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NAS CECIL FIELD
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LETTER REPORT REGARDING TEST PITTING SITES POTENTIAL SOURCE OF
CONTAMINATION 19 (PSC19), AOI 22, AND MB-11 NAS CECIL FIELD FL
5/27/1998
HARDING LAWSON ASSOCIATES



May 27, 1998

2523-3258

Ms. Debbie Vaughn-Wright
Remedial Project Manager
Federal Facilities Branch
Waste Management Division
USEPA Region IV
61 Forsyth Street
Atlanta, Georgia 30303

SUBJECT: Test Pitting at Sites AOI-22, PSC 19, and MB-11
NAS Cecil Field, Jacksonville, Florida
Contract No. N62467-89-D-0317/090

Dear Ms. Vaughn-Wright:

The purpose of this document is to provide guidance for test pitting of geophysical anomalies at three sites, AOI-22, PSC 19, and MB-11 (Figure 1-1), located at NAS Cecil Field. The objective of the test pitting is to investigate these anomalies and uncover and identify buried metallic material. If the material is hazardous, it will be removed from the site. The significance of detected anomalies varies markedly from site to site. Test pitting operations will be conducted at each of the anomalies identified at AOI-22, PSC 19, and MB-11. A short description of known site conditions is summarized below for each location. The contractor should take all necessary health and safety precautions during test pitting operations as unexploded ordnance and hazardous materials (pesticides) have been found during test pitting operations at other NAS Cecil Field sites.

AOI-22 Numerous surface exposures of buried metallic debris, including 5 to 55-gallon drums and aerosol spray cans have been observed within the wooded area west of the NAS Cecil Field golf course fairway number 7 and south of fairway number 6. All visible surface debris was removed from AOI-22 to facilitate geophysical delineation of subsurface anomalies. Five-gallon metal cans, some containing a suspected aviation fuel stabilizer, were encountered by the RAC contractor (BEI) at this time. Historical accounts of golf course activities indicate there is a potential that pesticides, including Nemagon (active ingredient 1,2-dibromo-3-chloropropane), or pesticide residue could be encountered in containers disposed of in this area. Magnetic gradient and terrain conductivity surveys were conducted by HLA-ES (formerly ABB-ES) over the accessible extent of AOI-22. Twelve anomalies indicative of buried metallic debris were detected. The location of these anomalies is shown on Figure 1-2.

PSC 19 A geophysical survey was conducted at PSC 19 by HLA-ES personnel in the summer of 1997. The site was surveyed using a magnetometer and a Geonics EM-31 electromagnetometer unit. There were very few readings above background. In the vicinity of the concrete rubble piles, the geophysical survey indicated little to no variation from background conditions. Where readings appeared above background, metal objects such as pipes and drainage culverts were clearly visible. The geophysical survey results indicate that the rubble piles contain little to no iron or other metal in the concrete. Survey results did not indicate buried material in the north or central parts of PSC 19.

In the southern part of PSC 19, in the area of the old borrow pit, several locations had readings above background. These locations were marked with white pin flags. Magnetometer readings indicate that these objects are shallow, being just below the land surface. It was interpreted that the geophysical survey results show a pattern of areas above background typical of the indiscriminate dumping associated with rubbish heaps. During a site walkover conducted in April 1998 by HLA-ES personnel, three of the white pin flags were recovered (see Figure 1-3). If other white pin flags are recovered during test pitting, these areas will be test pitted also.

MB-11 The EPIC survey noted a large depression west of the west end of Runway 9R, and suggested that objects noted in 1982 and 1988 aerial photographs were drums. An HLA-ES site walkover confirmed the presence of the depression. No evidence of drum disposal was noted at the surface, however, scattered pieces of buried construction debris (steel rebar and cable) were exposed at the surface in many locations. A long-time employee from the NAS Cecil Field Staff Civil Engineer's office (Mr. Woodrow) indicated that corrugated steel culverts from airfield drainage reconstruction projects were disposed of in this area. HLA-ES conducted magnetic gradient and terrain conductivity surveys over the extent of the depressed area. Ten large anomalies were detected throughout the area. The location of these anomalies is shown on Figure 1-4.

Questions or comments may be directed to HLA-ES at the number listed below or to Mr. Mark Davidson at (843) 820-5669.

Sincerely,

HARDING LAWSON ASSOCIATES

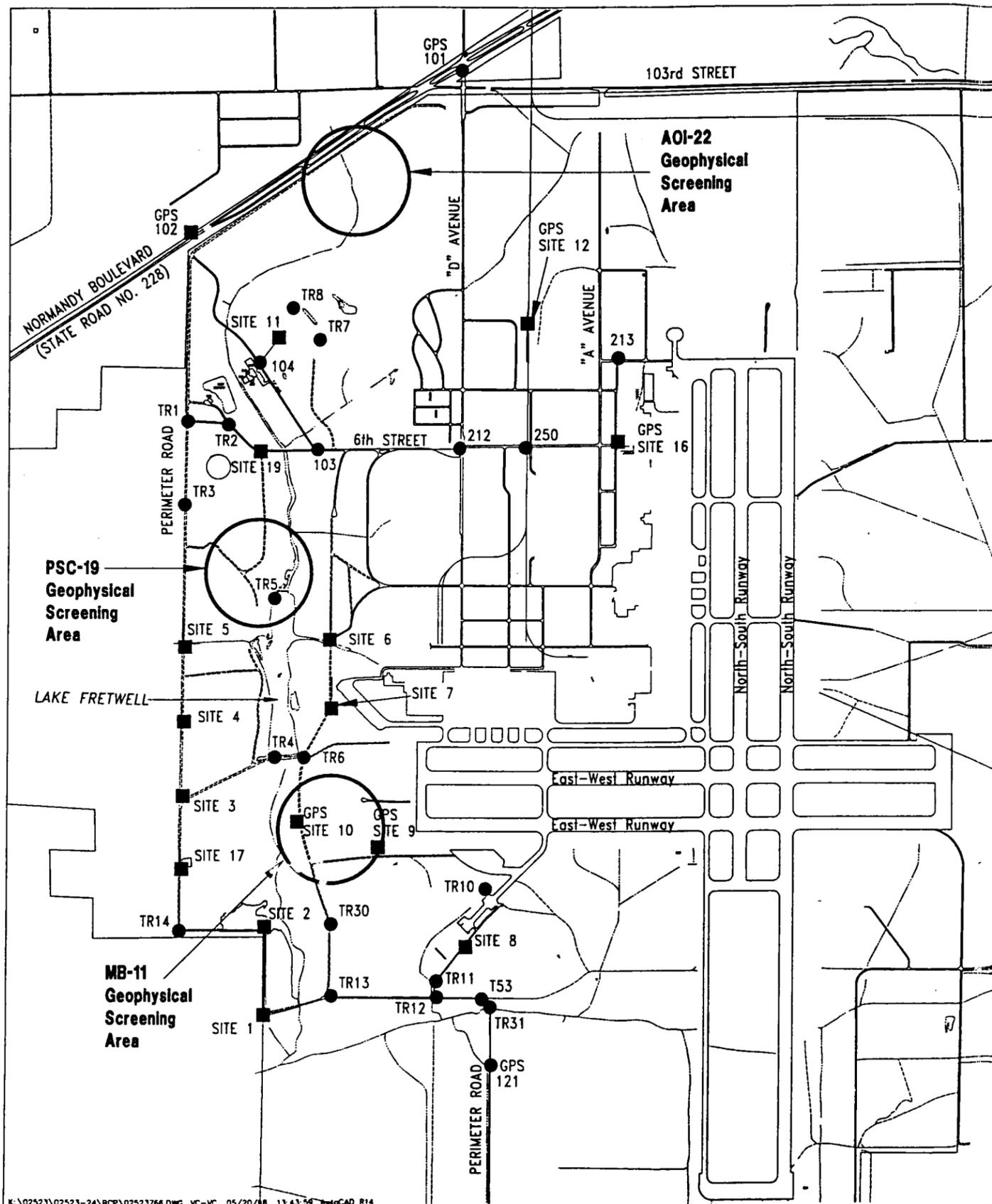


Robert Lunardini, Jr., P.E.
Principal Engineer

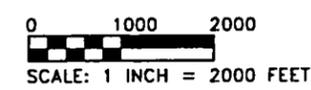


Rao Angara
Installation Manager

cc: Mike Deliz, FDEP (1 copy)
David Porter, SDIV (1 copy)
Mark Davidson, SDIV (1 copy)
David Kruzicki, NASCF (1 copy)
Dale Obenauer, BEI (2 copies)
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Mark Speranza, Tetra Tech NUS (1 copy)
Mr. Sam Pratt, Tetra Tech NUS (3 copies)
Lewis Shields, City of Jacksonville (1 copy)
file



Survey Control Points		
Name	Easting	Northing
101	375,184.89	2,150,779.13
102	371,049.09	2,148,385.53
103	372,996.21	2,145,124.24
121	375,693.16	2,135,874.93
212	375,160.26	2,145,129.19
213	377,559.88	2,146,489.16
T53	375,543.55	2,136,859.48
TR1	371,013.73	2,145,551.96
TR3	370,972.94	2,144,298.41
TR4	372,358.76	2,140,479.06
TR5	372,342.22	2,142,875.67
TR6	372,806.63	2,140,471.75
TR7	373,025.25	2,146,773.00
TR8	372,610.11	2,147,250.81
TR10	375,585.51	2,138,499.62
TR12	374,847.89	2,136,888.08
TR13	373,247.81	2,136,902.39
TR14	370,916.28	2,137,879.84
TR30	373,235.77	2,137,974.04
TR31	375,671.63	2,136,739.75
SITE 1	372,212.65	2,136,619.17
SITE 2	372,219.34	2,137,935.02
SITE 3	370,964.84	2,139,895.23
SITE 4	370,977.56	2,141,013.00
SITE 5	370,987.99	2,142,139.79
SITE 6	373,201.95	2,142,239.95
SITE 7	373,228.71	2,141,202.02
SITE 8	375,290.09	2,137,630.86
SITE 9	373,945.75	2,139,116.17
SITE 10	372,708.83	2,139,502.44
SITE 11	372,394.58	2,146,804.05
SITE 12	376,194.41	2,147,001.33
SITE 16	377,558.88	2,145,227.58
SITE 17	370,947.74	2,138,801.26
SITE 19	372,126.23	2,145,092.92
104	372,098.62	2,146,434.94
250	376,165.04	2,145,142.14
TR2	371,631.32	2,145,501.61
TR11	374,840.20	2,137,127.14

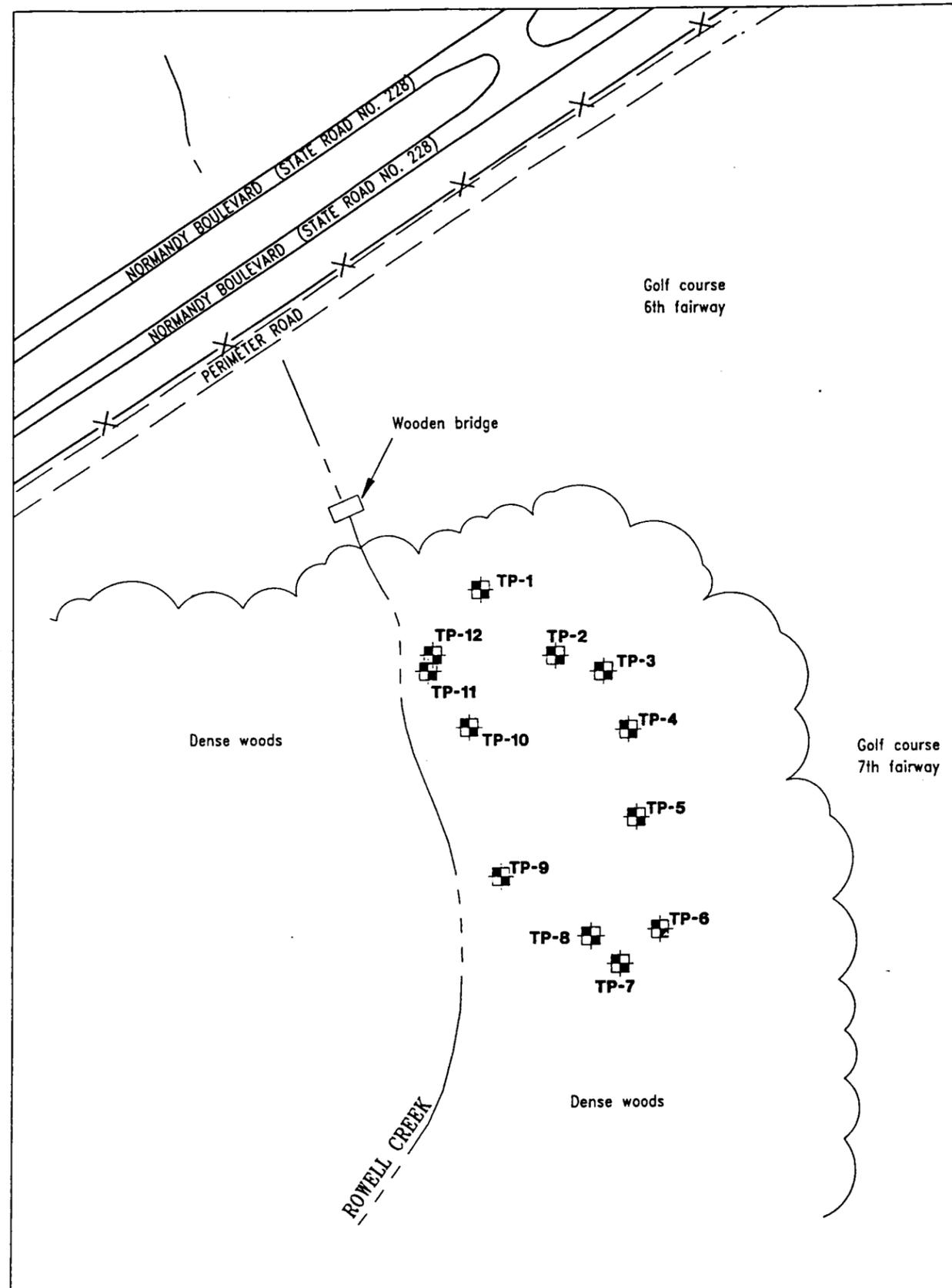


LEGEND	
■	Monument
●	Iron bar
○	Potential source of contamination
□	Area of interest
GPS	Global positioning system

FIGURE 1-1
TEST PIT SITE LOCATIONS AND
SURVEY CONTROL MAP



BASE REALIGNMENT AND CLOSURE
TEST PITTING
NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA



NOTES:

1. Test pit locations are marked with a wooden stake.
2. Test pit a 10-foot x 10-foot area at each stake.
3. Excavate to a minimum depth of 2 feet. If debris is found, continue excavating until undisturbed soil is reached.
4. Place all uncovered debris onto 6 mil Visqueen™ (or equal) next to the test pit.
5. Identify and inventory debris from each test pit.
6. If hazardous or unknown material is discovered, segregate and stockpile securely next to test pit. Contact BCT for disposal instructions.
7. Contractor should be prepared to upgrade to Level B.
8. Return soil back to excavation.
9. Leave nonhazardous debris on site.
10. **WARNING:** If UXO is unearthed, stop all excavation activities immediately. Notify the BCT for instructions.

AOI-22 1983-90 State Plane			
Test pit number	Easting	Northing	Pit orientation
1	373,615	2,149,217	E-W
2	373,722	2,149,126	N-S
3	373,788	2,149,104	E-W
4	373,820	2,149,022	N-S
5	373,831	2,148,899	N-S
6	373,865	2,148,741	E-W
7	373,805	2,148,697	N-S
8	373,766	2,148,740	E-W
9	373,641	2,148,818	E-W
10	373,603	2,149,024	E-W
11	373,540	2,149,104	E-W
12	373,550	2,149,126	E-W

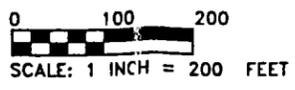
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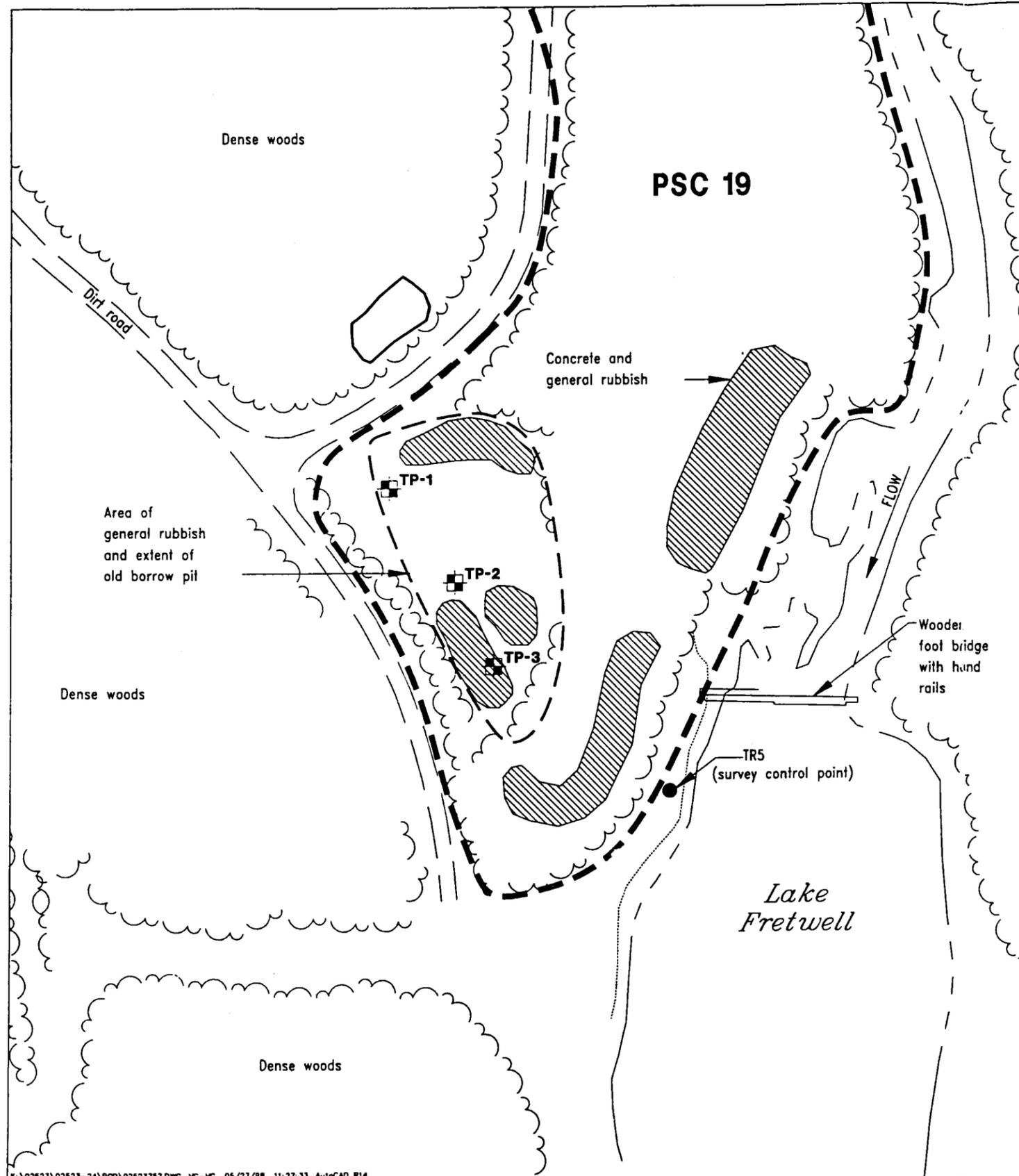
- TP-1 Test pit location and designation
- Fence
- BCT Base Realignment and Closure cleanup team
- UXO Unexploded ordnance
- AOI Area of interest

FIGURE 1-2
AREA OF INTEREST 22
TEST PIT LOCATIONS

BASE REALIGNMENT AND CLOSURE
TEST PITTING

NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA





NOTES:

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2. Test pit a 10-foot x 10-foot area at each stake.
3. Excavate to a minimum depth of 2 feet. If debris is found, continue excavating until undisturbed soil is reached.
4. Place all uncovered debris onto 6 mil Visqueen™ (or equal) next to the test pit.
5. Identify and inventory debris from each test pit.
6. If hazardous or unknown material is discovered, segregate and stockpile securely next to test pit. Contact BCT for disposal instructions.
7. Contractor should be prepared to upgrade to Level B.
8. Return soil back to excavation.
9. Leave nonhazardous debris on site.
10. **WARNING:** If UXO is unearthed, stop all excavation activities immediately. Notify the BCT for instructions.

LEGEND

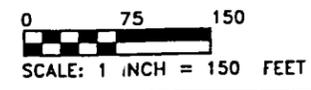
- Approximate locations of observed debris
- TP-1 Test pit location and designation
- TR5 Iron bar
- PSC Potential source of contamination
- Area of investigation
- BCT Base Realignment and Closure cleanup team
- UXO Unexploded ordnance
- FLOW Flow direction

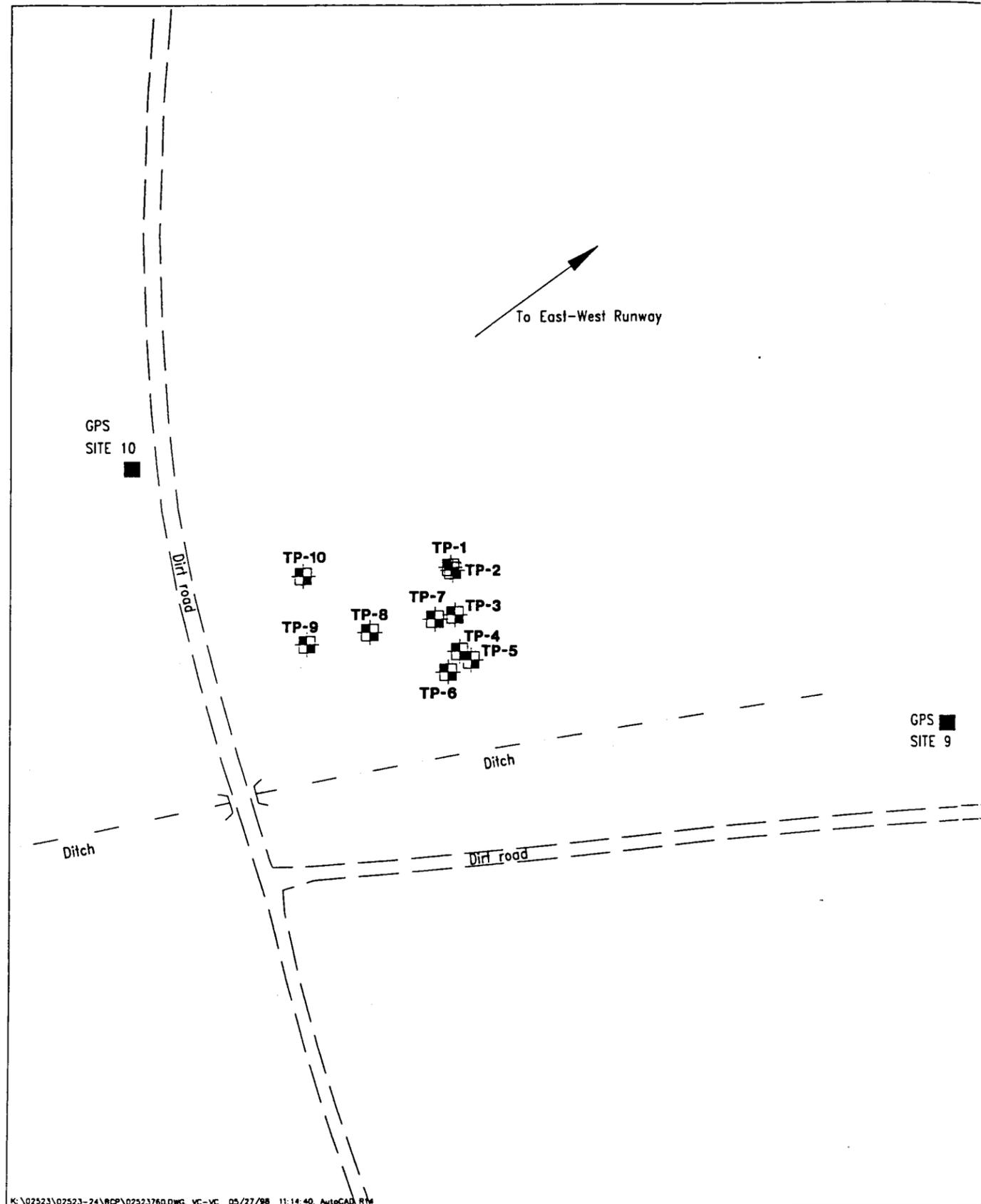
**FIGURE 1-3
POTENTIAL SOURCE OF CONTAMINATION 19
TEST PIT LOCATIONS**

**BASE REALIGNMENT AND CLOSURE
TEST PITTING**



**NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA**



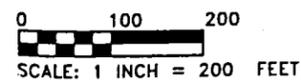


NOTES:

1. Test pit locations are marked with a wooden stake.
2. Test pit a 10-foot x 10-foot area at each stake.
3. Excavate to a minimum depth of 2 feet. If debris is found, continue excavating until undisturbed soil is reached.
4. Place all uncovered debris onto 6 mil Visqueen™ (or equal) next to the test pit.
5. Identify and inventory debris from each test pit.
6. If hazardous or unknown material is discovered, segregate and stockpile securely next to test pit. Contact BCT for disposal instructions.
7. Contractor should be prepared to upgrade to Level B.
8. Return soil back to excavation.
9. Leave nonhazardous debris on site.
10. **WARNING:** If UXO is unearthed, stop all excavation activities immediately. Notify the BCT for instructions.

MB-11 1983-90 State Plane			
Test pit number	Easting	Northing	Pit orientation
1	373,193	2,139,354	N-S
2	373,196	2,139,350	N-S
3	373,200	2,139,281	N-S
4	373,207	2,139,226	N-S
5	373,224	2,139,215	N-S
6	373,190	2,139,195	N-S
7	373,169	2,139,275	N-S
8	373,072	2,139,255	N-S
9	372,965	2,139,237	N-S
10	372,971	2,139,340	N-S

Survey Control Points		
Name	Easting	Northing
SITE 10	372,708.83	2,139,502.44
SITE 9	373,945.75	2,139,116.17



LEGEND

- TP-1 Test pit location and designation
- SITE 10 Monument
- BCT Base Realignment and Closure cleanup team
- UXO Unexploded ordnance
- GPS Global positioning system

**FIGURE 1-4
MB-11 TEST PIT LOCATIONS**

**BASE REALIGNMENT AND CLOSURE
TEST PITTING**

**NAVAL AIR STATION CECIL FIELD
JACKSONVILLE, FLORIDA**