N60508.AR.000249
NAS WHITING FIELD
5090.3a

LETTER REGARDING U S NAVY RESPONSE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION COMMENTS ON SITE 7 REMEDIAL ACTION PLAN ADDENDUM NAS WHITING FIELD FL
10/18/2007
CH2M HILL

Response to the October 18, 2007
Florida Department of Environmental Protection
Technical Review Comments to the Site 7 RAP Addendum
NAS Whiting Field, Florida dated September 2007

General Comments:

Comment: The soil data presented in this report is a bit sketchy in terms of being able to grasp the extent of contamination. I know there have been plenty of previous documents presenting this information, but it would be helpful to have figures showing the overall bounds of the contamination at the four depth ranges 0-20, 20-60, 60-80, and 80-GWT.

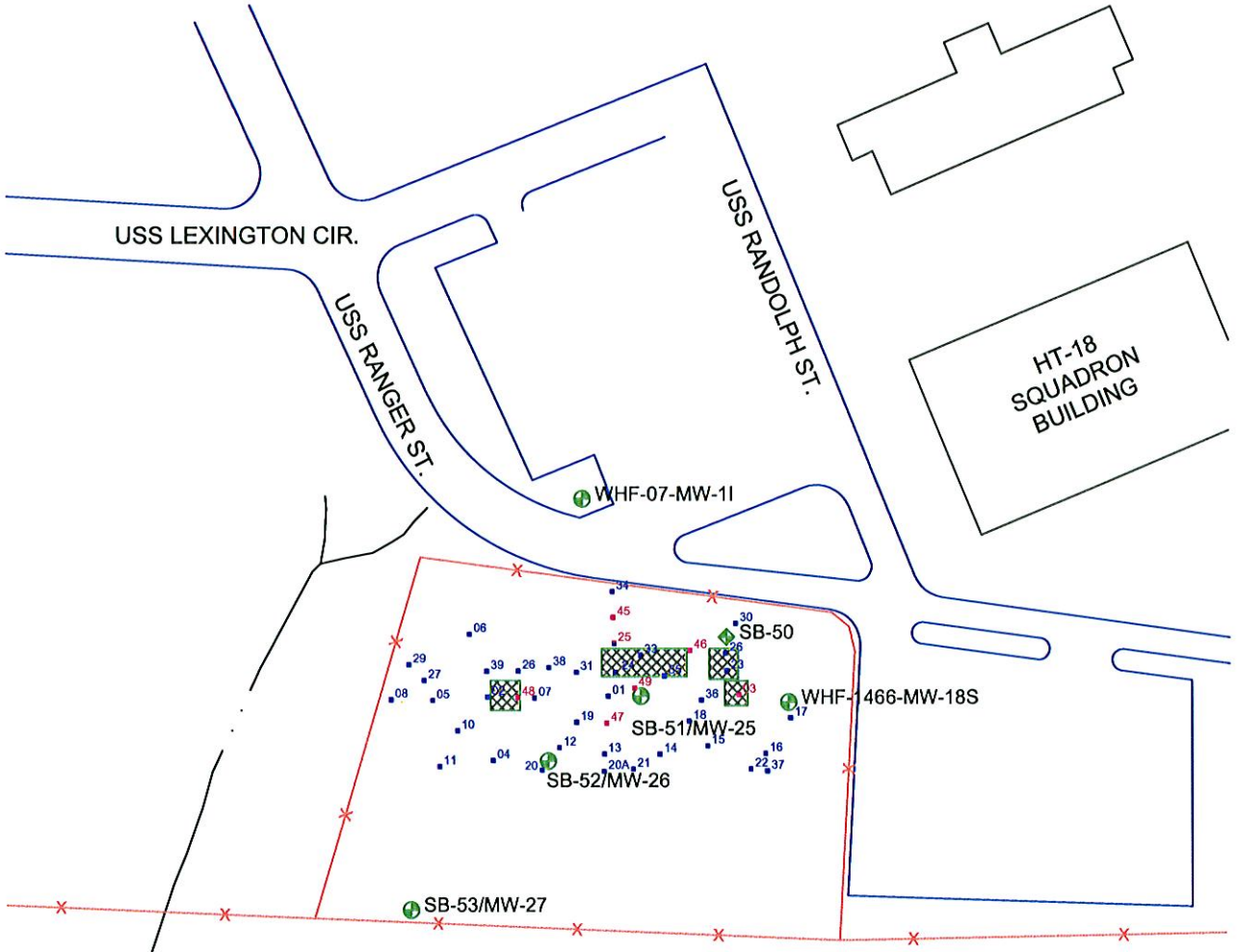
Response: *Four figures (Figures 2-5 through 2-8) have been generated which include OVA data and soil exceedances from 0 – 126 ft bls. Figures 1-3, 2-1, 2-4, and 3-12 have also been updated and are attached as replacement figures.*

Comment: The first page of calculations in Appendix E references the four depth ranges. The last appears to have a typo: should it be 80-126 ft bls, not 60-126 ft bls?

Response: *It should remain "60-80 ft bls **'or'** 60-126 ft bls". The calculations were originally completed for three zones (0 to 20, 20 to 60, and 60 to 80 ft bls). The fourth zone (60 to 126 ft bls) was calculated due to the variable nature of the water table and potential for perched groundwater zones in the area.*

Comment: Getting more specific with comment 1, with regard to SB-53, a look at both the headspace data in Table 2-2 and analyticals in Table 2-4 (toluene, xylene) show that SB-53 is definitely within the plume at the lowest depth range (80-126 ft). So it appears that we have a kind of bell-shaped soil plume with the asymmetrical "flange" occurring at close to the water table in the direction of SB-53 (toward the southwest). If it's not too much trouble, you might want to create one of those famous CH2MH "3D" plume figures incorporating both the TTNUS and the new data for the four headspace and three analyticals from this past April. As long as the SVE system captures the overall plume at 80 feet and shallower, I think we have a viable system. I would however offer the disclaimer that the deep soil contamination will have to be addressed under Site 40 unless the GWT rises significantly (which could be happening as I write this, knock on wood!) and the BTEX goes back into the dissolved phase from the large smear zone that seems to be there now.

Response: *There are several 3D maps available that were prepared by WRS; however, these maps only included soil headspace data and are not necessarily representative of the actual soil plume. Currently, sufficient analytical data does not exist to complete an accurate 3D plume figure. The SVE is designed to capture to 80 ft bls.*



NOTE:
Historic information obtained from the WRS Interim Remedial Action Plan for Site 07, South AVGAS Tank Sludge Disposal area. Revision 02, May 17, 2006.

LEGEND

- Building
- Fence
- Excavation Extents
- Monitor Well
- Soil Boring
- Historic Soil Boring, 2000
- Historic Soil Boring, 2003

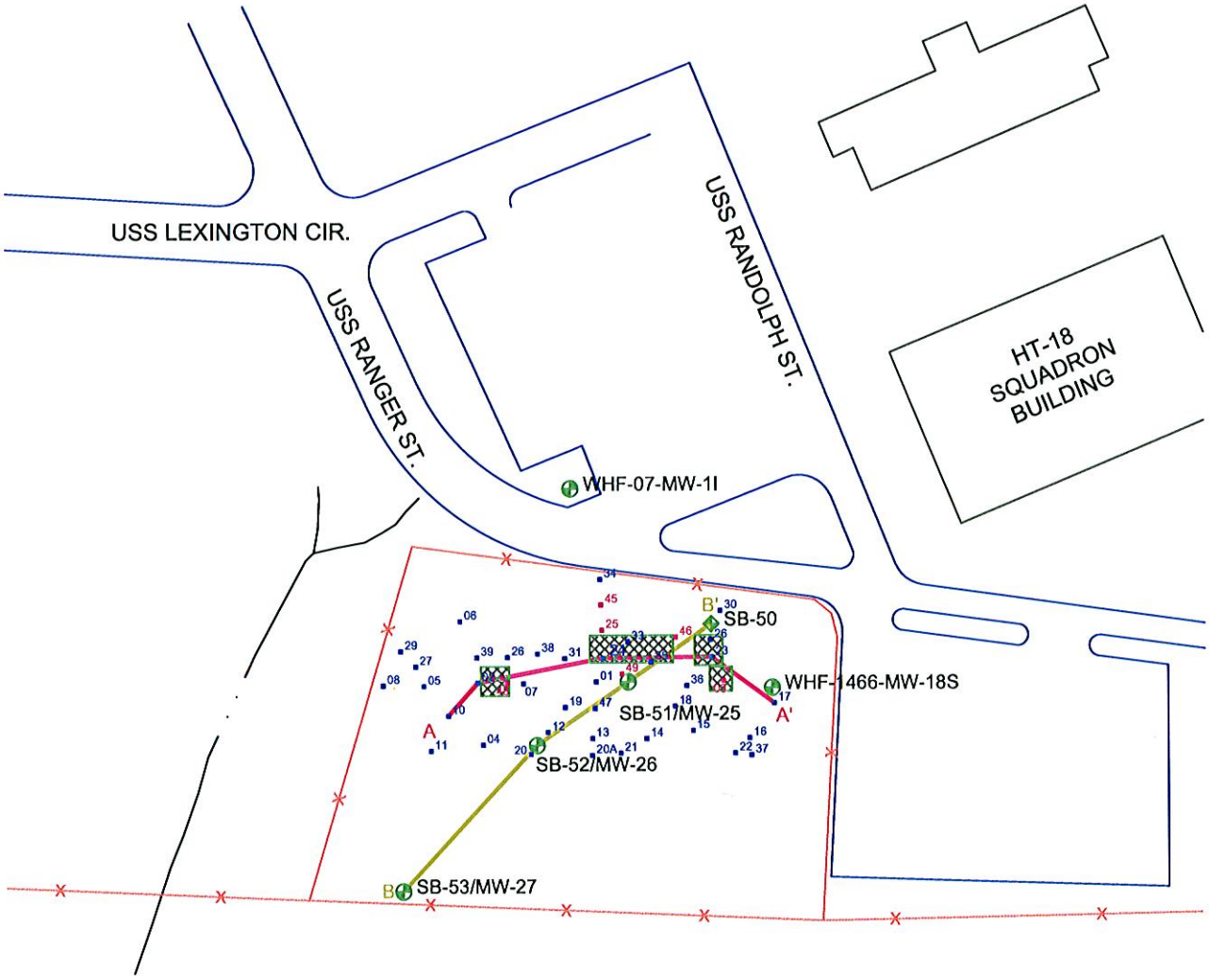
0 125 250

Scale: 1" = 125'

N

Figure 1-3
Site Plan
Site 7, NAS Whiting Field

site-7-figure-1-3.dwg
16-July-2007



NOTE:
Historic information obtained from the WRS Interim Remedial Action Plan for Site 07, South AVGAS Tank Sludge Disposal area. Revision 02, May 17, 2006.

LEGEND

- Building
- Fence
- Excavation Extents
- Monitor Well
- Soil Boring
- 11 Historic Soil Boring, 2000
- 25 Historic Soil Boring, 2003

0 125 250

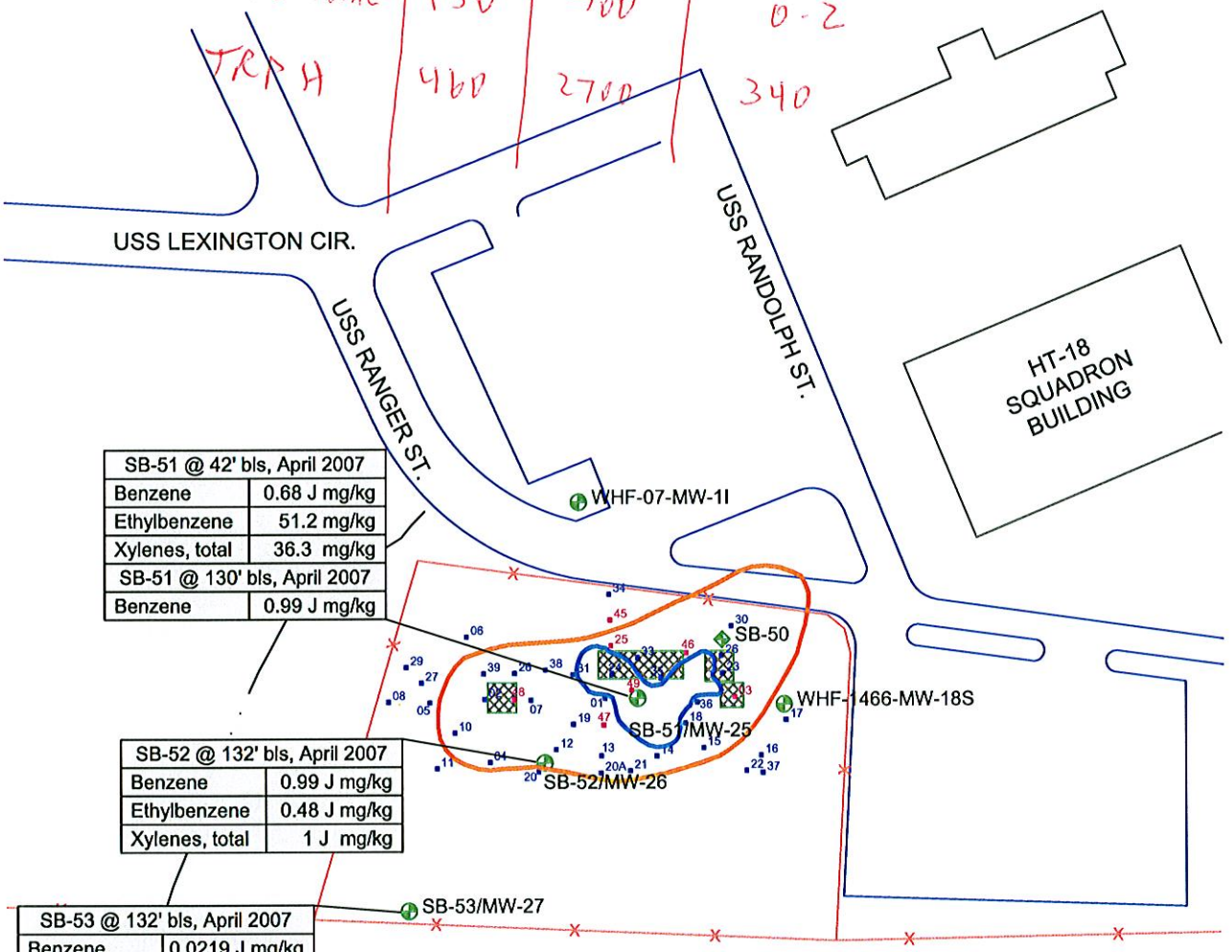
Scale: 1" = 125'

N

Figure 2-1
Historic and Current Investigation Locations
Site 7, NAS Whiting Field

site-7-figure-2-1.dwg
16-July-2007

CONTAM.	RES mg/kg	IND mg/kg	LEACHABILITY mg/kg
BENZENE	1.2	1.7	0.007
ETHYL B	1500	9200	0.6
TOL	7500	60,000	0.5
XYL TOTAL	130	700	0.2
TRPH	460	2700	340



SB-51 @ 42' bls, April 2007	
Benzene	0.68 J mg/kg
Ethylbenzene	51.2 mg/kg
Xylenes, total	36.3 mg/kg
SB-51 @ 130' bls, April 2007	
Benzene	0.99 J mg/kg

SB-52 @ 132' bls, April 2007	
Benzene	0.99 J mg/kg
Ethylbenzene	0.48 J mg/kg
Xylenes, total	1 J mg/kg

SB-53 @ 132' bls, April 2007	
Benzene	0.0219 J mg/kg
Toluene	9 mg/kg
Ethylbenzene	3.2 mg/kg
Xylenes, total	8 mg/kg

NOTE:
Historic information obtained from the WRS Interim Remedial Action Plan for Site 07, South AVGAS Tank Sludge Disposal area. Revision 02, May 17, 2006.

LEGEND

- Building
- Fence
- Excavation Extents
- Monitor Well
- Soil Boring
- Historic Soil Boring, 2000
- Historic Soil Boring, 2003
- Shallow Target Treatment Zone
- Intermediate and Deep Target Treatment Zone

J = estimated value

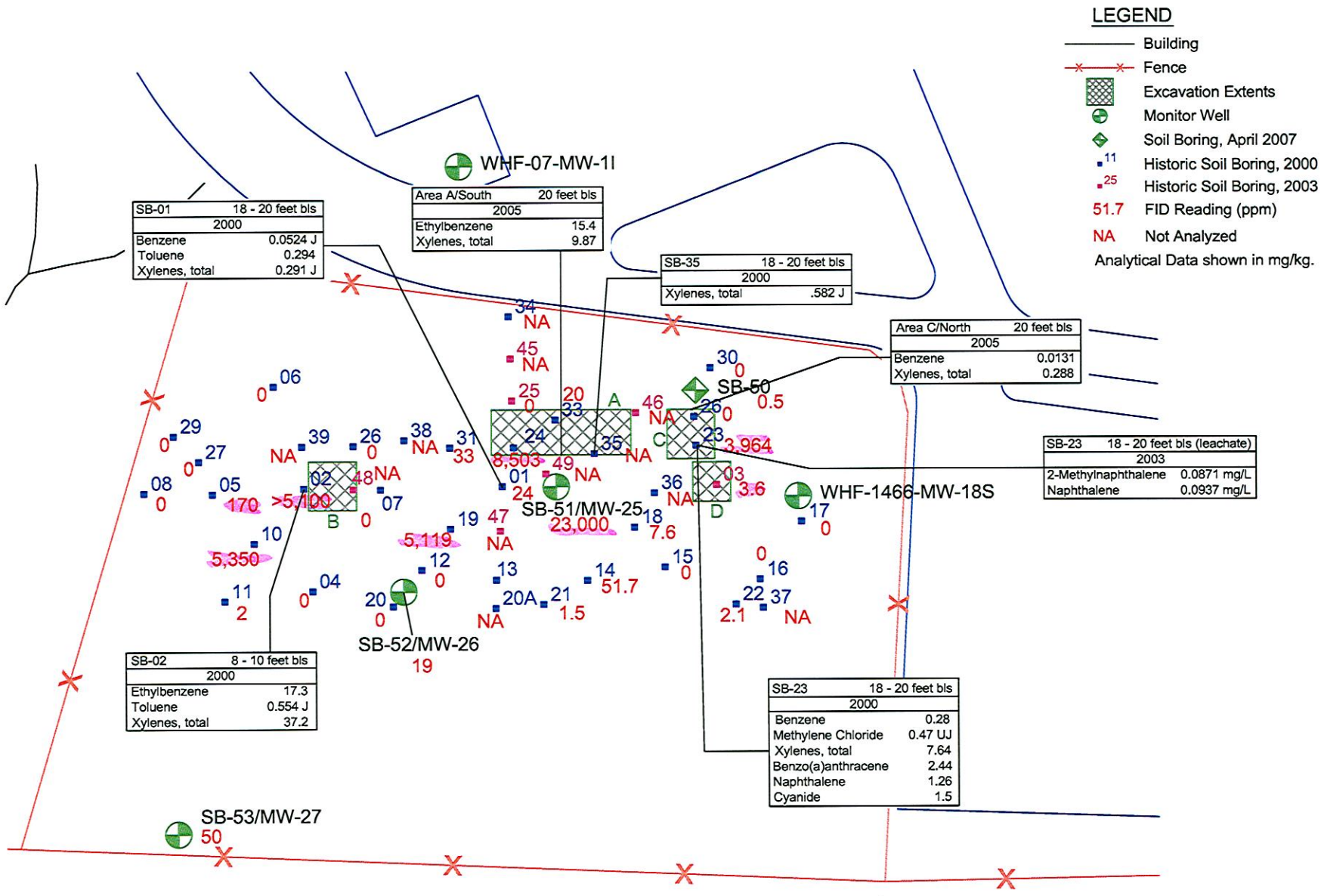
0 125 250

Scale: 1" = 125'

N

Figure 2-4
Soil Boring
Analytical Exceedences
Site 7, NAS Whiting Field

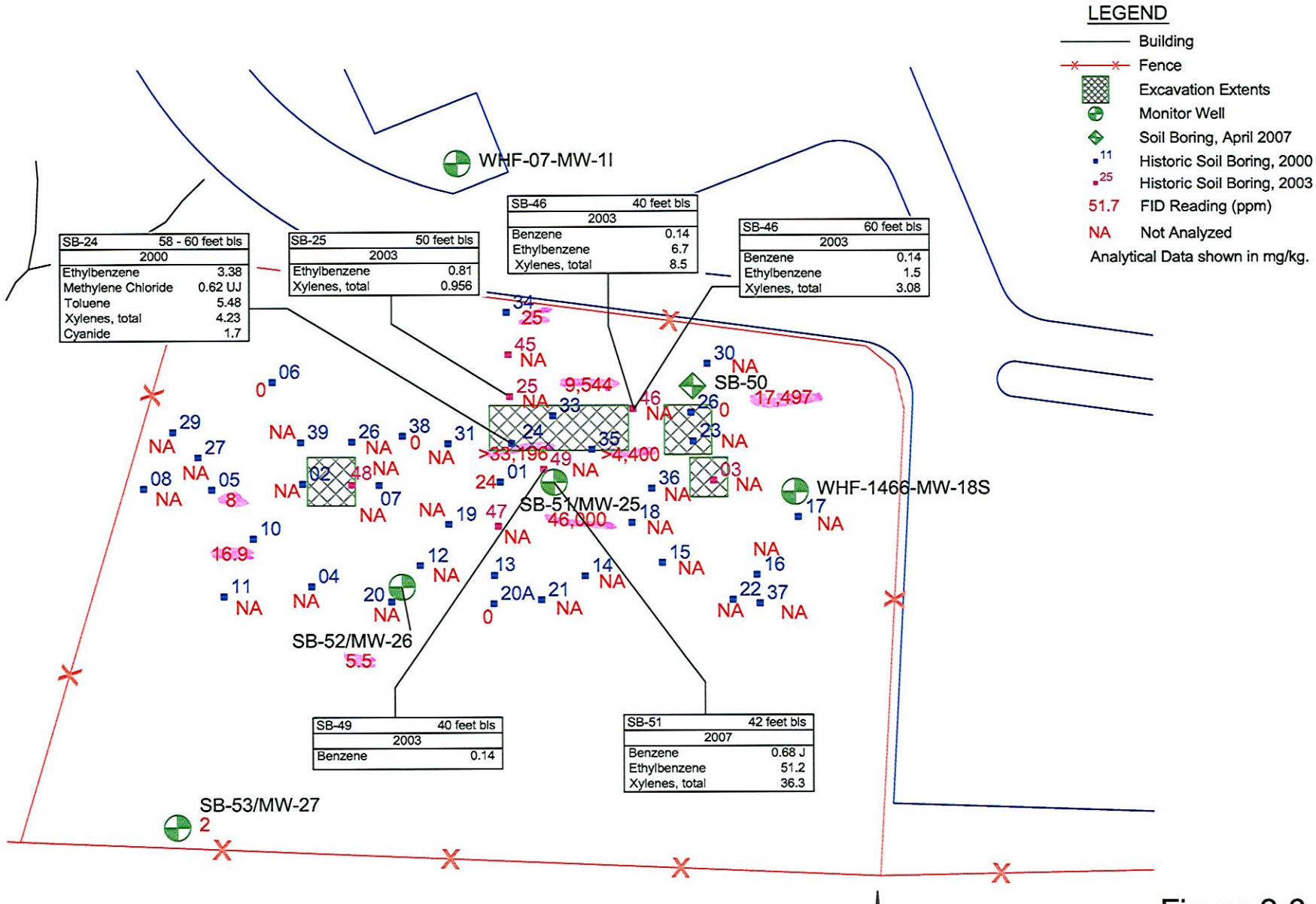
site-7-figure-2-4.dwg
19-July-2007



NOTE:
Historic information obtained from the WRS Interim Remedial Action Plan for Site 07, South AVGAS Tank Sludge Disposal area. Revision 02, May 17, 2006.

Figure 2-5
Soil Exceedances
0 - 20 ft bls
Site 7, NAS Whiting Field

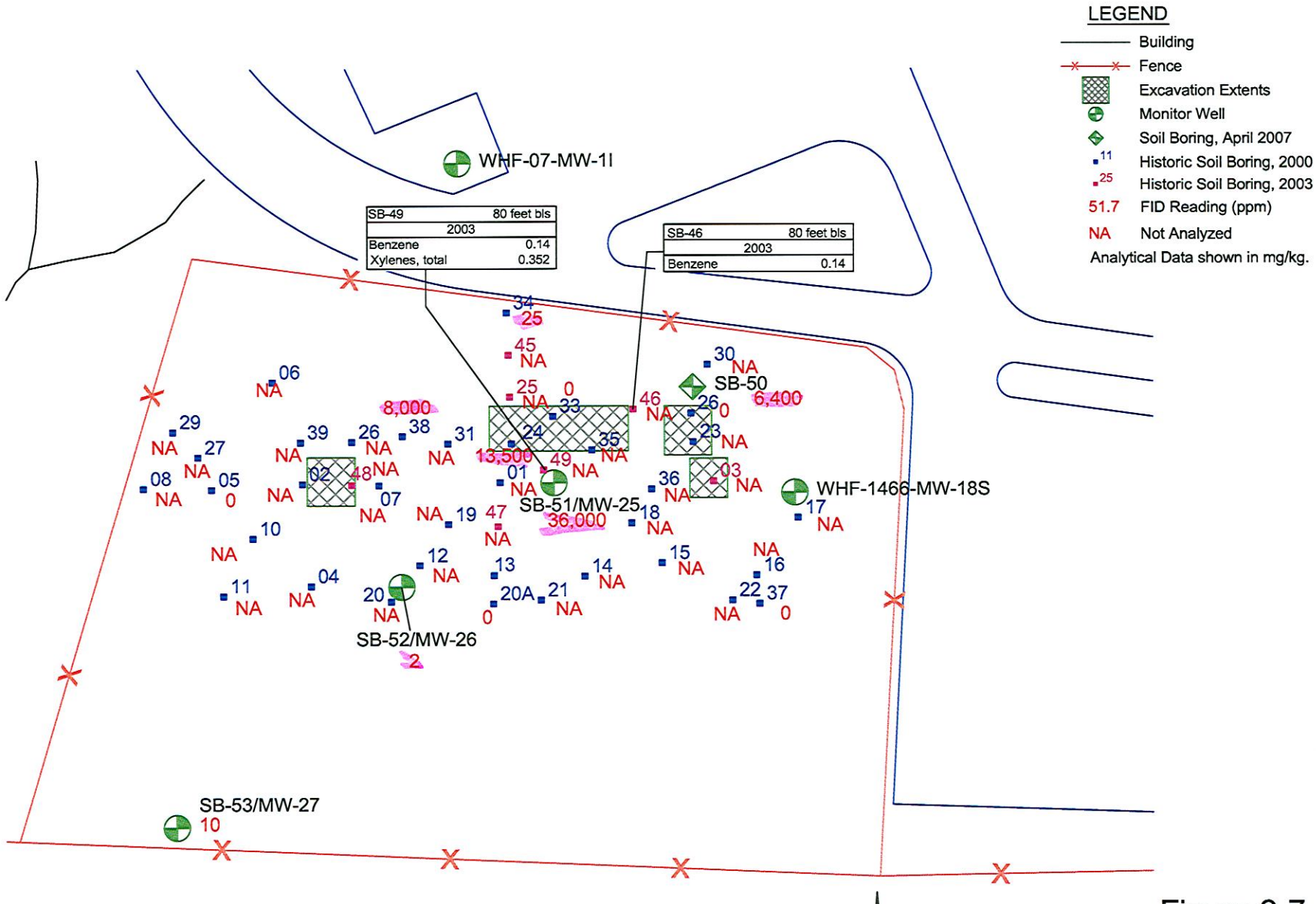
site-7-figure-2-5.dwg
28-November-2007



NOTE:
Historic information obtained from the WRS Interim Remedial Action Plan for Site 07, South AVGAS Tank Sludge Disposal area. Revision 02, May 17, 2006.

Figure 2-6
Soil Exceedances
21 - 60 ft bls
Site 7, NAS Whiting Field

site-7-figure-2-6.dwg
28-November-2007



NOTE:
Historic information obtained from the WRS Interim Remedial Action Plan for Site 07, South AVGAS Tank Sludge Disposal area. Revision 02, May 17, 2006.

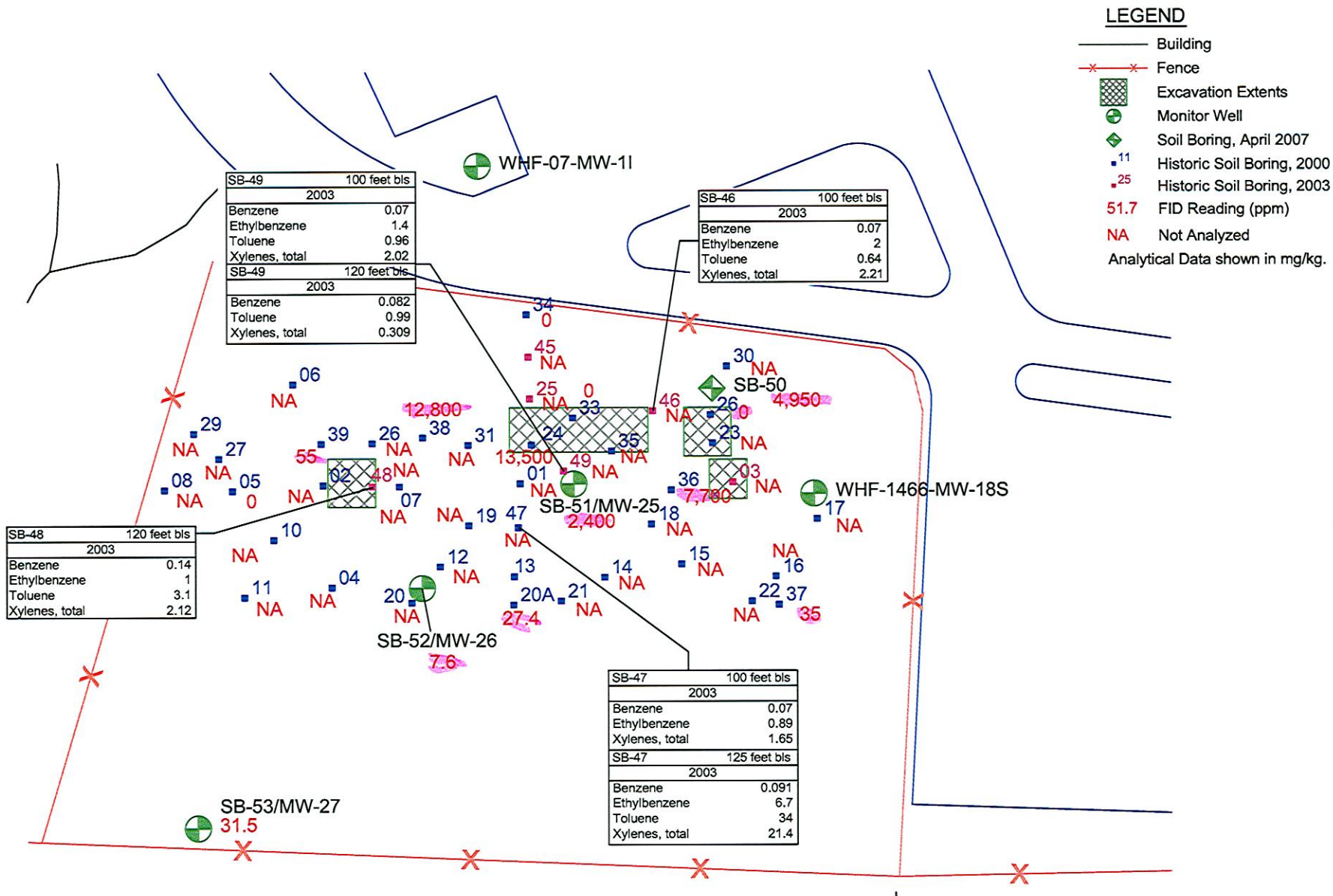
0 60 120

Scale: 1" = 60'

N

Figure 2-7
Soil Exceedances
61 - 80 ft bls
Site 7, NAS Whiting Field

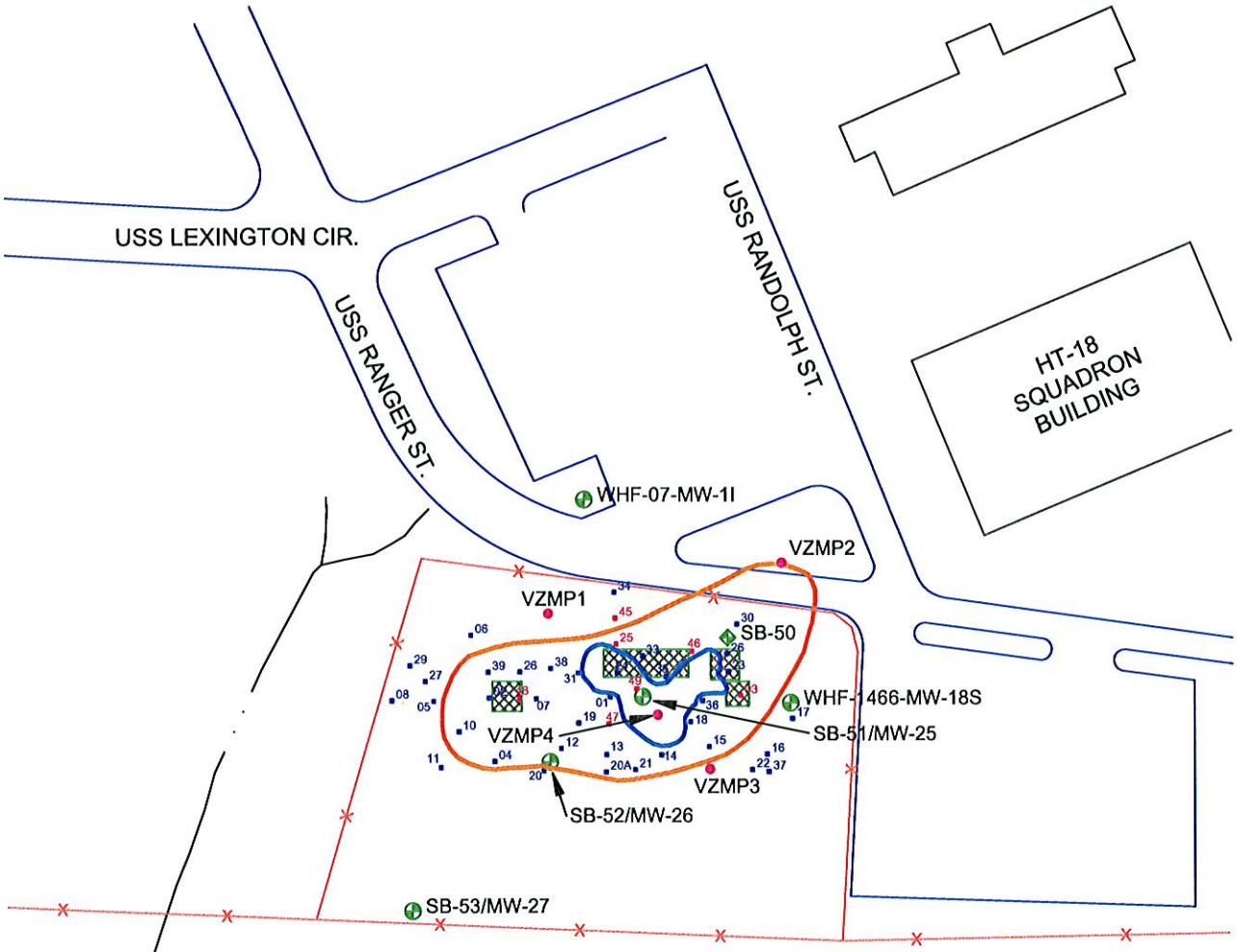
site-7-figure-2-7.dwg
28-November-2007



NOTE:
Historic information obtained from the WRS Interim Remedial Action Plan for Site 07, South AVGAS Tank Sludge Disposal area. Revision 02, May 17, 2006.

Figure 2-8
Soil Exceedances
81 - 126 ft bls
Site 7, NAS Whiting Field

site-7-figure-2-8.dwg
28-November-2007



NOTE:
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LEGEND

- Building
- Fence
- Excavation Extents
- Monitor Well
- Soil Boring
- Proposed VZMP Location
- Historic Soil Boring, 2000
- Historic Soil Boring, 2003
- Shallow Target Treatment Zone
- Intermediate and Deep Target Treatment Zone

0 125 250

Scale: 1" = 125'

N

Figure 3-12
Proposed Vadose Zone Monitoring Locations
Site 7, NAS Whiting Field

site-7-figure-3-12.dwg
25-Sep-2007