WAG 9

APPENDIX B

MAPS OF 1986-1995 SAMPLE LOCATIONS

for OPERABLE UNIT 9-04: COMPREHENSIVE RI/FS FINAL WORK PLAN

Prepared By
Argonne National Laboratory-West

Appendix B

List of Maps

Key Between Appendix A (Analytical Results) and Appendix B (Location Maps)

Operable Units 9-01, 9-02, 9-03, and 9-04 of WAG-9

Operable Unit 9-04 of WAG-9 1986 Sampling (Industrial Waste Pond)

Operable Unit 9-04 of WAG-9 1987 Sample Points (Industrial Waste Pond)

Operable Unit 9-04 of WAG-9 1988 Sample Locations (MCTBD)

Operable Unit 9-04 of WAG-9 1988 Sampling (Ditches A, B, and C)

Operable Unit 9-04 of WAG-9 1988 Sample Locations (North Ditch)

Operable Unit 9-03 of WAG-9 1988 DOE Sampling (Burn Pits)

Operable Unit 9-04 of WAG-9 1988 DOE Sampling (Ditches A, B, and C)

Operable Unit 9-03 of WAG-9 1988 DOE Sampling (Industrial Waste Pond Sludge)

Operable Unit 9-04 of WAG-9 1988 DOE Sampling (Industrial Waste Pond Water)

Operable Unit 9-04 of WAG-9 1988 DOE Sampling (North Ditch)

Operable Unit 9-01 of WAG-9 (Sewage Lagoons) (1994)

Operable Unit 9-03 of WAG-9 (Burn Pits) (1994)

Operable Unit 9-04 of WAG-9 (Main Cooling Tower Blowdown Ditch) (1994)

Operable Unit 9-04 of WAG-9 (Ditches A, B, and C) (1994)

Operable Unit 9-04 of WAG-9 (Industrial Waste Pond) (1994)

Operable Unit 9-04 of WAG-9 (Interception Canal) (1994)

Operable Unit 9-04 of WAG-9 (North Ditch) (1994)

EBR-II Leach Pit Borehole and Sample Locations (1991)

Samples Collected for Chemical Analyses (EBR-II 1991)

EBR-II Leach Pit Actual Sample Locations (1993)

Chen-Northern 1989 Background Soil Sample Locations

EBR-II Transformer Yard PCB Cleanup Building 768 ANL-61 (1992)

Profile Map of Arsenic Concentrations in ANL-09

Profile Map of Copper Concentrations in ANL-09

Profile Map of Lead Concentrations in ANL-09

Profile Map of Mercury Concentrations in ANL-09

Profile Map of Cobalt-60 and Cesium-137 Levels in ANL-09

Key

Explanation of correlation between Appendix A (WAG 9 data results) and Appendix B (sample maps). Appendix A lists the pages where all the sampling data for a specific unit and type (soil, water, and sludge). These tables are a correlation of all data for each unit and type collected between 1986 and 1995. The data in Appendix A has been sorted according to the fourth column (compound). Appendix B shows location of where the 1986 to 1995 samples were collected. The steps to either locate a sample location or corresponding sample data are as follows.

Step 1 locate the sample in Appendix A that you want to find the sample location. For this example we will use the first sample on page A-4.

Step 2 Use the furthest column (sample date) in Appendix A to determine the year the sample was collected along with the sample unit from table of contents. For this example November 2, 1994, and analytical results for soil samples collected at the ANL Sewage Lagoons.

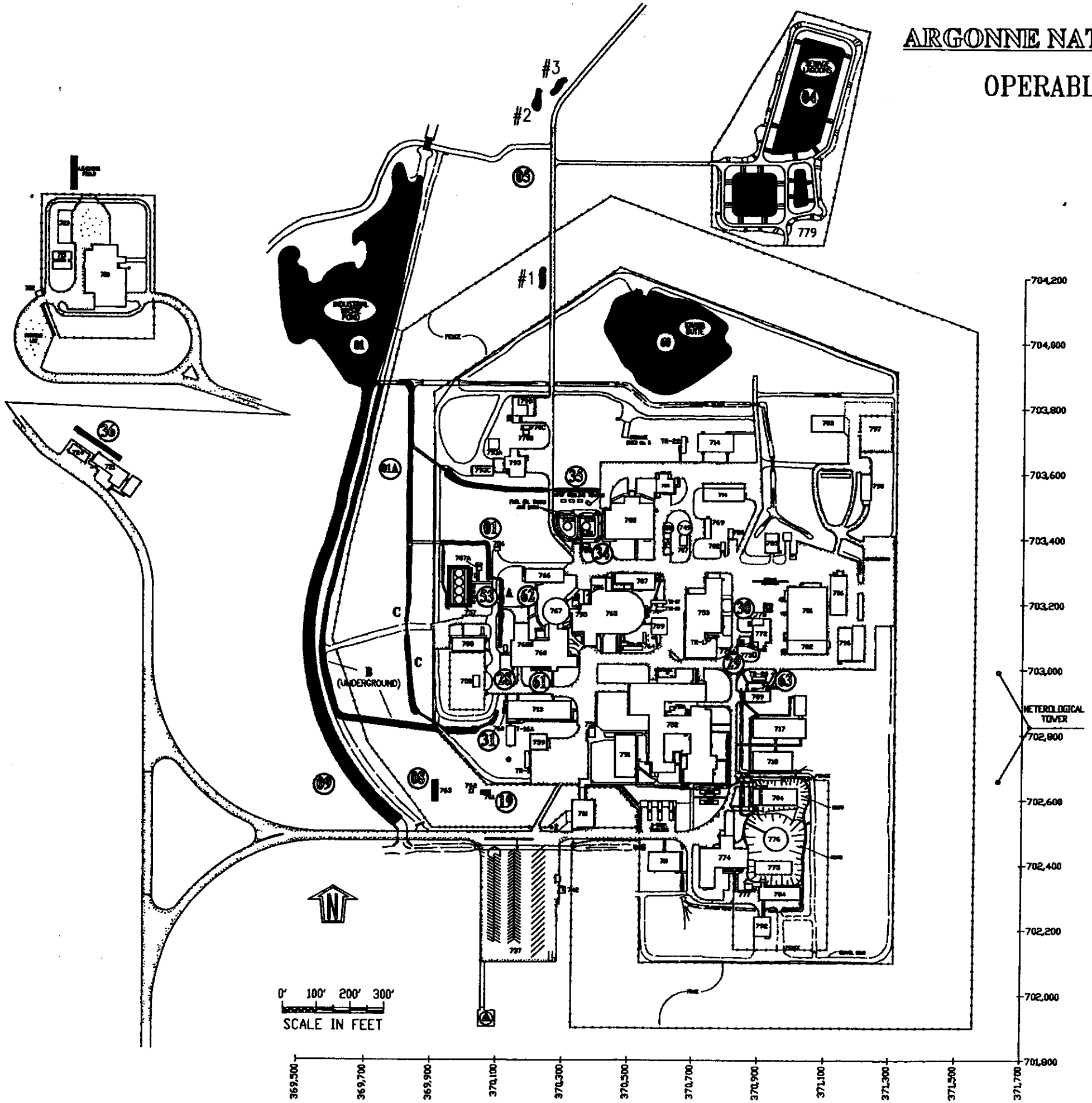
Step 3 Take the values from Steps 2 to locate the appropriate map in Appendix B. For this example Operable Unit 9-01 of WAG-9 (Sewage Lagoons) (1994) map would be used.

Step 4 Find the column labeled "Location" in Appendix A. For this example 8.

Step 5 Use the map identified in Step 3 and the grid location from Step 4 to find the sample location.

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNITS 9-01, 9-02, 9-03, AND 9-04 OF WAG-9



LEGEND:

OPERABLE UNIT 9-01

- 04 SEWAGE LAGOONS
- 19 IMHOFF TANK AND SLUDGE PIT
- 28 EBR-II SUMP
- 29 INDUSTRIAL LIFT STATION
- 30 SANITARY LIFT STATION
- 36 TREAT PHOTO PROCESSING DISCHARGE
- 60 KNAWA BUTTE DEBRIS PILE
- 61 EBR-II TRANSFORMER YARD
- 62 SODIUM BOILER BUILDING HOTWELL
- 63 SEPTIC TANK

OPERABLE UNIT 9-02

- 08 EBR-II LEACH PIT

OPERABLE UNIT 9-03

- 05 OPEN BURN PITS (#1, #2, AND #3)
- 31 INDUSTRIAL/SANITARY WASTE LIFT STATION
- 34 FUEL OIL SPILL BY BUILDING 755

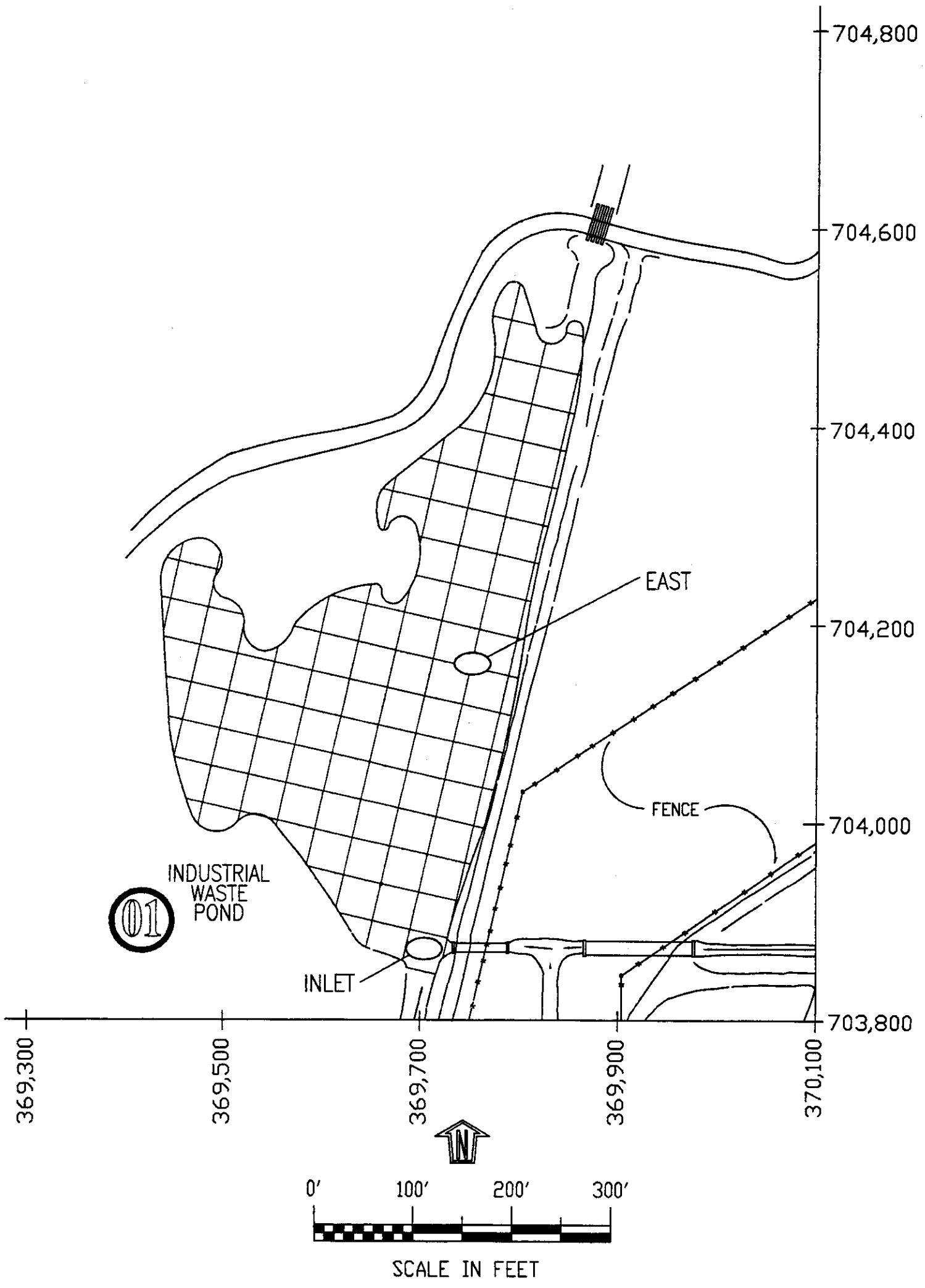
OPERABLE UNIT 9-04

- 01 INDUSTRIAL WASTE POND AND THREE DITCHES (A, B, AND C)
- 01A MAIN COOLING TOWER BLOWDOWN DITCH (LDU)
- 09 INTERCEPTOR CANAL
- 35 INDUSTRIAL WASTE LIFT STATION DISCHARGE DITCH
- 53 RISER PITS

OCTOBER 5, 1995/ESWM
SITE-087.DWG (SITE-24)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1986 SAMPLING ANL-W CHEMISTRY



LEGEND:

OPERABLE UNIT 9-04

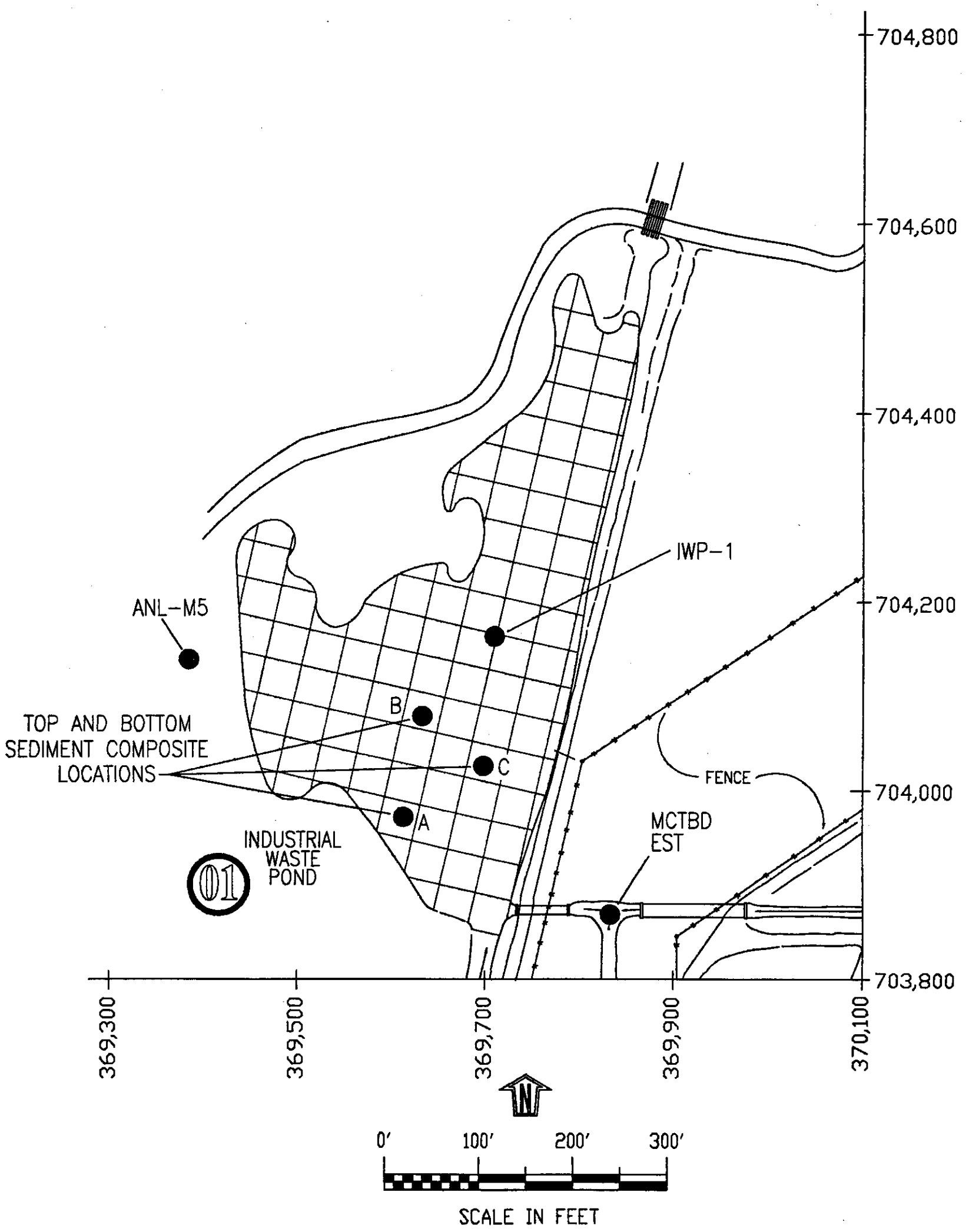
01 INDUSTRIAL WASTE POND

1986 SAMPLE LOCATIONS

AUGUST 10, 1995/ESWM
SITE-125.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1987 SAMPLE POINTS



LEGEND:

OPERABLE UNIT 9-04

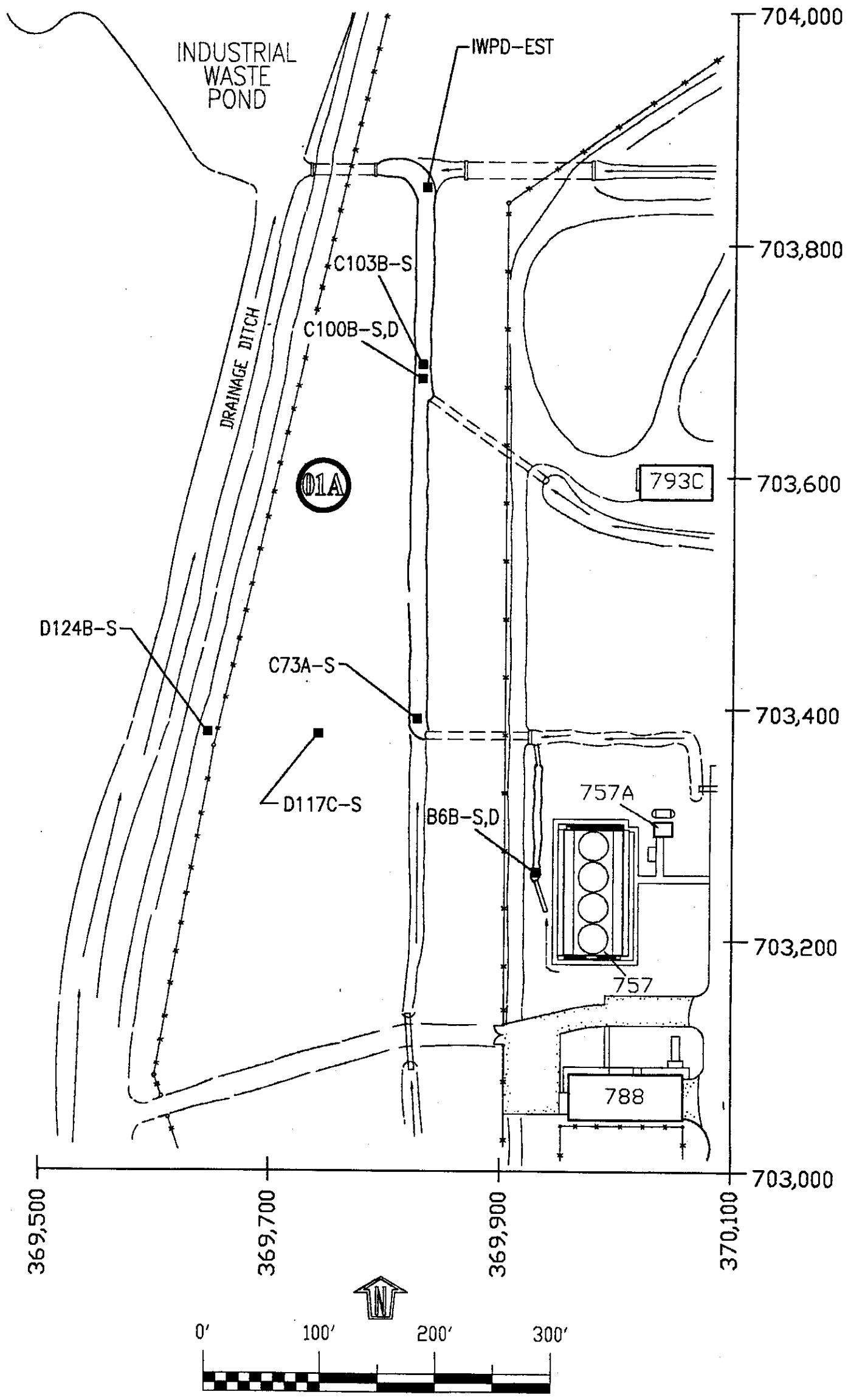
01 INDUSTRIAL WASTE POND

● NUMBERED SOLIDS INDICATE RANDOM SAMPLE SITES

AUGUST 10, 1995 /ESWM
SITE-126.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1988 SAMPLE LOCATIONS



LEGEND:

OPERABLE UNIT 9-04

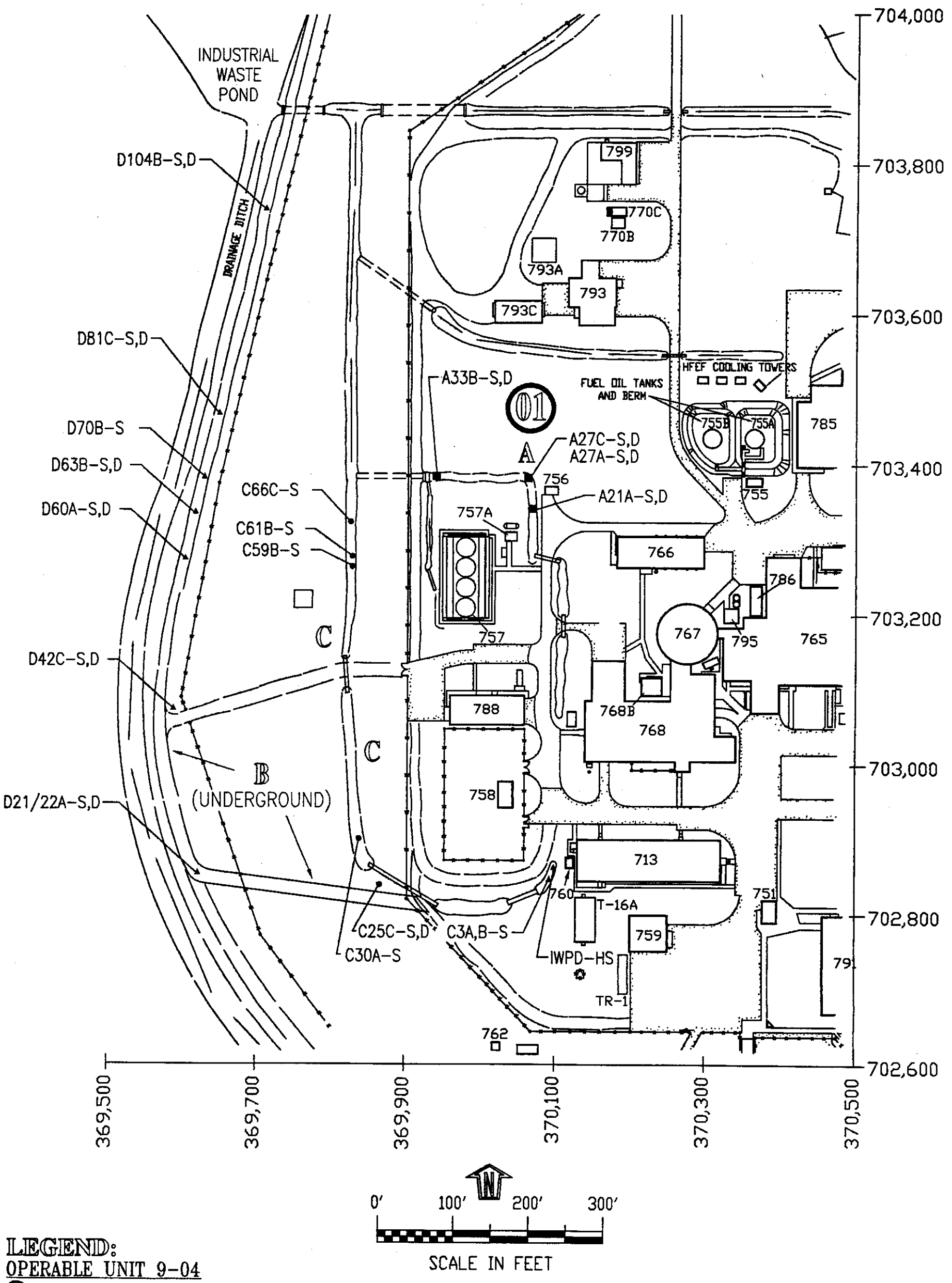
01A MAIN COOLING TOWER BLOWDOWN DITCH (LDU)

■ D (MCTBD) DITCH SAMPLE LOCATIONS

OCTOBER 20, 1995/ESWM
SITE-121.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1988 SAMPLING



LEGEND:

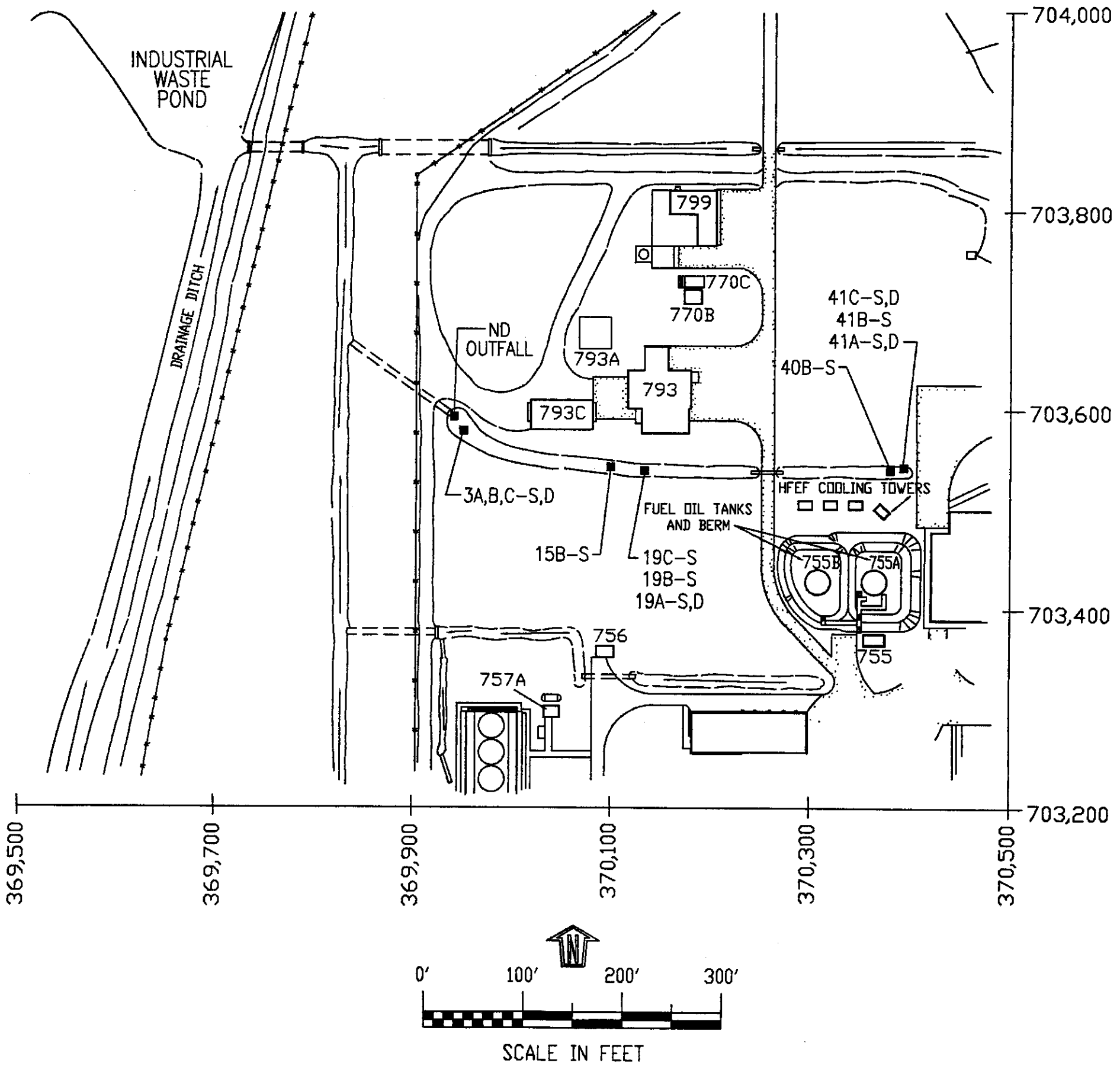
OPERABLE UNIT 9-04

- (01) INDUSTRIAL WASTE POND AND THREE DITCHES (A, B, AND C)
- ■ A DITCH SAMPLE LOCATIONS
- ▲ B DITCH SAMPLE LOCATIONS
- ● C DITCH SAMPLE LOCATIONS

OCTOBER 20, 1995/ESWM
SITE-131.DWG (SITE-33)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1988 SAMPLE LOCATIONS



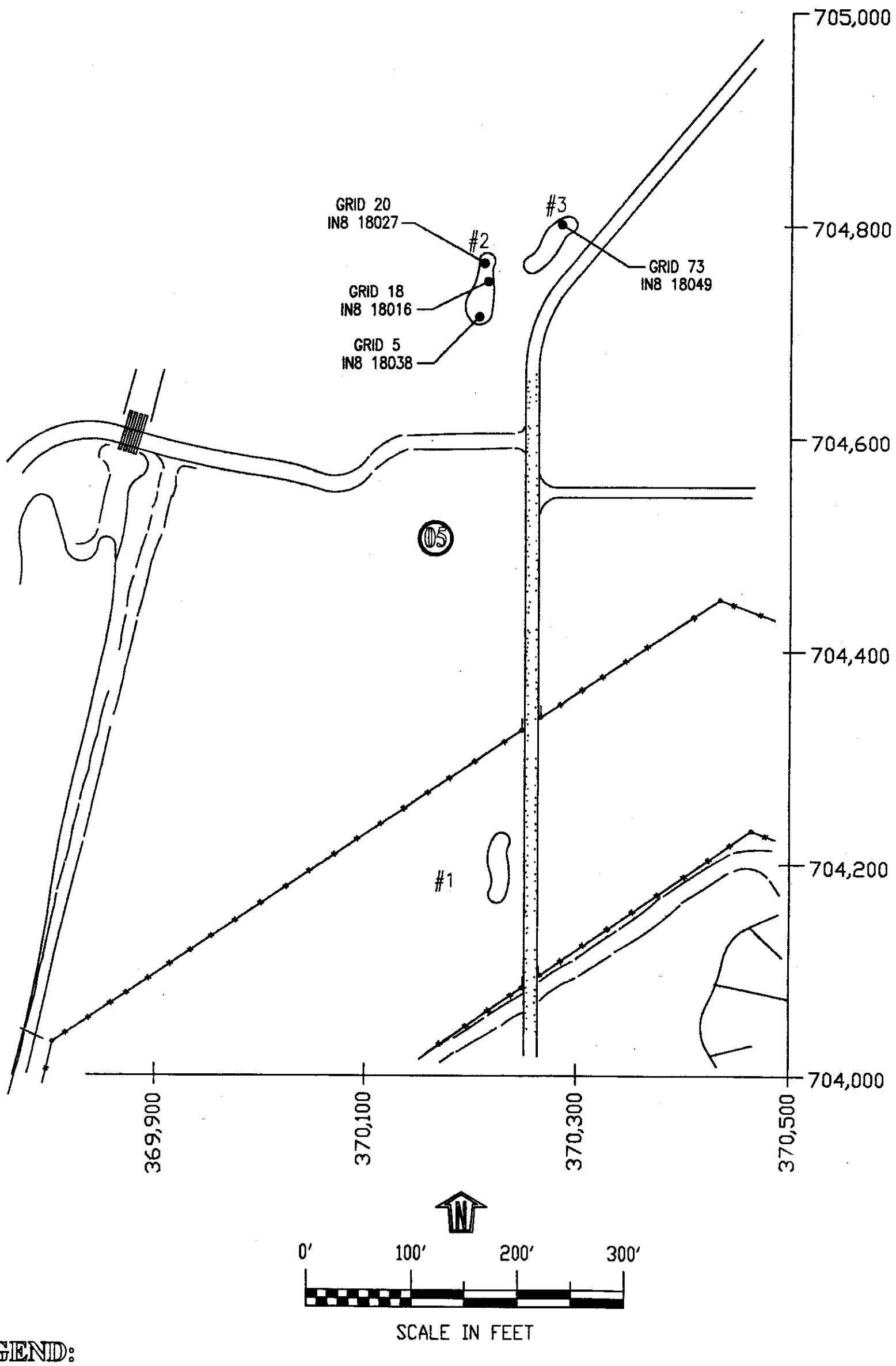
LEGEND:
OPERABLE UNIT 9-04

NORTH DITCH SAMPLE LOCATIONS

SEPTEMBER 9, 1995/ESWM
SITE-123.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-03
OF WAG-9
1988 DOE SAMPLING



LEGEND:

OPERABLE UNIT 9-03

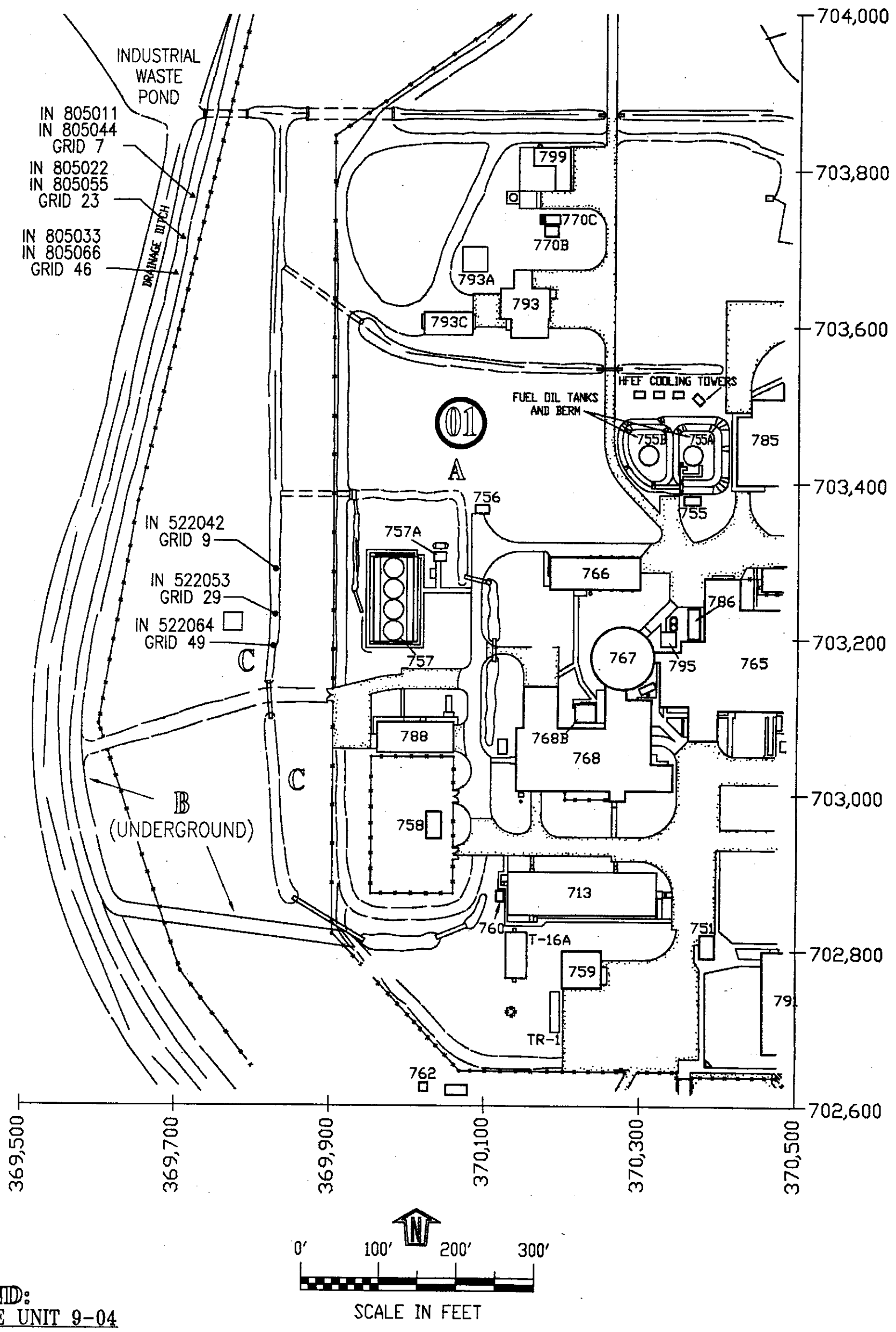
05 OPEN BURN PITS (#1, #2, AND #3)

● NUMBERED SOLIDS INDICATE GRID LOCATION – W – SAMPLE NUMBER

OCTOBER 5, 1995/ESWM
SITE-124.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1988 DOE SAMPLING



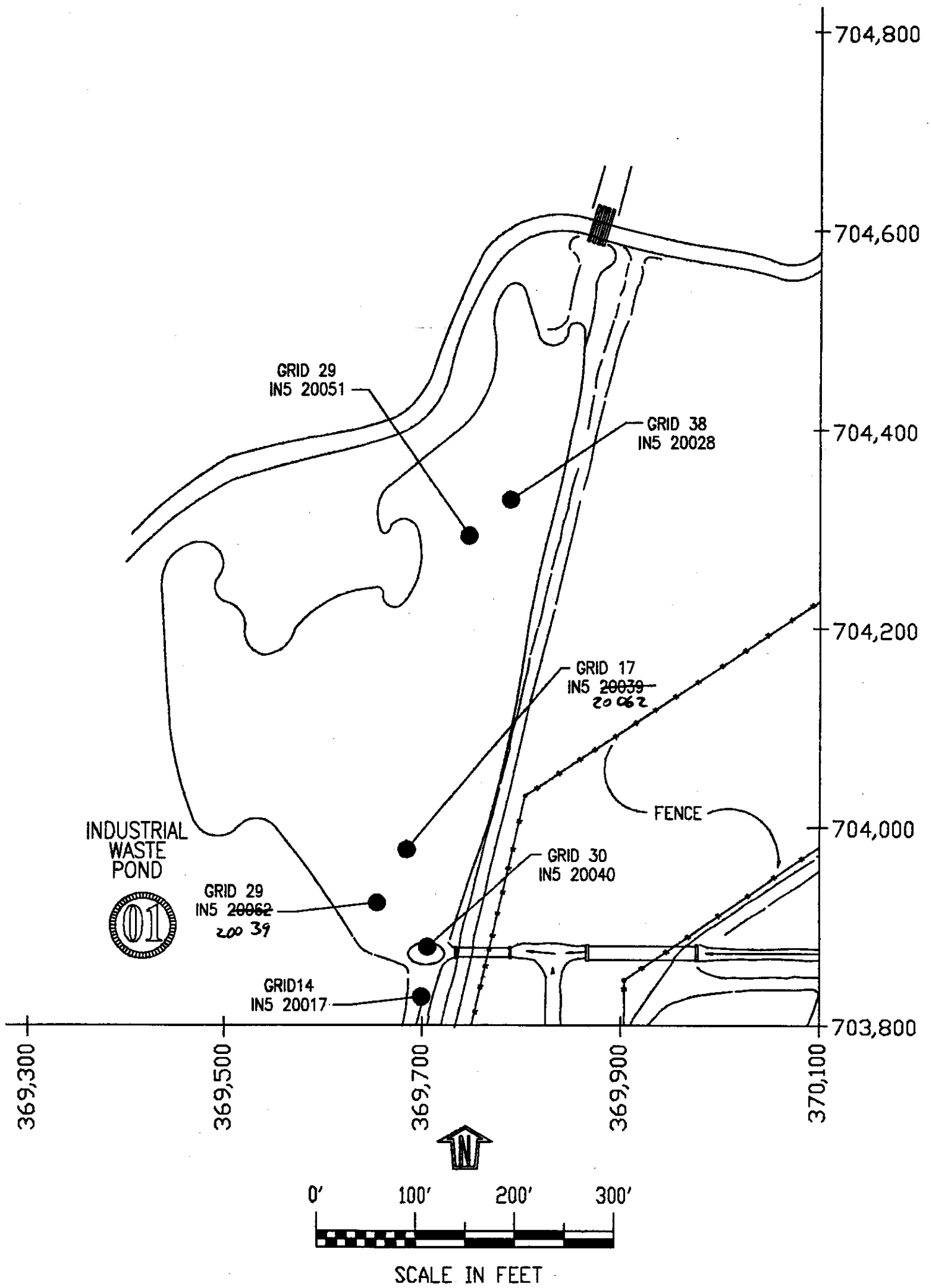
LEGEND:
OPERABLE UNIT 9-04

- (01) INDUSTRIAL WASTE POND AND THREE DITCHES (A, B, AND C)
- ▲ B DITCH SAMPLE LOCATIONS
- ● C DITCH SAMPLE LOCATIONS

NOVEMBER 8, 1995/ESWM
SITE-133.DWG (SITE-33)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1988 DOE SAMPLING



LEGEND:
OPERABLE UNIT 9-04

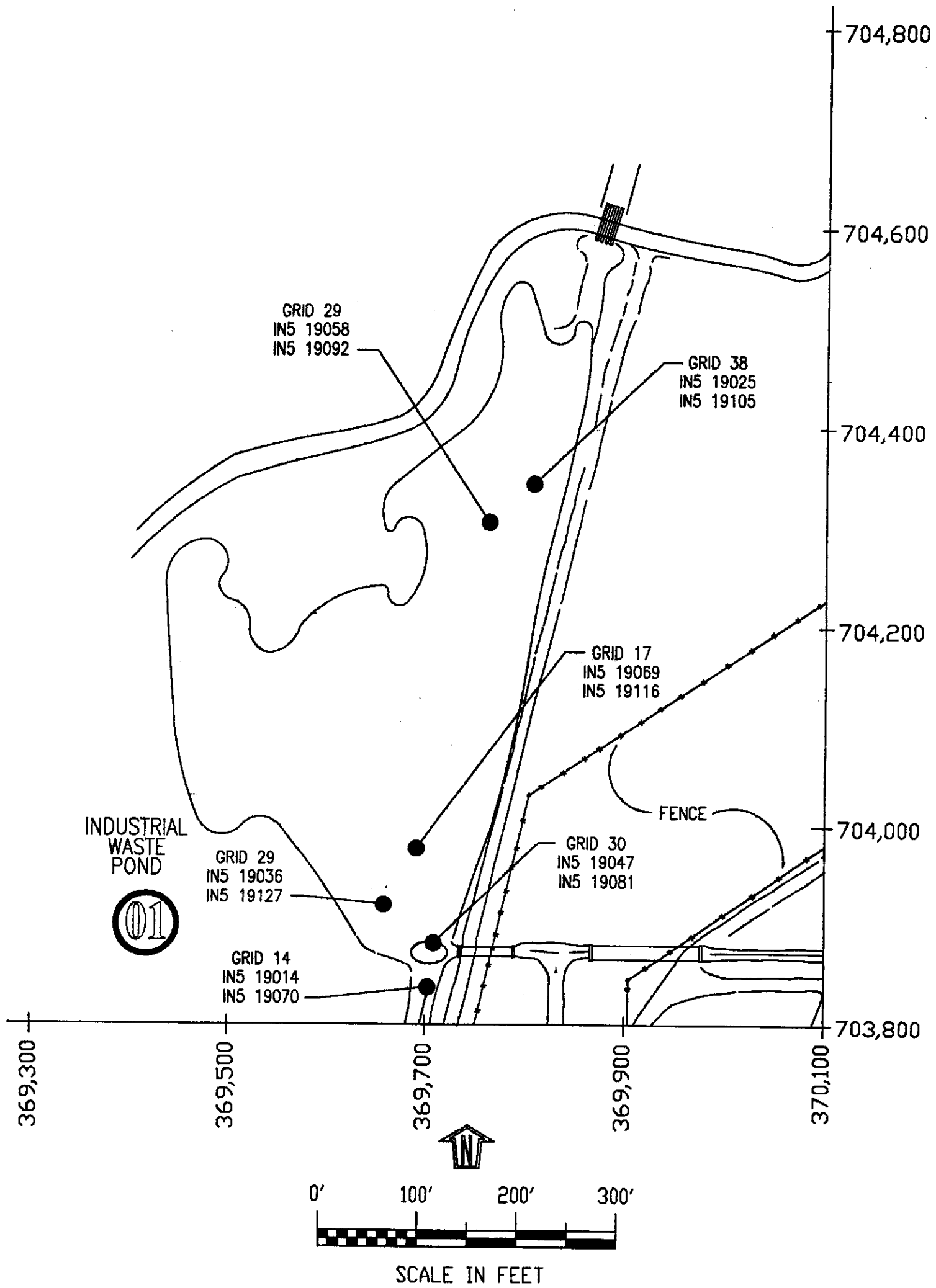
01 INDUSTRIAL WASTE POND - SLUDGE SAMPLES

● 1988 GRID LOCATIONS - W - SAMPLE NUMBER

MARCH 13, 1996/ESWM
SITE-130.DWG (SITE-33)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1988 DOE SAMPLING



LEGEND:

OPERABLE UNIT 9-04

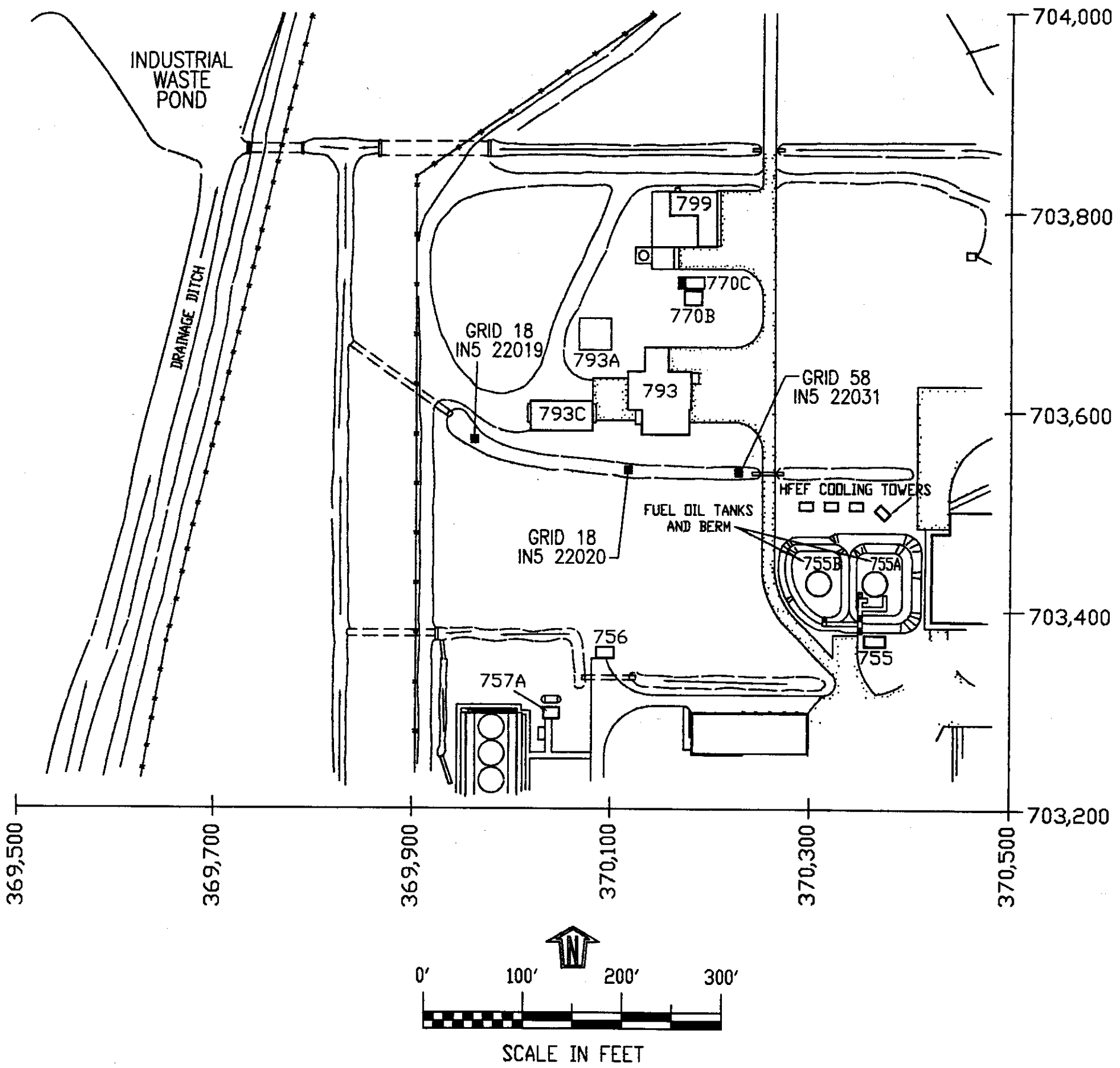
01 INDUSTRIAL WASTE POND – WATER SAMPLES

● 1988 GRID LOCATIONS – W – SAMPLE NUMBERS

OCTOBER 5, 1995/ESWM
SITE-129.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1988 DOE SAMPLING



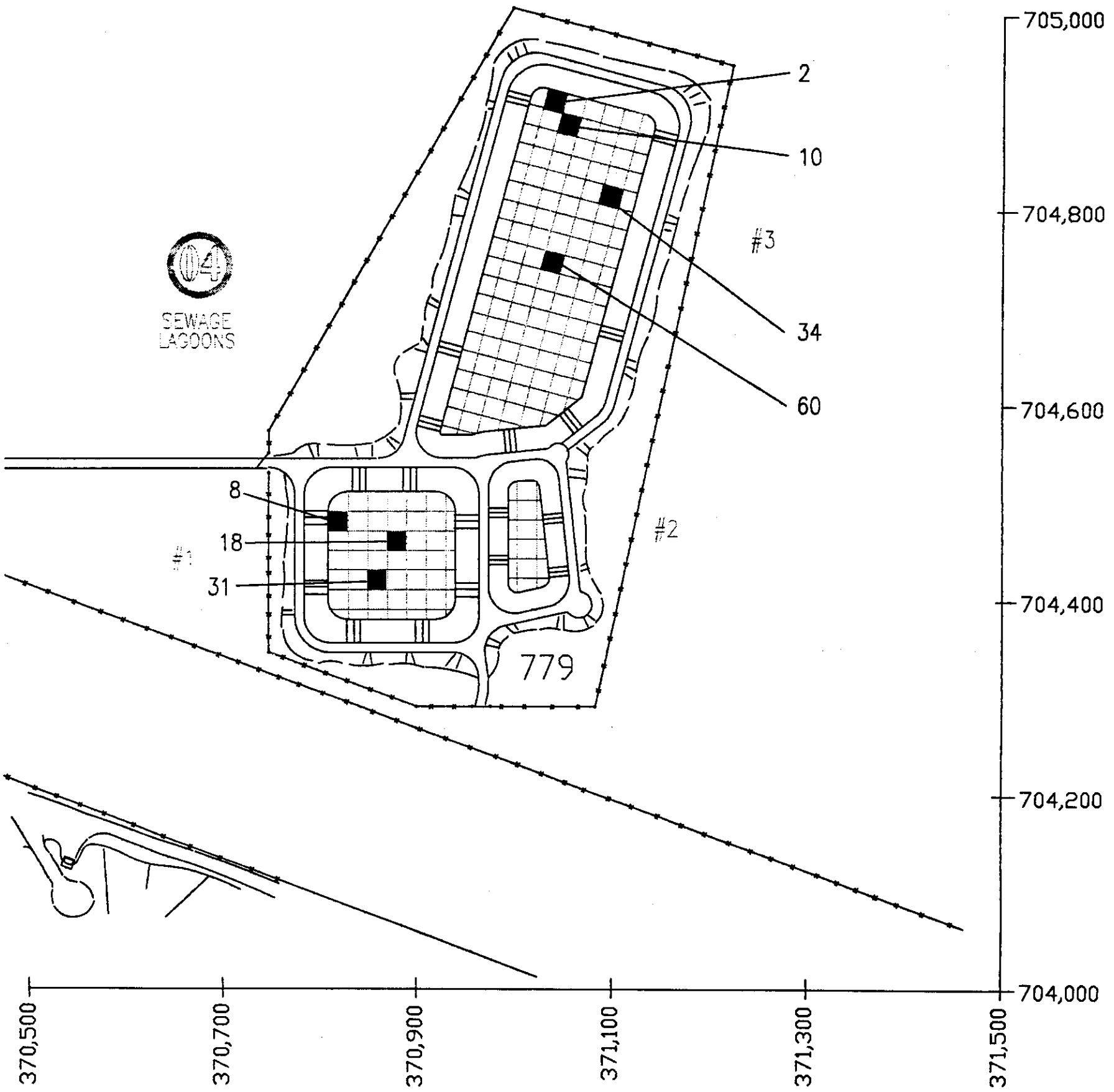
LEGEND:
OPERABLE UNIT 9-04

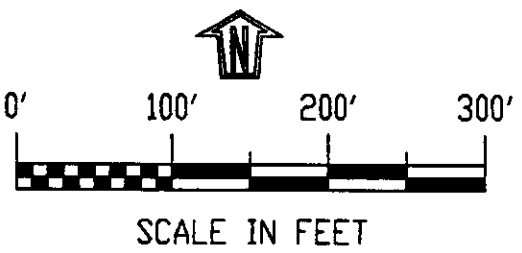
■ NORTH DITCH GRID LOCATIONS – SAMPLE NUMBER

OCTOBER 5, 1995/ESWM
SITE-128.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-01
OF WAG-9
1994 SAMPLE LOCATIONS





LEGEND:

OPERABLE UNIT 9-01

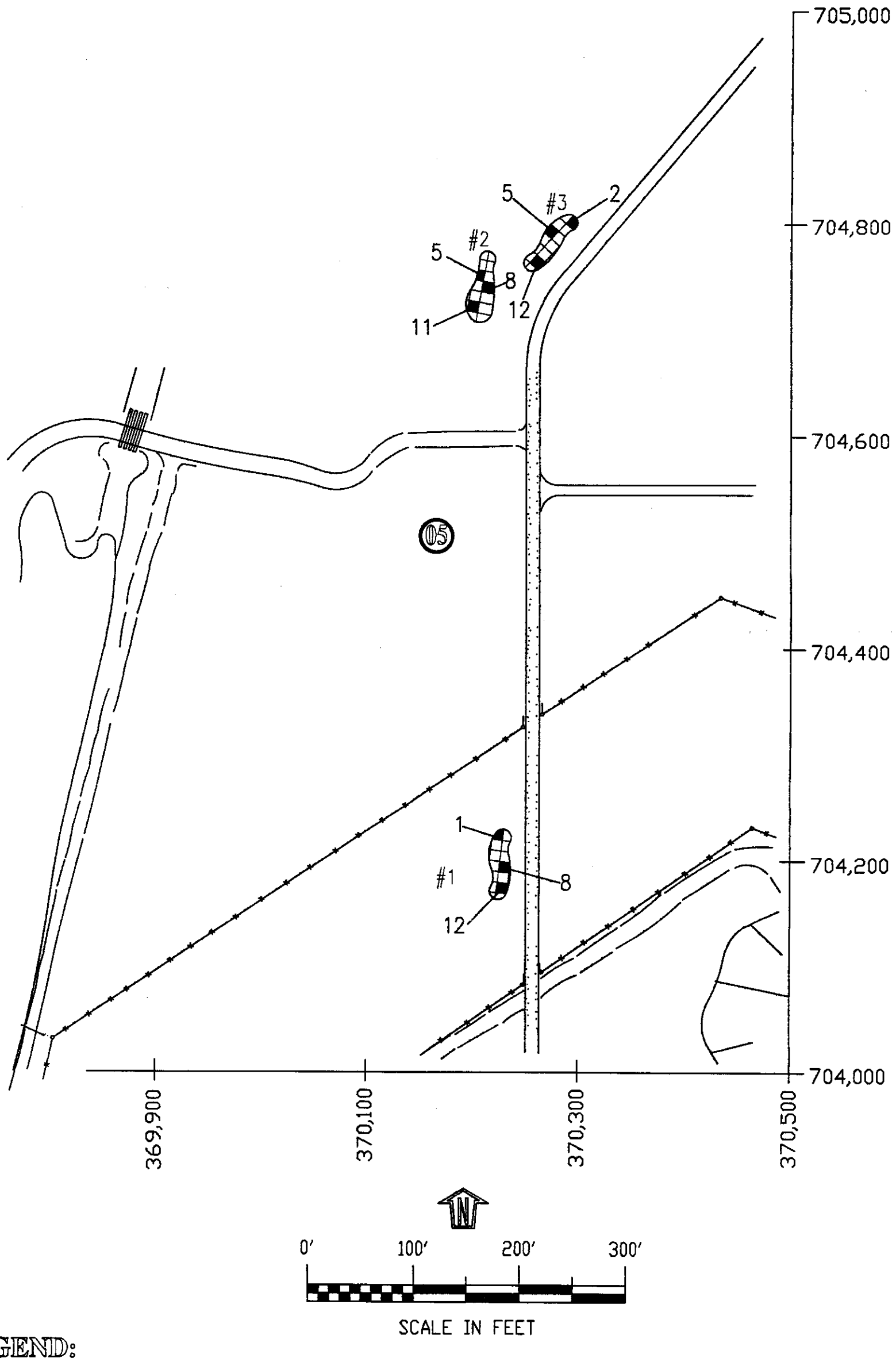
SEWAGE LAGOONS

NUMBERED SOLIDS INDICATE RANDOM SAMPLE SITES

OCTOBER 6, 1994/ESWM
SITE-093.DWG (SITE-26)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-03
OF WAG-9
1994 SAMPLE LOCATIONS



LEGEND:

OPERABLE UNIT 9-03

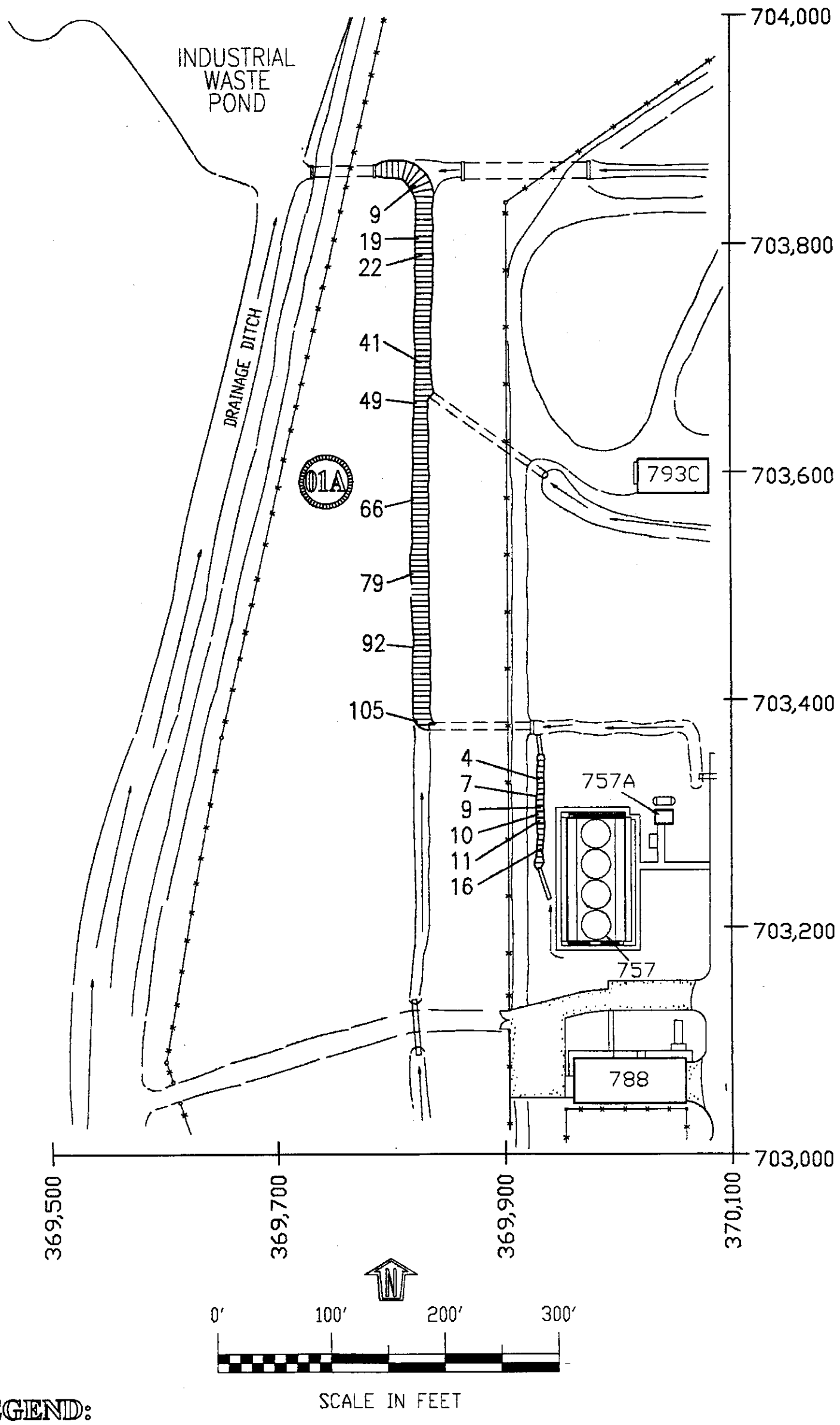
05 OPEN BURN PITS (#1, #2, AND #3)

■ NUMBERED SOLIDS INDICATE RANDOM SAMPLE SITES

SEPTEMBER 9, 1995/ESWM
SITE-124.DWG (SITE-32)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1994 SAMPLE LOCATIONS



LEGEND:

OPERABLE UNIT 9-04

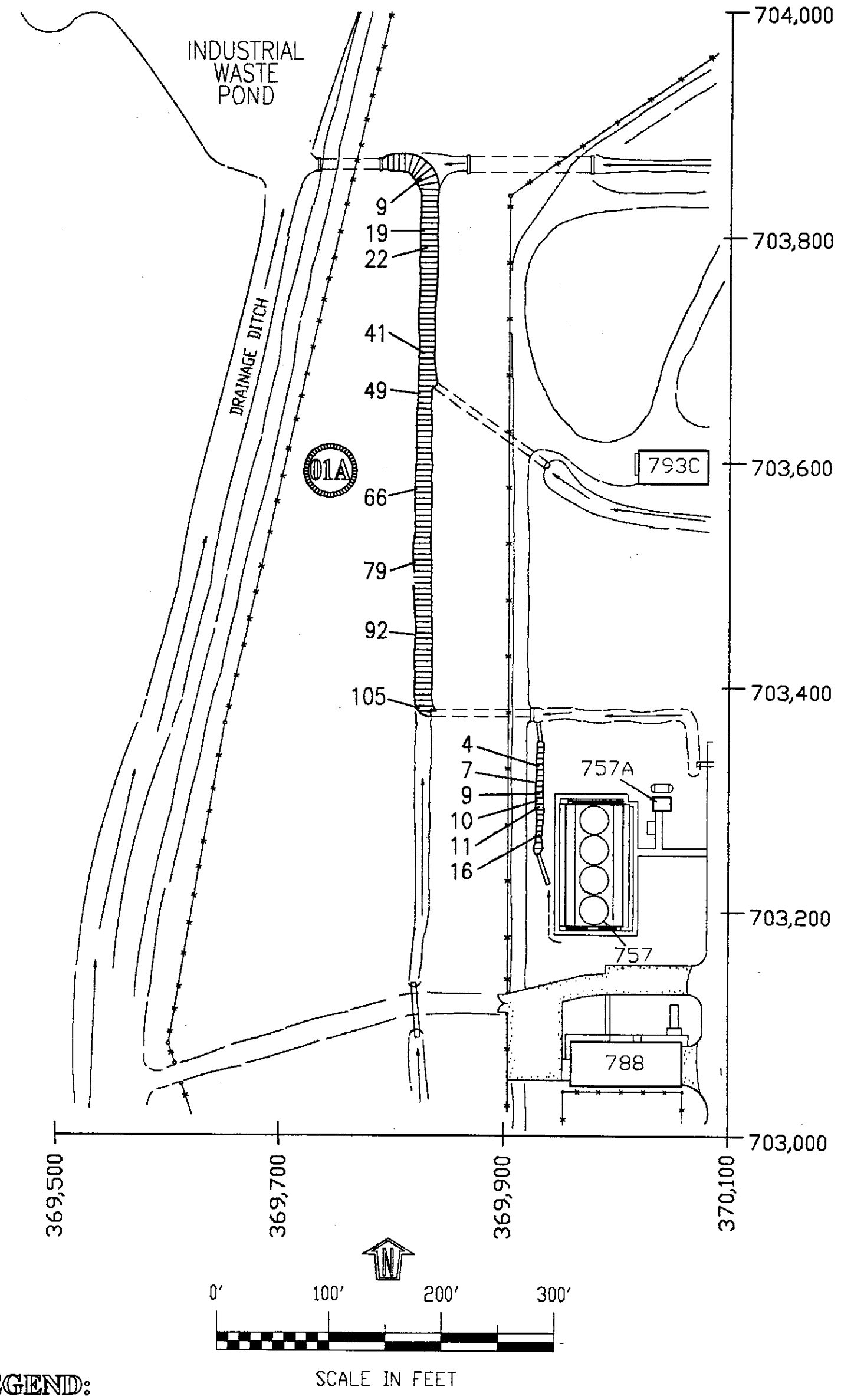
01A MAIN COOLING TOWER BLOWDOWN DITCH (LDU)

☐ NUMBERED SOLIDS INDICATE RANDOM SAMPLE SITES

MARCH 13, 1996/ESWM
SITE-096.DWG (SITE-26)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1994 SAMPLE LOCATIONS



LEGEND:

OPERABLE UNIT 9-04

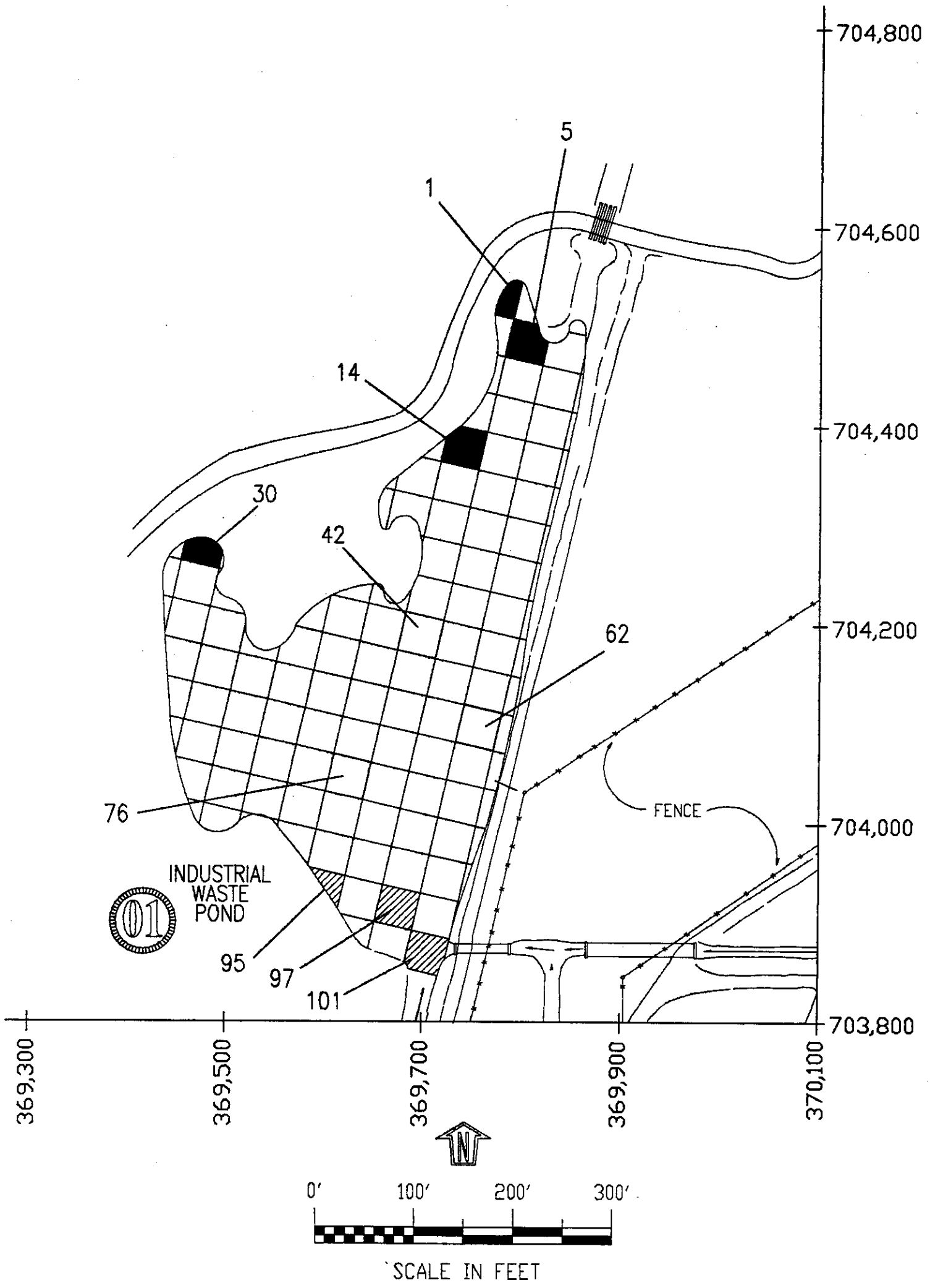
(01A) MAIN COOLING TOWER BLOWDOWN DITCH (LDU)

☐ NUMBERED SOLIDS INDICATE RANDOM SAMPLE SITES

MARCH 13, 1996/ESWM
SITE-096.DWG (SITE-26)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1994 SAMPLE LOCATIONS



LEGEND:

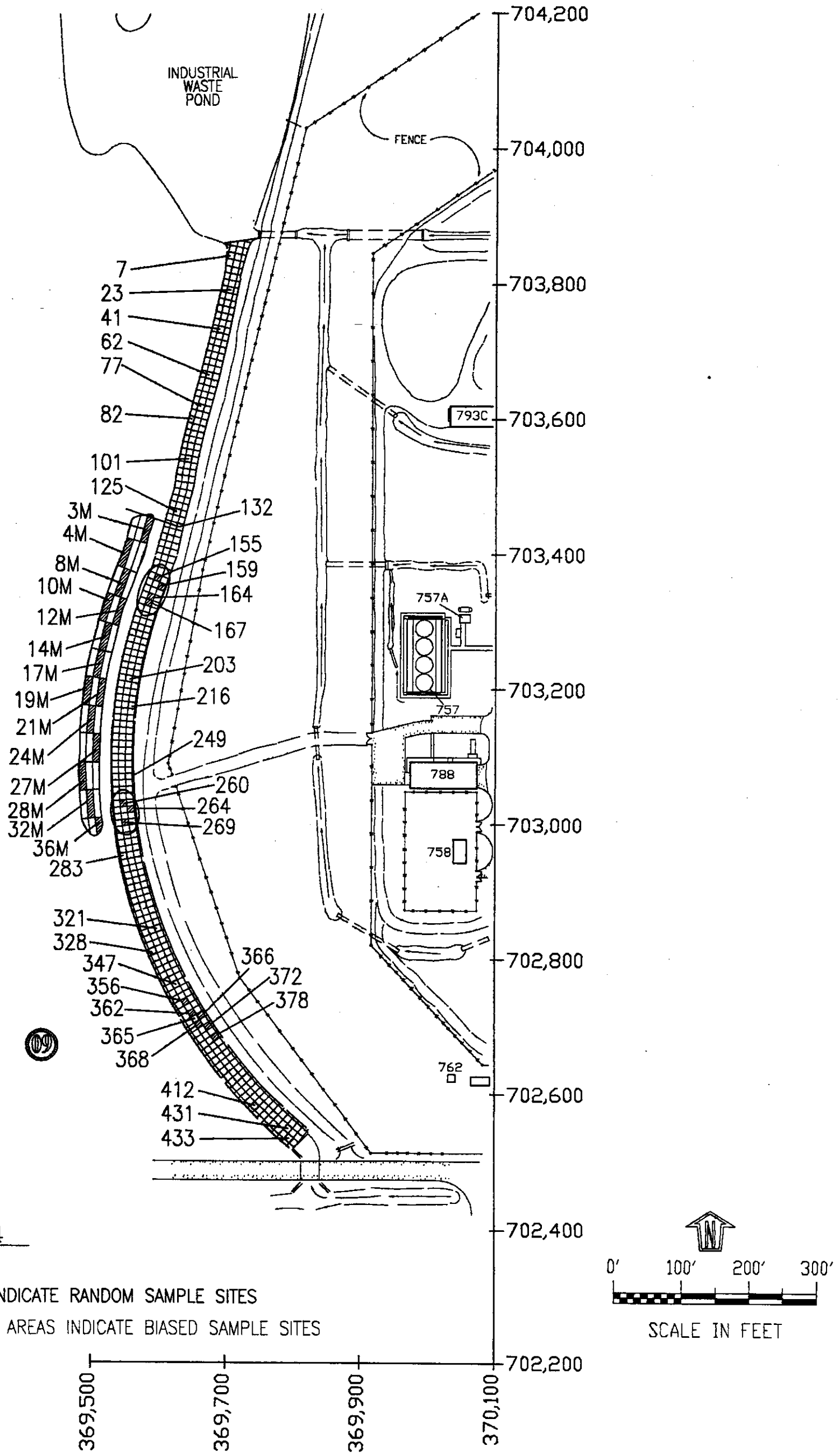
OPERABLE UNIT 9-04

- (01) INDUSTRIAL WASTE POND
- ☐ NUMBERED SOLIDS INDICATE RANDOM SAMPLE SITES
- ▨ NUMBERED HATCHED AREAS INDICATE BIASED SAMPLE SITES

MARCH 13, 1996/ESWM
SITE-099.DWG (SITE-27)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

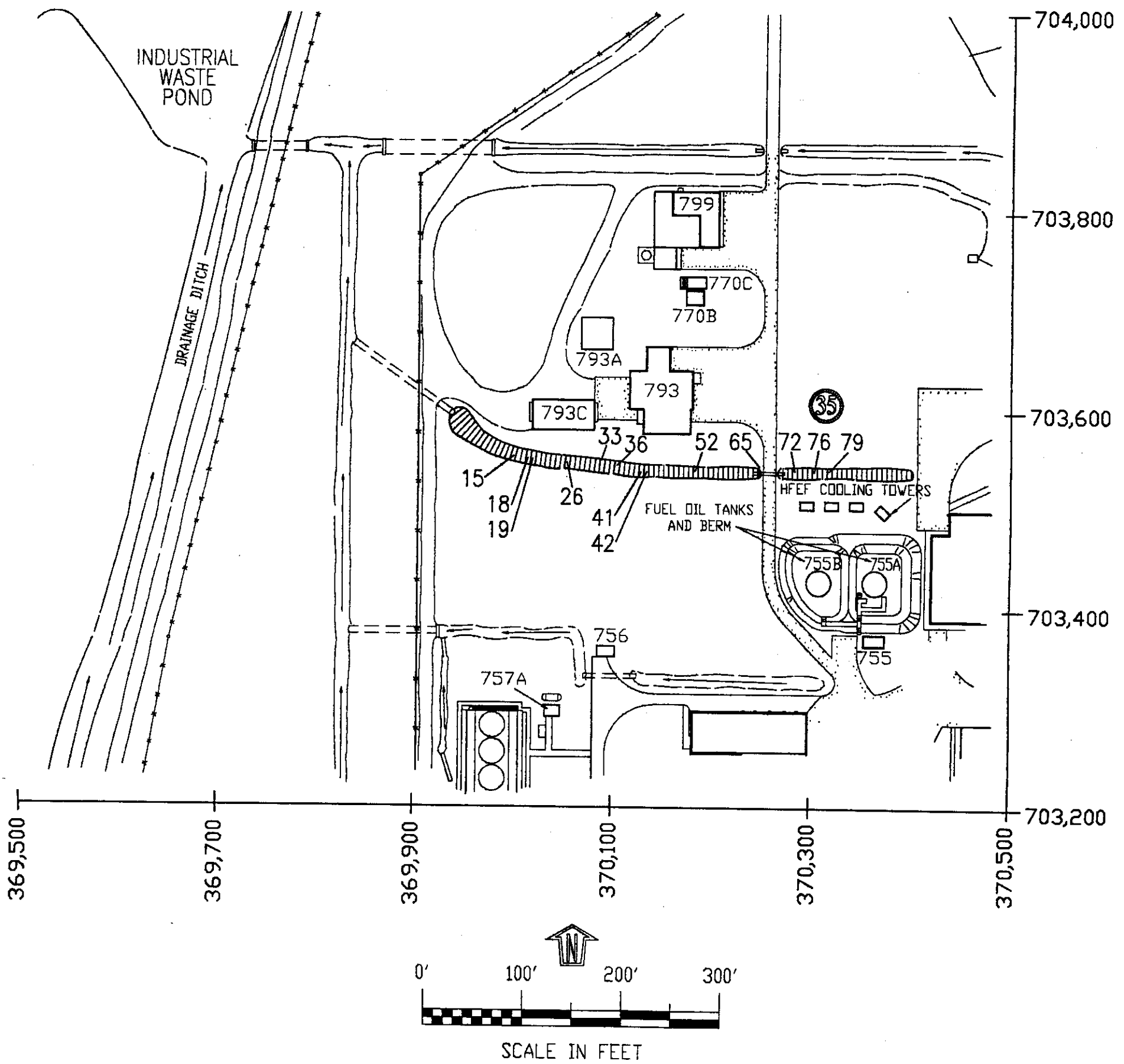
OPERABLE UNIT 9-04
OF WAG-9
1994 SAMPLE LOCATIONS



MARCH 13, 1996/ESWM
SITE-094.DWG (SITE-27)

ARGONNE NATIONAL LABORATORY-WEST SITE PLOT PLAN

OPERABLE UNIT 9-04
OF WAG-9
1994 SAMPLE LOCATIONS



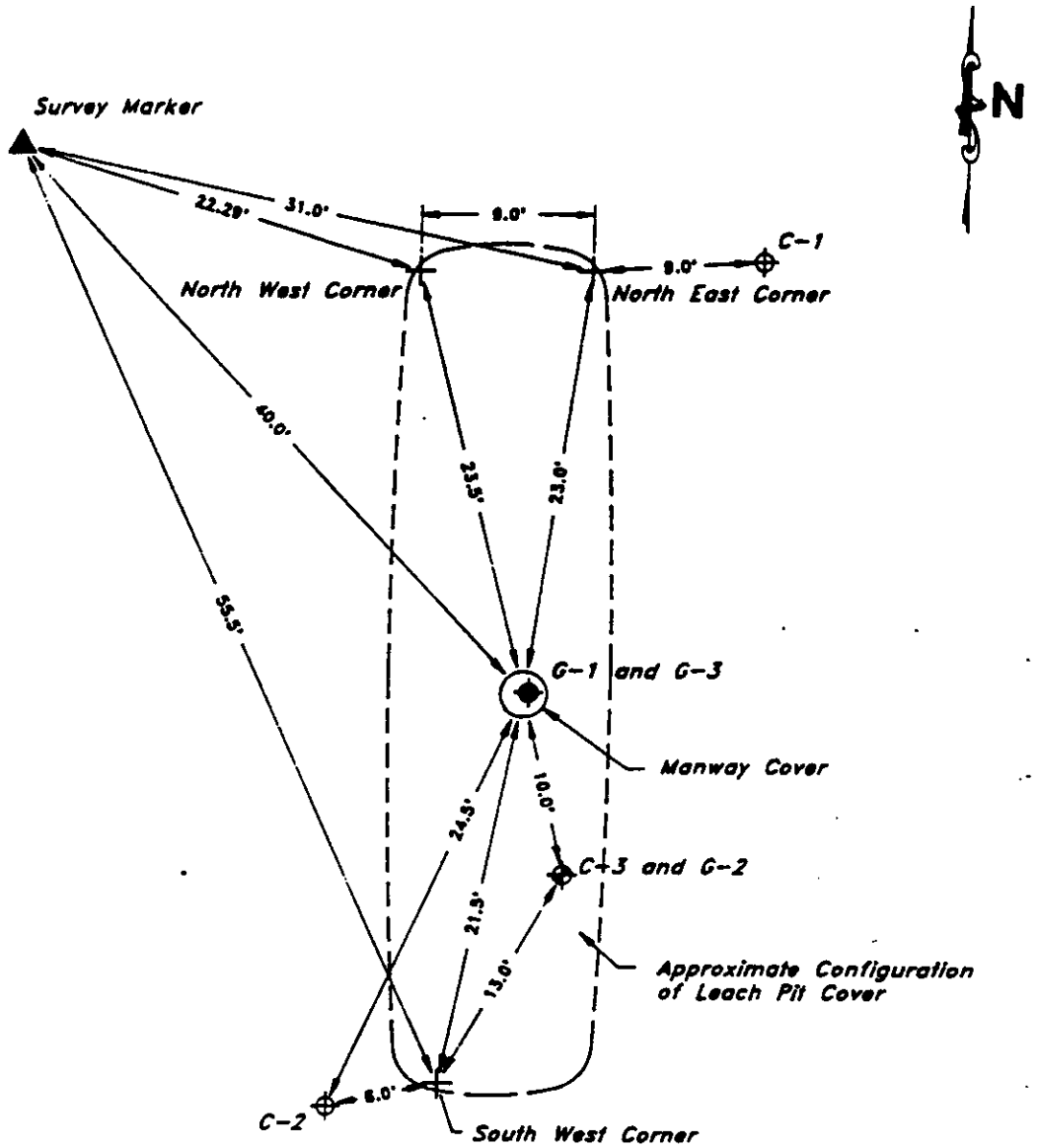
LEGEND:

OPERABLE UNIT 9-04

(35) INDUSTRIAL WASTE LIFT STATION DISCHARGE DITCH

☐ NUMBERED SOLIDS INDICATE RANDOM SAMPLE SITES

MARCH 13, 1996/ESWM
SITE-095.DWG (SITE-26)



LEGEND:

C-1 Sample Borehole Location

G-1 Pit Bottom Grab Sample Location

C-3 Borehole and Pit Bottom Grab Sample Location

Staked Corner

NOTE:
All readings to center of manway cover.

FIGURE 1-3
EBR-II LEACH PIT BOREHOLE AND SAMPLE LOCATIONS
ANL-W EBR-II LEACH PIT

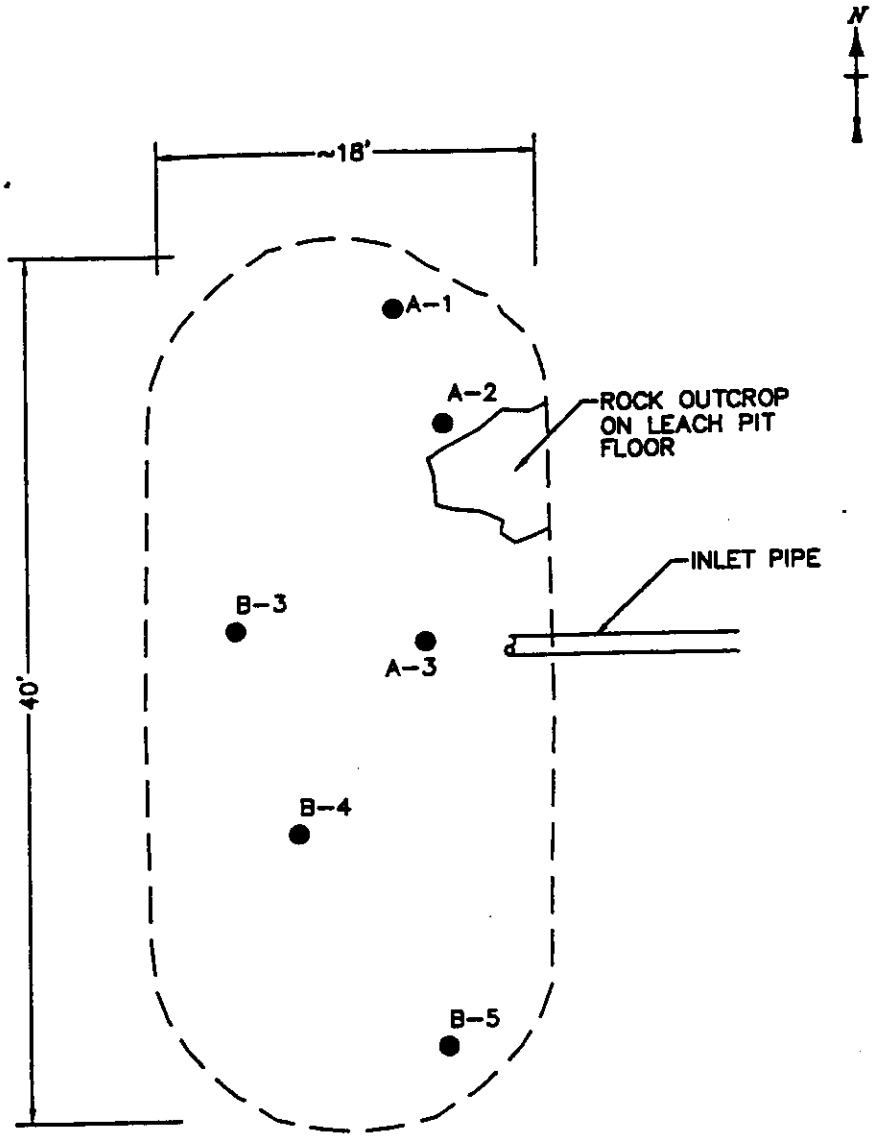
PROJECT NO 913-1023.020 DWG NO 36310 DATE 12-31-91 DRAWN DH

Golder Associates

TABLE 3-1

SAMPLES COLLECTED FOR CHEMICAL ANALYSES

LOCATION	DEPTH	COMMENTS
MW-642	642.4 ft	Groundwater collected from monitoring well
G1, G2, G3	Surface of Leach Pit Bottom	Grab sample of sediment contents in the bottom to the leach pit.
C1	2 ft	Sample of alluvial soil from location adjacent to the leach pit.
C2	1 ft	Sample of alluvial soil from location adjacent to the leach pit.
C3	36 ft	Sample of alluvial soil from borehole drilled through location G1 in the bottom of the leach pit.

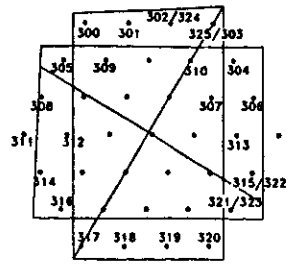


RUST GEOTECH INC.

Figure 10 EBR-II Leach Pit
Actual Sample Locations

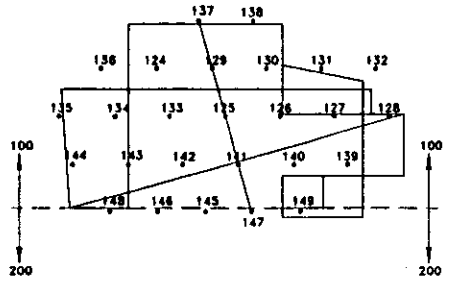
DATE PREPARED: December 13, 1993

FILENAME: E0205800



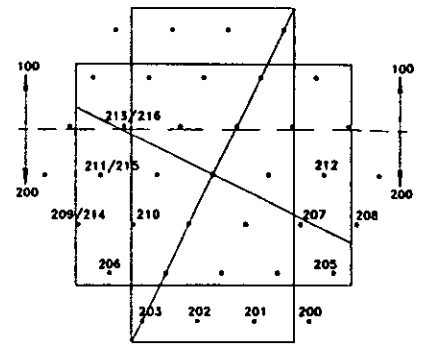
(C) 300 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
300 SL	1.0	1'	
301 SL	1.0	1.5'	
302 SL	1.0	1.5'	
303 SL	1.0	2'	
304 SL	1.0	3.5'	
305 SL	1.0	3'	
306 SL	1.0	1'	
307 SL	1.0	5'	BR W/BB SEE NOTE 2
308 SL	1.0	0.5'	
309 SL	1.0	4'	BR W/BB
310 SL	1.0	3'	BR W/BB
311 SL	1.0	GS	
312 SL	1.0	4'	
313 SL	1.0	3.5'	
314 SL	1.0	0.5'	
315 SL	1.0	1.5'	
316 SL	1.0	3.5'	
317 SL	1.0	1.5'	
318 SL	1.0	1.5'	
319 SL	1.0	1.5'	
320 SL	1.0	1.5'	
321 SL	1.0	4'	
322 SL	1.0	1.5'	
323 SL	1.0	4'	
324 SL	1.0	1.5'	
325 SL	1.0	2'	
326 MI	1.0		
327 MI	1.0		
328 SL	4.9		
329 SL	1.0		
330 SL	1.0		



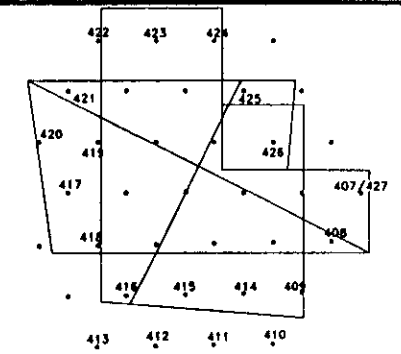
(A) 100 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
124 SL	1.0	5.5'	BR W/BB
125 SL	1.0	8'	BR W/BB
126 SL	2.2	8'	BR W/BB
127 SL	1.0	5'	BR W/BB
128 SL	1.0	2'	
129 SL	1.0	5.5'	
130 SL	1.0	3.5'	
131 SL	1.0	GS	
132 SL	1.0	GS	
133 SL	850	8'	BR W/BB
134 SL	1.2	4.5'	
135 SL	1.0	GS	
136 SL	1.0	GS	
137 MI	1.2	GS	
138 MI	1.3	GS	
139 SL	0.85	5'	BR W/BB
140 SL	1.0	6'	BR W/BB
141 SL	2.6	8'	BR W/BB
142 SL	29	7.5'	BR W/BB
143 SL	68	7.5'	BR W/BB
144 SL	1.0	0.5'	
145 SL	1.0	7'	BR W/BB SEE NOTE 1
146 SL	1.0	7'	BR W/BB
147 SL	1.0	5'	BR W/BB
148 SL	1.0	5'	
149 SL	1.1	1'	



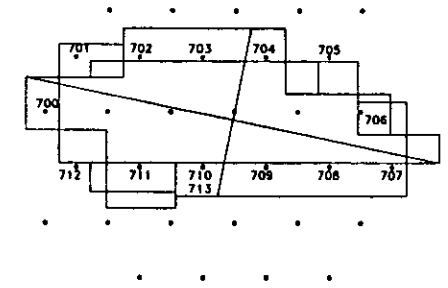
(B) 200 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
200 SL	1.0	2.5'	
201 SL	11	2.5'	
202 SL	1.2	2.5'	
203 SL	1.2	2.5'	
205 SL	3.3	2'	
206 SL	1.2	4.5'	
207 SL	1.2	6'	
208 SL	1.1	GS	
209 SL	1.1	GS	
210 SL	1.0	7.5'	BR W/BB
211 SL	1.0	3'	
212 SL	1.0	3.5'	SEE NOTE 2
213 SL	1.0	8'	
214 SL	1.0	GS	
216 SL	1.0	8'	



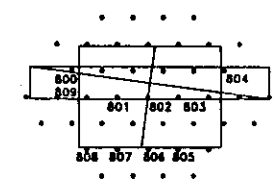
(D) 400 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
400 SL	1.1	3'	
401 SL	1.1	3'	
402 SL	1.1	3'	
403 SL	5.6	3'	SEE NOTE 2
404 SL	1.1	3'	
405 SL	1.1	3'	
406 SL	1.1	3'	
407 SL	8.0	1'	
408 SL	1.1	4.5'	
409 SL	5.8	3'	
410 SL	4.0	GS	
411 SL	1.1	GS	
412 SL	24	GS	
413 SL	1.0	GS	
414 SL	3.1	2.5'	
415 SL	6.7	2'	
416 SL	1.0	1'	
417 SL	1.0	3'	
418 SL	1.1	6'	
419 SL	1.0	7.5'	
420 SL	1.5	GS	
421 SL	1.0	5'	
422 MI	3.3	4'	
423 MI	5.3	4'	
424 MI	13	4'	
425 MI	20	6.5'	
426 SL	6.9	4'	
427 SL	18	1'	



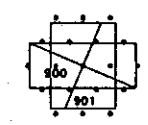
(E) 700 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
700 SL	1.1	3.5'	
701 SL	1.2	1.5'	
702 SL	13	3.5'	
703 SL	7.6	3.5'	
704 SL	4.4	3.5'	SEE NOTE 2
705 SL	1.0	GS	
706 SL	1.9	3.5'	
707 SL	210	3.5'	SEE NOTE 3
708 SL	51	3.5'	SEE NOTE 3
709 SL	2.3	3.5'	
710 SL	5.8	3.5'	
711 SL	4.7	2'	
712 SL	36	GS	SEE NOTE 4
713 SL	9.7	3.5'	



(F) 800 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
800 SL	1.2	5'	
801 SL	2.4	6'	BR W/BB
802 SL	1.2	6'	BR W/BB
803 SL	1.2	6'	BR W/BB
804 SL	2.0	5.5'	
805 SL	1.0	GS	SEE NOTE 2
806 SL	1.2	GS	
807 SL	1.1	GS	
808 SL	1.2	GS	
809 SL	1.1	3'	



(G) 900 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
900 SL	1.0	2.5'	SEE NOTE 2
901 SL	1.0	2.5'	

LEGEND

A.P. LOCATION SAMPLED BY ARGONNE NATIONAL LABORATORY-WEST 1991

S.B. PROPOSED SAMPLING LOCATIONS ENVIRONMENTAL MANAGEMENT INC. 1992.

— — PROPOSED EXCAVATION LIMITS

— — — EXCAVATION LIMITS #

BB = BENTONITE BARRIER SEE SECTION (F/213)

BR = BED ROCK

GS = GROUND SURFACE

▭ = BENTONITE BARRIER PLACED ON TOP OF BED ROCK

NOTE 1: SAMPLE TAKEN UNDER DUCT.

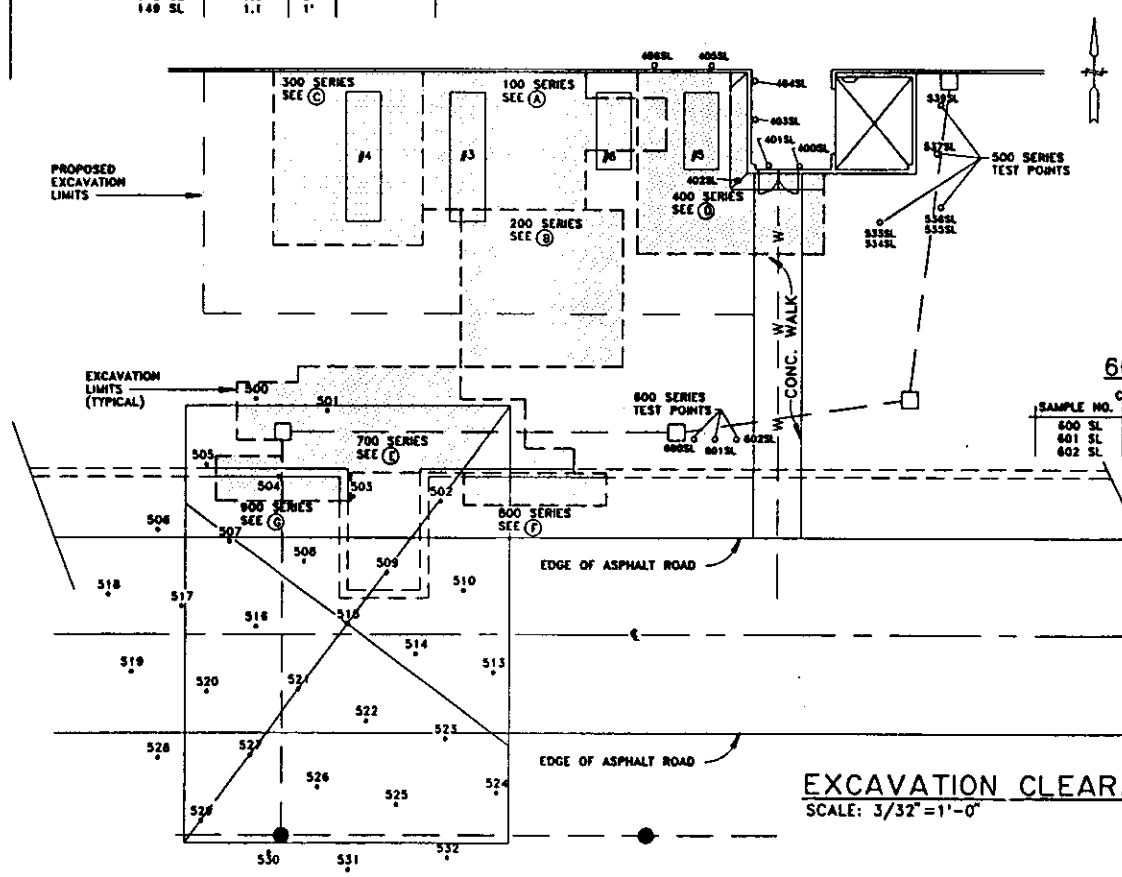
NOTE 2: EXCAVATION TO BR W/BB OVER FLOOR OF EXCAVATION. SEE EXCAVATION CLEARANCE PLAN.

NOTE 3: FURTHER EXCAVATION WAS DONE IN THIS AREA AS PART OF THE 800 SERIES.

NOTE 4: FURTHER EXCAVATION WAS DONE IN THIS AREA AS PART OF THE 900 SERIES.

NOTE 5: FURTHER EXCAVATION WAS DONE IN THIS AREA AS PART OF THE 700 SERIES.

NOTE 6: NO FURTHER EXCAVATION WAS DONE IN THIS AREA, SAMPLING POINT ONLY.



EXCAVATION CLEARANCE PLAN

SCALE: 3/32"=1'-0"

(G) 500 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
500 SL	74	2.5'	SEE NOTE 5
501A SL	11	3'	
501B SL	110	1.5'	SEE NOTE 5
502 SL	1.2	3.5'	
503 SL	1.3	3.5'	
504 SL	1	4'	
505 SL	1.6	3'	
506 SL	1	3.7'	
507 SL	1	4.5'	
508 SL	7.3	3'	
509 SL	1	3'	
510 SL	1	4'	
513 SL	1	3'	
514 SL	1	4'	
515 SL	1	4'	
516 SL	1	4'	
517 SL	1	3'	
518 SL	1	4.5'	
519 SL	1	4.3'	
520 SL	1	4.3'	
521 SL	1	4.5'	
523 SL	1	4.25'	
524 SL	1	4.3'	
525 SL	1	4.7'	
526 SL	1	4.5'	
527 SL	2.4	3'	
528 SL	1	4.3'	
529 SL	1	3'	
530 SL	1	3.25'	
531 SL	1	4.3'	
532 SL	1	4'	
533 SL	6.4	5'	
534 SL	4.1	9'	
535 SL	6.7	5'	
536 SL	11	5'	
537 SL	55	5'	SEE NOTE 6
538 SL	38	5'	SEE NOTE 6

600 SERIES

SAMPLE NO.	CONCENTRATION (PPM)	DEPTH	COMMENTS
600 SL	1.2	1'	ABOVE STORM DRAIN
601 SL	1.2	1'	ABOVE STORM DRAIN
602 SL	1.2	1'	ABOVE STORM DRAIN

APPROVED JUN 1996

ENVIRONMENTAL MANAGEMENT INCORPORATED

TITLE: EBR-II TRANSFORMER YARD PCB CLEANUP BUILDING 768

POST CLEANUP SAMPLING PLAN

DRAWN BY: JEF. | SERVICE REQUEST: 82410 | DESIGNED: B.C. Harris 12/92 | PROJECT ENGINEER: B.C. Harris 12/92 | RESP. ENGINEER: B.C. Harris 12/92 | APPRO'D / RELEASED: 12/92

STATE OF ALASKA 49TH

SHEET 5 OF 5 | DRAWING NUMBER W7680-0171-ED | REV. 02

PLOT SCALE: 3/32"=1'-0" LOST DATE: 20 NOV. 1992

Arsenic Concentrations for ANL-09 Ditch mg/kg

Surface	356	362	366	365	368	372	378	Surface
0.50 ft.	6.10	ND	ND	ND	7.90	7.50	9.40	0.50 ft.
2.00 ft.								2.00 ft.
4.00 ft.	8.30	6.70	11.50	10.70	11.90	8.20	11.30	4.00 ft.
6.00 ft.	7.80				10.90		9.10	6.00 ft.

Copper Concentrations for ANL-09 Ditch mg/kg

Surface	356	362	366	365	368	372	378	Surface
0.50 ft.	—	27.80	19.10	27.10	17.00	25.00	21.80	24.70 —	0.50 ft.
2.00 ft.	—							—	2.00 ft.
4.00 ft.	—	19.90	16.20	21.40	34.80	23.00	19.40	18.70 —	4.00 ft.
6.00 ft.	—	17.40				19.90		22.00 —	6.00 ft.

Lead Concentrations for ANL-09 Ditch mg/kg

Surface	356	362	366	365	368	372	378	Surface
0.50 ft.	16.40	13.30	17.90	13.30	37.70	18.10	39.70	0.50 ft.
2.00 ft.								2.00 ft.
4.00 ft.	15.30	16.40	15.70	13.30	15.70	11.10	12.30	4.00 ft.
6.00 ft.	13.10				13.70		14.80	6.00 ft.

Mercury Concentrations for ANL-09 Ditch mg/kg

Surface	356	362	366	365	368	372	378	Surface
0.50 ft.	—	ND	ND	0.33	ND	ND	ND	— 0.50 ft.
2.00 ft.	—							— 2.00 ft.
4.00 ft.	—	ND	ND	ND	0.25	0.12	0.12	— 4.00 ft.
6.00 ft.	—	ND			ND		0.12	— 6.00 ft.

Chromium Concentrations for ANL-09 Ditch mg/kg

Surface	356	362	366	365	368	372	378	Surface
0.50 ft.	—	25.20	21.00	28.10	18.30	25.60	27.20	30.20	—	0.50 ft.
2.00 ft.	—							—	2.00 ft.
4.00 ft.	—	20.50	17.50	22.70	23.10	24.20	20.60	20.80	—	4.00 ft.
6.00 ft.	—	20.00				22.80		24.40	—	6.00 ft.

Cobalt-60 Concentrations for ANL-09 Ditch pCi/g

	7	23	41	62	77	82	101	125	132	155	159	164	167	203	216	249	260	264	269	283	321	328	347	356	362	366	365	368	372	378	412	431	433
Surface 0.50 ft.	ND	ND	ND	ND	0.09	0.09	ND ND	0.09	ND	ND	ND	ND	0.08	ND	ND	ND	ND	ND	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	0.24	ND	ND
4.00 ft.	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	0.08	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND

Cesium-137 Concentrations for ANL-09 Ditch pCi/g

	7	23	41	62	77	82	101	125	132	155	159	164	167	203	216	249	260	264	269	283	321	328	347	356	362	366	365	368	372	378	412	431	433
Surface 0.50 ft.	0.18	0.88	1.80	6.80	ND	ND	1.20 1.20	ND	3.10	1.70	1.10	4.30	ND	4.37	2.72	5.00	0.05	5.20	ND	0.49	0.10	0.42	0.20	0.34	ND	2.20	2.40	0.37	1.30	ND	ND	0.87	2.40
4.00 ft.	0.13	0.06	ND	0.30	ND	0.23		ND	ND	ND	ND	ND	ND	0.29	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND ND	ND	0.10	0.10	ND	0.04	0.35 ND	4.30	ND	ND

Cobalt-60 Concentrations for ANL-09 Mound pCi/g

	M3	M4	M8	M10	M12	M14	M17	M19	M21	M24	M27	M28	M32	M36
Surface 0.50 ft.	0.37	0.30	0.09	0.32	ND	0.18	ND	0.29	0.14	ND		0.22	0.19	0.15
4.00 ft.	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.31	ND	ND	ND	ND

Cesium-137 Concentrations for ANL-09 Ditch pCi/g

	M3	M4	M8	M10	M12	M14	M17	M19	M21	M24	M27	M28	M32	M36
Surface 0.50 ft.	ND	ND	ND	ND	7.70	ND	2.10	ND	ND	16.90		ND	ND	ND
4.00 ft.	0.13	0.13	2.40	1.20	0.34	1.60	1.10	3.30	1.10	ND	0.95	1.30	5.90	1.60