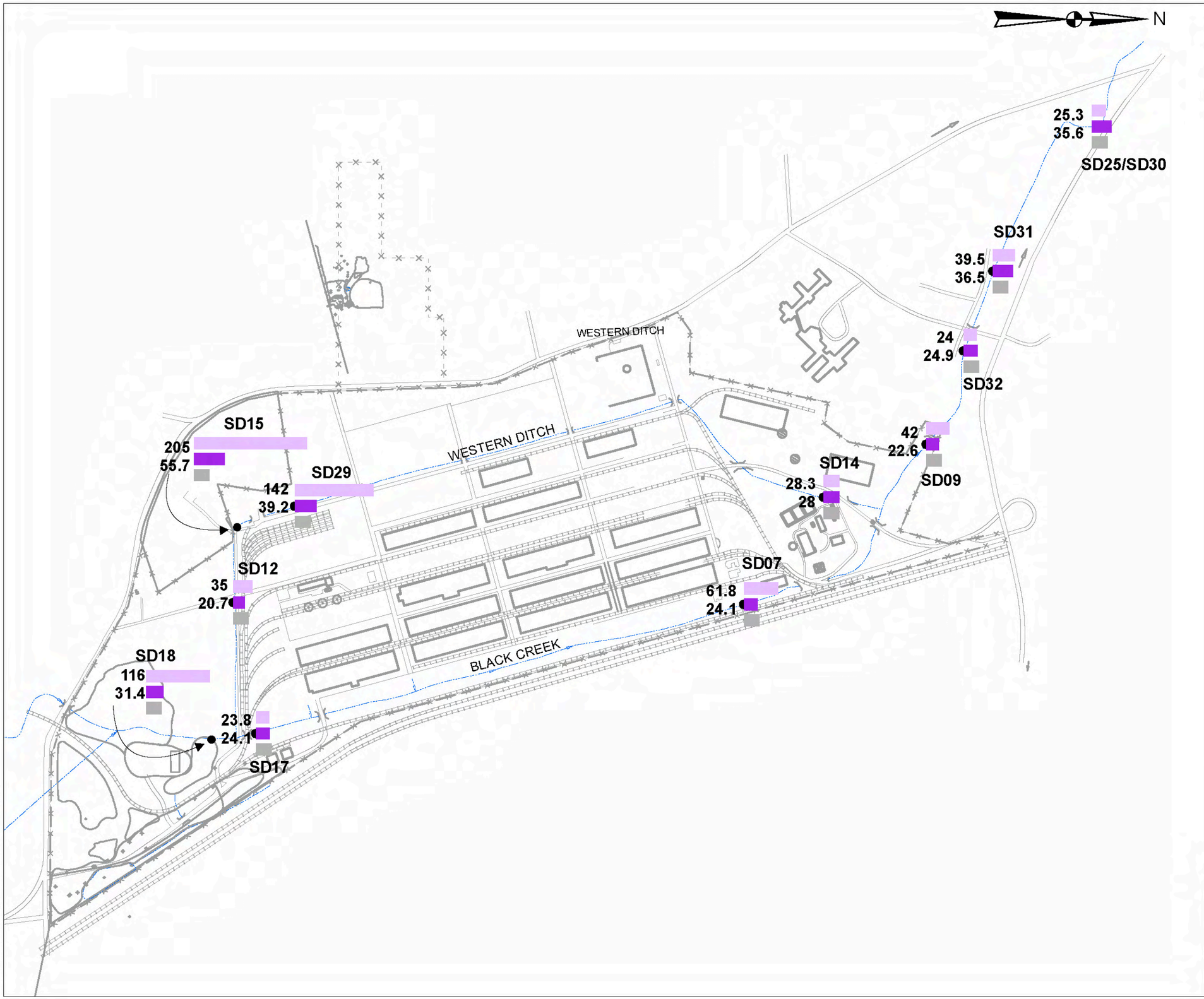


LEGEND

205 SHALLOW SAMPLE CONCENTRATION (IN MG/KG)

55.7 DEEP SAMPLE CONCENTRATION (IN MG/KG)

CRITERION (27.7 MG/KG)

500 0 500 1,000 1,500

SCALE IN FEET

FIGURE – 3.41b

SADVA
GUILDERLAND, NEW YORK
AOC 8 SEDIMENT
SAMPLE RESULTS – COPPER

PARSONS

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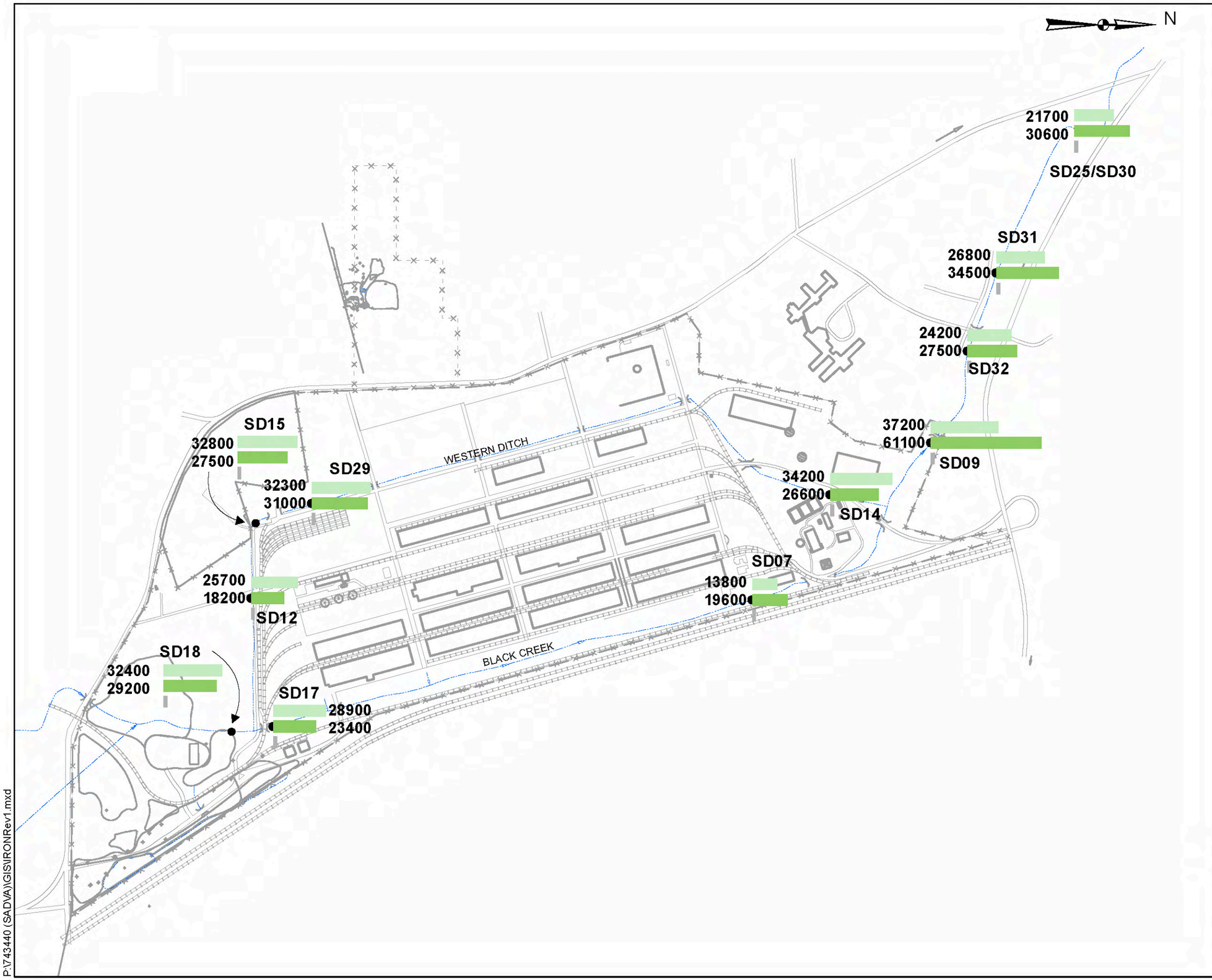


LEGEND

205 SHALLOW SAMPLE CONCENTRATION (IN MG/KG)

55.7 DEEP SAMPLE CONCENTRATION (IN MG/KG)

CRITERION (2000 MG/KG)

500 0 500 1,000 1,500

SCALE IN FEET

FIGURE – 3.41c

SADVA
GUILDERLAND, NEW YORK
AOC 8 SEDIMENT
SAMPLE RESULTS – IRON

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088, PHONE: 315-451-9560

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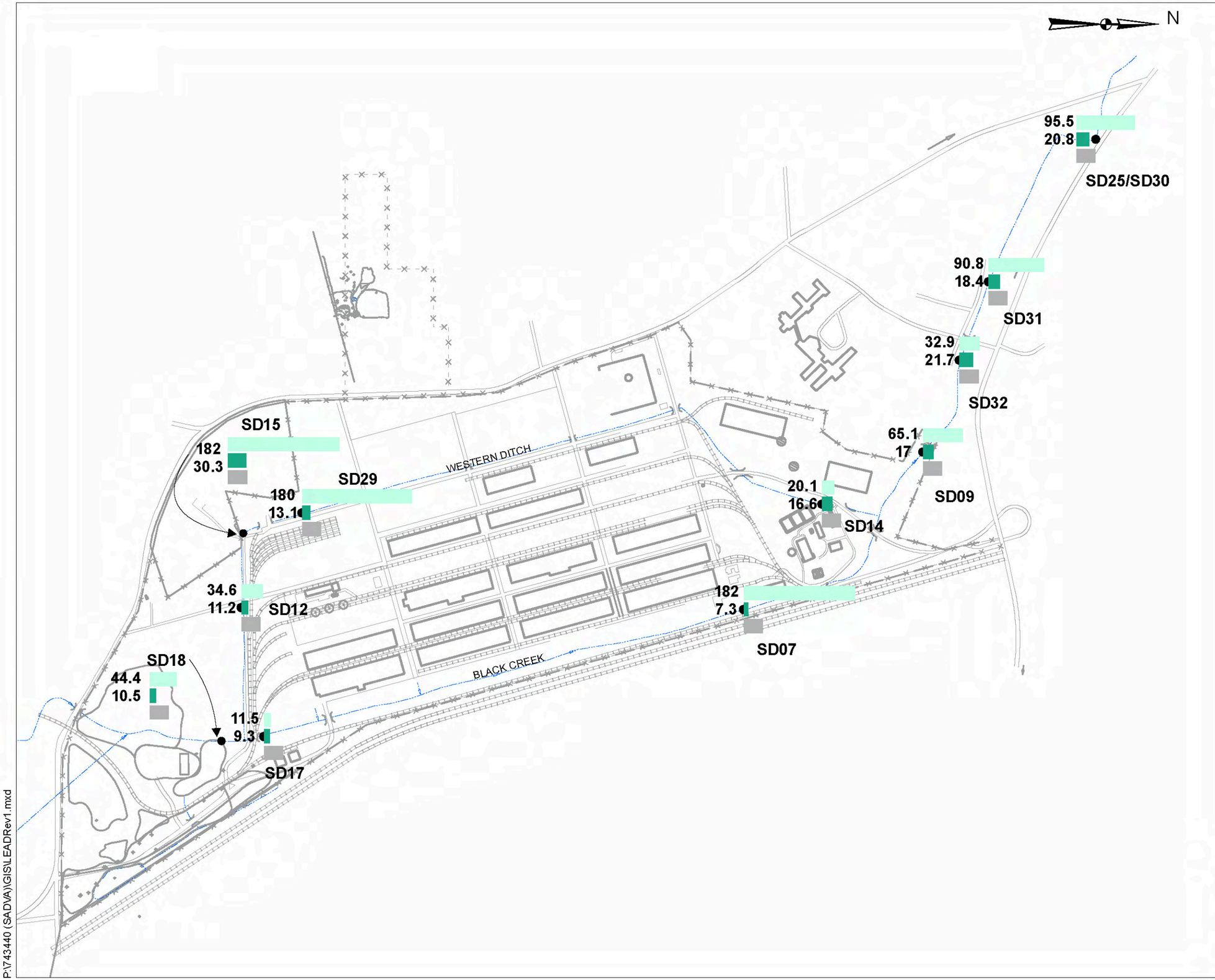


LEGEND

205 SHALLOW SAMPLE CONCENTRATION (IN MG/KG)

55.7 DEEP SAMPLE CONCENTRATION (IN MG/KG)

CRITERION (31 MG/KG)

500 0 500 1,000 1,500

SCALE IN FEET

FIGURE – 3.41d

SADVA
GUILDERLAND, NEW YORK
AOC 8 SEDIMENT
SAMPLE RESULTS – LEAD

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088, PHONE: 315-451-9560

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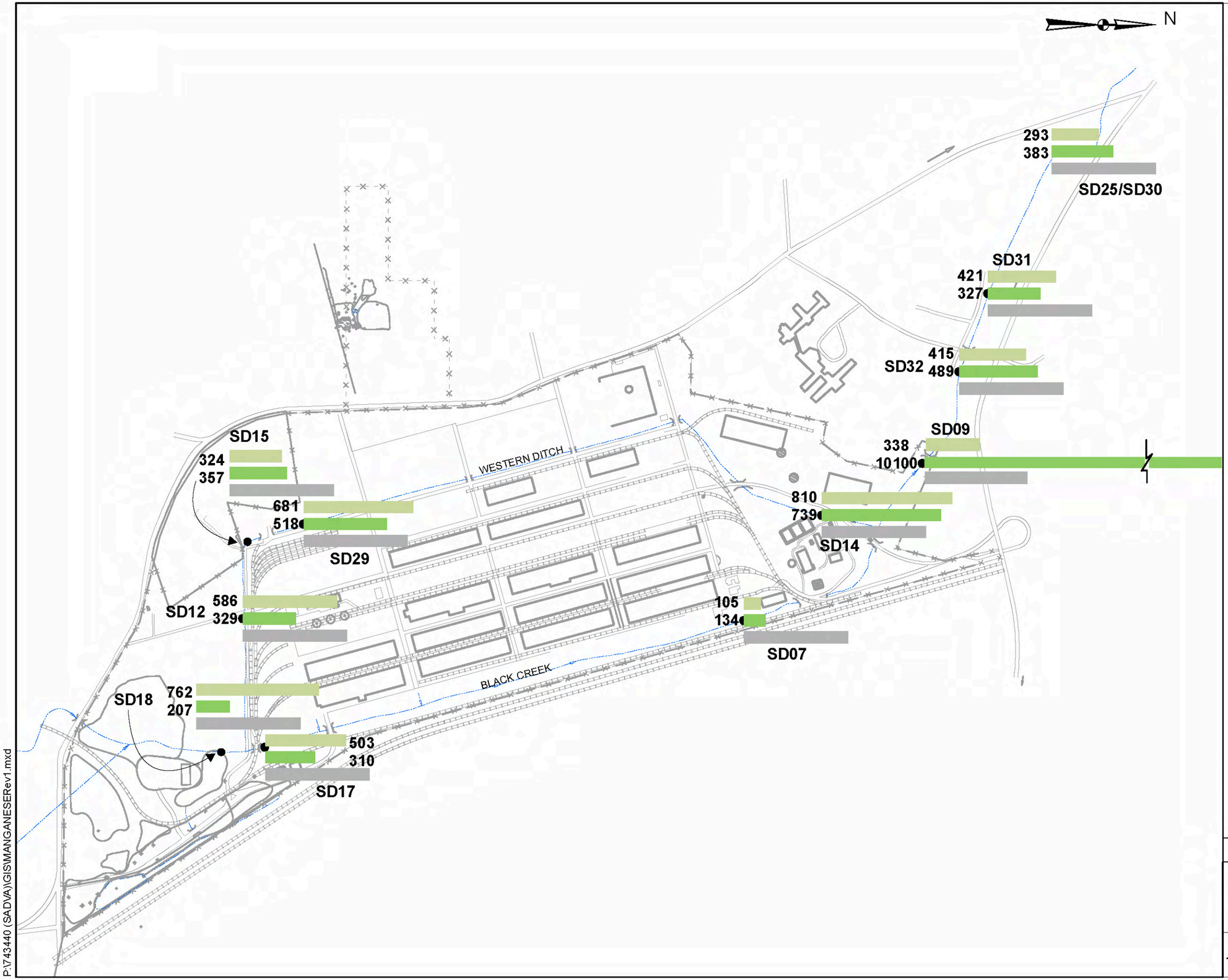


LEGEND

205 SHALLOW SAMPLE CONCENTRATION (IN MG/KG)

55.7 DEEP SAMPLE CONCENTRATION (IN MG/KG)

CRITERION (647 MG/KG)

500 0 500 1,000 1,500

SCALE IN FEET

FIGURE – 3.41e

SADVA
GUILDERLAND, NEW YORK
AOC 8 SEDIMENT
SAMPLE RESULTS – MANGANESE

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088, PHONE: 315-451-9560

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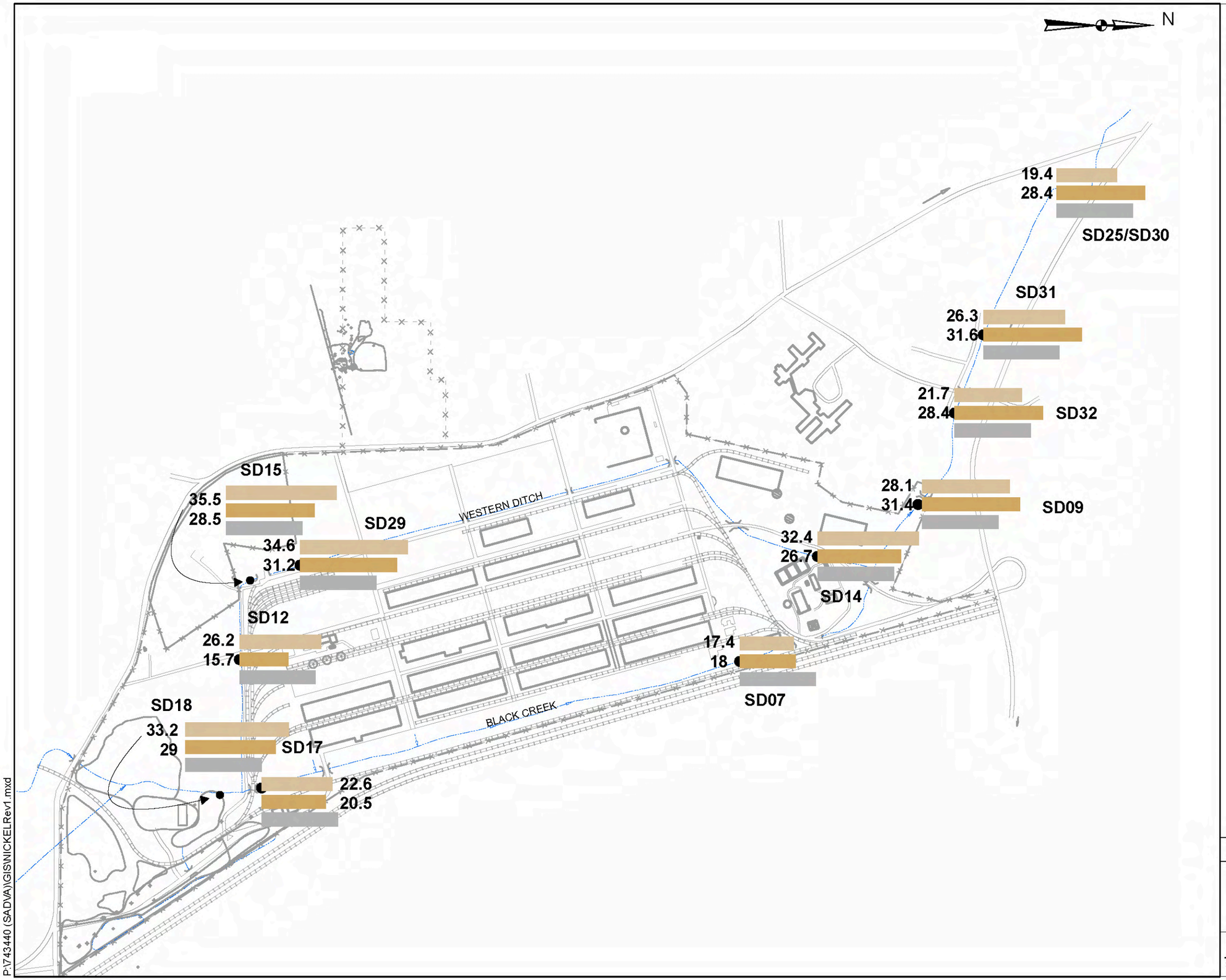


LEGEND

205 SHALLOW SAMPLE CONCENTRATION (IN MG/KG)

55.7 DEEP SAMPLE CONCENTRATION (IN MG/KG)

CRITERION (24.5 PPM)

500 0 500 1,000 1,500

SCALE IN FEET

FIGURE – 3.41f

SADVA
GUILDERLAND, NEW YORK
AOC 8 SEDIMENT
SAMPLE RESULTS – NICKEL

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088, PHONE: 315-451-9560

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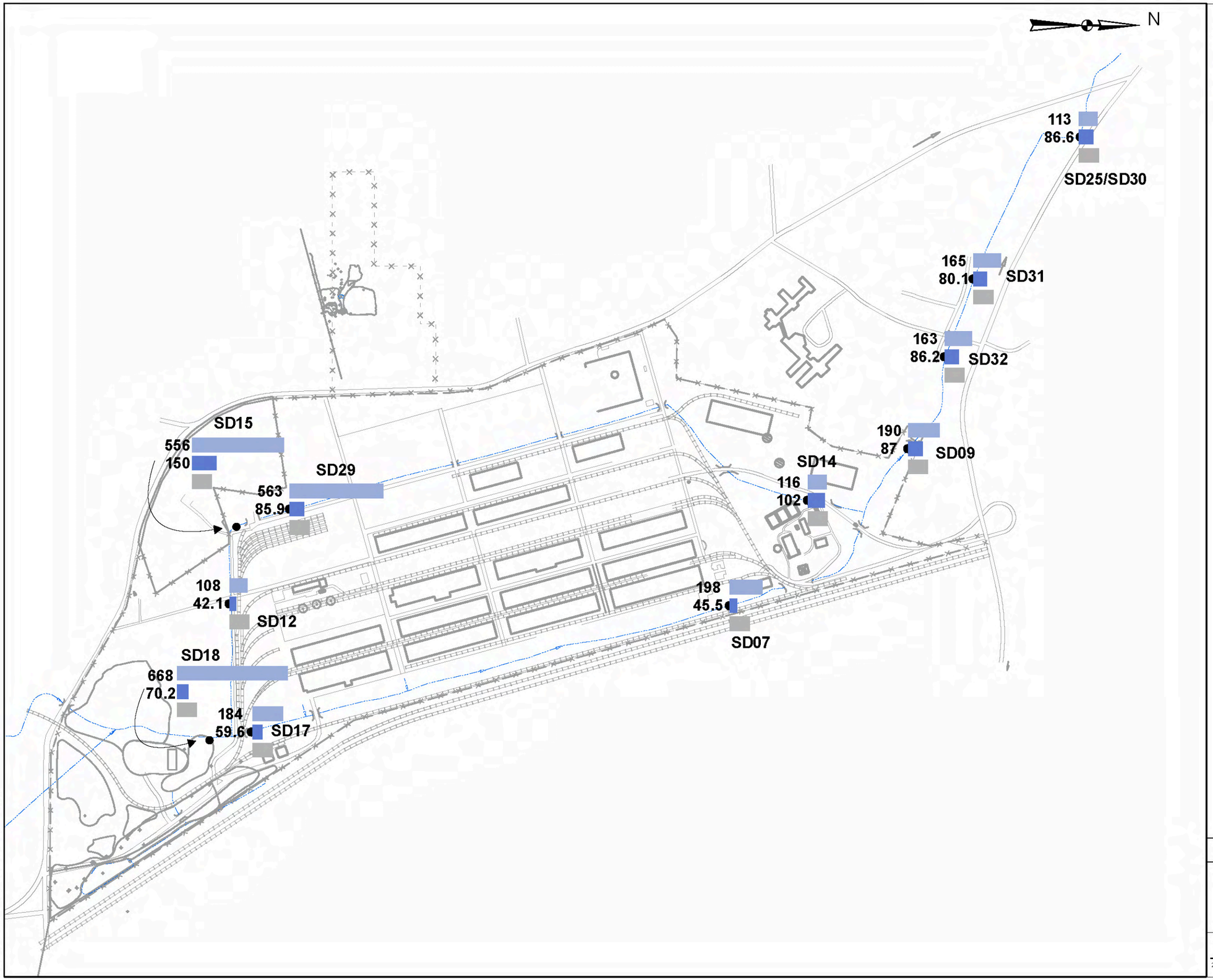


LEGEND

205 SHALLOW SAMPLE CONCENTRATION (IN MG/KG)

55.7 DEEP SAMPLE CONCENTRATION (IN MG/KG)

CRITERION (120 PPM)

500 0 500 1,000 1,500

SCALE IN FEET

FIGURE – 3.41g

SADVA
GUILDERLAND, NEW YORK
AOC 8 SEDIMENT
SAMPLE RESULTS – ZINC

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, NY 13088, PHONE: 315-451-9560

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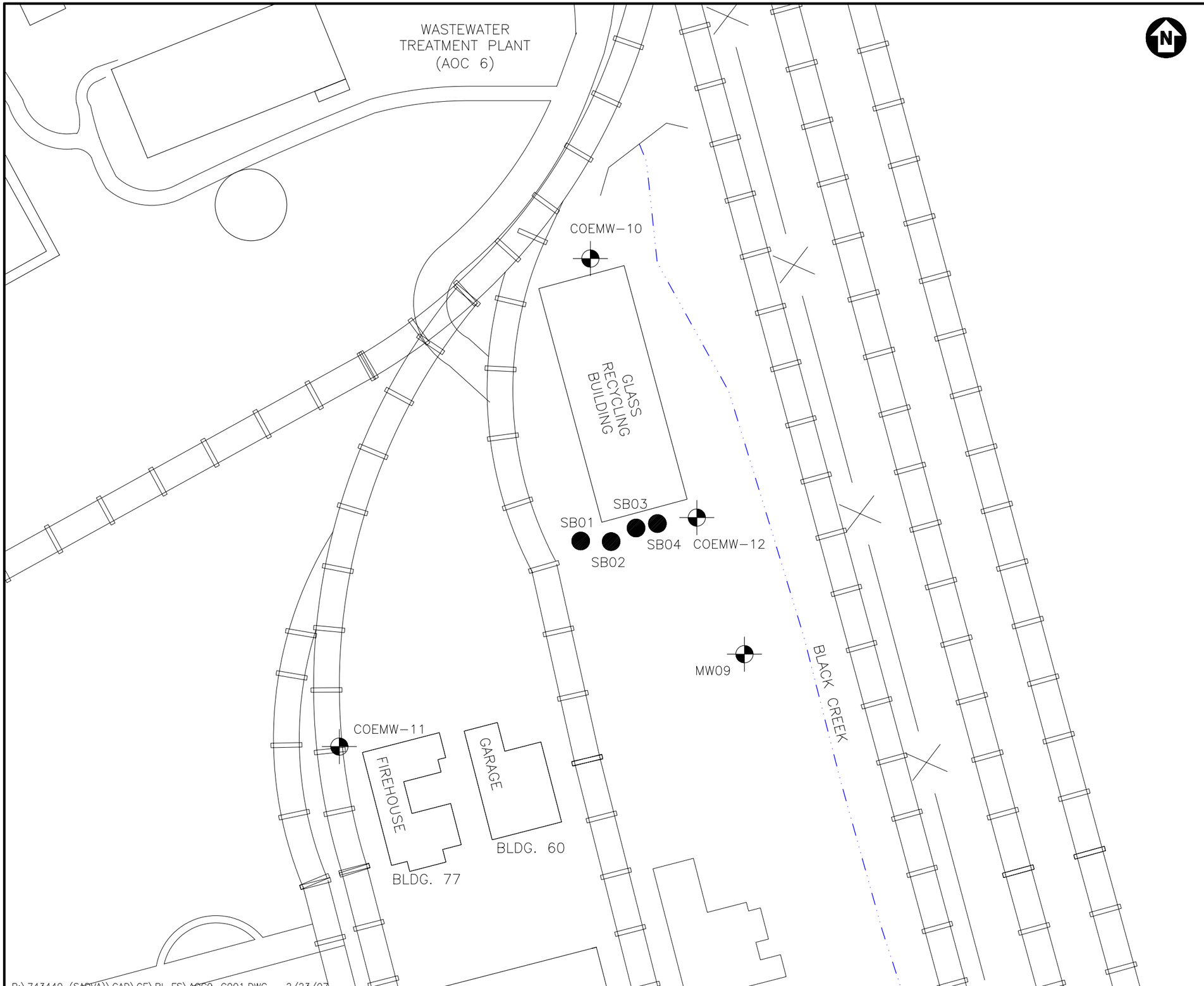


LEGEND

SB04 SOIL BORING

MW09 EXISTING MONITORING WELL

CREEKS/ DRAINAGE DITCH

RAILROAD TRACKS

FENCING

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.42

SADVA
GUILDERLAND, NEW YORK

AOC 9
BUILDING 60 AREA
SITE PLAN

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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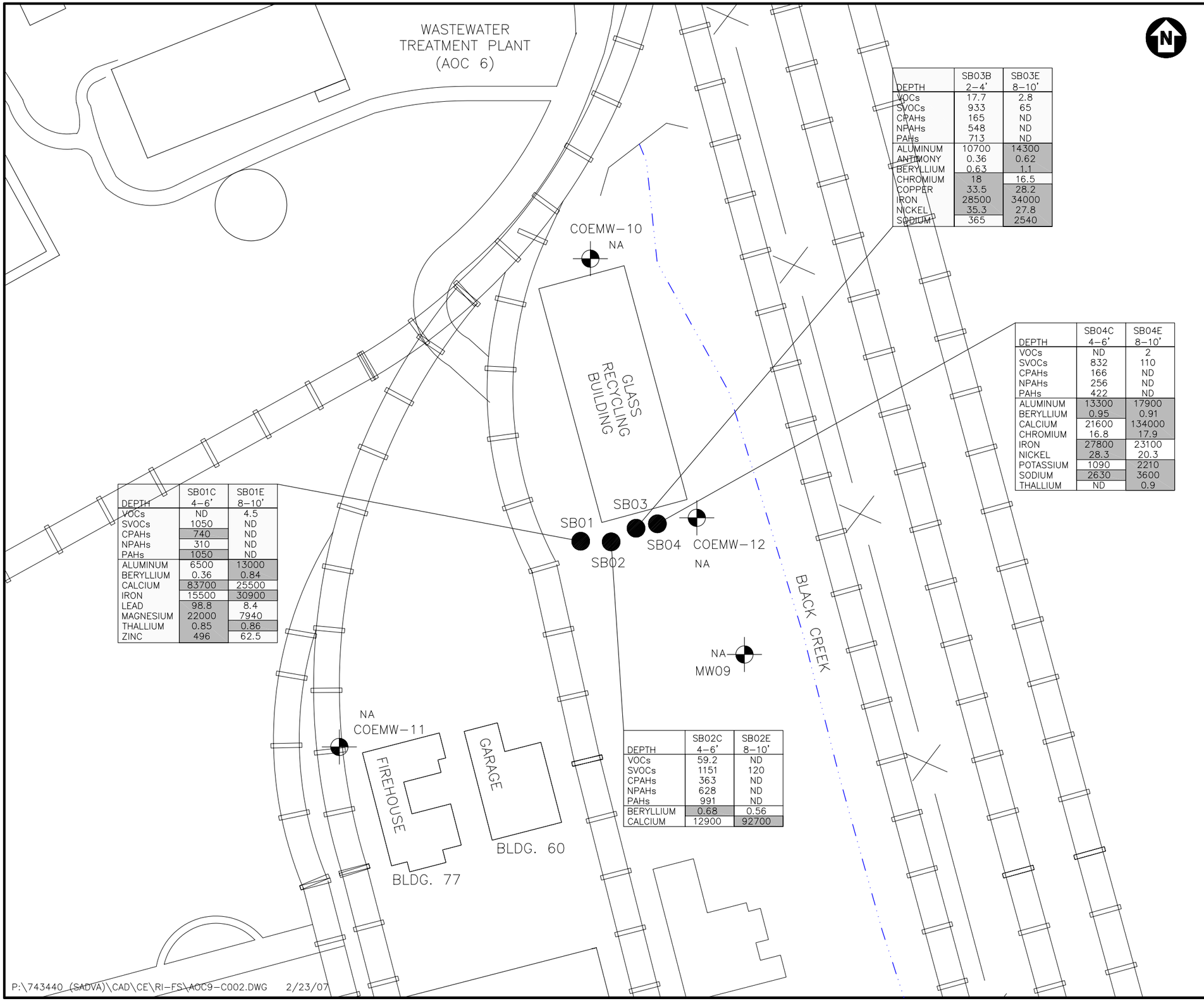


| DEPTH | SB03B 2-4' | SB03E 8-10' |
|---|---|---|
| VOCs | 17.7 | 2.8 |
| SVOCs | 933 | 65 |
| CPAHs | 165 | ND |
| NPAHs | 548 | ND |
| PAHs | 713 | ND |
| ALUMINUM | 10700 | 14300 |
| ANTIMONY | 0.36 | 0.62 |
| BERYLLIUM | 0.63 | 1.1 |
| CHROMIUM | 18 | 16.5 |
| COPPER | 33.5 | 28.2 |
| IRON | 28500 | 34000 |
| NICKEL | 35.3 | 27.8 |
| SODIUM | 365 | 2540 |

| DEPTH | SB04C 4-6' | SB04E 8-10' |
|---|---|---|
| VOCs | ND | 2 |
| SVOCs | 832 | 110 |
| CPAHs | 166 | ND |
| NPAHs | 256 | ND |
| PAHs | 422 | ND |
| ALUMINUM | 13300 | 17900 |
| BERYLLIUM | 0.95 | 0.91 |
| CALCIUM | 21600 | 134000 |
| CHROMIUM | 16.8 | 17.9 |
| IRON | 27800 | 23100 |
| NICKEL | 28.3 | 20.3 |
| POTASSIUM | 1090 | 2210 |
| SODIUM | 2630 | 3600 |
| THALLIUM | ND | 0.9 |

| DEPTH | SB01C 4-6' | SB01E 8-10' |
|---|---|---|
| VOCs | ND | 4.5 |
| SVOCs | 1050 | ND |
| CPAHs | 740 | ND |
| NPAHs | 310 | ND |
| PAHs | 1050 | ND |
| ALUMINUM | 6500 | 13000 |
| BERYLLIUM | 0.36 | 0.84 |
| CALCIUM | 83700 | 25500 |
| IRON | 15500 | 30900 |
| LEAD | 98.8 | 8.4 |
| MAGNESIUM | 22000 | 7940 |
| THALLIUM | 0.85 | 0.86 |
| ZINC | 496 | 62.5 |

| DEPTH | SB02C 4-6' | SB02E 8-10' |
|---|---|---|
| VOCs | 59.2 | ND |
| SVOCs | 1151 | 120 |
| CPAHs | 363 | ND |
| NPAHs | 628 | ND |
| PAHs | 991 | ND |
| BERYLLIUM | 0.68 | 0.56 |
| CALCIUM | 12900 | 92700 |

LEGEND

SB04 ● SOIL BORING

MW09 EXISTING MONITORING WELL

CREEKS/ DRAINAGE DITCH

RAILROAD TRACKS

—X——X——X— FENCING

NA NOT ANALYZED
ND NOT DETECTED

18 ONLY SOIL CONCENTRATIONS ABOVE BACKGROUND AND NYSDEC TAGM CRITERIA SHOWN.

| DEPTH | SB02C 4-6' |
|---|---|
| VOCs | 59.2 |
| SVOCs | 1151 |
| CPAHs | 363 |
| NPAHs | 628 |
| PAHs | 991 |
| BERYLLIUM | 0.68 |
| CALCIUM | 12900 |

SAMPLE ID
DEPTH IN FEET
TOTAL VOCs (ug/kg)
TOTAL SVOCs (ug/kg)
TOTAL CPAHs (ug/kg)
TOTAL NPAHs (ug/kg)
TOTAL PAHs (ug/kg)
TOTAL METALS (mg/kg)

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.43

SADVA
GUILDERLAND, NEW YORK

AOC 9
BUILDING 60 AREA
SOIL SAMPLE RESULTS

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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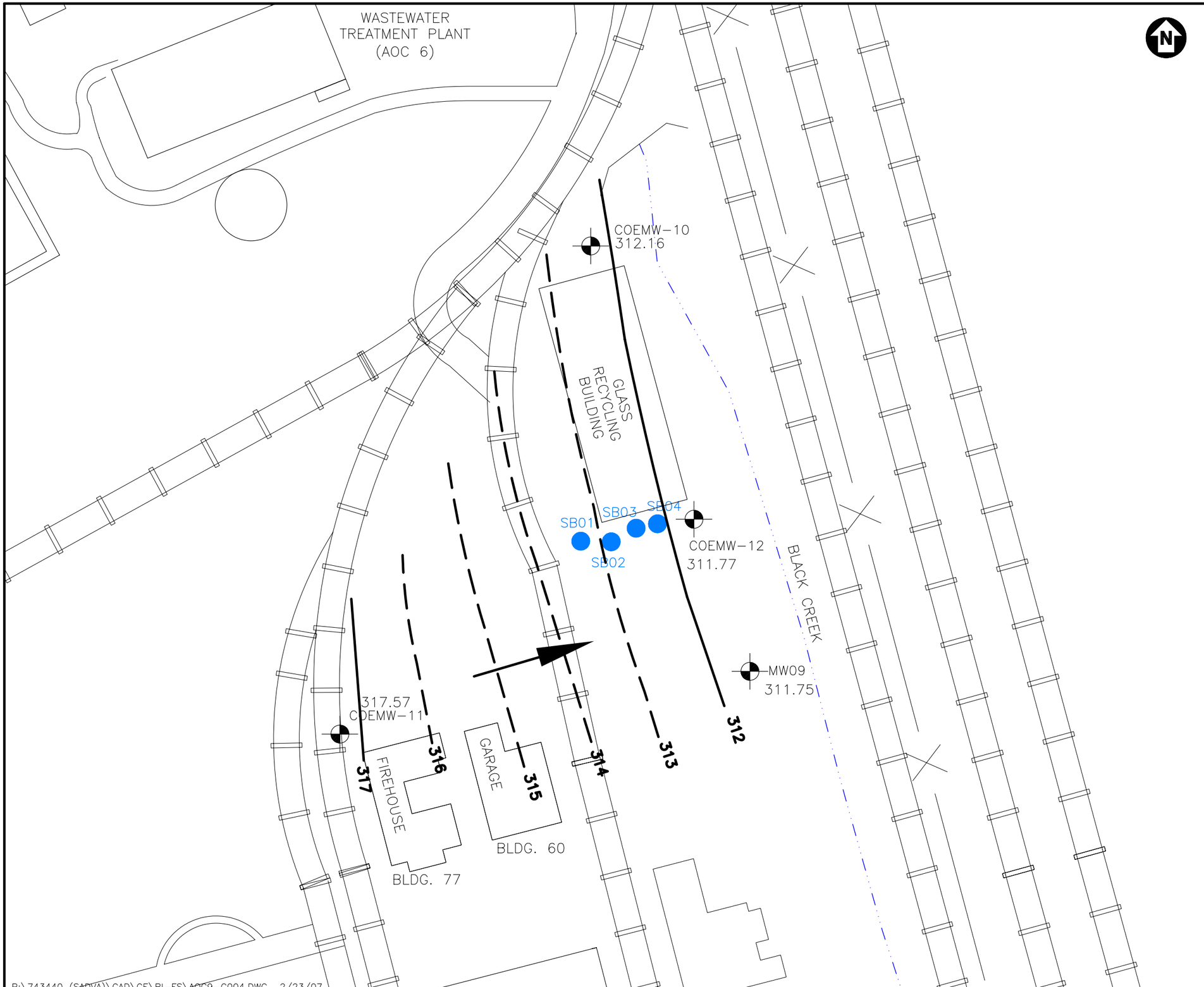


LEGEND

SB04 SOIL BORING

MW09 EXISTING MONITORING WELL

CREEKS/ DRAINAGE DITCH

RAILROAD TRACKS

FENCING

GROUNDWATER ELEVATION CONTOUR

INFERRED GROUNDWATER ELEVATION CONTOUR

* ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL AS REPORTED BY USACE IN JANUARY 1999

DIRECTION OF GROUNDWATER FLOW

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

FIGURE 3.44

SADVA
GUILDERLAND, NEW YORK
AOC 9
BUILDING 60 AREA
GROUNDWATER ELEVATION MAP

PARSONS

290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

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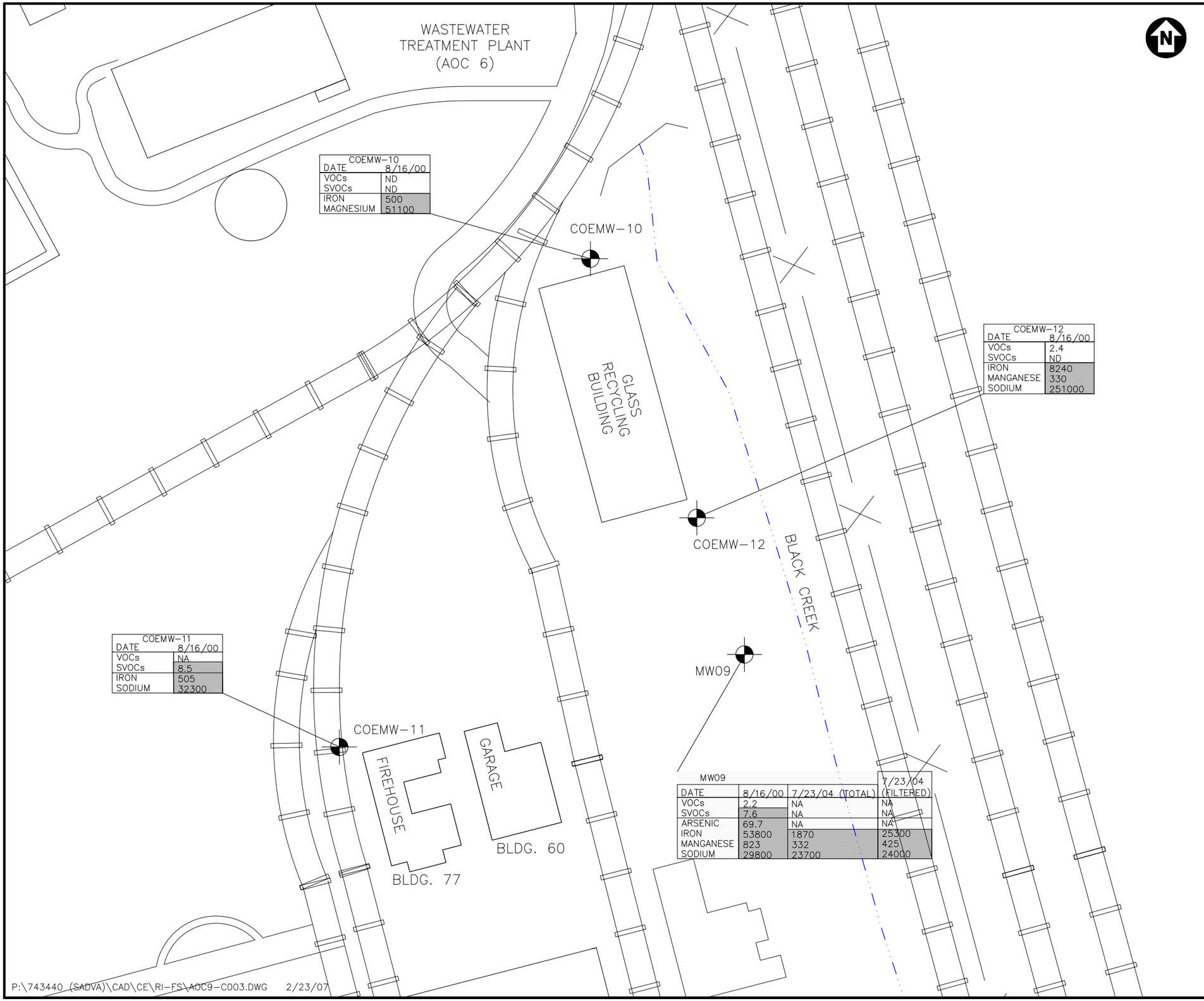


| COEMW-10 | |
|---|---|
| DATE | 8/16/00 |
| VOCs | ND |
| SVOCs | ND |
| IRON | 500 |
| MAGNESIUM | 51100 |

| COEMW-11 | |
|---|---|
| DATE | 8/16/00 |
| VOCs | NA |
| SVOCs | 8.5 |
| IRON | 505 |
| SODIUM | 32300 |

| COEMW-12 | |
|---|---|
| DATE | 8/16/00 |
| VOCs | 2.4 |
| SVOCs | ND |
| IRON | 8240 |
| MANGANESE | 330 |
| SODIUM | 251000 |

| MW09 | | | |
|---|---|---|---|
| DATE | 8/16/00 | 7/23/04 (TOTAL) | 7/23/04 (FILTERED) |
| VOCs | 2.2 | NA | NA |
| SVOCs | 7.6 | NA | NA |
| ARSENIC | 69.7 | NA | NA |
| IRON | 53800 | 1870 | 25300 |
| MANGANESE | 823 | 332 | 425 |
| SODIUM | 29800 | 23700 | 24000 |

LEGEND

MW09 — EXISTING MONITORING WELL

CREEKS/ DRAINAGE DITCH

RAILROAD TRACKS

—X—X—X— FENCING

NA — NOT ANALYZED
ND — NOT DETECTED

373 — SAMPLE CONCENTRATION ABOVE NYSDEC GROUNDWATER STANDARD/GUIDANCE VALUE AND BACKGROUND CONCENTRATIONS.

| MW09 | |
|---|---|
| VOCs | NA |
| SVOCs | NA |
| IRON | 25300 |
| MANGANESE | 425 |
| SODIUM | 24000 |

SAMPLE ID
TOTAL VOCs (ug/kg)
TOTAL SVOCs (ug/kg)
TOTAL METALS (mg/kg)

NOTE: NO PESTICIDES OR PCBs WERE DETECTED IN ANY GROUNDWATER SAMPLES.

100 50 0 100 200

Approximate Scale in Feet

SOURCE: USACE, 1999.

# FIGURE 3.45

SADVA
GUILDERLAND, NEW YORK

**AOC 9**
BUILDING 60 AREA
GROUNDWATER SAMPLE RESULTS

PARSONS
290 ELWOOD DAVIS ROAD, SUITE 312, LIVERPOOL, N.Y. 13088, PHONE: 315-451-9560

**Figure 4.1**
**Graphical Summary of Post-remediation Non-cancer Risk for SADVA AOC 2**

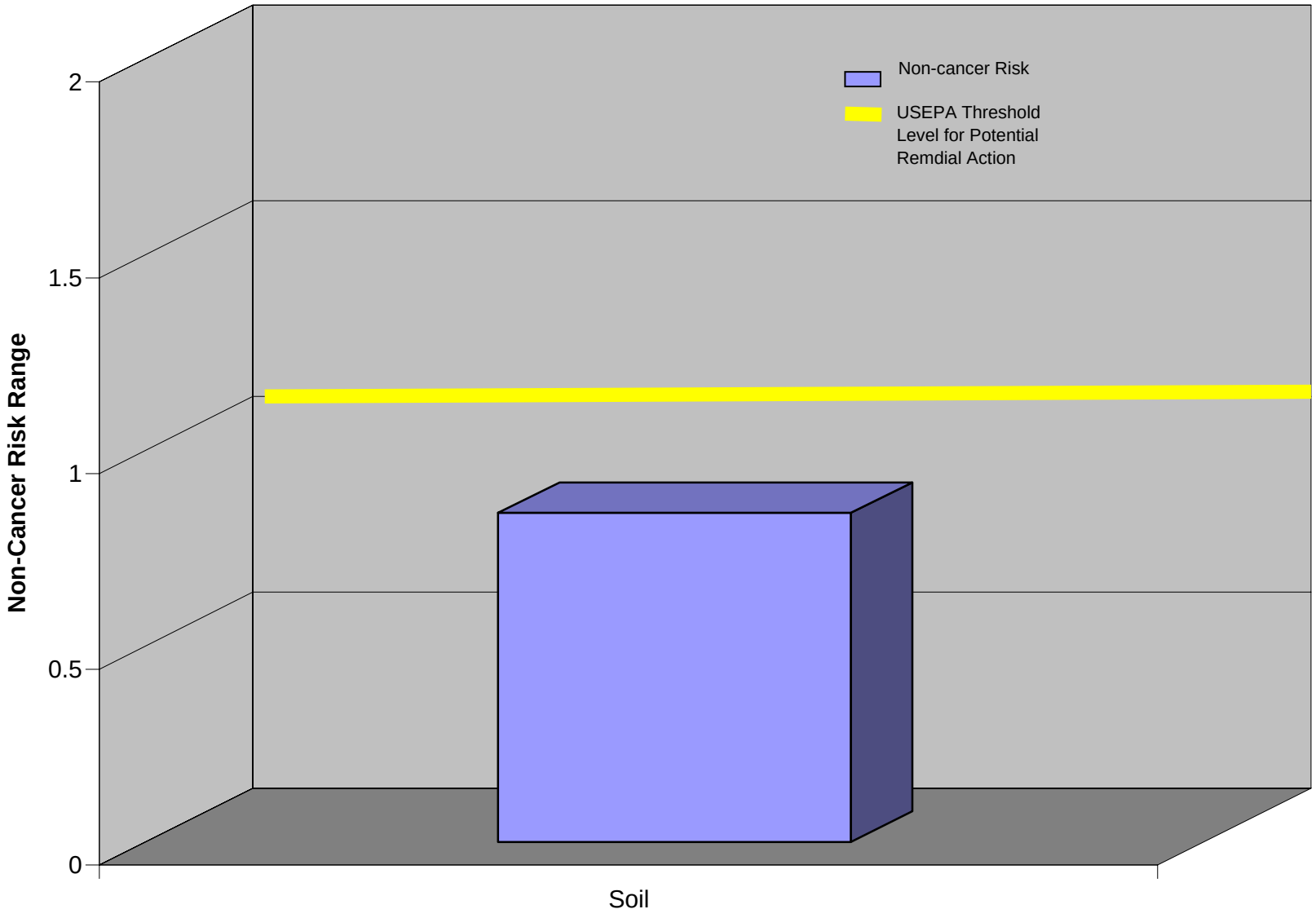


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**Figure 4.2**
**Graphical Summary of Post-Remediation Cancer Risk for SADVA AOC 2**

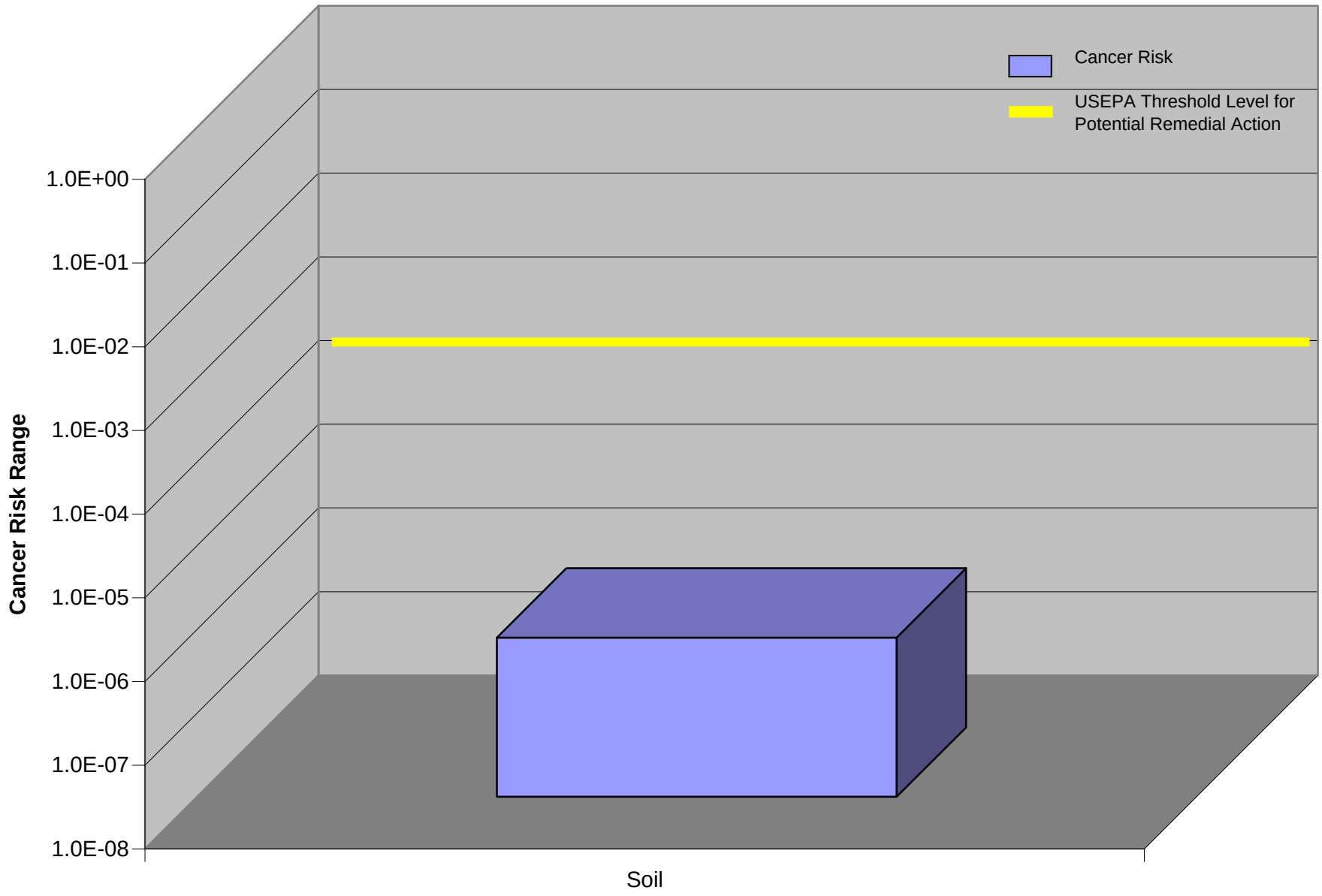


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**Figure 4.3**
**Graphical Summary of Post-Remediation Cancer Risk for SADVA AOC 3**

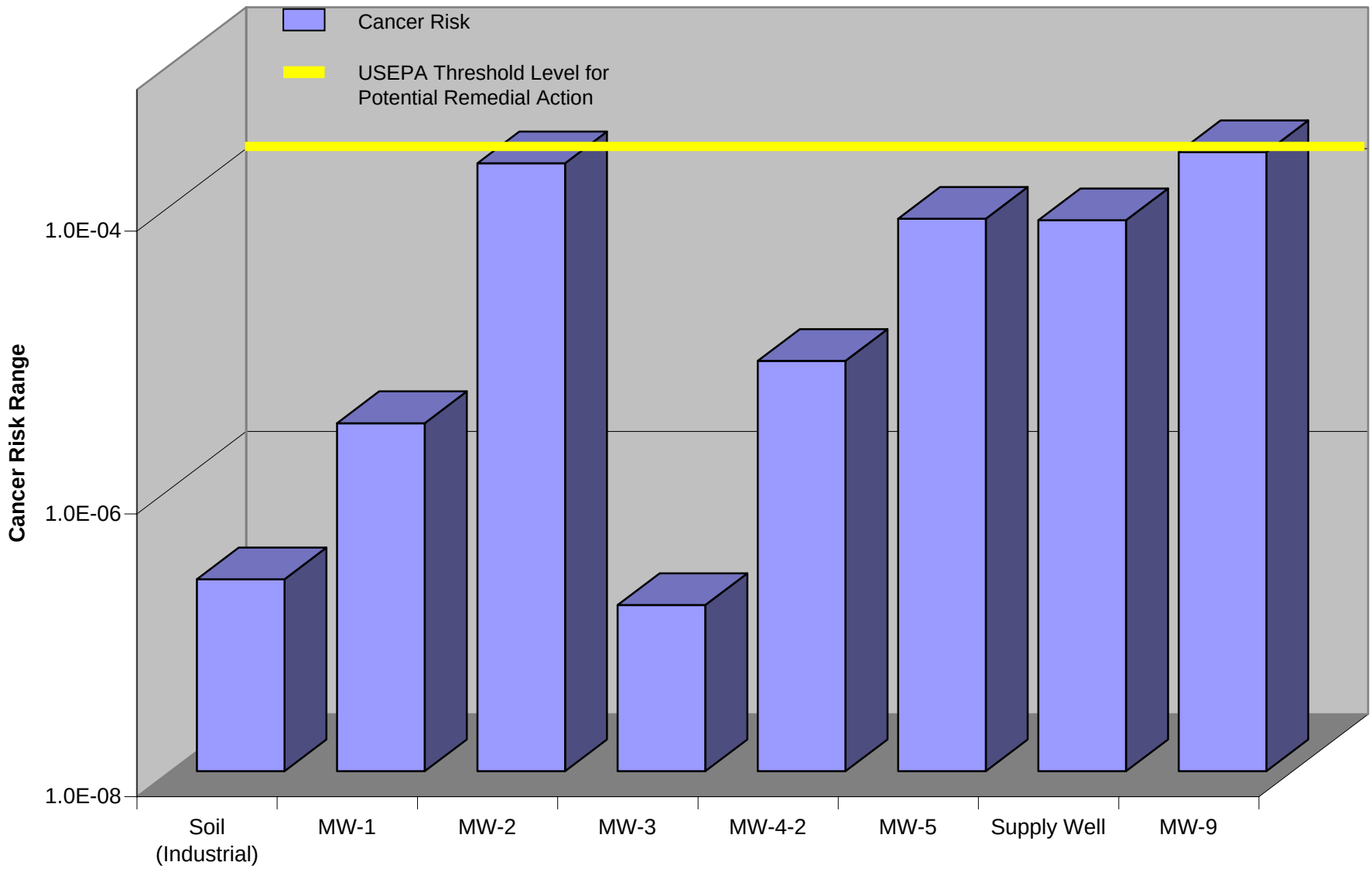


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**Figure 4.4**
**Graphical Summary of Post-Remediation Non-cancer Risk for SADVA AOC 3**

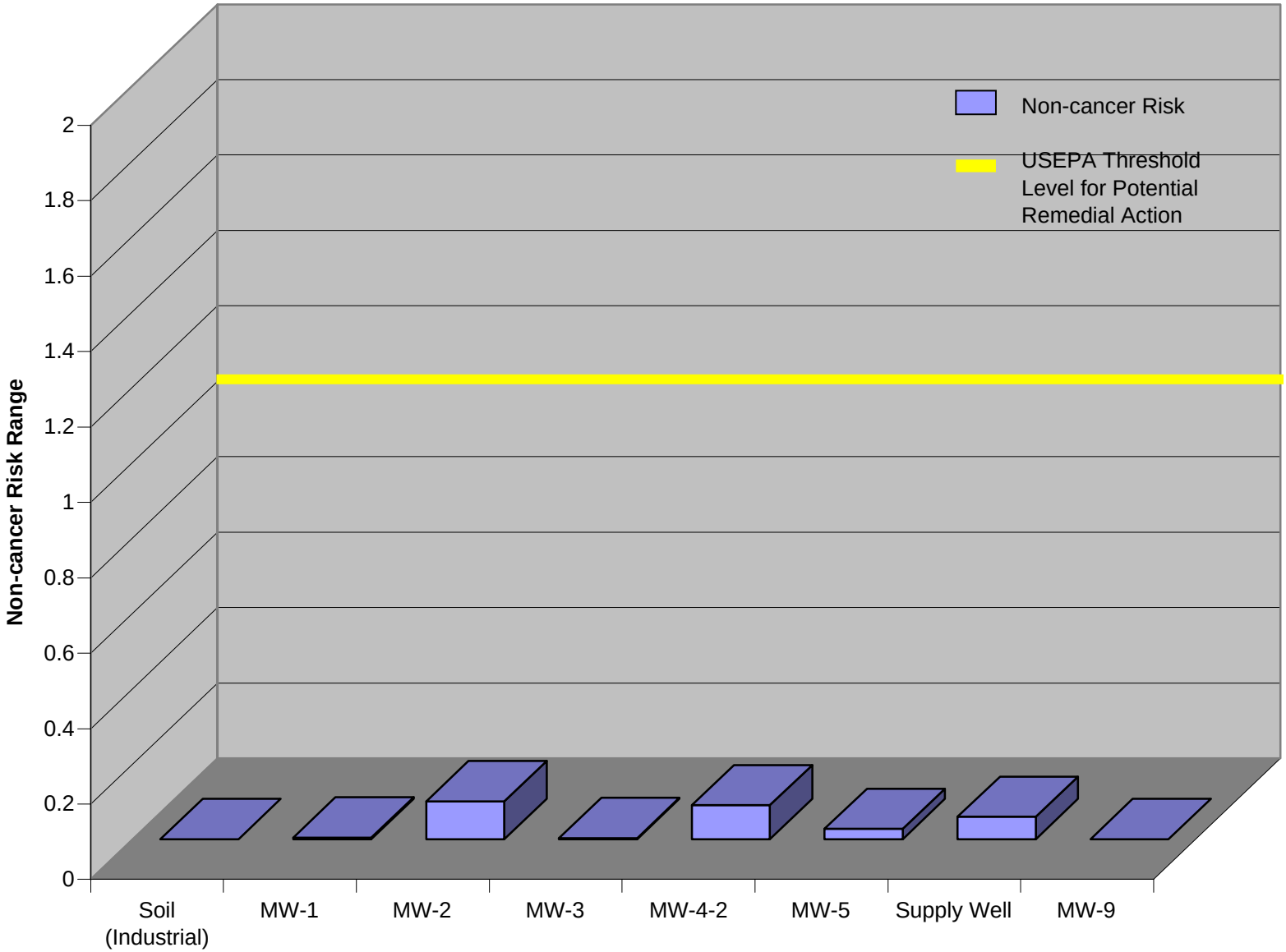


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**Figure 4.5**
**Graphical Summary of Non-cancer Risk for SADVA AOCs 1 and 7**

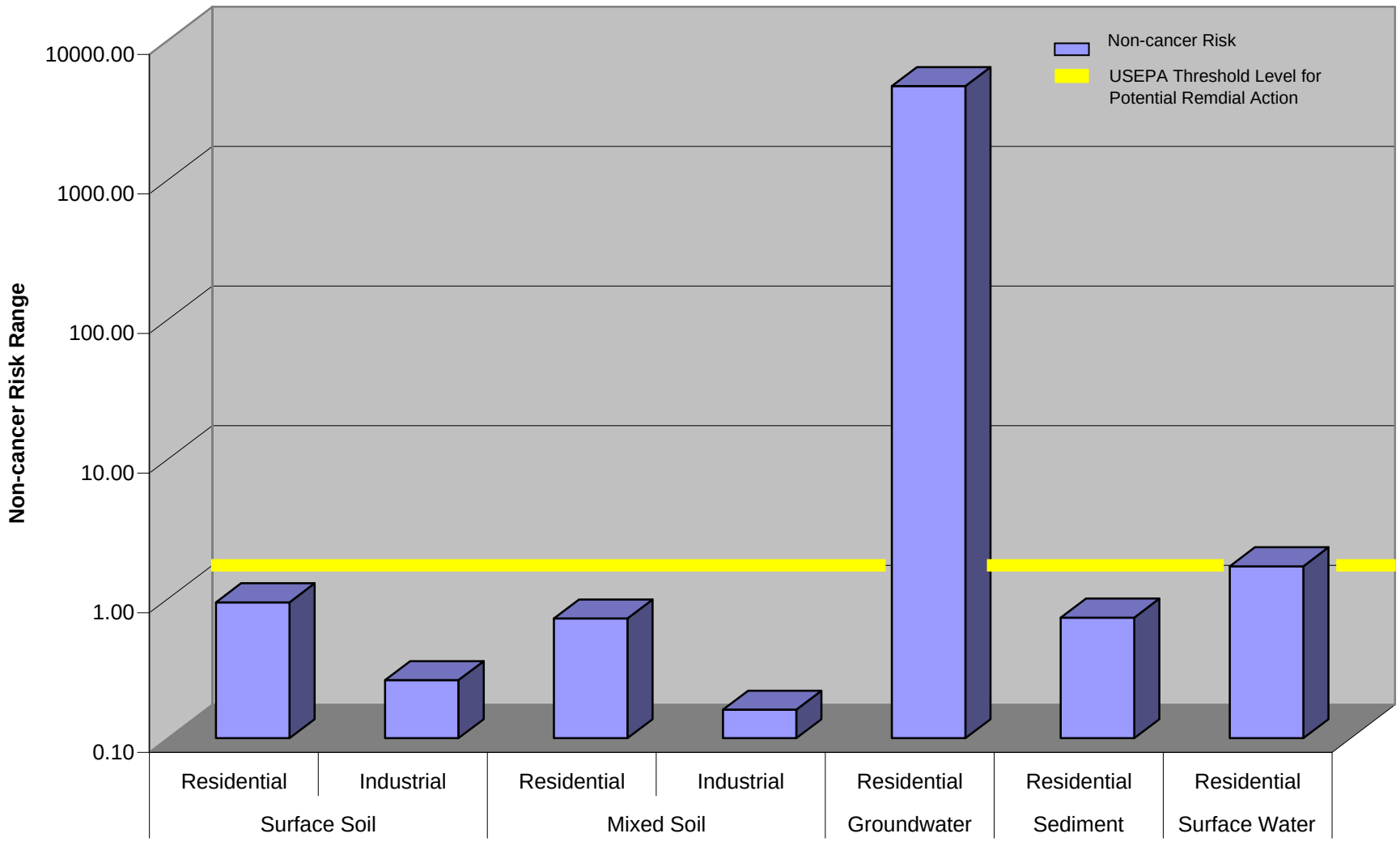


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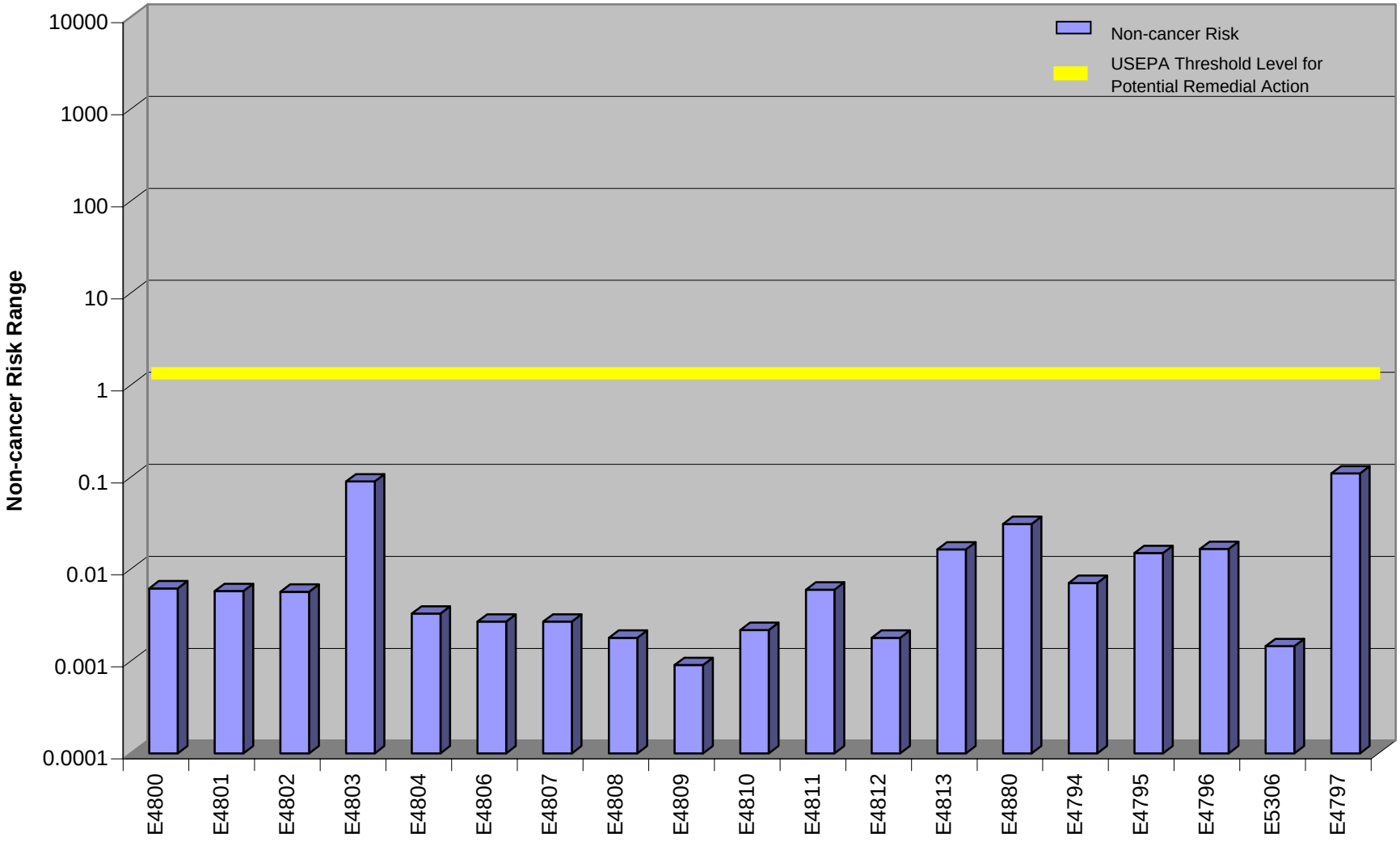
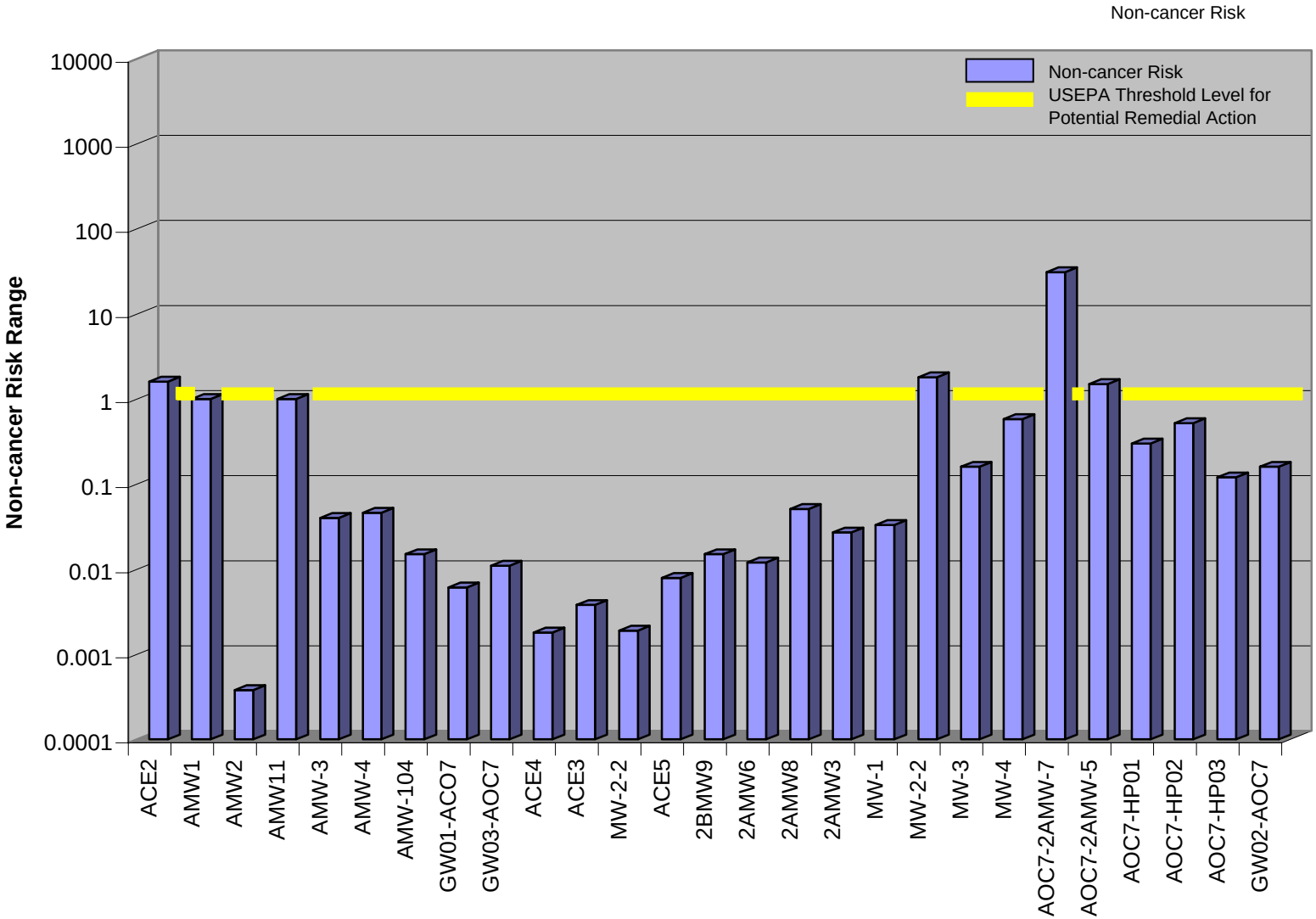
**Figure 4.5a**
**Graphical Summary of Non-cancer Risk for Residential Wells**



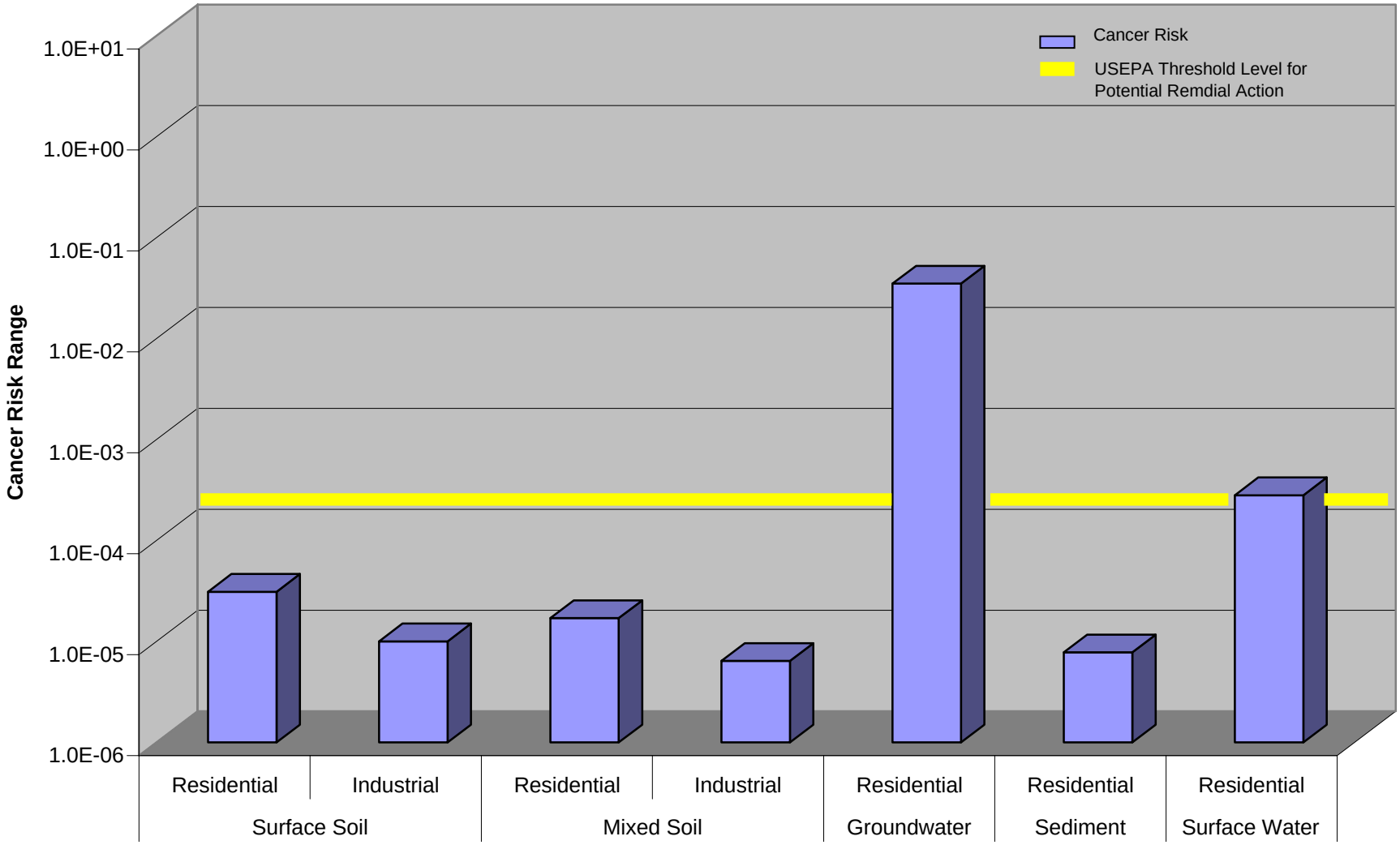

P:\743440 (SADVA)\Wp\RI Report\Graphs\Figure 4.5 AOC 1-7 noncance-A.xls\Fig 4.5a Graph

**Figure 4.5b**
**Graphical Summary of Non-cancer Risk for Nonresidential Monitoring Wells**




P:\743440 (SADVA)\Wp\RI Report\Graphs\Figure 4.5 AOC 1-7 noncance-A.xls\Fig 4.5b Graph

**Figure 4.6**
**Graphical Summary of Cancer Risk for SADVA AOCs 1 and 7**




P:\743440 (SADVA)\Wp\RI Report\Graphs\Figure 4.6 AOC 1-7 cancer.xls\Chart1

**Figure 4.6a**
**Graphical Summary of Cancer Risk forResidential Wells**

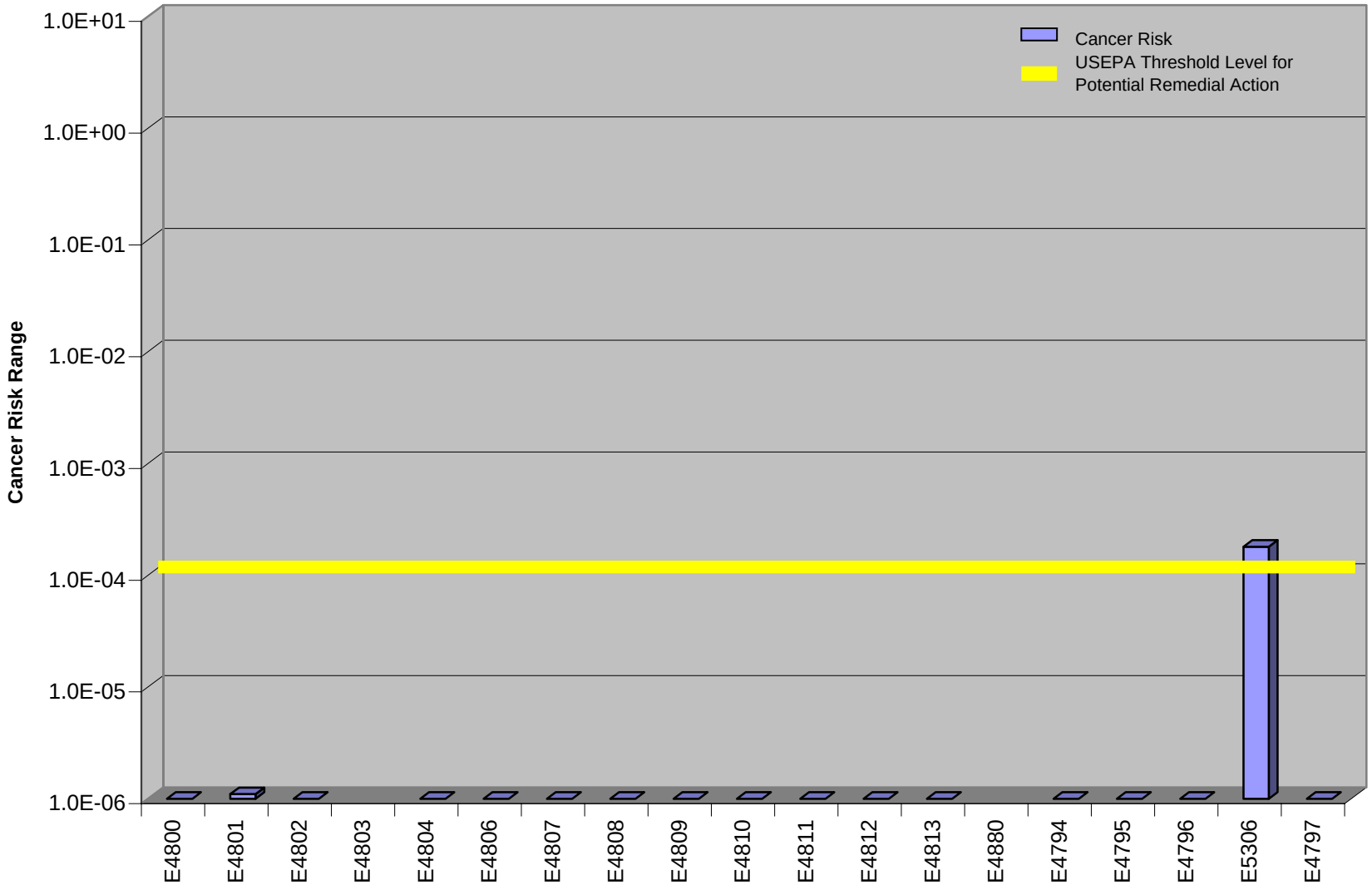


**Figure 4.6b**
**Graphical Summary of Cancer Risk for Nonresidential Monitoring Wells**

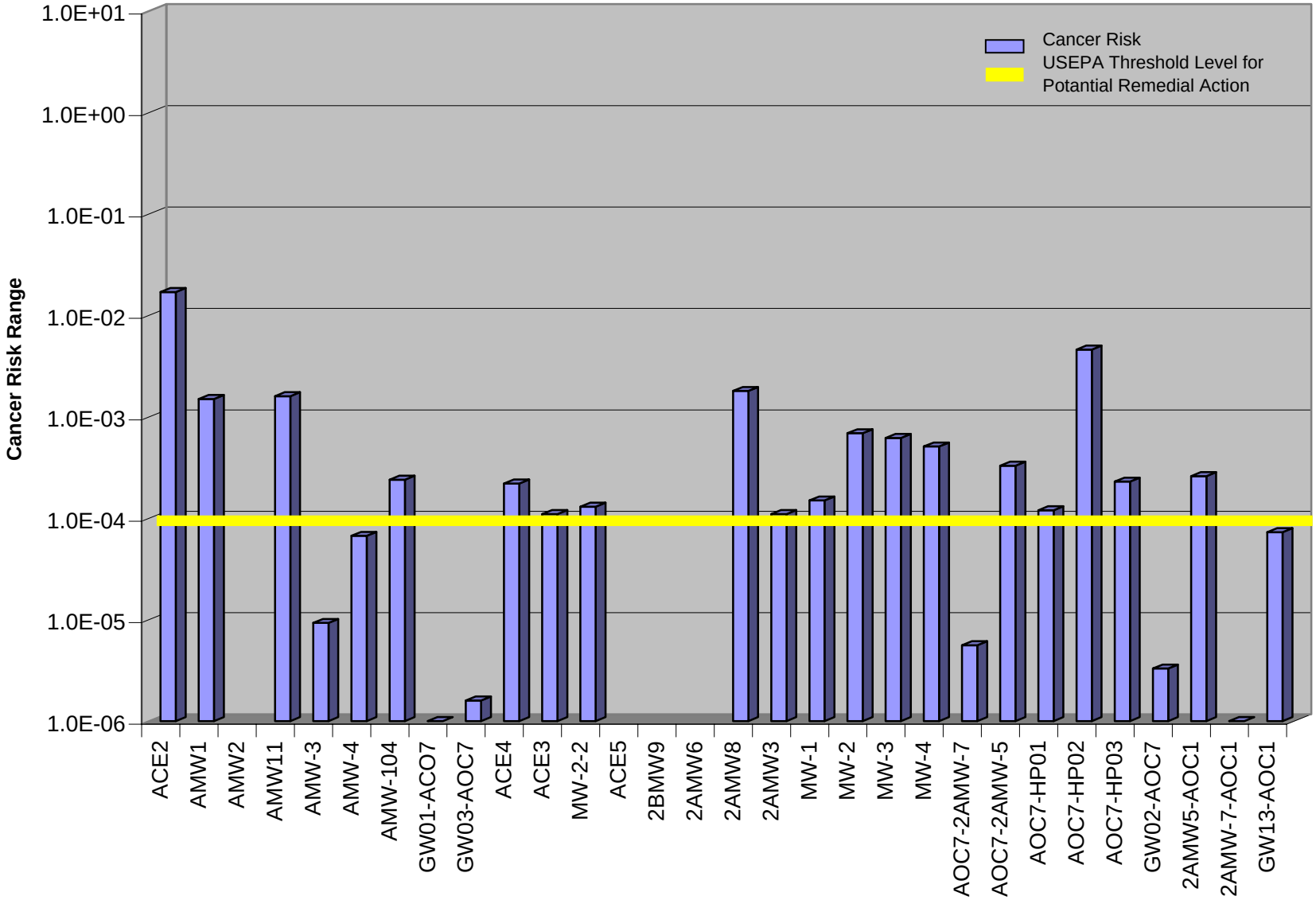


**Figure 4.7**
**Graphical Summary of Non-cancer Risk for SADVA AOC 8**

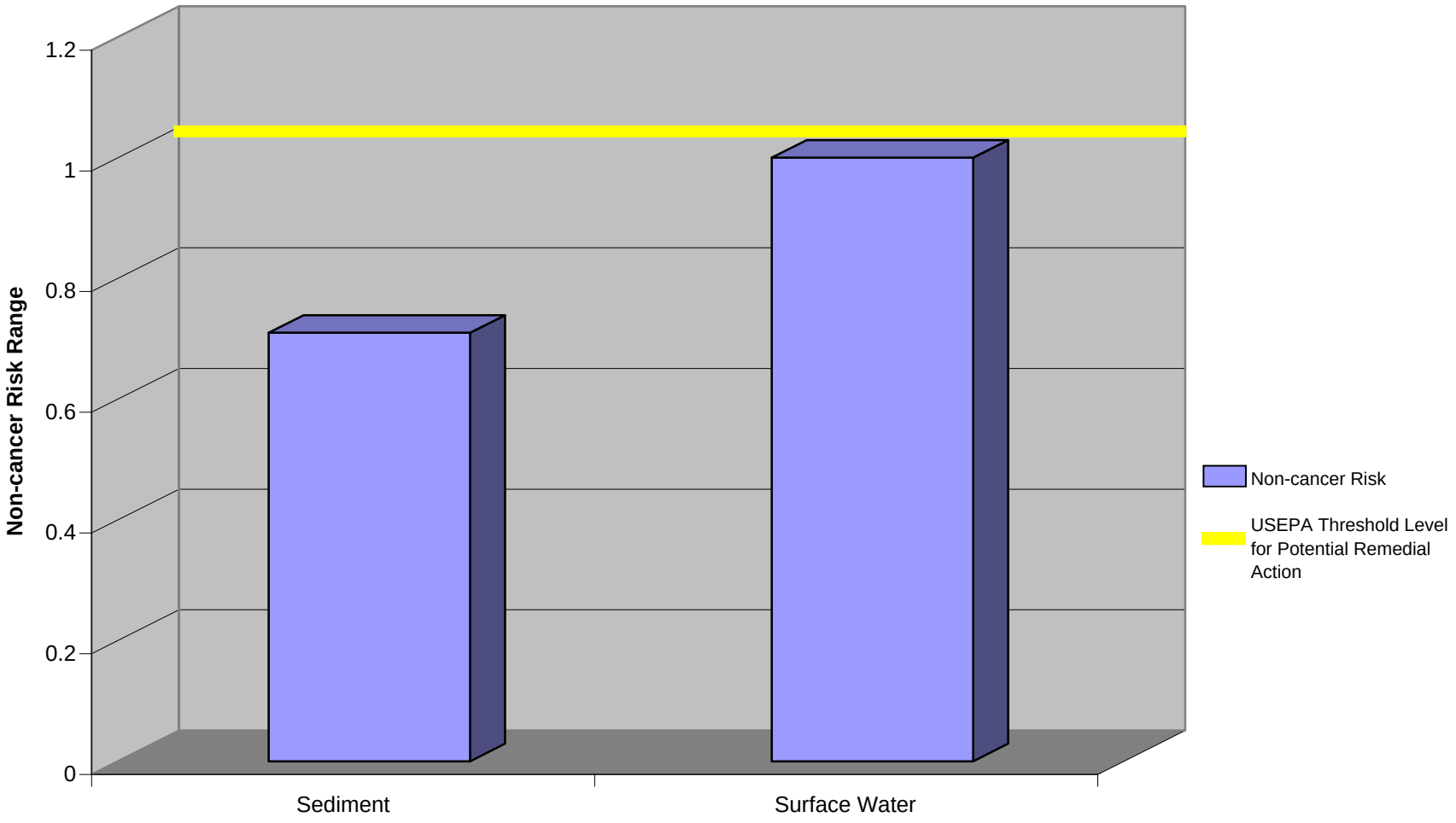



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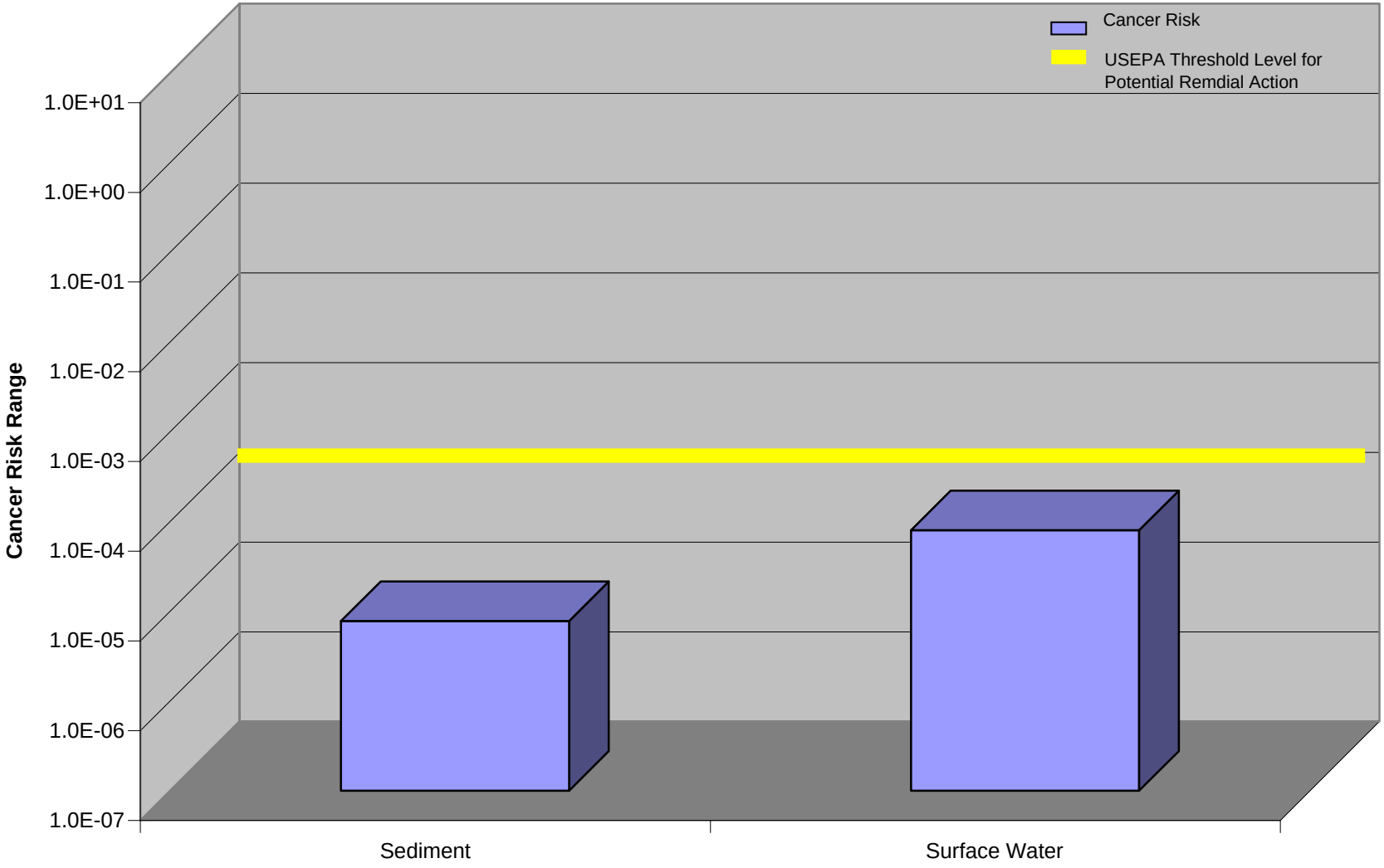
**Figure 4.8**
**Graphical Summary of Cancer Risk for SADVA AOC 8**




P:\743440 (SADVA)\Wp\RI Report\Graphs\Figure 4.8 AOC 8 cancer.xls\Chart1