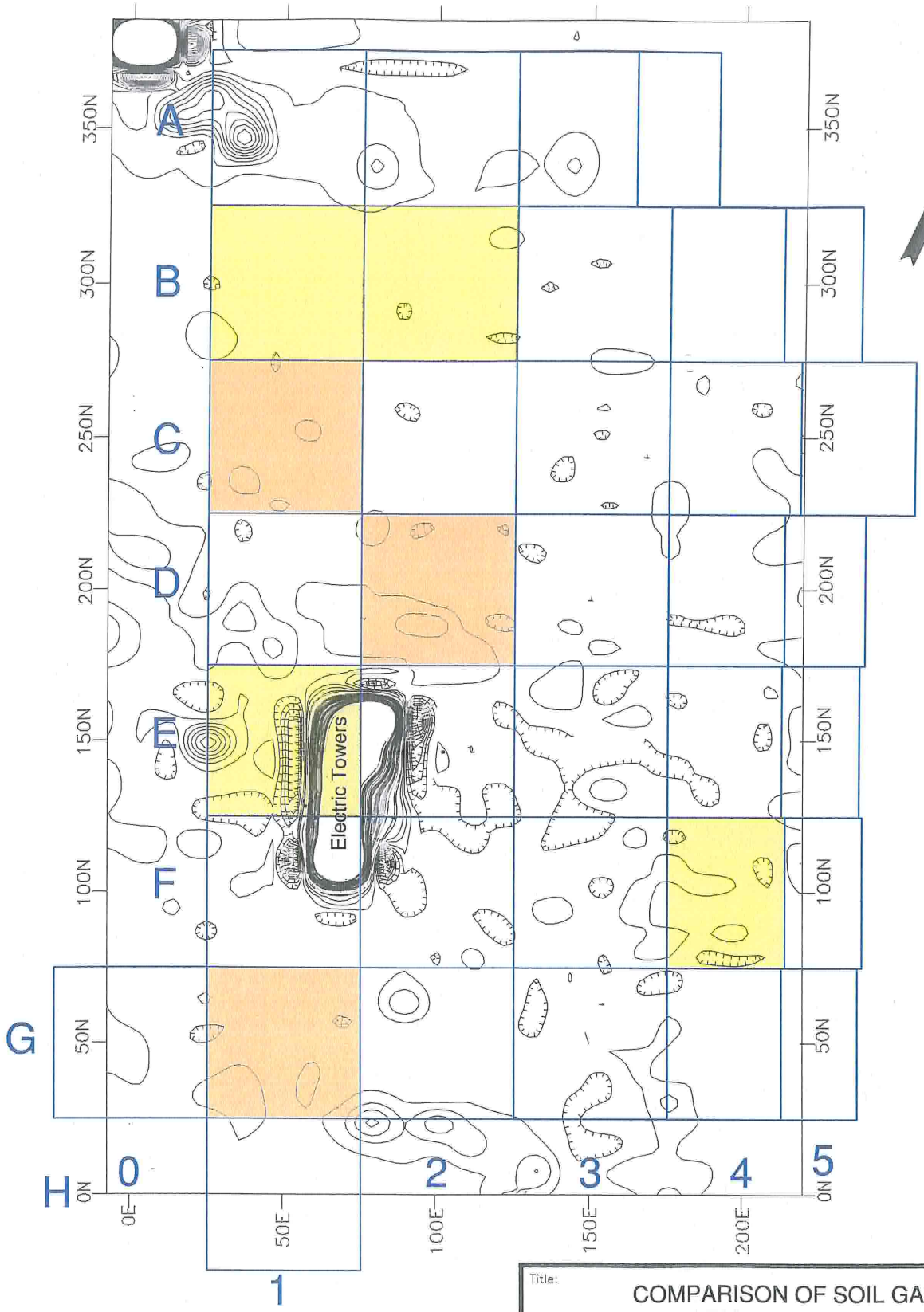


50' 0 50'

Benzene Concentrations (ppmv)

- 100-1,000
- 10-100
- ND

Title:

COMPARISON OF SOIL GAS AND GEOPHYSICAL ANOMALIES - WEST HIDE PILE STUDY AREA

INDUSTRI-PLEX SUPERFUND SITE
WOBURN, MASSACHUSETTS

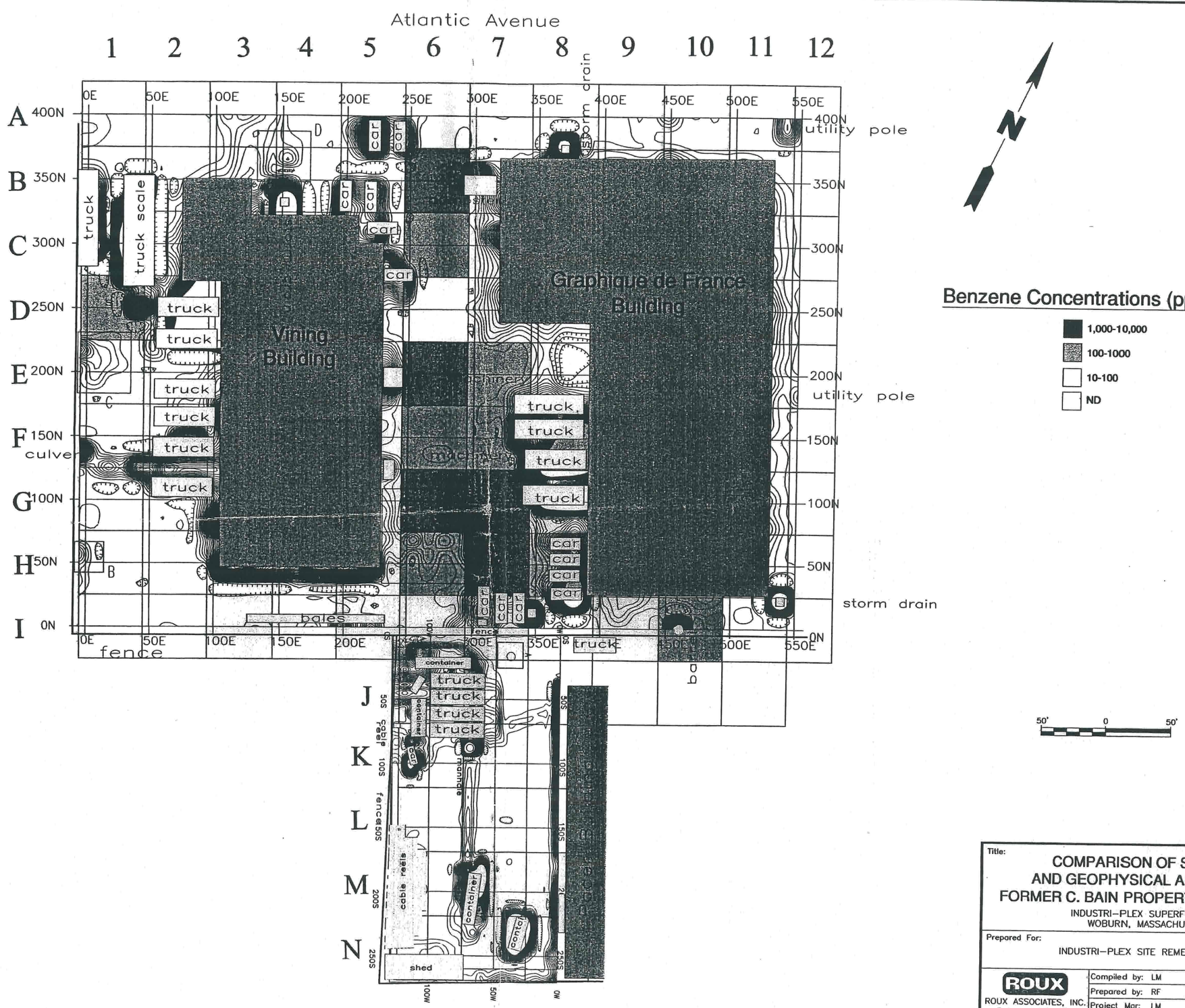
Prepared For:

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX
ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: LM	Date: 31OCT2001	FIGURE
Prepared by: RF	Scale: AS SHOWN	4
Project Mgr: LM	Office: MA	
File No: M02616402-4	Project: 06626M35	

N:\PROJECTS\Solutia 066\M0066M\M026M\M35\164\M02616402-4.dwg



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Title:

COMPARISON OF SOIL GAS AND GEOPHYSICAL ANOMALIES - FORMER C. BAIN PROPERTY STUDY AREA

INDUSTRI-PLEX SUPERFUND SITE
WOBURN, MASSACHUSETTS

Prepared For:

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: LM	Date: 31OCT2001	FIGURE
Prepared by: RF	Scale: AS SHOWN	5
Project Mgr: LM	Office: MA	
File No: M02616402-5	Project: 06626M35	

ATTACHMENT 1

Soil Gas Data

Mobile Laboratory Analysis
Soil Gas Results, Woburn Site
(ppbv)

Sample	Depth	Date	Benzen	Toluene	Notes
Hide Pile					
A-1	2'-3'	8/6/01	BDL	BDL	
A-2	2'-3'	8/6/01	BDL	BDL	
A-3	2'-3'	8/6/01	BDL	BDL	
A-4	1'-1.5'	8/7/01	BDL	BDL	
B-1	2'-3'	8/6/01	66	48	
B-2	2'-3'	8/6/01	22	BDL	
B-3	2'-2.5'	8/7/01	BDL	13	
B-4	2.75'-3'	8/7/01	BDL	BDL	
B-5	1'-1.5'	8/7/01	BDL	BDL	
C-1	2'-3'	8/6/01	130	BDL	
C-2	2'-3'	8/6/01	BDL	BDL	
C-3	2'-2.5'	8/7/01	BDL	11	
C-4	2.75'-3'	8/7/01	BDL	BDL	
C-5	1'-1.5'	8/7/01	BDL	BDL	
D-1	2'-3'	8/6/01	BDL	BDL	
D-2	2'-3'	8/6/01	120	46	
D-3	2'-2.5'	8/7/01	BDL	13	
D-4	2.75'-3'	8/7/01	BDL	BDL	
D-5	2'-2.5'	8/7/01	BDL	BDL	
E-1	2'-3'	8/6/01	34	30	
E-2	2'-3'	8/6/01	BDL	13	
E-3	2'-2.5'	8/7/01	BDL	BDL	
E-4	2.75'-3'	8/7/01	BDL	BDL	
E-5	2'-2.5'	8/7/01	BDL	BDL	
EB	0	8/6/01	BDL	BDL	
F-1	2'-3'	8/6/01	BDL	IN	Matrix interference at toluene retention time
F-2	2'-3'	8/6/01	BDL	BDL	
F-3	2'-2.5'	8/7/01	BDL	BDL	
F-4	2'-3'	8/7/01	11	BDL	
F-5	2'-2.5'	8/7/01	BDL	11	
G-0	2'-3'	8/8/01	BDL	BDL	
G-1	2'-3'	8/6/01	590	BDL	
G-2	2'-3'	8/6/01	BDL	50	
G-3	2.75'-3'	8/7/01	BDL	BDL	
G-4	2.75'-3'	8/7/01	BDL	BDL	
G-5	2.75'-3'	8/7/01	BDL	BDL	
H-1	2'-3'	8/8/01	BDL	BDL	
Transfer Station					
J-6	2'-3'	8/8/01	BDL	BDL	

Mobile Laboratory Analysis
Soil Gas Results, Woburn Site
(ppbv)

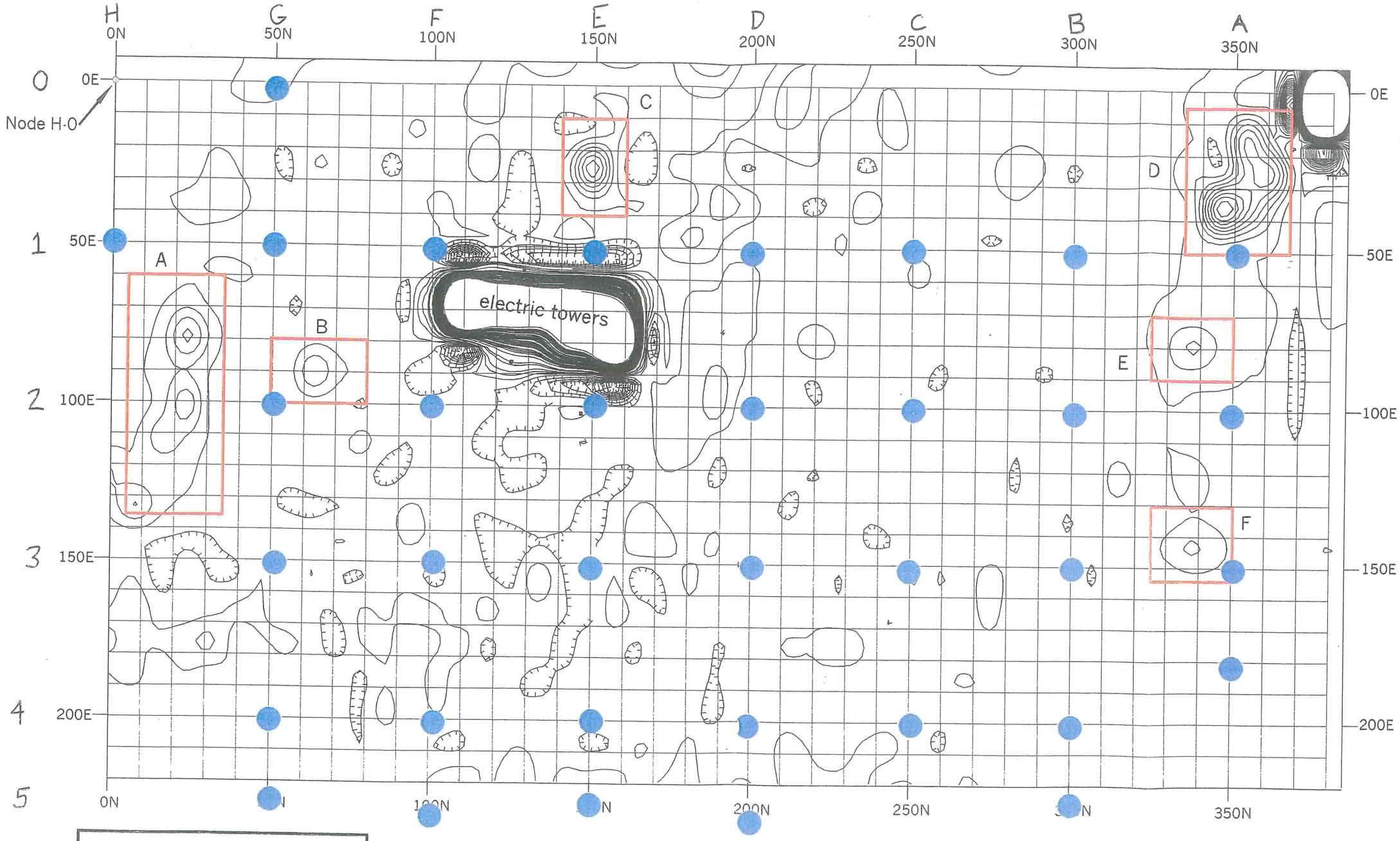
J-7	2'-3'	8/8/01	BDL	14	
J-8	2'-3'	8/8/01	BDL	BDL	
K-6	2'-3'	8/8/01	BDL	BDL	
K-7	2'-3'	8/8/01	BDL	BDL	
K-8	2'-3'	8/8/01	BDL	BDL	
L-6	2'-3'	8/8/01	BDL	BDL	
L-7	2'-3'	8/8/01	BDL	16	
L-8	2'-3'	8/8/01	BDL	BDL	
M-6	2'-3'	8/8/01	BDL	BDL	
M-7	2'-3'	8/8/01	11	BDL	
M-8	2'-3'	8/8/01	10	IN	Matrix interference at toluene retention time
N-6	2'-3'	8/8/01	BDL	BDL	
N-7*	2'-3'	8/8/01	11	IN	Matrix interference at toluene retention time
N-8	2'-3'	8/8/01	BDL	BDL	
A-1	2'-3'	8/10/01	BDL	BDL	
A-10	2'-3'	8/9/01	BDL	BDL	
A-11	2'-3'	8/9/01	BDL	BDL	
A-12	2'-3'	8/9/01	BDL	BDL	
A-2	2'-3'	8/10/01	BDL	BDL	
A-3	2'-3'	8/10/01	BDL	BDL	
A-4	2'-3'	8/10/01	BDL	BDL	
A-5	2'-3'	8/10/01	BDL	IN	Matrix interference at toluene retention time
A-6	2'-3'	8/9/01	86	120	
A-7	2'-3'	8/9/01	11	55	
A-8	2'-3'	8/9/01	BDL	27	
A-9	2'-3'	8/9/01	BDL	BDL	
B-1	2'-3'	8/10/01	24	BDL	
B-2	2'-3'	8/10/01	BDL	BDL	
B-10	2'-3'	8/9/01	BDL	BDL	
B-11	2'-3'	8/9/01	BDL	BDL	
B-12	2'-3'	8/9/01	BDL	BDL	
B-3	2'-3'	8/10/01	BDL	BDL	
B-4	2'-3'	8/10/01	BDL	BDL	
B-5	2'-3'	8/10/01	BDL	BDL	
B-6	2'-3'	8/9/01	1100	430	
B-7	2'-3'	8/9/01	BDL	43	
B-8	2'-3'	8/9/01	BDL	BDL	
B-9	2'-3'	8/9/01	BDL	140	
C-12	2'-3'	8/9/01	BDL	BDL	
C-1	2'-3'	8/10/01	26	15	
C-2	2'-3'	8/17/01	BDL	27	

Mobile Laboratory Analysis
Soil Gas Results, Woburn Site
(ppbv)

C-5	2'-3'	8/17/01	BDL	BDL	
C-6	2'-3'	8/9/01	180	680	
C-7	2'-3'	8/10/01	22	BDL	
D-12	2'-3'	8/9/01	BDL	BDL	
D-1	2'-3'	8/17/01	250	270	
D-2	2'-3'	8/17/01	BDL	BDL	
D-5	2'-3'	8/17/01	BDL	BDL	
D-6	2'-3'	8/9/01	38	180	
D-7	2'-3'	8/10/01	60	53	
E-12	2'-3'	8/9/01	BDL	BDL	
E-1	2'-3'	8/17/01	BDL	BDL	
E-2	2'-3'	8/10/01	BDL	BDL	
E-5	2'-3'	8/17/01	BDL	BDL	
E-6	2'-3'	8/9/01	2100	600	
E-7	2'-3'	8/10/01	240	170	
E-8	2'-3'	8/10/01	BDL	BDL	
F-12	2'-3'	8/9/01	BDL	48	
F-1	2'-3'	8/17/01	BDL	BDL	
F-2	2'-3'	8/17/01	BDL	BDL	
F-5	2'-3'	8/17/01	BDL	BDL	
F-6	2'-3'	8/9/01	910	400	
F-7	2'-3'	8/10/01	230	40	
F-8	2'-3'	8/10/01	280	12	
G-12	2'-3'	8/9/01	BDL	54	
G-1	2'-3'	8/17/01	BDL	BDL	
G-2	2'-3'	8/17/01	BDL	BDL	
G-5	2'-3'	8/17/01	BDL	BDL	
G-6	2'-3'	8/9/01	1600	370	
G-7	2'-3'	8/10/01	5400	24	
G-8	2'-3'	8/10/01	72	BDL	
H-1	2'-2.5'	8/17/01	BDL	BDL	
H-12	2'-3'	8/9/01	BDL	66	
H-2	2'-3'	8/9/01	BDL	BDL	
H-3	2'-3'	8/9/01	BDL	BDL	
H-4	2'-3'	8/9/01	BDL	BDL	
H-5	2'-3'	8/9/01	BDL	BDL	
H-6	2'-3'	8/9/01	320	41	
H-7	2'-3'	8/10/01	1600	20	
H-8	2'-3'	8/10/01	950	10	
I-1	2'-3'	8/9/01	BDL	BDL	
I-10	2'-3'	8/9/01	230	45	

Mobile Laboratory Analysis
Soil Gas Results, Woburn Site
(ppbv)

I-11	2'-3'	8/9/01	BDL	64	
I-12	2'-3'	8/9/01	BDL	BDL	
I-2	2'-3'	8/9/01	BDL	BDL	
I-3	2'-3'	8/9/01	15	15	
I-4	2'-3'	8/9/01	BDL	BDL	
I-5	2'-3'	8/9/01	16	31	
I-6	2'-3'	8/9/01	17	24	
I-7	2'-3'	8/9/01	86	390	
I-8	2'-3'	8/9/01	BDL	16	
I-9	2'-3'	8/9/01	45	36	
J-10	2'-3'	8/17/01	BDL	BDL	
J-11	2'-3'	8/17/01	76	BDL	
J-9	2'-3'	8/17/01	BDL	BDL	
TB		8/9/01	BDL	BDL	
Note:					
BDL= Below detection limit					
*=spiked with know concentration of standard, found Toluene to be BDL					
TB=trip blank					



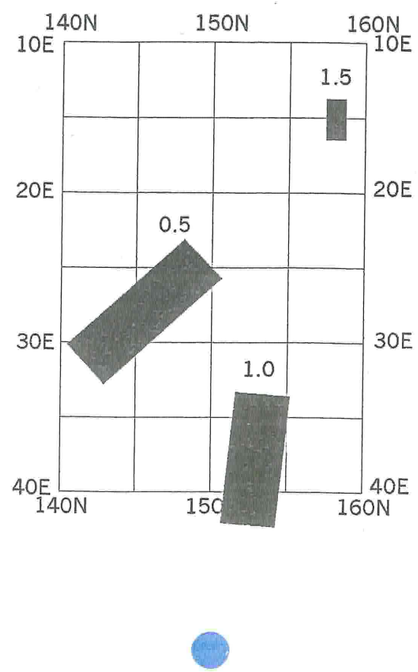
0 30 60
feet

1 inch = 30 feet.
Contour interval: 20 mV.
Locations are approximate.

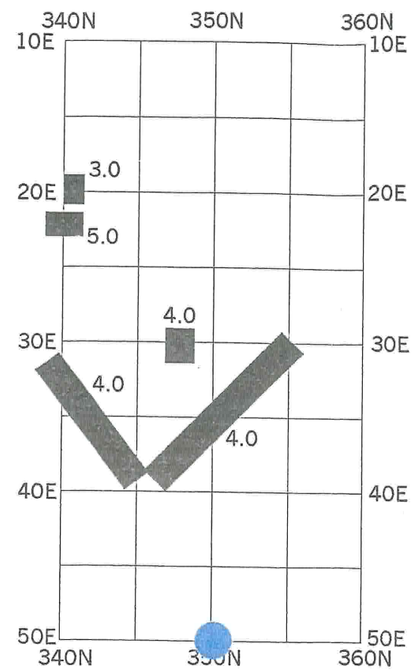
Figure 1
Contour Map of EM Response
West Hide Pile - Industri-Plex Site
Woburn, Massachusetts

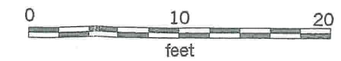
Geophysics GPR International, Inc.
File B01347 August 2001

West Hide Pile
Area C



West Hide Pile
Area D





1 inch = 10 feet..

Surface objects shown in gray.

Subsurface objects shown in black.

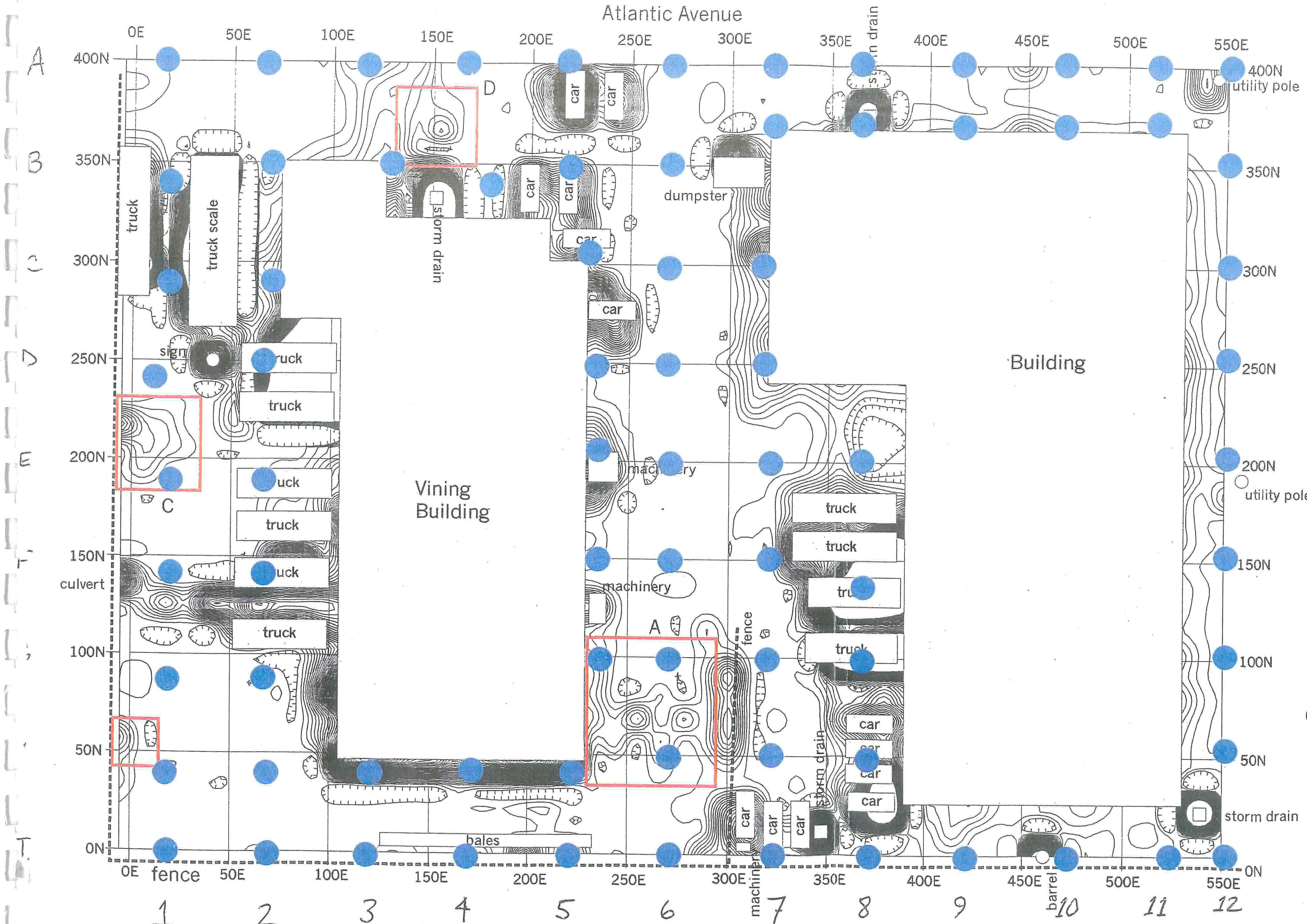
Estimated depths given in feet below ground surface..

Locations are approximate.

Figure 1A
Locations of Subsurface Objects
Detected By GPR

Areas C and D
West Hide Pile
Industri-Plex Site
Woburn, Massachusetts

Geophysics GPR International, Inc.
File B01347 August 2001

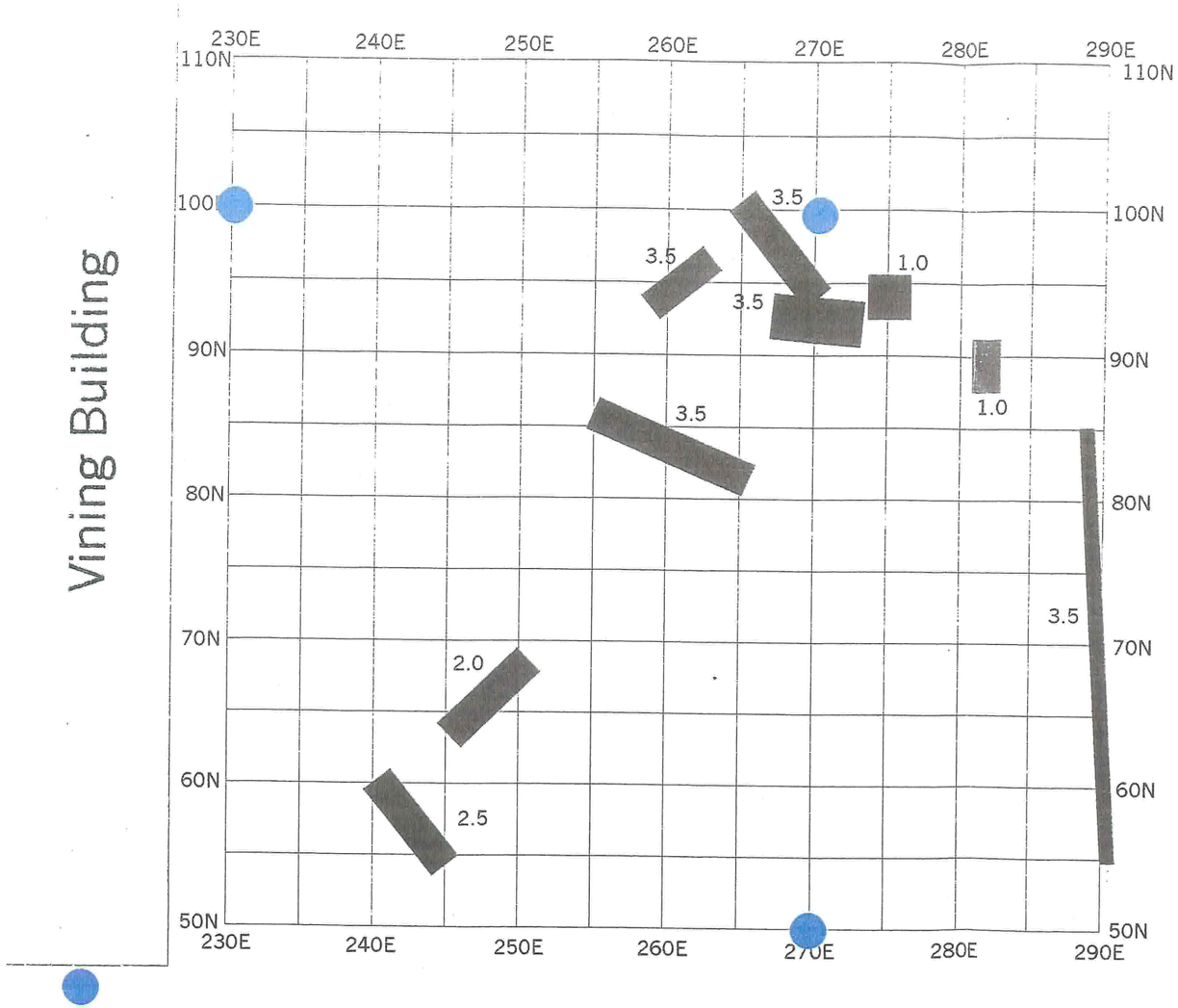


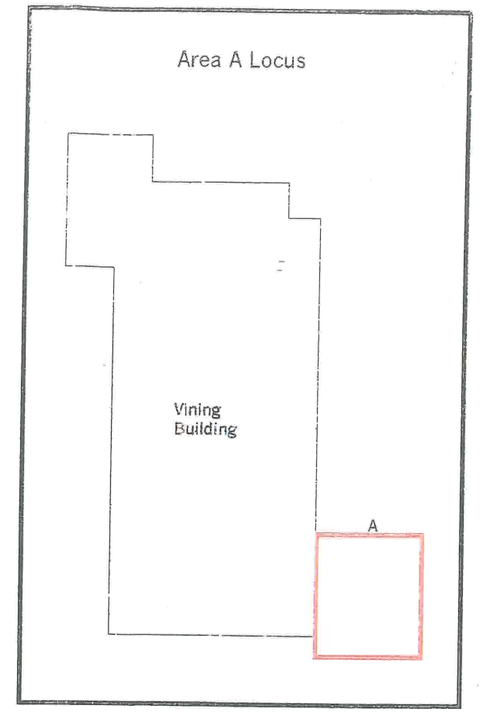
0 50 100
feet

1 inch = 50 feet.
Contour Interval: 20 mV.
Surface objects shown in gray.
Locations are approximate.

Figure 2
Contour Map of EM Response
Former C. Bain Property
Industri-Plex Site
Woburn, Massachusetts

Geophysics GPR International, Inc.
File B01347 August 2001





0 10 20
feet

1 inch = 10 feet.

Surface objects shown in gray.

Subsurface objects shown in black.

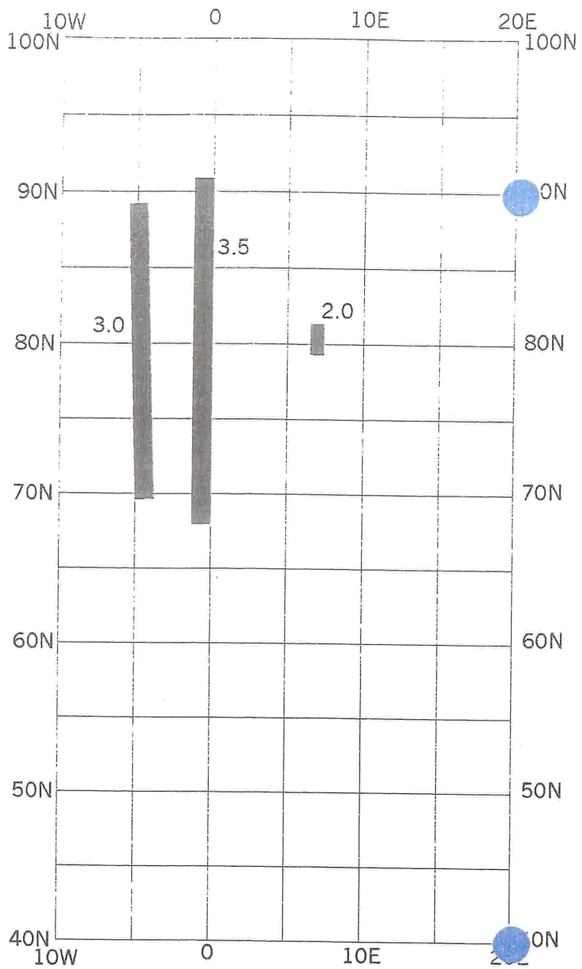
Estimated depths given in feet below ground surface..

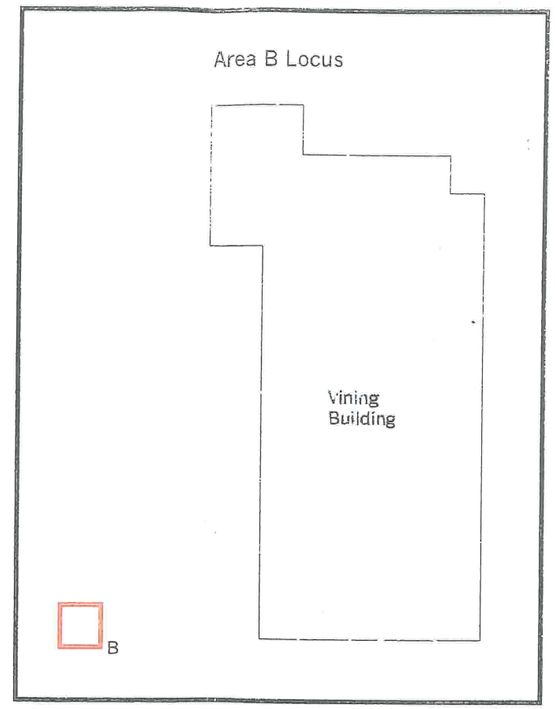
Locations are approximate.

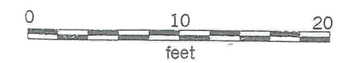
Figure 2A
Locations of Subsurface Objects Detected By GPR

Area A
Former C. Bain Property
Industri-Plex Site
Woburn, Massachusetts

Geophysics GPR International, Inc.
File B01347 August 2001







1 inch = 10 feet.

Surface objects shown in gray.

Subsurface objects shown in black.

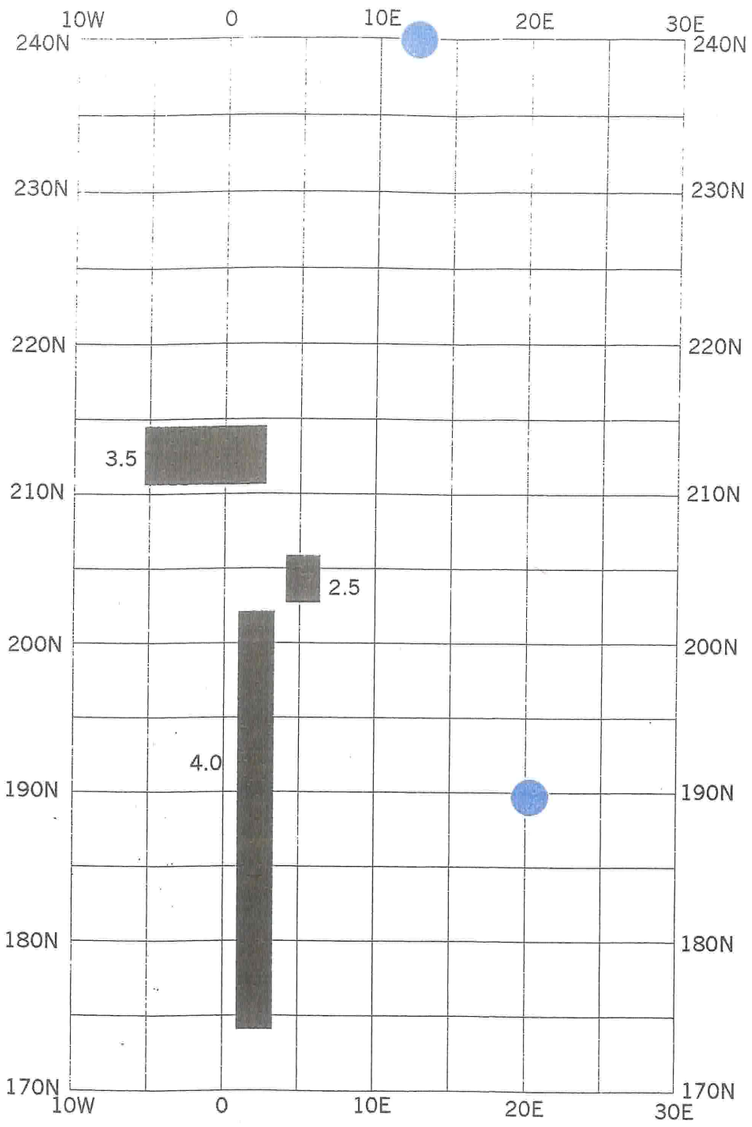
Estimated depths given in feet below ground surface..

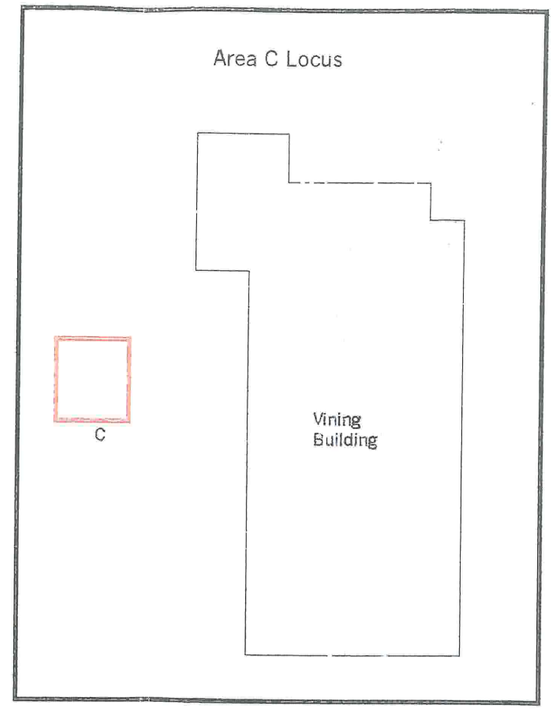
Locations are approximate.

Figure 2B
Locations of Subsurface Objects
Detected By GPR

Area B
Former C. Bain Property
Industri-Plex Site
Woburn, Massachusetts

Geophysics GPR International, Inc.
File B01347 August 2001





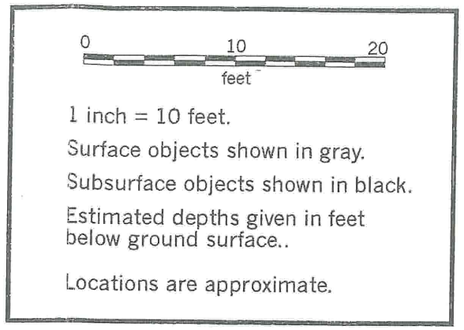
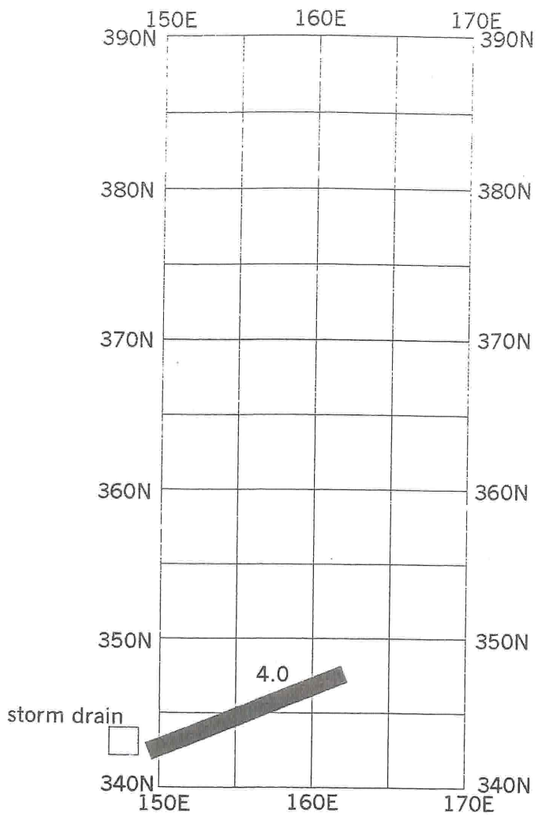


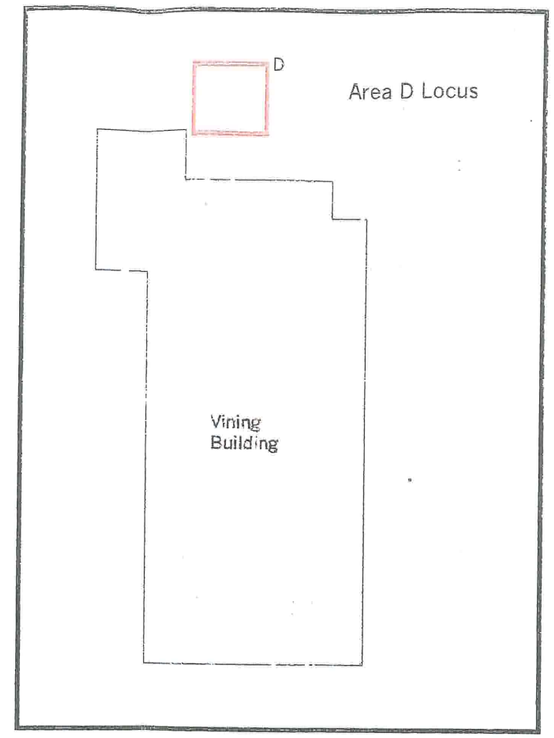
Figure 2C
Locations of Subsurface Objects
Detected By GPR

Area C
Former C. Bain Property
Industri-Plex Site
Woburn, Massachusetts

Geophysics GPR International, Inc.
File B01347 August 2001

CLICK TO RETURN TO APPENDIX 2





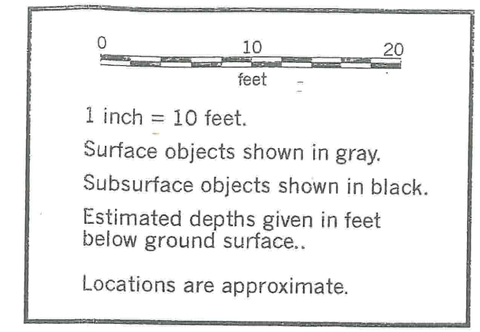


Figure 2D
Locations of Subsurface Objects
Detected By GPR

Area D
Former C. Bain Property
Industri-Plex Site
Woburn, Massachusetts

Geophysics GPR International, Inc.
File B01347 August 2001