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GROUND PENETRATING RADAR SURVEY

General Electric Company
Pittsfield, Massachusetts

January 1995



BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS



GROUND PENETRATING RADAR SURVEY

COPIES OF
MAPS
PAPER CLIPPED
TO
MAP HOLDER

JESSP

General Electric Company
Pittsfield, Massachusetts

January 1995

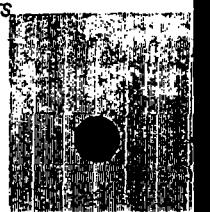
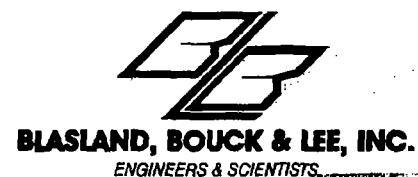


BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

GROUND PENETRATING RADAR SURVEY

**General Electric Company
Pittsfield, Massachusetts**

January 1995





BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

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(315) 446-9120 FAX: (315) 449-0017

January 4, 1995

Mr. Jeffrey G. Ruebesam, P.E.
Manager-Compliance, Operation and Laboratory
Environmental and Facility Programs
General Electric Company
100 Woodlawn Avenue
Building 11-250
Pittsfield, MA 01201

Re: General Electric Company
Pittsfield, Massachusetts
Ground Penetrating Radar Survey

File: 0201 20119 #2

Transmitted Via: FedEx
Pages Sent: 5 (w/attachment)

Dear Mr. Ruebesam:

This letter provides the results of the Ground Penetrating Radar (GPR) surveys completed at the Pittsfield, Massachusetts facility on November 15 and 16, 1994. The GPR surveys were completed at the request of General Electric (GE) to assist in the evaluation of the presence or absence of underground tanks or other "targets" at six locations at the facility. A discussion of the survey procedures and a summary of our findings are provided below.

Introduction

Blasland, Bouck and Lee, Inc. (BB&L) performed six GPR surveys at the locations identified by Mr. Tom Bednarz of GE. The six areas surveyed and the underground "targets" evaluated included the following:

1. Plastics Technology Center - two possible underground storage tanks (USTs) at the former State Police barracks;
2. Southwest of Building OP-3 - possible buried drums;
3. Building 114 Area - four possible USTs;
4. Building 51 Area - one possible UST;
5. Building 119 Area - one possible UST; and

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6. Building 59 Area - one possible UST and a 42-inch concrete drain pipe.

At each of the above areas, GPR profile lines were performed at the locations specified by GE to determine if GPR reflections characteristic of the target materials were present. The equipment used for the GPR surveys included:

1. A Geophysical Survey Systems, Inc. (GSSI) SIR-3;
2. A 300 megahertz (MHz) transducer; and
3. A model PR-8300 graphic recorder.

At each survey area, a determination of the target depth was estimated and a calculation of the equipment's range and filter settings were completed using a two-way travel time of six nanoseconds (ns) for the soils at the sites. Field calculations for the GPR surveys are included with the survey field notes provided in Attachment 1. Survey results for the six areas are summarized in the following section.

Summary of GPR Results

1. Plastics Technology Center

The GPR survey at the Plastics Technology center was performed to evaluate the presence or absence of two USTs that were alleged to be located at the former State Police barracks. The survey area and the location of the GPR profile lines are shown on the Survey Area Location Map, Figure 1. A total of 11 east-west oriented GPR lines (designated A through K) and six north-south oriented GPR lines (designated 3, 4, 5, 6, 7, and 8) were completed. The 11 east-west and five north-south oriented GPR lines were spaced at 10-foot intervals to provide adequate coverage over the suspected UST area.

The reflections observed on the graphic records for the 11 east-west and five north-south GPR lines were evaluated and were not determined to be associated with USTs.

The GPR profiles for the 11 east-west and five north-south GPR lines are shown on Figure 1. The GPR profiles display about 4 feet of fill materials overlying a westerly dipping soil horizon. This soil horizon extends to a depth of about 6 to 8 feet below grade and may represent the original ground surface in this area.

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2. Southwest of Building OP-3

The GPR survey completed southwest of Building OP-3 was performed to evaluate the presence or absence of target materials that could represent potential buried drums. The survey area and GPR profile locations are shown on the attached Survey Area Location Map, Figure 2. A total of 16 GPR survey lines, oriented north-south, were performed at the site. The GPR survey lines were spaced approximately 5 feet apart, as shown on the Survey Area Location Map, to increase the survey coverage over the site. The profiling depth of the GPR was increased to about 16 feet by increasing the profiling recorder's range to 120 ns.

Numerous reflections were observed on the GPR profiles from the 16 survey lines. These reflections indicate that up to 12 of the 16 survey lines have target materials that could represent buried drums. The GPR profiles for the 16 survey lines are presented on Figures 2 and 2B. An evaluation of the location of target materials having reflections characteristic of drums are presented on Figures 2A and 2C. The target material locations for each GPR profile line shown on Figures 2A and 2C also show the estimated depth to each target. This estimated depth is an approximation based on an estimated two-way travel time of six ns/foot in site soils. Targets may be slightly less shallow or deep than the depths identified on the attached figures. In general, target materials range in depth from about 2 to 8' feet below grade. In the area of GPR profile lines 1 and 2, there appears to be about 8 feet of fill materials overlying the original ground surface. No target materials were observed on GPR profile lines 14, 15, and 16, near Merrill Road, or along GPR line 5.

3. Building 114 Area

A GPR survey was performed on the east side of Building 114 to evaluate the presence or absence of four USTs. The survey area along with the GPR survey line locations and profiles are shown on attached the Survey Area Location Map, Figure 3. GPR survey lines included three profiles (designated lines 1, 2, and 3) and confirmatory reruns over suspected location of the USTs. Along each of the GPR profiles potential buried pipe locations were identified and labeled. An evaluation of the location of the buried pipes is presented on Figure 3A. Some of these pipe reflections were observed to correspond with the approximate known locations of utility pipes in this area. Along GPR line 3, at approximately 85 feet from the starting location, a unknown reflection was observed having the characteristics of a potential UST; however, further review of underground utility plans by GE personnel identified this location as an underground pipe structure. No other subsurface features characteristic of USTs were observed on these GPR profiles.

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4. Building 51 Area

A GPR survey was completed on the east side of Building 51 to evaluate the presence of one UST (120-gallon fuel oil) in this area. The GPR survey line locations and GPR profiles are shown on the attached Survey Area Location Map, Figure 4. Four GPR survey profiles (designated lines 1, 2, 3, and 4) were performed over the suspected UST area. Three GPR profiles were oriented perpendicular to the long axis of the UST, and one profile was oriented parallel to the long axis of the UST. No reflections characteristic of a UST were observed on the four GPR profiles. Buried pipe locations identified on the GPR profiles are presented on Figure 4A. An area that appeared to be excavated and backfilled was observed on all four GPR profiles. This area is identified as fill material on Figure 4A, and corresponds with the location of the suspected UST, indicating that the UST has been removed.

5. Building 119 Area

A GPR survey was performed on the eastern side of Building 119 to evaluate the presence of one UST (10,000-gallon fuel oil) in this area. The GPR survey area and GPR profiles are shown on the attached Survey Area Location Map, Figure 5. Four GPR profiles (designated lines 1, 2, 3, and 4) were completed over the suspected UST area at the locations identified by GE personnel. Three of the GPR profiles were completed parallel to the long axis of the UST, and one profile was completed perpendicular to the long axis of the UST. The four GPR profiles were reviewed to determine if reflections characteristic of a buried UST were present. No reflections were observed on the GPR profiles that were characteristic of a UST. The GPR profiles did identify an area of disturbed soils, which is evaluated as an excavation area located along GPR profiles 3 and 4. This excavation area corresponds with the UST location, indicating that the suspected UST has been removed. This excavation area is identified on the evaluation of the GPR profiles presented on Figure 5A.

6. Building 59 Area

At GE's request, GPR profiles were performed in the Building 59 Area to assist in the determination of the following:

- The location of a 42-inch concrete drain pipe located on the south side of Building 59; and
- The presence of a suspected UST that was identified during a GPR survey performed in August 1993.

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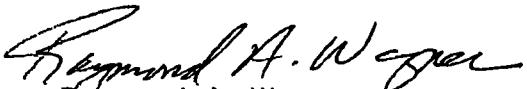
The location of the 42-inch concrete drain pipe was confirmed by two GPR profiles completed on the south side of Building 59. These two profiles were designated lines as D and E. The locations of these two GPR profiles are shown on the Survey Area Location Map, Figure 6. The reflections caused by the 42-concrete drain pipe are identified on the evaluation of the GPR profiles presented on Figure 6A. The location of the 42-inch concrete pipe was also investigated at the southeast corner of Building 59, to confirm the pipe's location under the building. Three GPR profiles, designated A, B, and C, were performed at the locations shown on Figure 6. The three GPR profiles at the southeast corner of Building 59 were evaluated for UST reflections and compared to the August 1993 GPR results for this area.

The 42-inch concrete drain pipe was detected along GPR profile B, passing beneath the corner of Building 59. No other reflections having the characteristics of a UST were observed on the GPR profiles. Based on these recent results, the reflection observed on the August 1993 GPR profiles, and evaluated as a possible UST, was caused by the 42-inch concrete pipe and not a UST.

BB&L appreciates the opportunity to provide GE with our services. If you have any questions regarding the work performed, or the results of the surveys described above, please contact either Mr. Andrew T. Silfer, P.E., or me at our Syracuse office.

Very truly yours,

BLASLAND, BOUCK & LEE, INC.



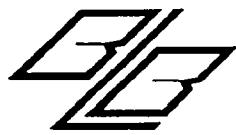
Raymond A. Wagner
Senior Project Geologist

RAW/gap

cc: Mr. Tom Bednarz, General Electric
Mr. Andrew T. Silfer, P.E., Blasland, Bouck & Lee, Inc.
Mr. Bruce Eulian, Blasland, Bouck & Lee, Inc.

BLASLAND, BOUCK & LEE, INC.

PGE00212061



Attachment 1

GPR Survey Field Notes

ATTACHMENT 1 GPR Survey Field Notes

11-15-84 RAW / JH 50° Cloudy

Equipment: SIR-3 w/ 300 MHz ANT. RANGE: Target depth 8'

$$8 \times 6 \text{ ns/ft.} = +25\%$$

① Set up on Line (A) Profile N to E.

$$48 + 25\% = 60 \text{ ns}$$

② Move to Line (B) - 10' (N) - E to W

③ " " Line (C) 10' (N) - W to E FILTERS:

④ " " Line (D) 10' (N) E to W

a. Center frequency of 144 Hz

⑤ " " Line (E) 10' (N) N to E.

60 range

⑥ " " Line (F) 10' N E to W.

$$3 \text{ Pulsewidth} = 20 \text{ cycles/sec.}$$

⑦ " " Line (G) 10' N W to E

⑧ " " Line (H) 10' N E to W

High Pass = 10 cycles/sec.

⑨ " " Line (I) 10' N W to E

Low Pass = 50 cycles/sec.

⑩ " " Line (J) 10' N E to W

⑪ " " Line (K) 10' N W to E

Gains - Surface - 3.0

Move to STAKE #③ @ 70' AND PROFILE S to N

Center 1.0

⑫ " " Line 8 S to N

Deep 2.0

⑬ " Line 7 N to S

Line 3 Profile AT 60' - 50' profile

⑭ " Line 6 S to N

END

⑮ " Lines N to S

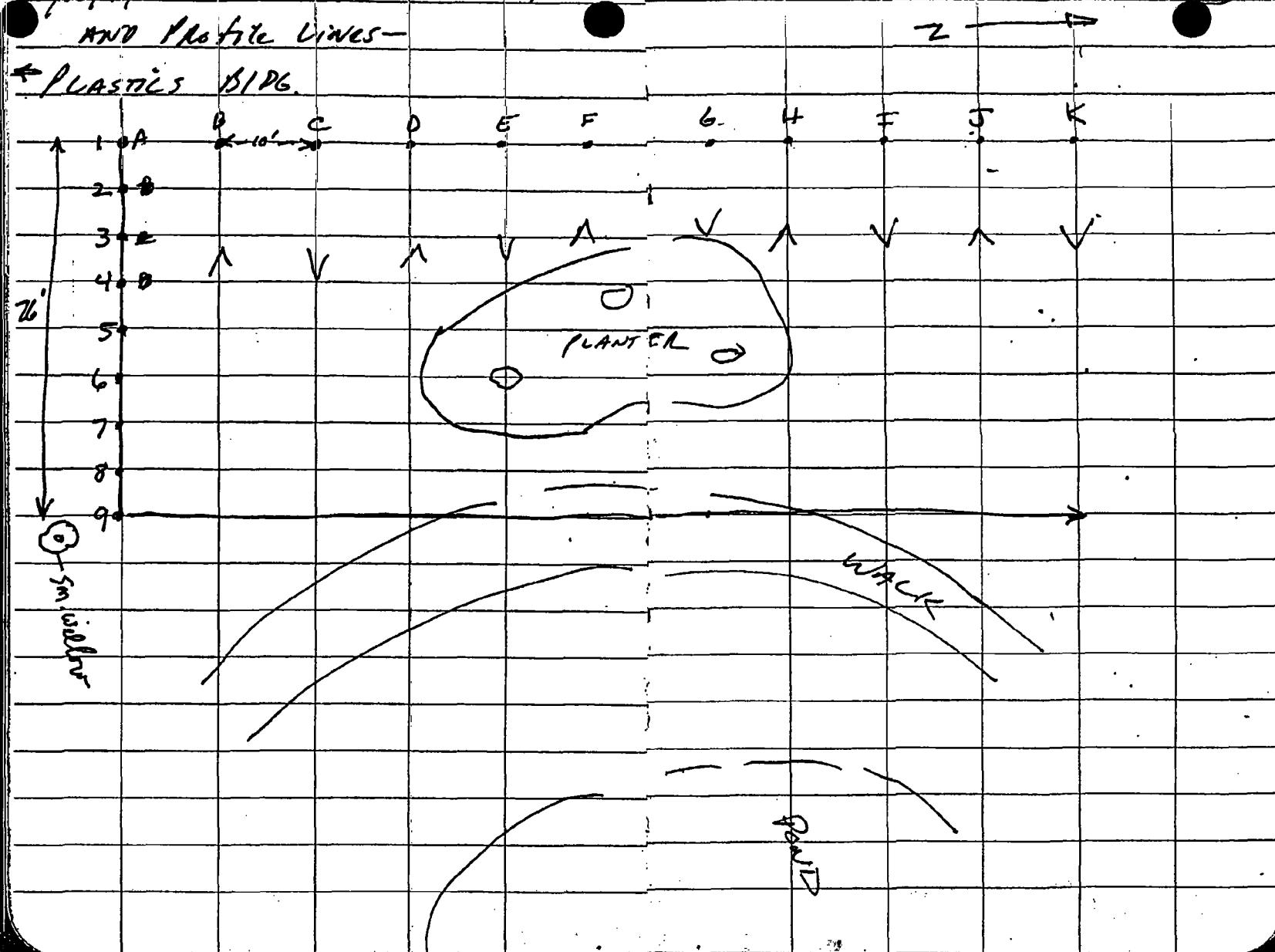
See Sketch on Next Pg.

⑯ " Line 4 S to N

11/15/94 - Sketch of UST AREA
AND PROFILE LINES -

(41)

PLASTICS B/DG.



11/15/194 - GPR SURVEY

GE-PITTSFIELD - RAW/5"

CALC. of GPR Survey Settings (65)

AREA - OP-3 - SOUTH

RANGE - Target depths - 15'

LINE 1 N to S.

* Target @ 120'

$$15 \times 6 \text{ ns/ft.} = 90 + 25\% = 112.5$$

LINE 2 S to N

* Target - 120-130

$$\text{Range} = 120 \text{ ns.}$$

LINE 2 - ReRun N to S. "

LINE 3 - S to N - Several targets - 100-140'
2-4'

FILTERS - Center frequency of depth

LINE 4 - N to S - " "

80-110
2-4'

120 ns,

$$\frac{3}{3} = 40 \text{ cycles/sec.}$$

LINE 5 - S to N -

LINE 6 - N to S - Target @ 72' - 8' deep

LINE 7 - S to N - Targets @ 70-80' 8' deep High Gains - 20

LINE 8 - N to S - Poss. like Targets @ 70-80' 6-8'

LINE 9 - S to N - Target @ 116' - 6' down Low Pass - 50

LINE 10 - N to S - Targets @ 75-90' 6-7'

LINE 11 - S to N - Targets @ 80-90' 7' Gains - Surface - 3

LINE 12 - ReRun - 30-50' Target @ 6' deep

center - 2

LINE 12 - N to S -

Deep - 4

LINE 13 - S to N - Target @ 45' - 4' deep

LINE 12 (ReRun) - N to S - Target @ 115' 4' deep

LINE 12 - VAULT ON LINE

LINE 14 - S to N -

LINE 15 - N to S -

LINE 16 - S to N - END

GE - Pittfield - 11-12-44 (64)

L110500 ap @ Bldg. 114 -

L TANKS @ Bldg. 114 -

L

L LINE 1 - Perpendicular to Bldg. 114

L

L LINE 2 Return - " " " 114

L

L LINE 3 Return - " " " 114

L

L LINE 4 Return.

L

L LINE 2 - Parallel to Bldg. 45' off Bldg.

L + Returns - 3

L LINE 3 - Parallel to Bldg. 15' to Bldg.

L + Returns - 3

L

L See SITE PLAN for line locations

L

L

L

L

L

L

L

L

GE - Pittfield - (65)

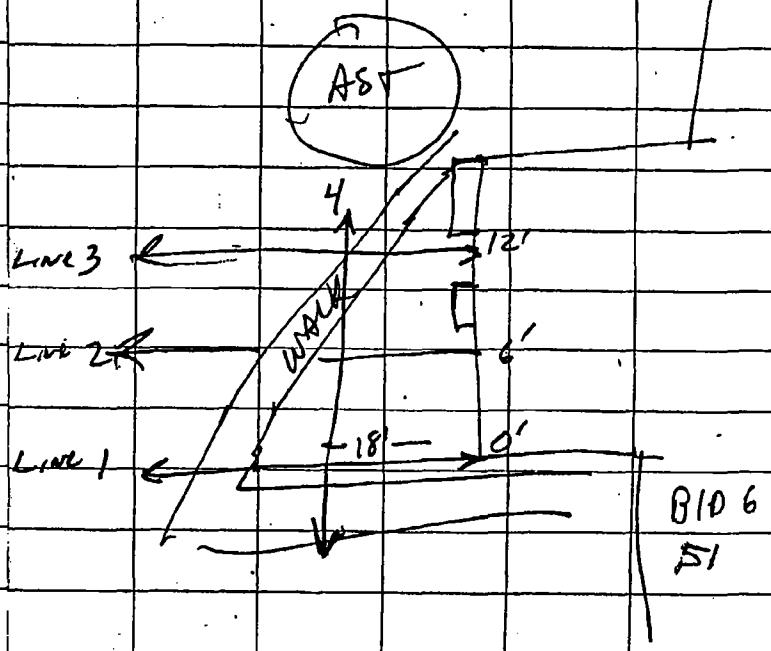
L GPR Survey -

L LINE 1 - +1 ReLav (18' long) 0'

L LINE 2 - +1 ReLav (18' long) 6'

L LINE 3 - (18' long) 12'

L LINE 4 - Perpendicular to Lines 1, 2, 3
(12' long)



11-16-94 GE-PITTSFIELD

GPR SURVEYS - RAW/STH/BE

45° - Cloudy -

SURVEY @ Bldg - 119 for UST.

LINE 1 - ADJACENT TO CONCRETE PAD

Profile TOWARD Bldg. 119.

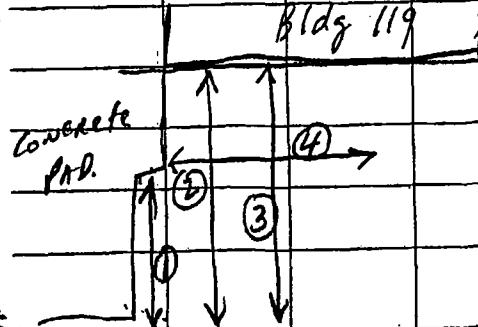
LINE 2 - 5' NORTH of Line 1

LINE 3 10' NORTH of Line 1 - " profile -

LINE 4 - L TO Lines 1, 2, 3 - 28' from

Bldg. 119 - 30° profile.

END Survey @ Bldg. 119.



11-16-94 - Bldg-59 survey (67)

- 42" concrete DRAIN PIPE -

- 2 lines along - Medill Rd. Side

of Bldg -

LINE 1 -

Profile N-S to

Between Bldg &
fence -

LINE 2 - Profile N-S

Between Bldg. & fence

Picked up 42" concrete

DRAIN PIPE - parallel

to fence.

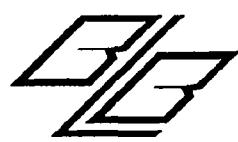
Moved behind Bldg.

and completed 3 profile

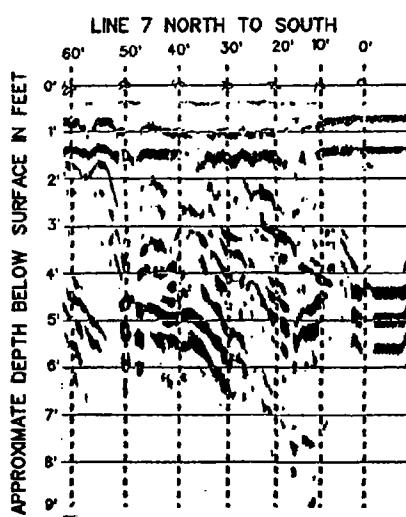
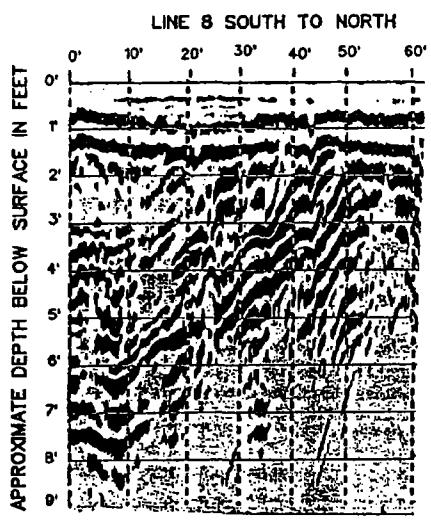
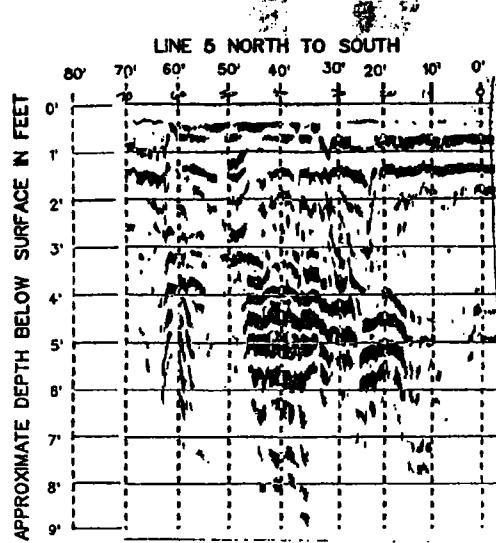
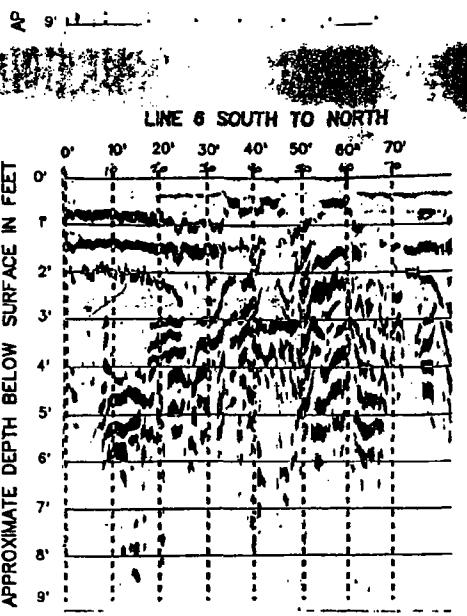
LINES - Picked up 42" pipe

ON LONG Diagonal profile -

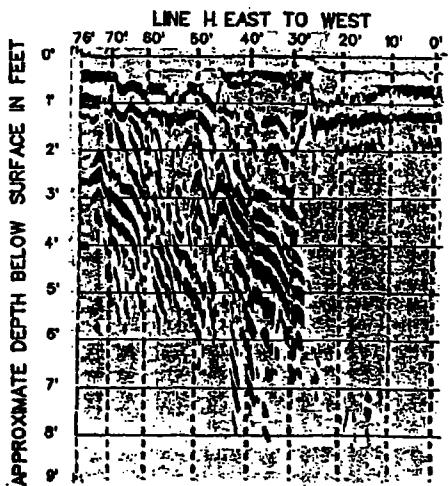
NO UST Reflections observed



Figures



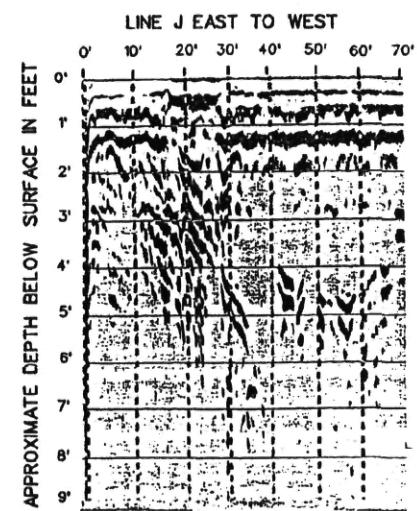
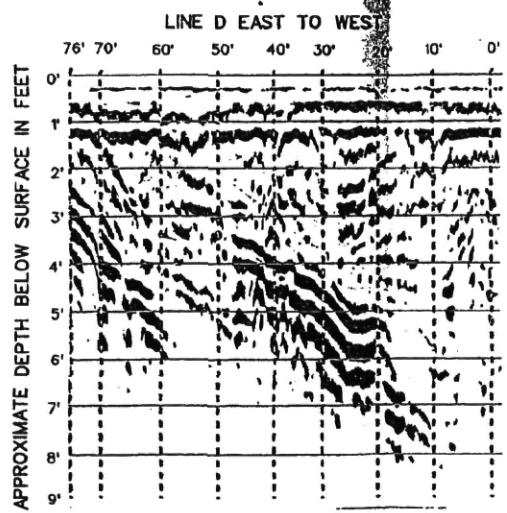
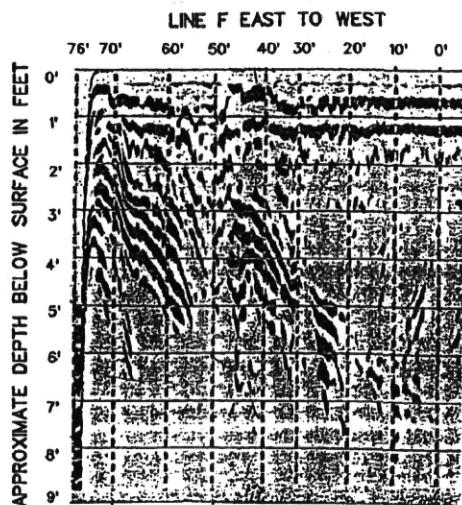
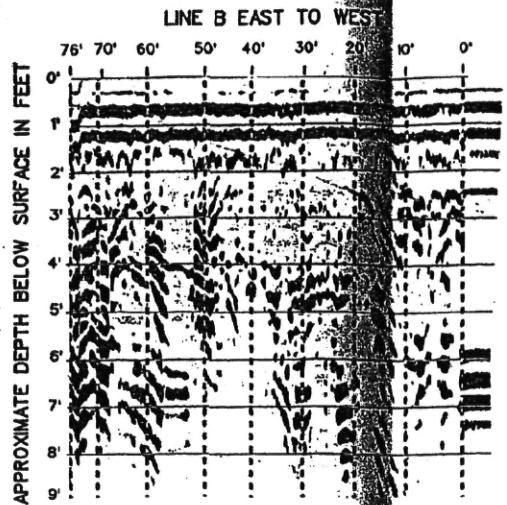
NOTE: GPR PROFILES SHOWN,
ARE 50% ACTUAL TAPE SIZE



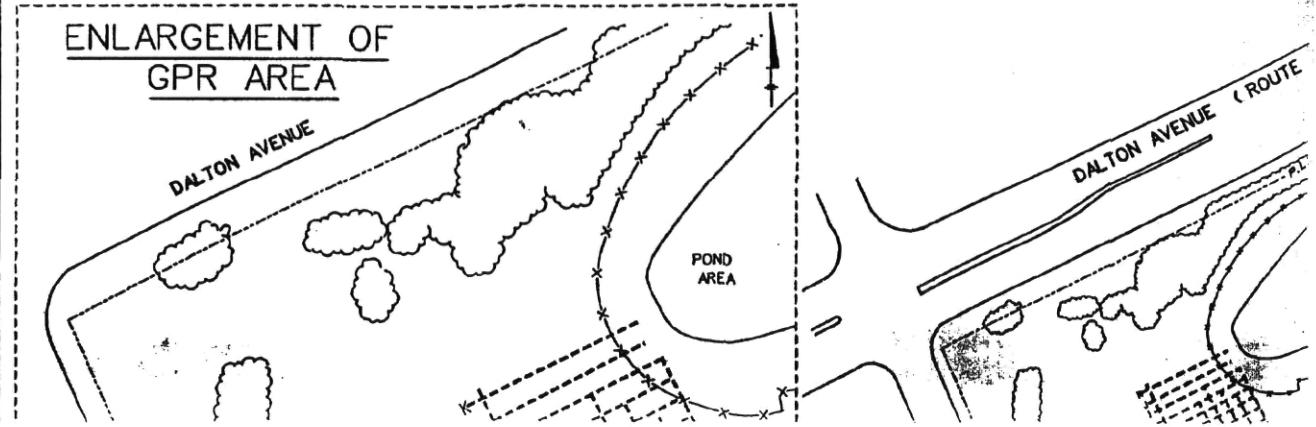
BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
PLASTICS AREA

GPR SURVEY AREA | FIGURE
LOCATION MAP & PROFILES | 1



ENLARGEMENT OF
GPR AREA



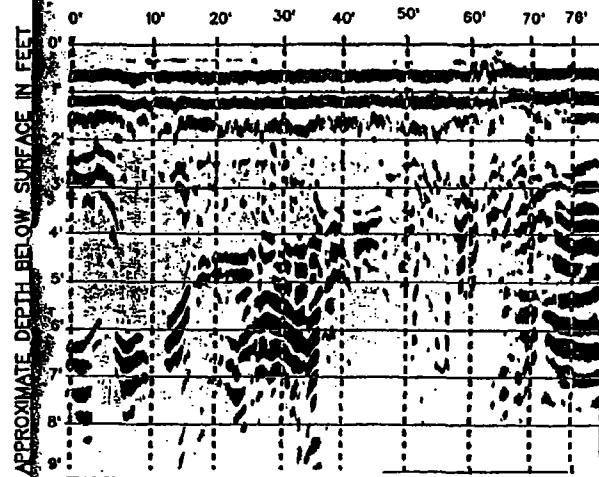
TO WEST

30' 20' 10' 0'

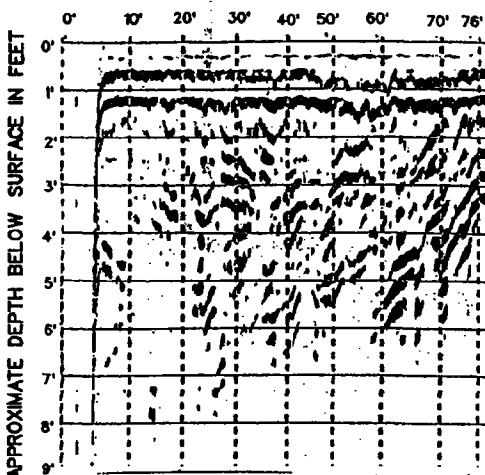
WEST

50' 60' 70'

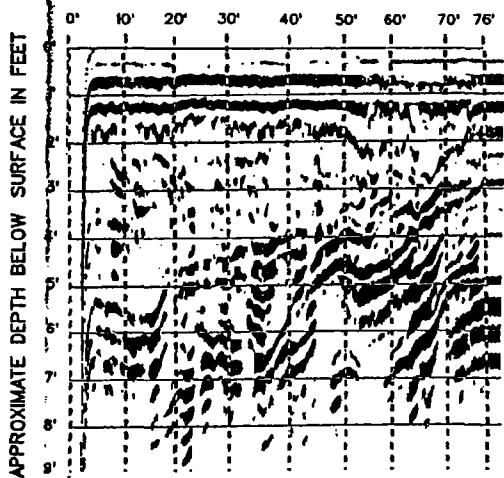
LINE A WEST TO EAST



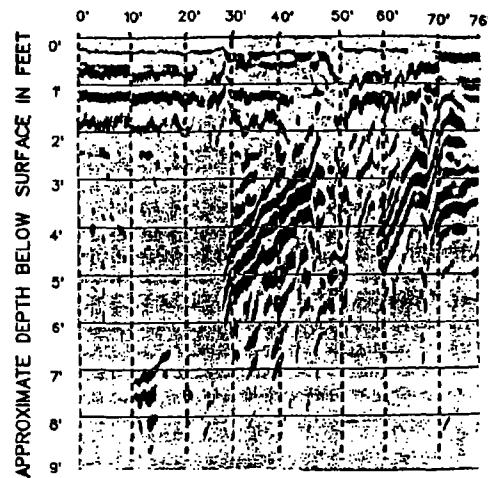
LINE E WEST TO EAST



LINE C WEST TO EAST



LINE G WEST TO EAST

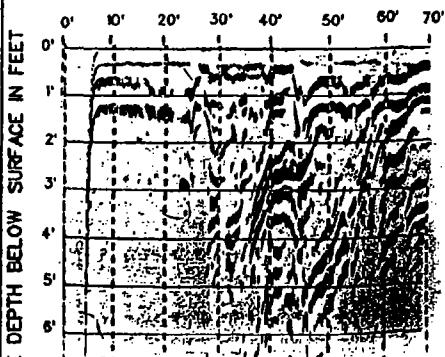


DALTON AVENUE (ROUTE 9)

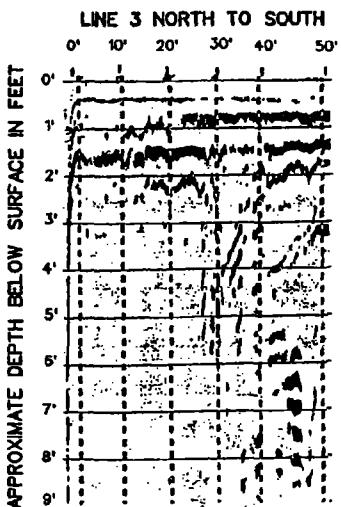
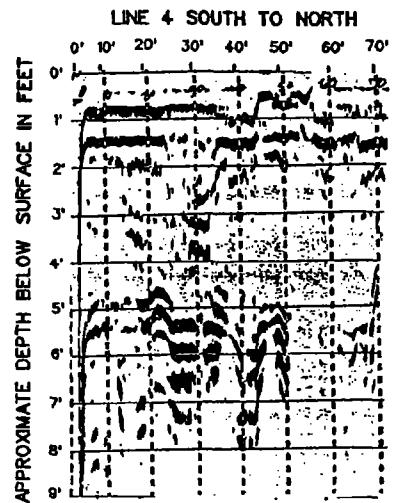
POND AREA

PARKING LOT

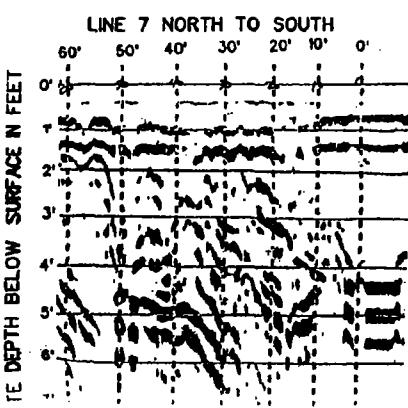
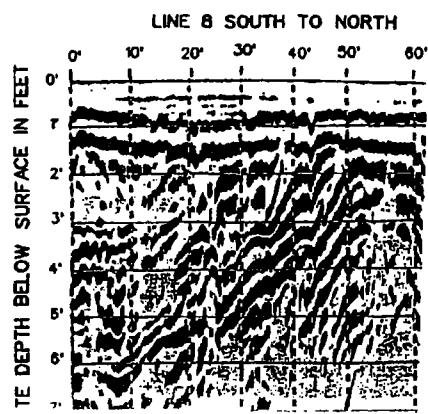
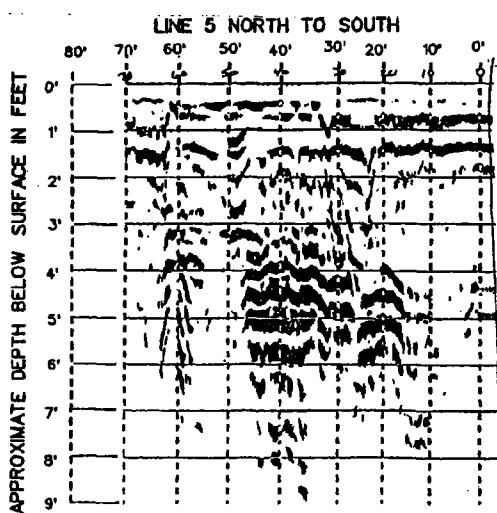
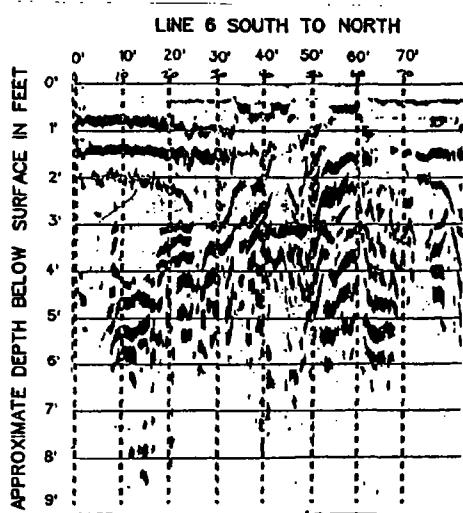
LINE I WEST TO EAST

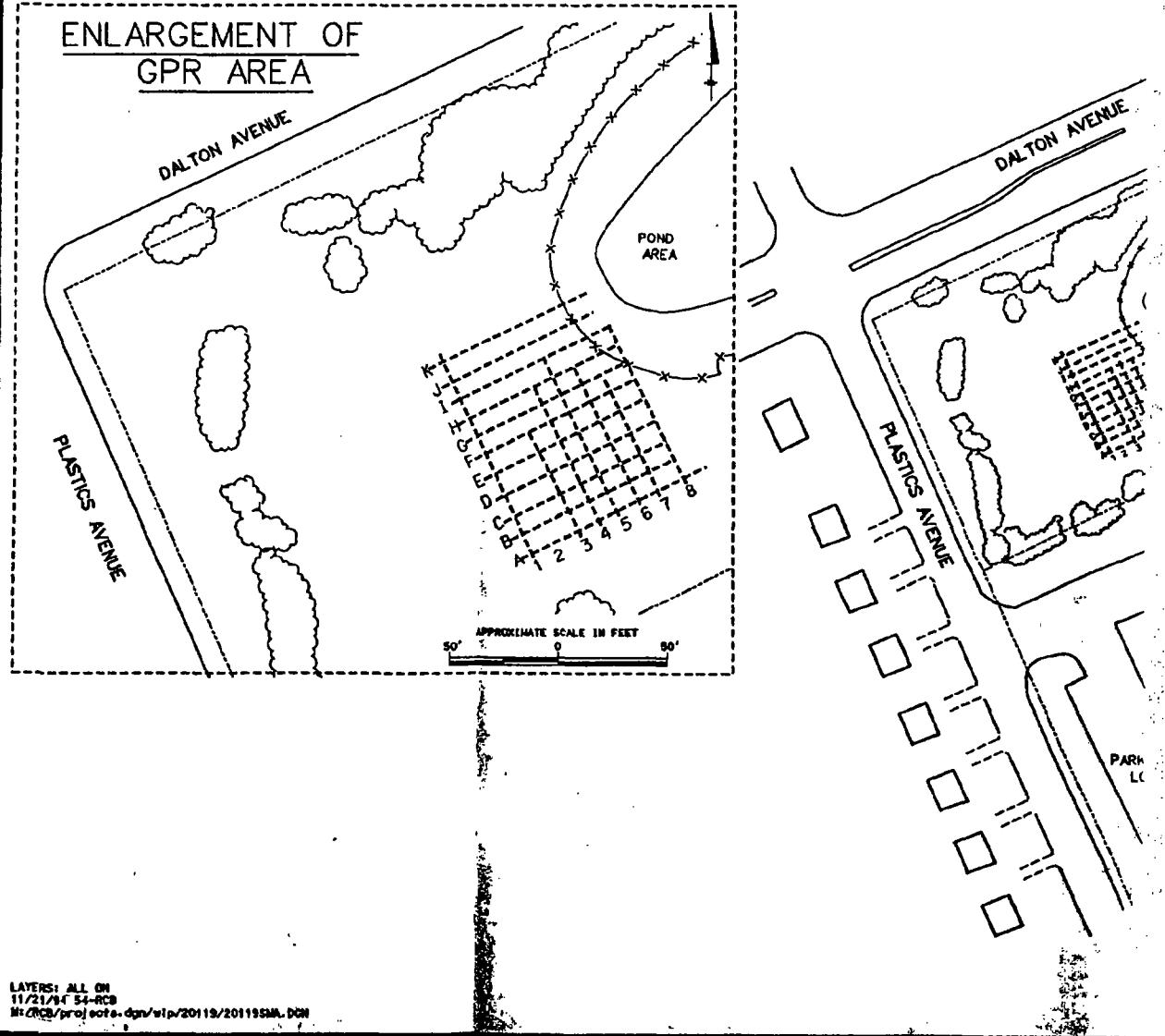
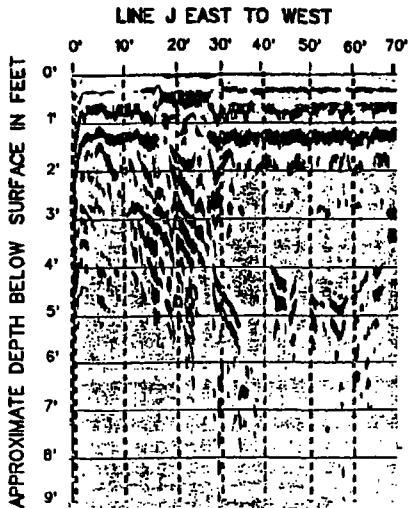
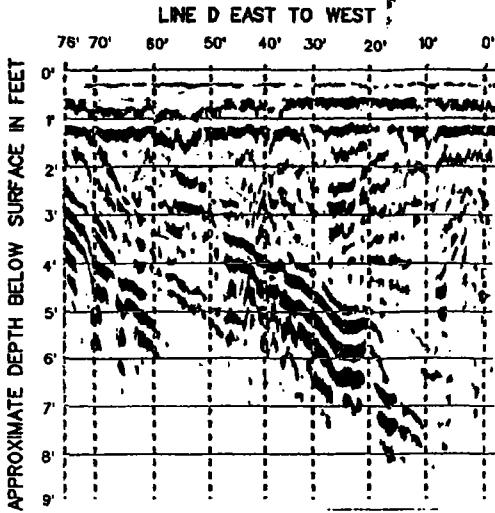


76°

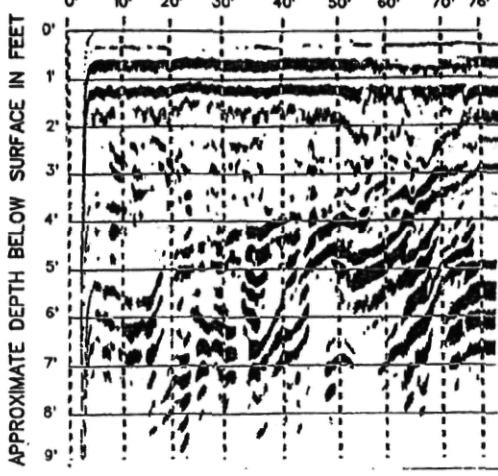


76°

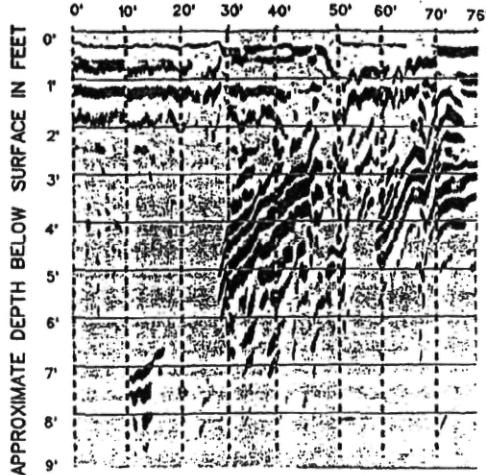




LINE C WEST TO EAST

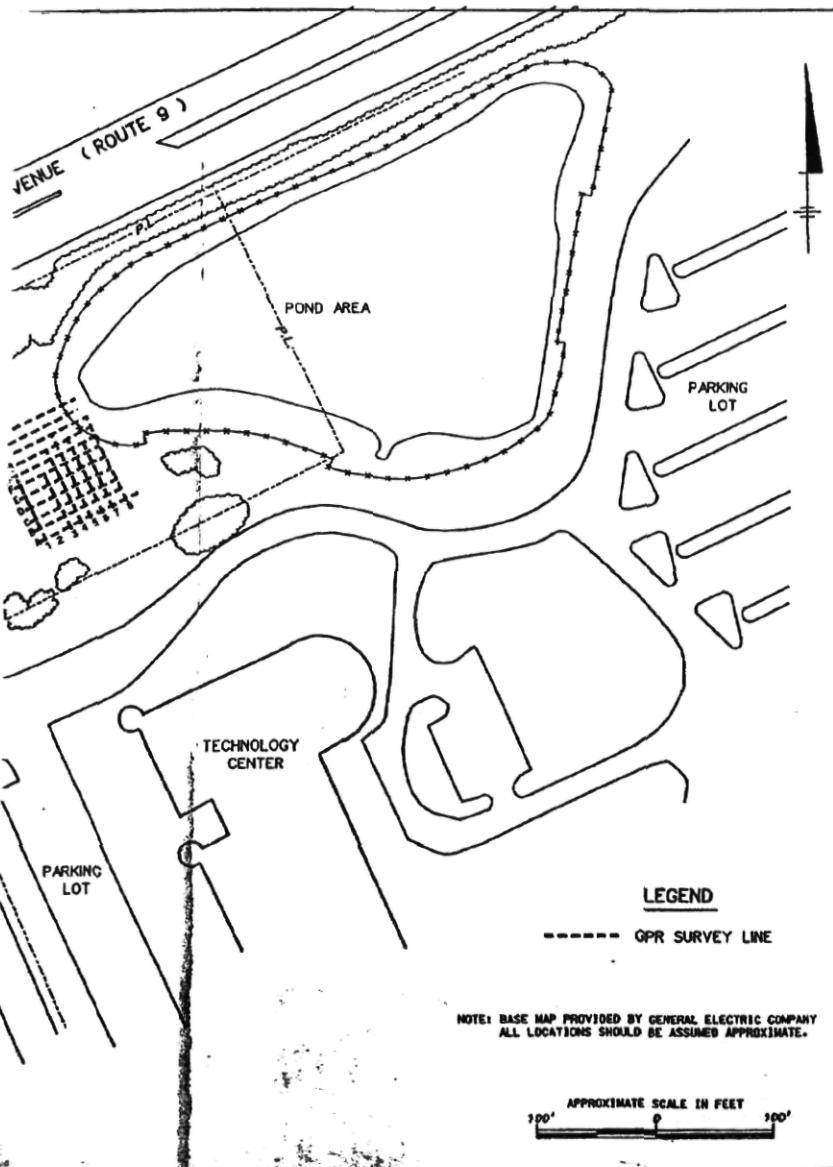


LINE G WEST TO EAST

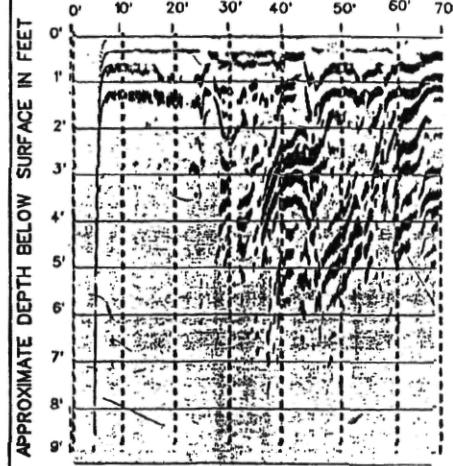


APPROXIMATE DEPTH BELOW SURFACE IN FEET

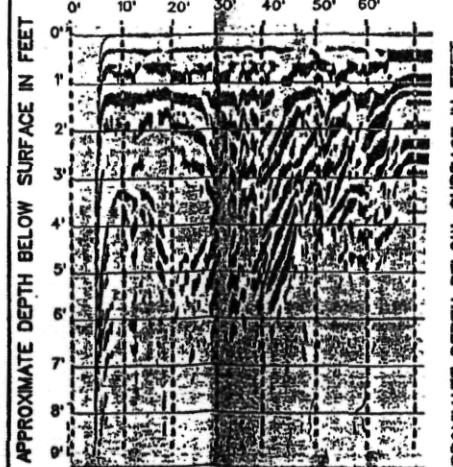
0' 1' 2' 3' 4' 5' 6' 7' 8' 9'



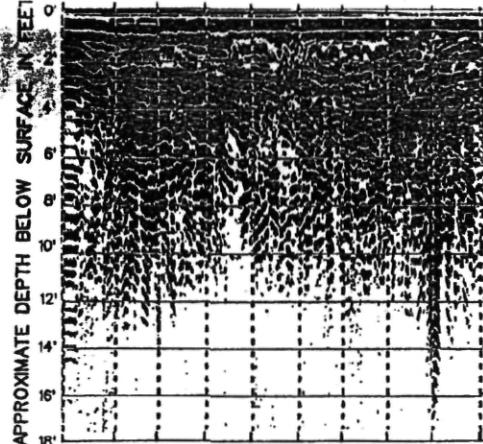
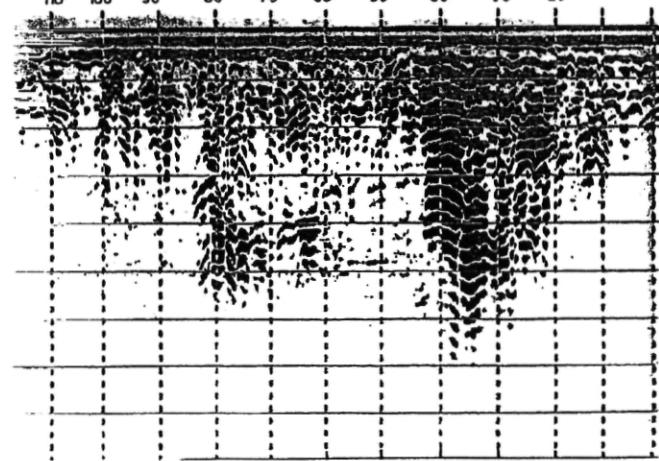
LINE I WEST TO EAST



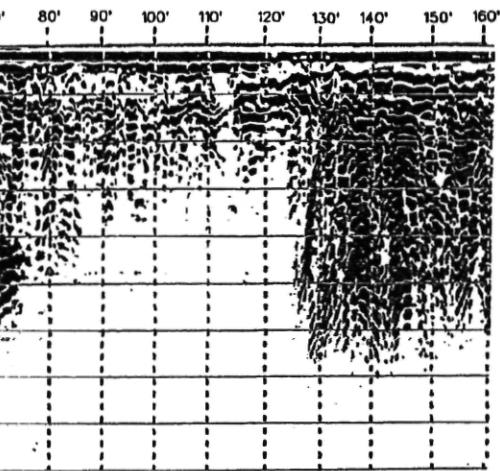
LINE K WEST TO EAST



NO
AR
LINE



1H TO SOUTH



NOTE: GPR PROFILES SHOWN,
ARE 50% OF ACTUAL TAPE SIZE

ENTIAL TARGET
PROFILE.

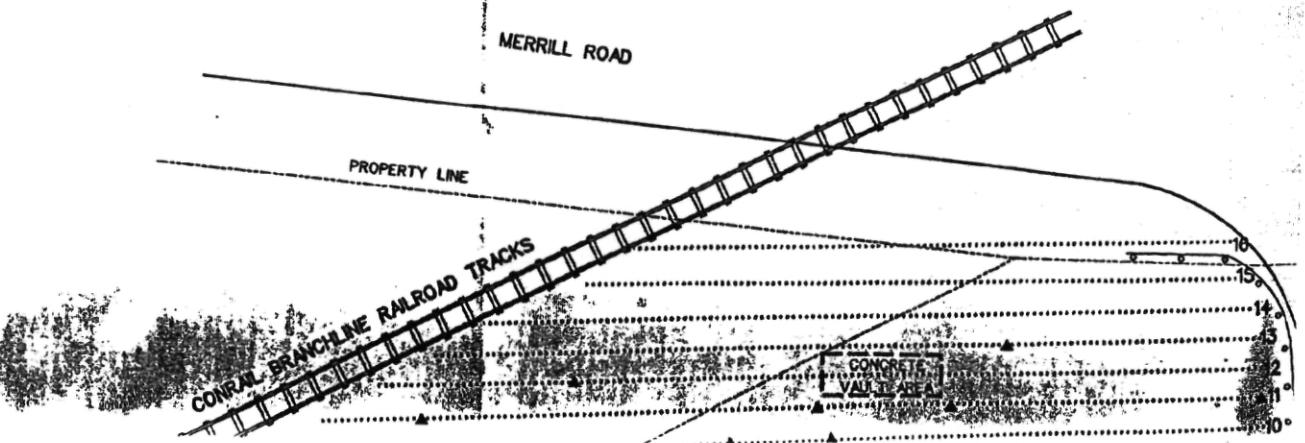
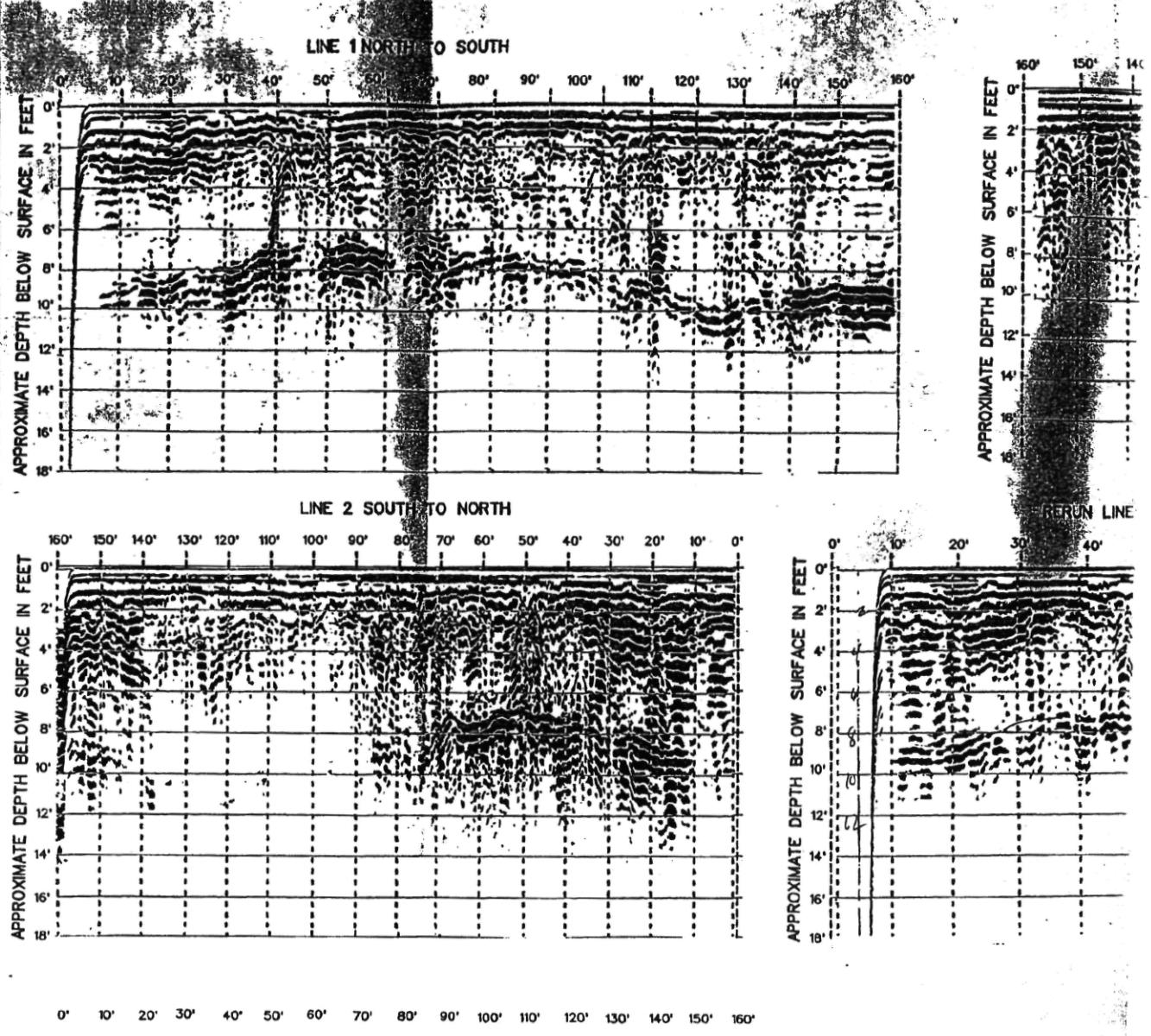
SUAL
TO DETERMINE
CTOR.

BB
BLASLAND BOUCK & LEE, INC.
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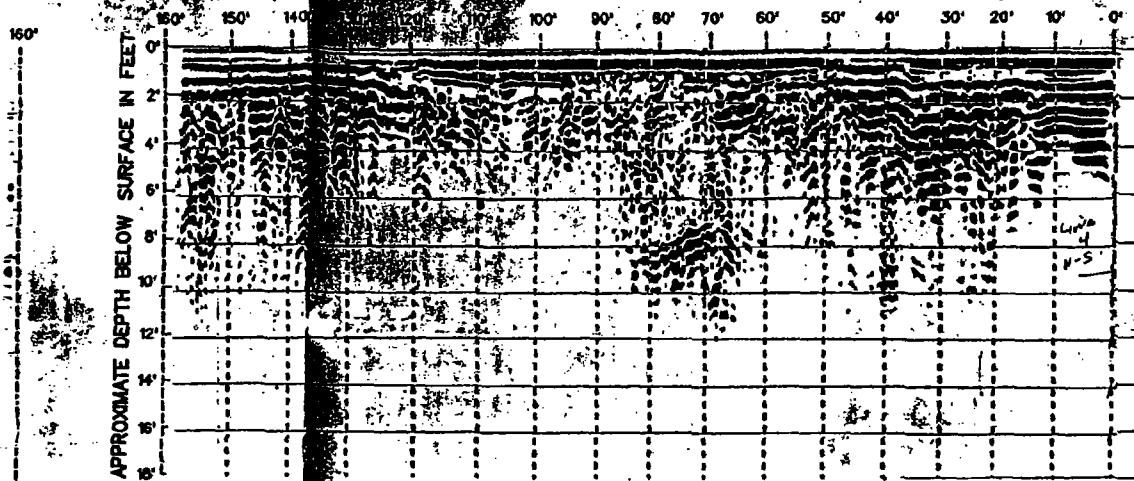
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
OP-3 AREA (SOUTH)

GPR SURVEY AREA
LOCATION MAP & PROFILES

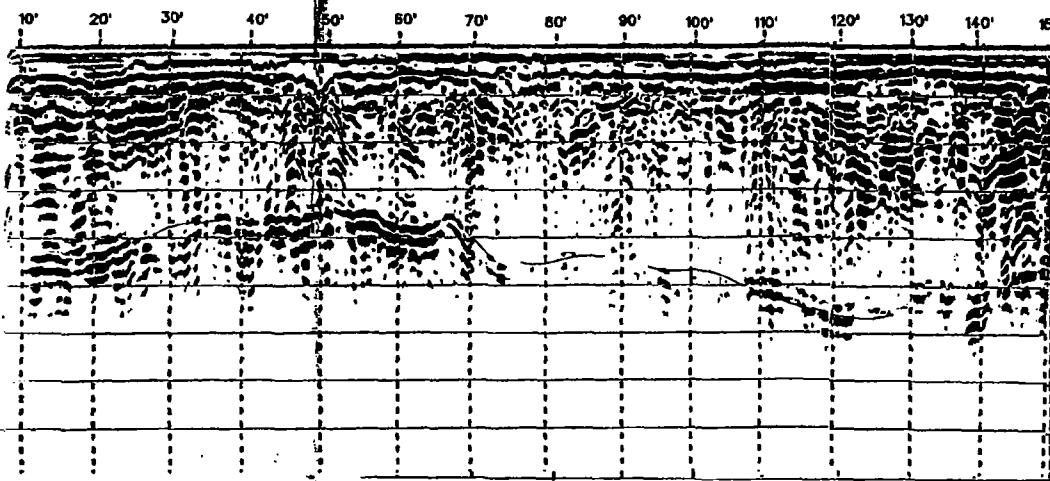
FIGURE
2



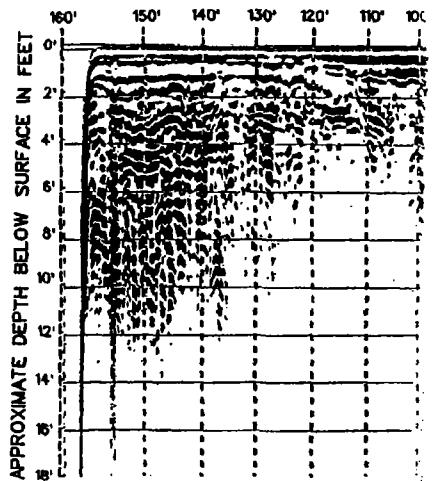
LINE 3 SOUTH TO NORTH



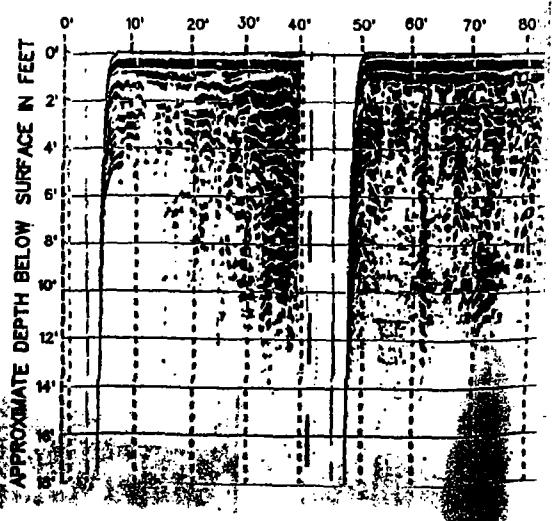
RERUN LINE 2 NORTH TO SOUTH



LINE 5 S



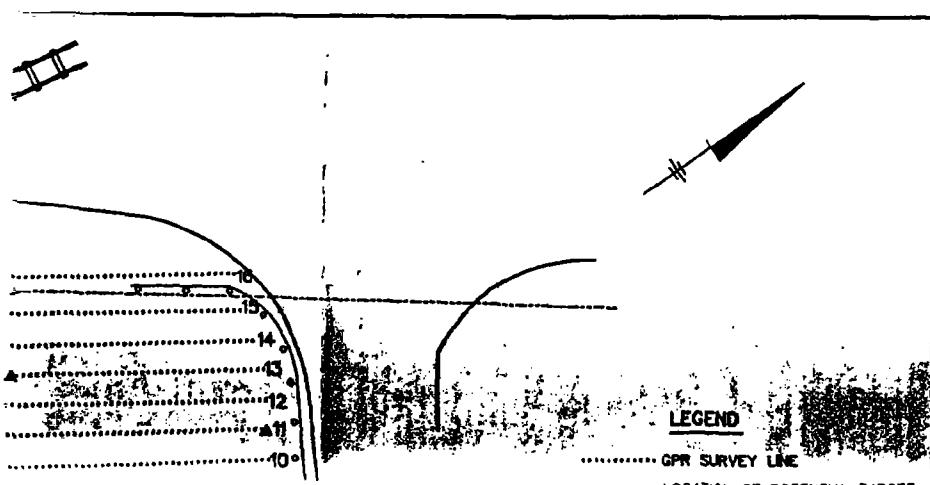
LINE 6 NORTH TO SO



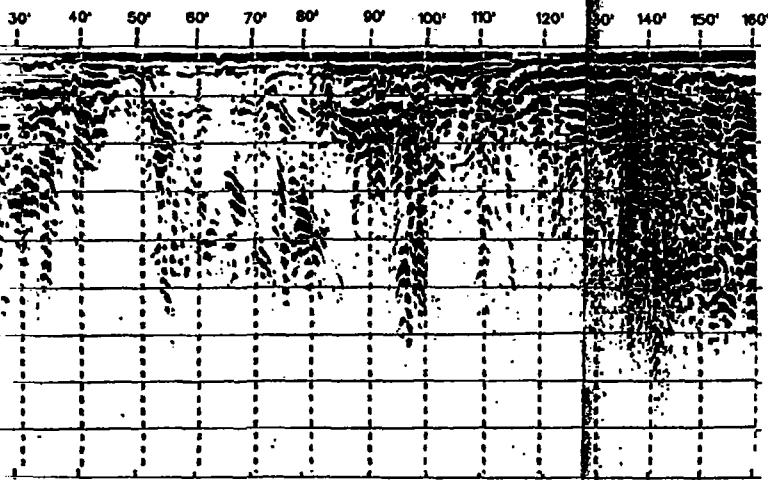
LEGEND

... GPR SURVEY LINE

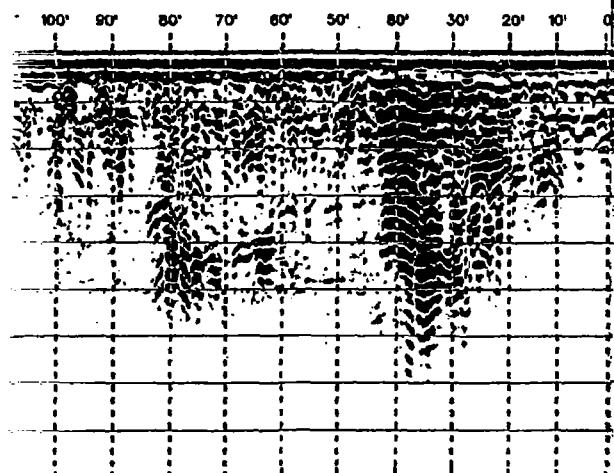
----- LOCATION OF POTHOLE TARGET



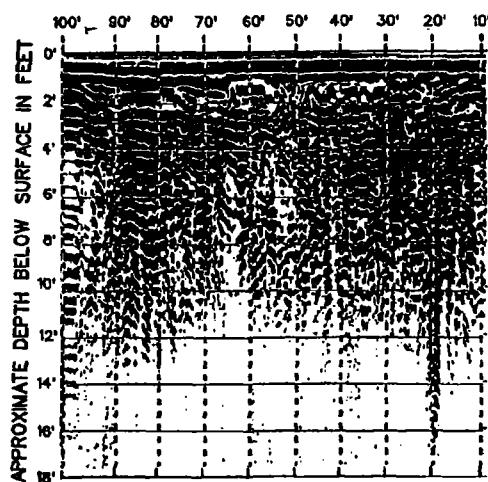
LINE 4 NORTH TO SOUTH



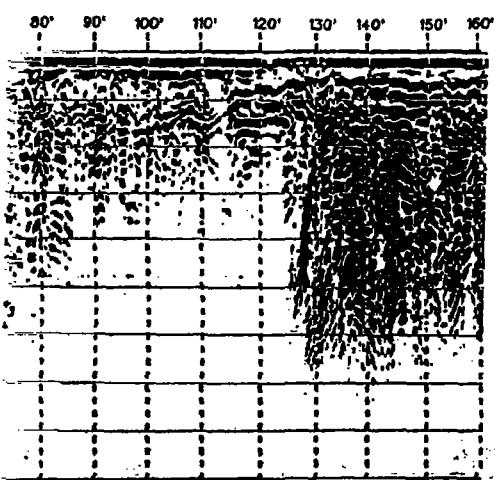
5 SOUTH TO NORTH



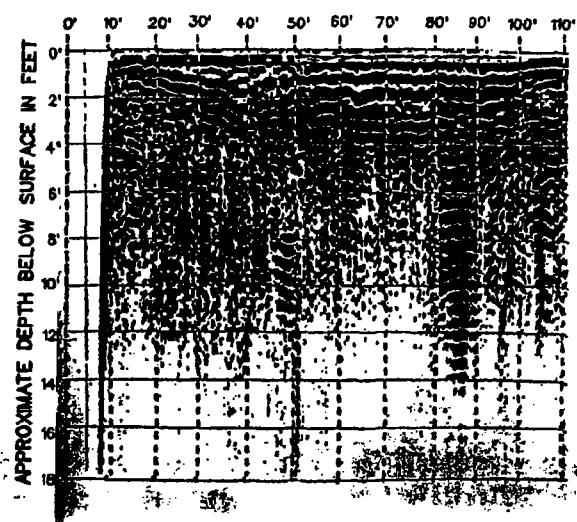
LINE 16 SOUTH TO NORTH

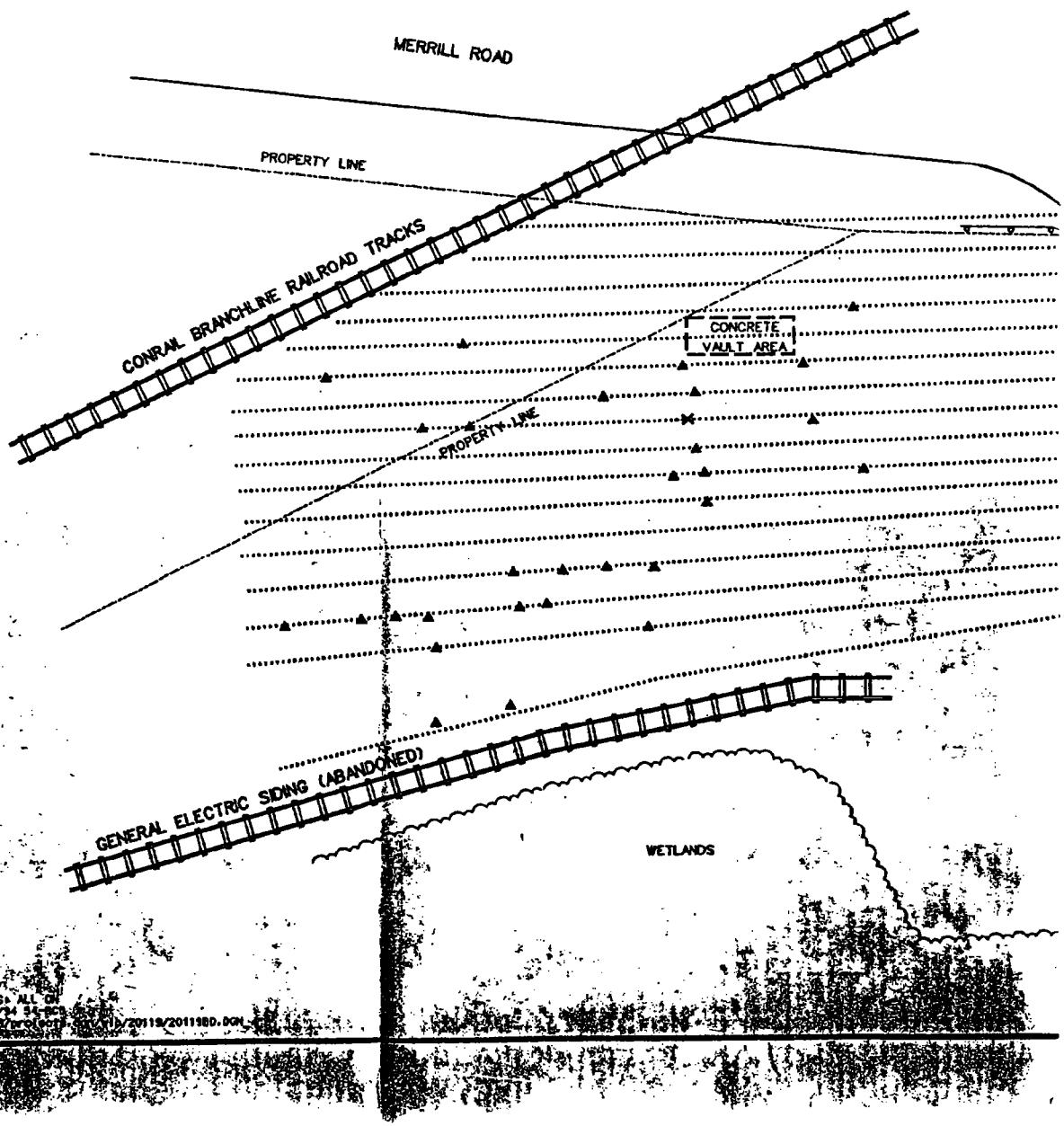
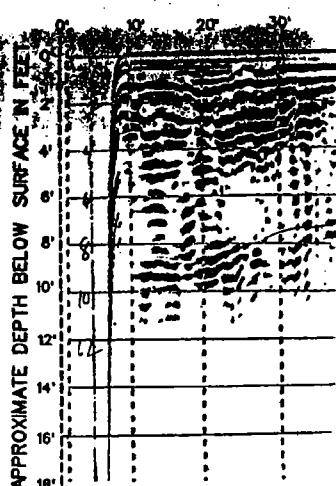
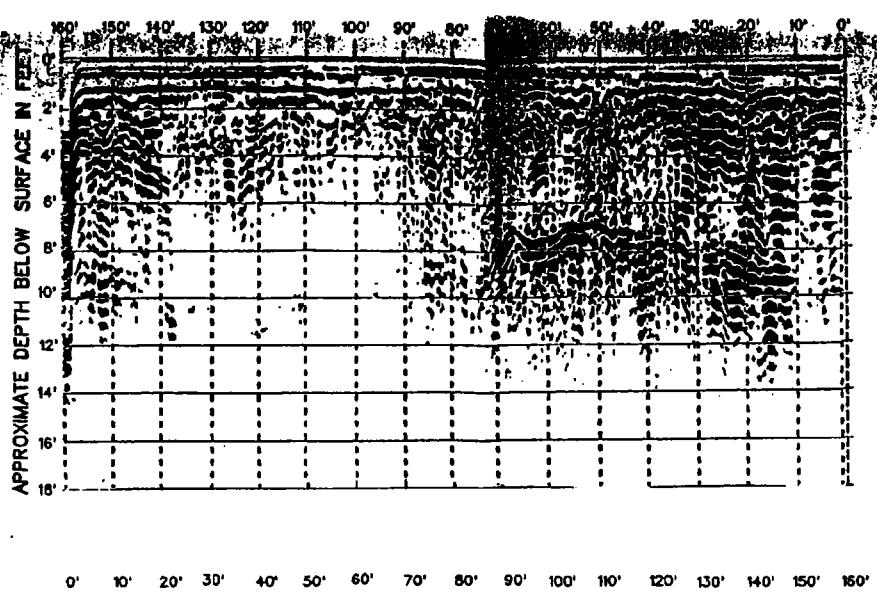


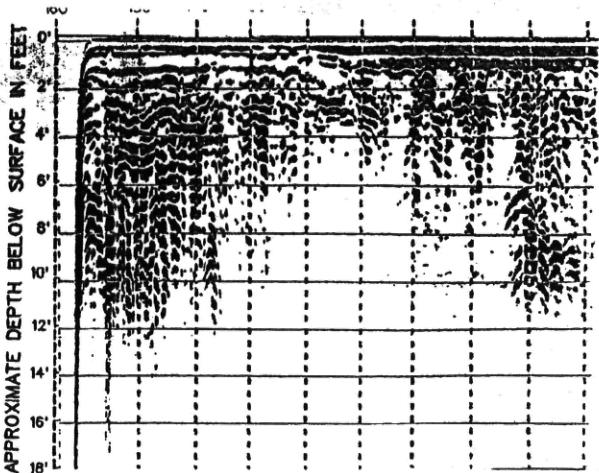
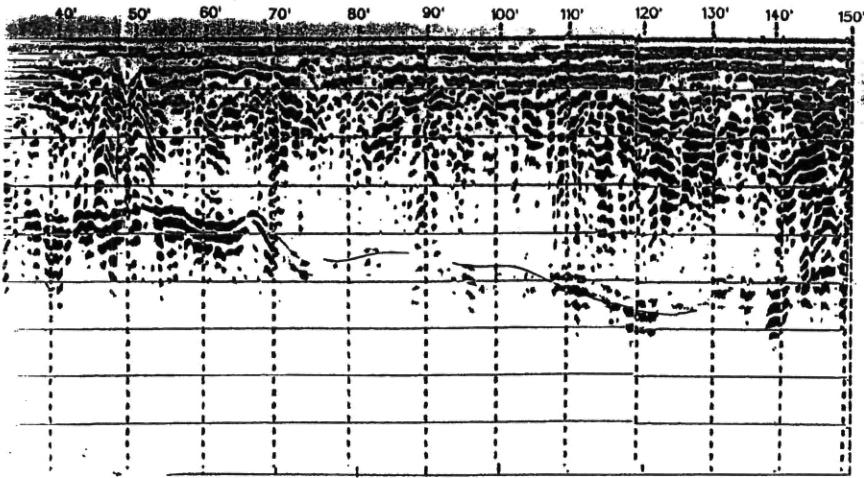
0 SOUTH



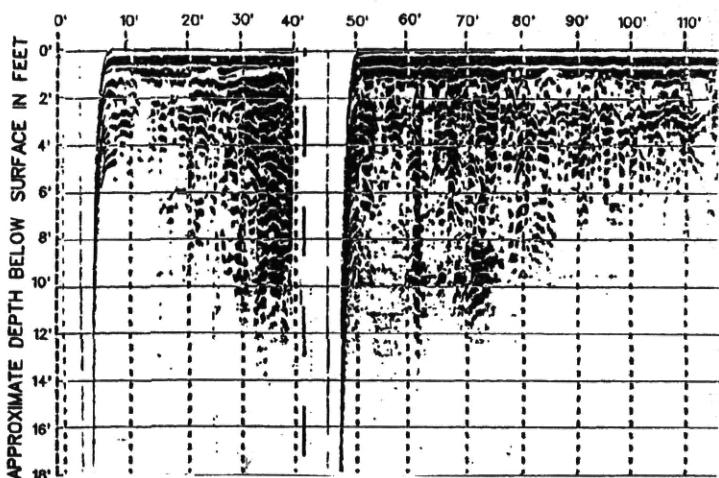
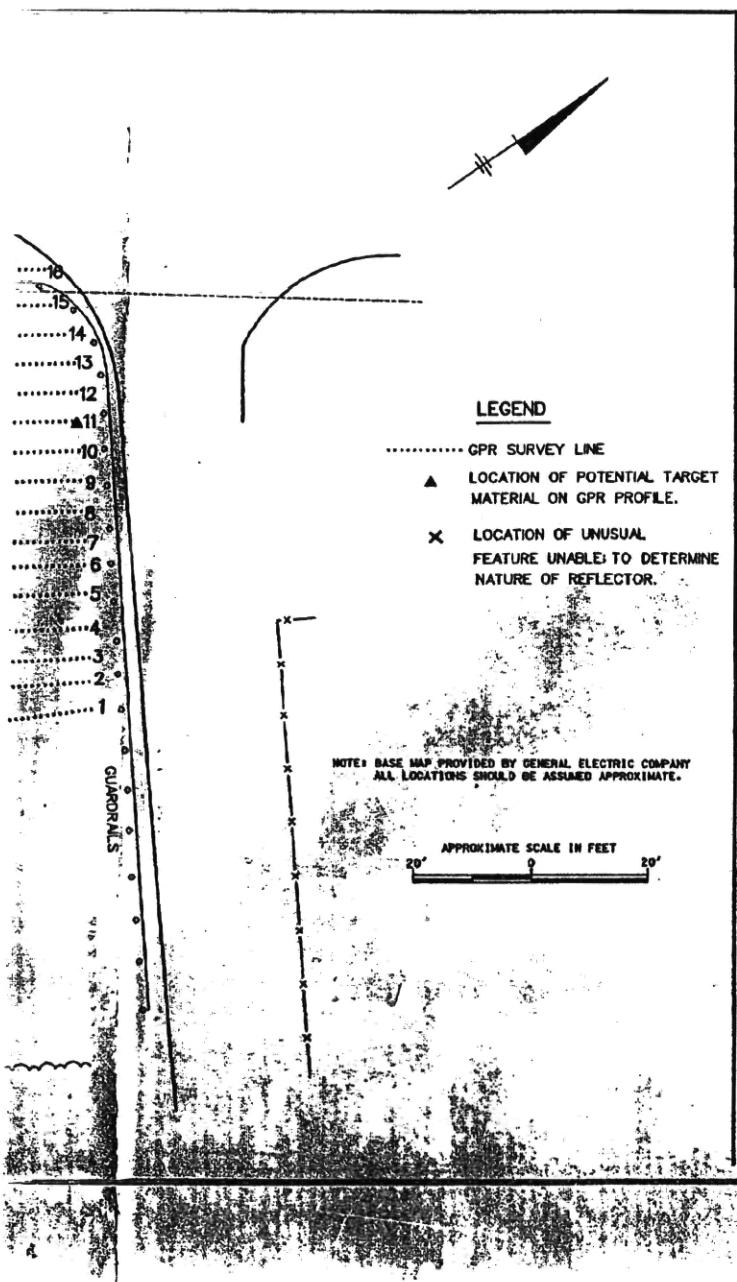
LINE 15 NORTH TO SOUTH



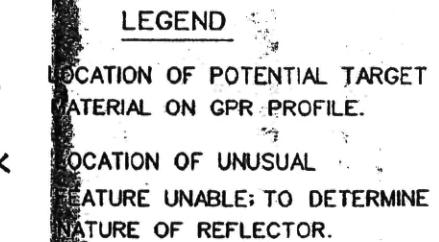


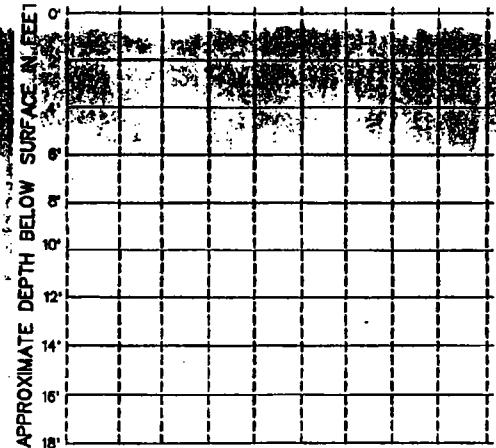
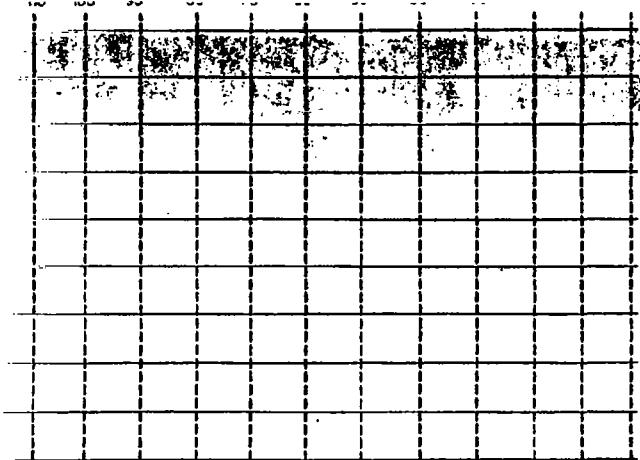


LINE 6 NORTH TO SOUTH

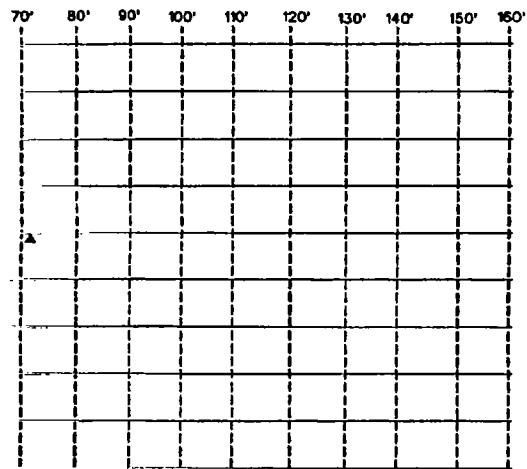


NOTE: GPR PROFILES
ARE 50% OF ACTUAL

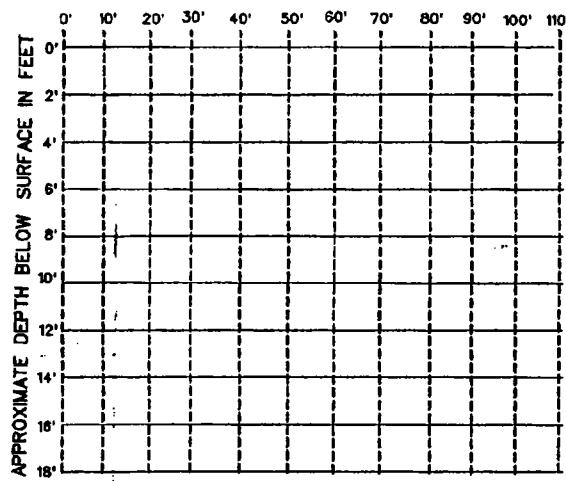




H TO SOUTH



LINE 15 NORTH TO SOUTH



NOTE: GPR PROFILES SHOWN,
ARE 50% OF ACTUAL TAPE SIZE

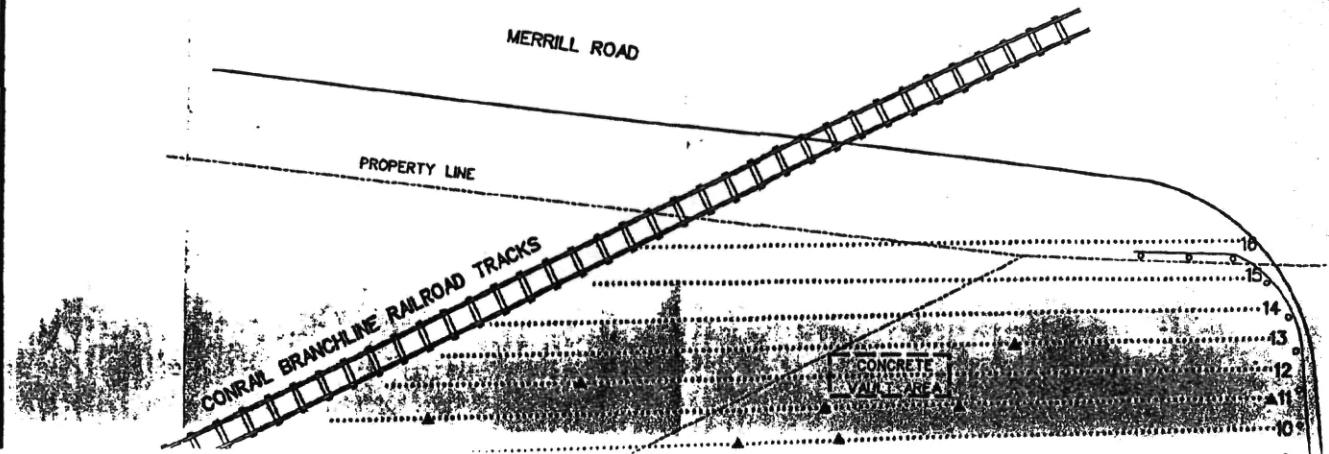
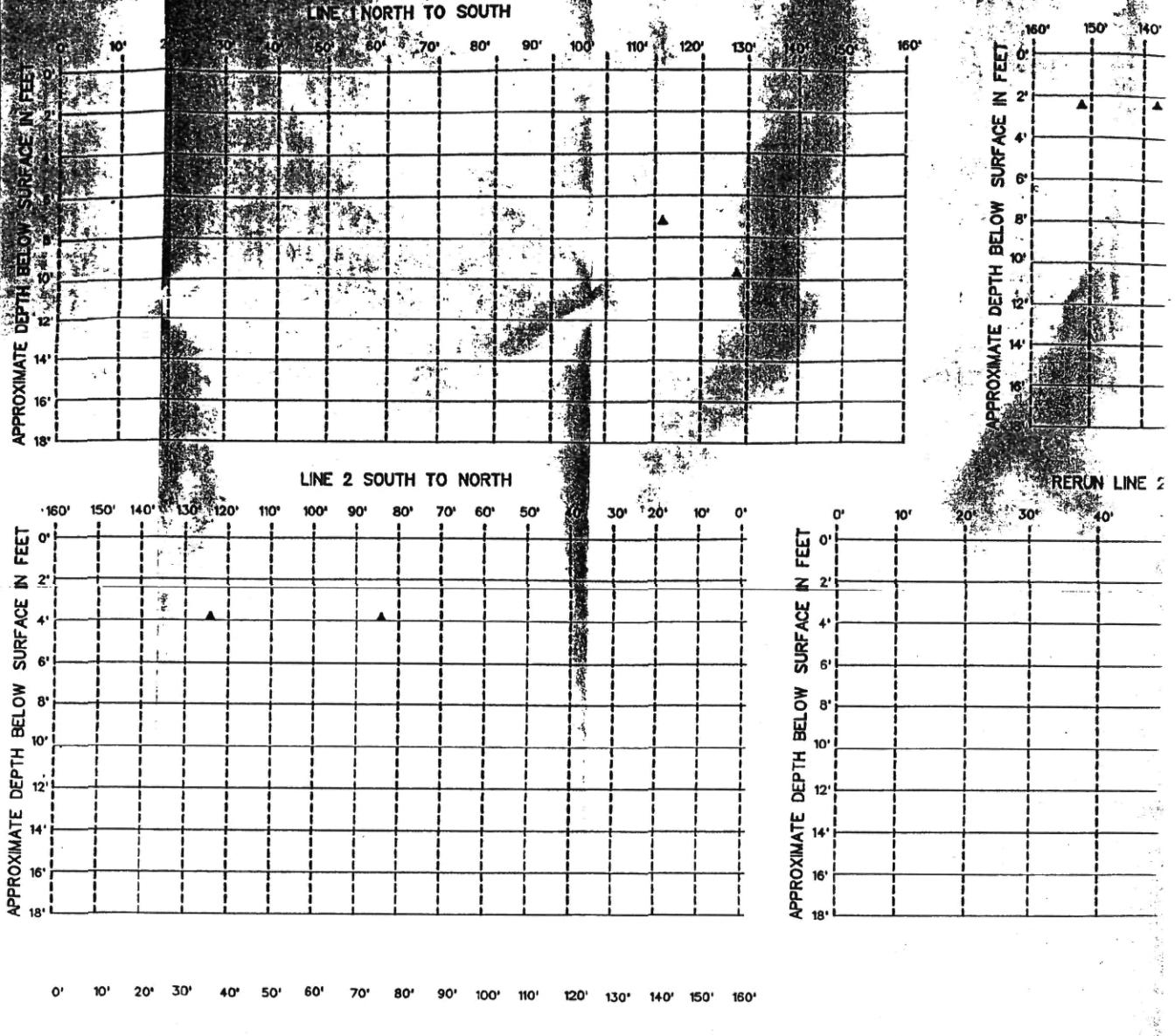
INITIAL TARGET
PROFILE.

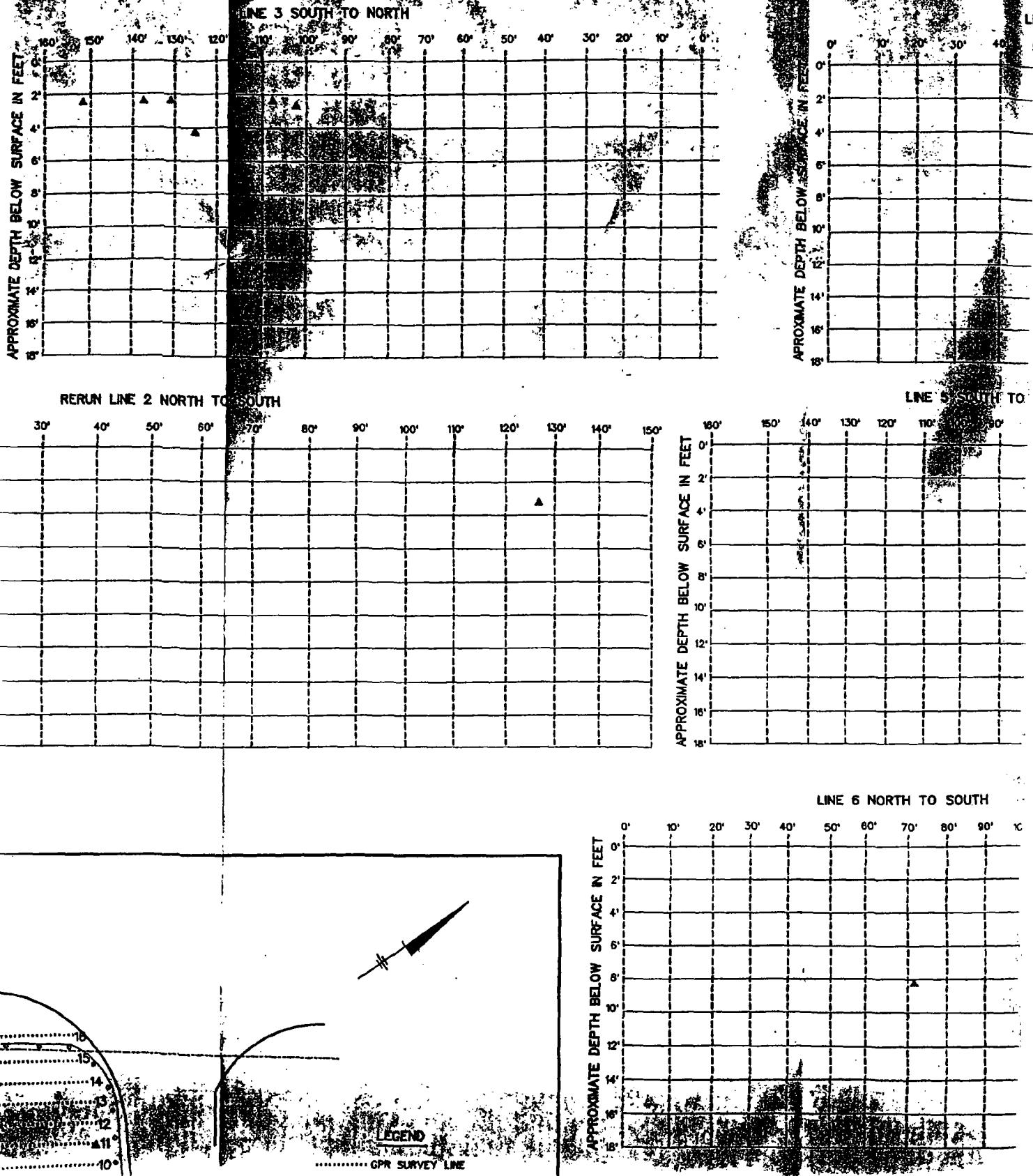
SUAL
TO DETERMINE
CTOR.

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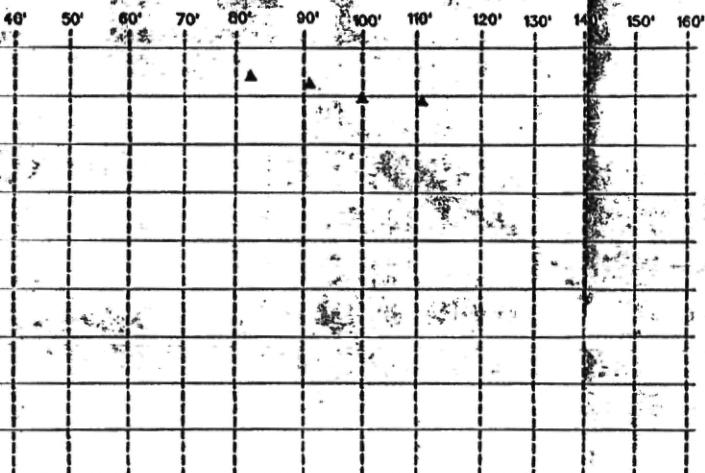
GENERAL ELECTRIC COMPANY
PITTSFIELD MASSACHUSETTS
OP-3 AREA (SOUTH)

GPR SURVEY AREA FIGURE
LOCATION MAP & PROFILES 2A

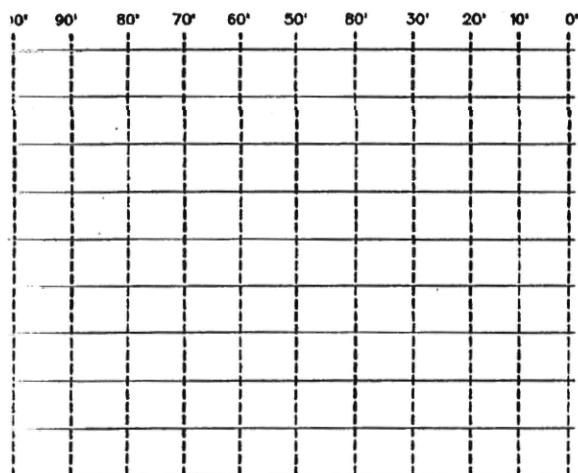




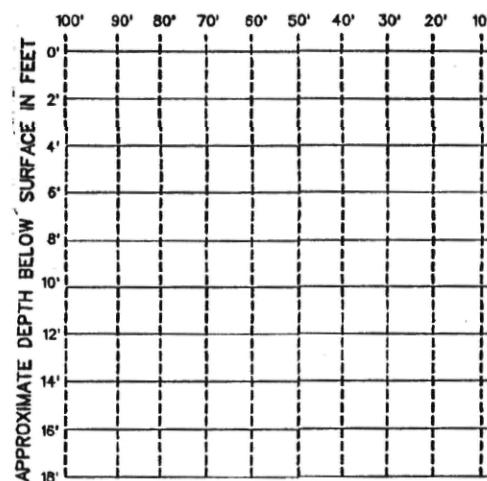
LINE 4 NORTH TO SOUTH



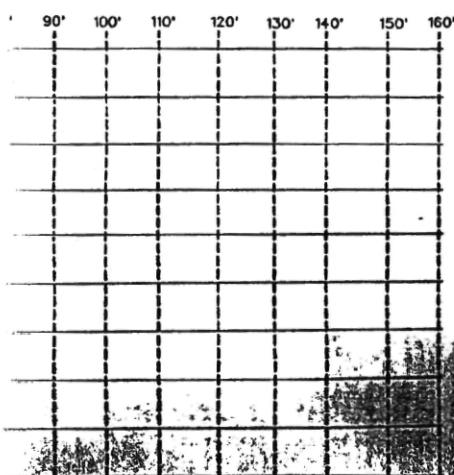
SOUTH TO NORTH



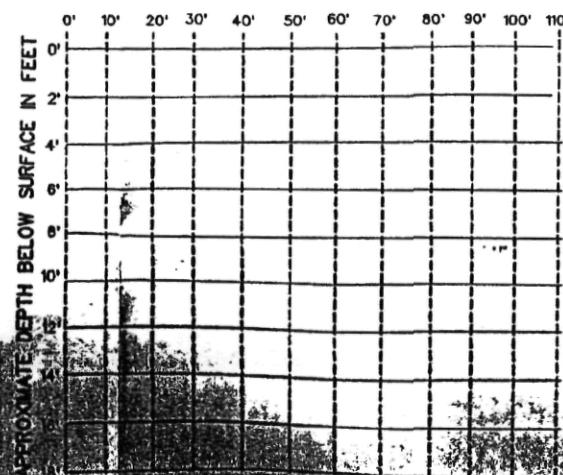
LINE 16 SOUTH TO NORTH

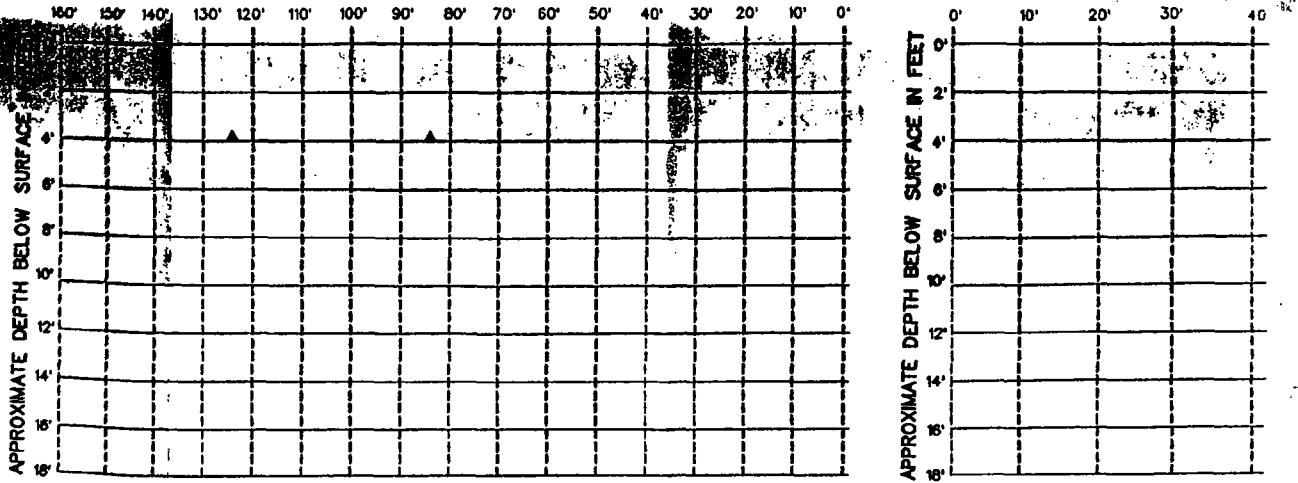


OUTH

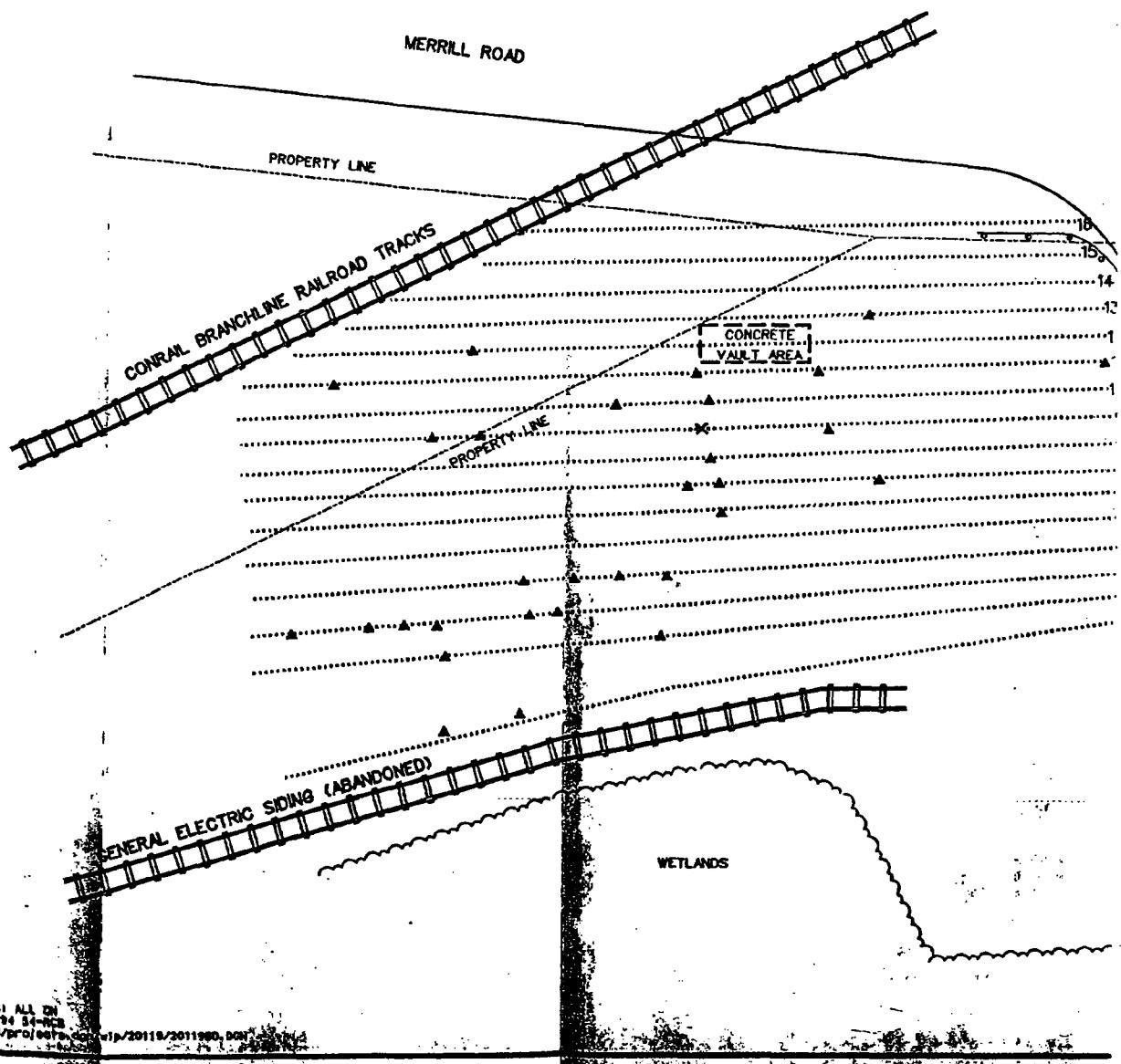


LINE 15 NORTH TO SOUTH

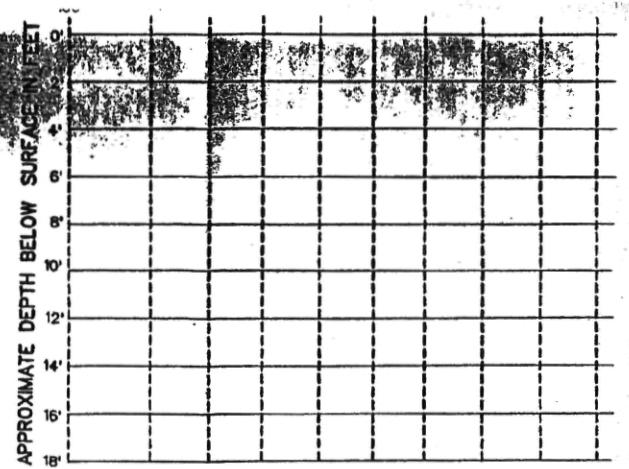
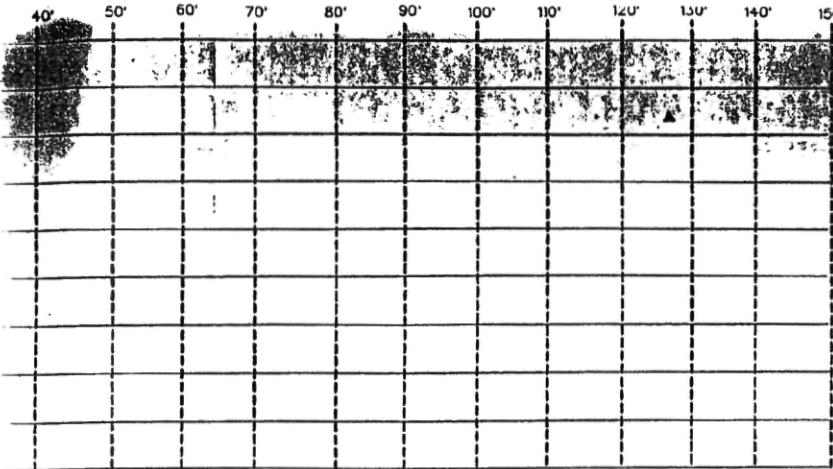




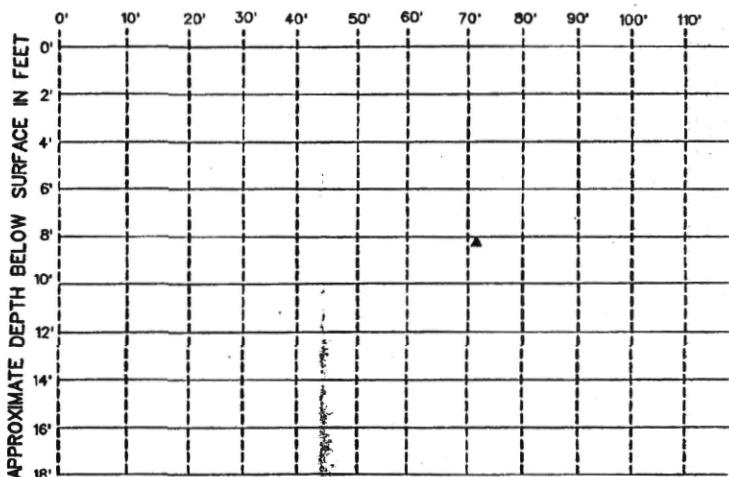
0' 10' 20' 30' 40' 50' 60' 70' 80' 90' 100' 110' 120' 130' 140' 150' 160'



PGE00212086



LINE 6 NORTH TO SOUTH

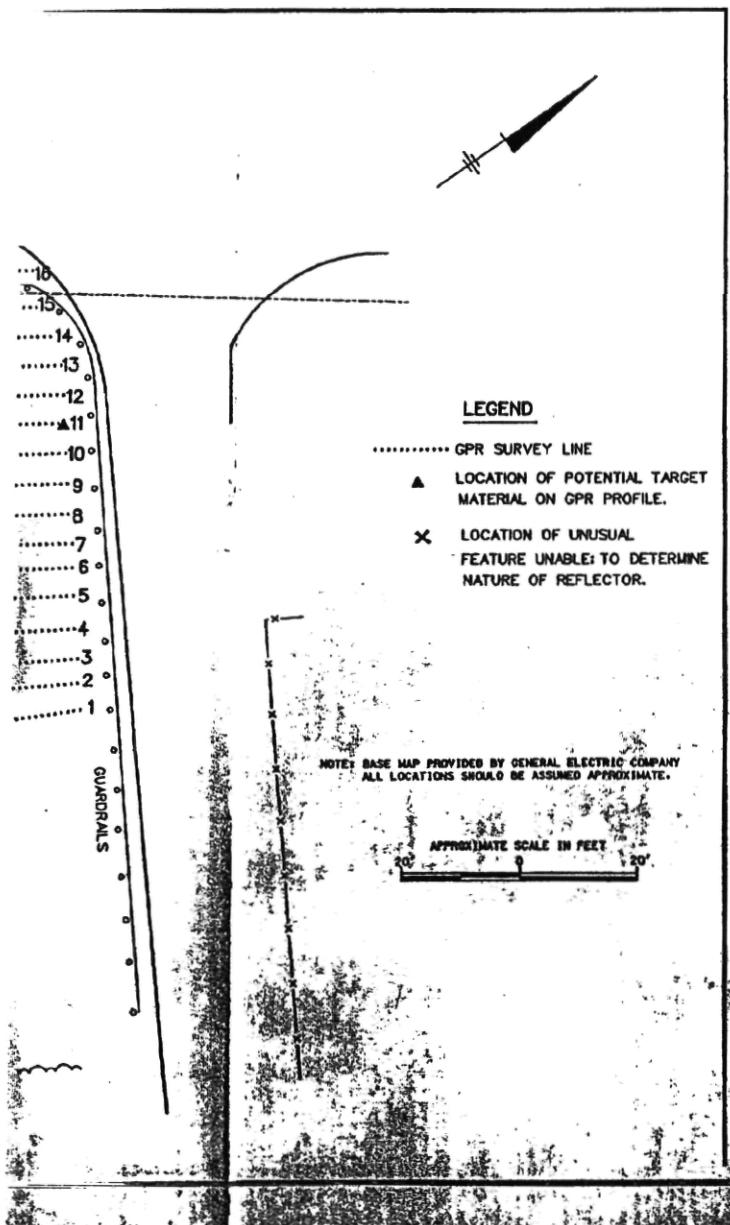


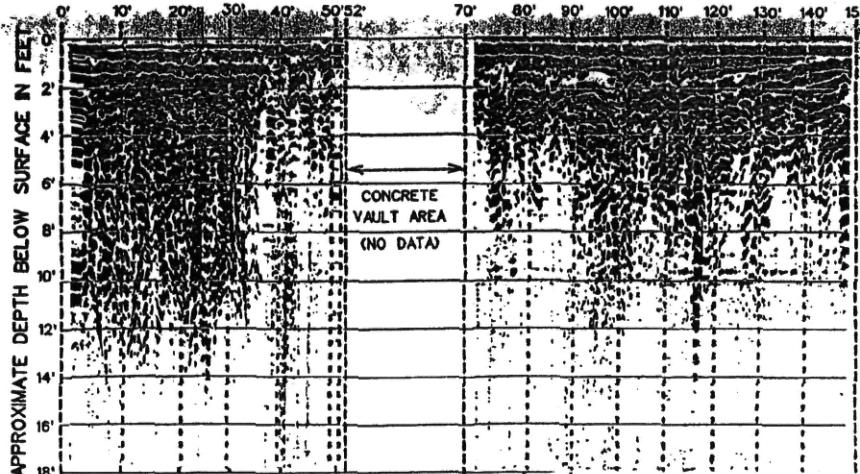
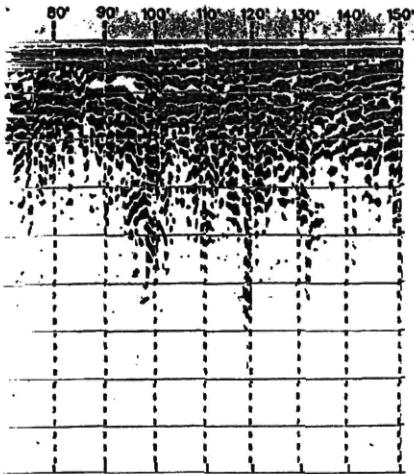
NOTE: GPR PROFIL
ARE 50% OF ACTL

LEGEND

LOCATION OF POTENTIAL TARGET MATERIAL ON GPR PROFILE.

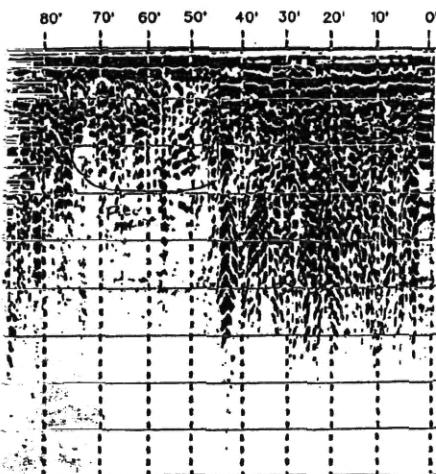
LOCATION OF UNUSUAL
FEATURE UNABLE TO DETERMINE
NATURE OF REFLECTOR.



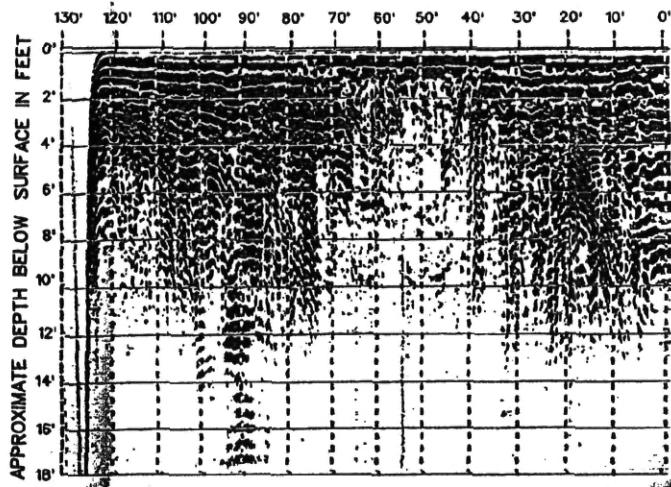


IE
EA
40

SOUTH TO NORTH



LINE 14 SOUTH TO NORTH

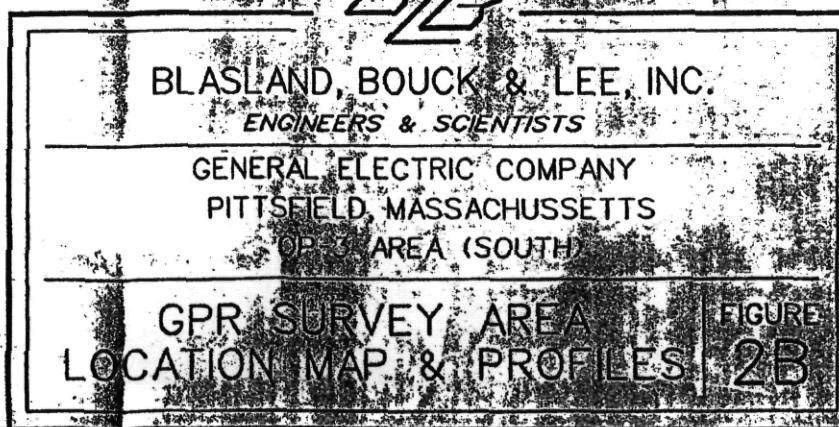


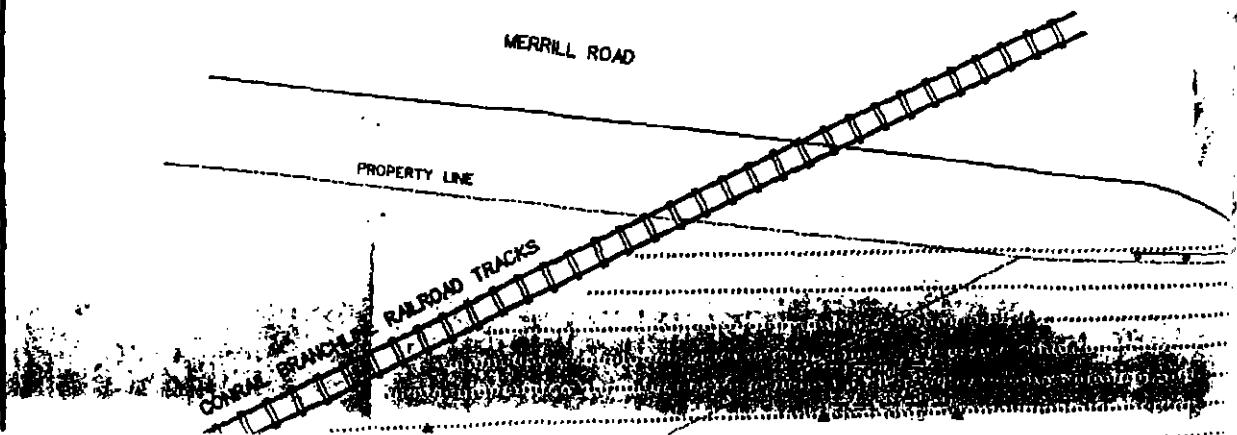
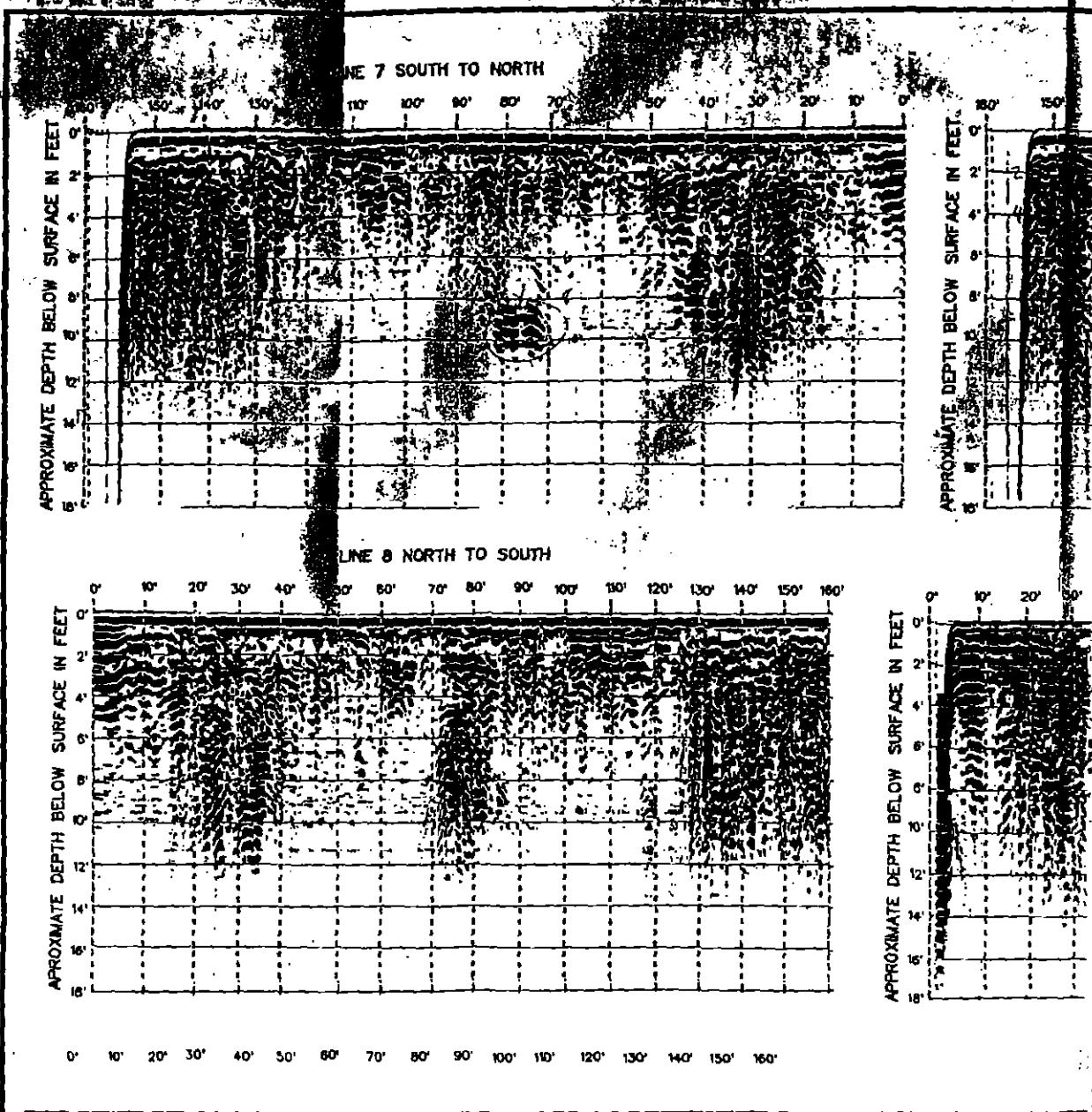
NOTE: GPR PROFILES SHOWN
ARE 50% ACTUAL TAPE SIZE.

LEGEND

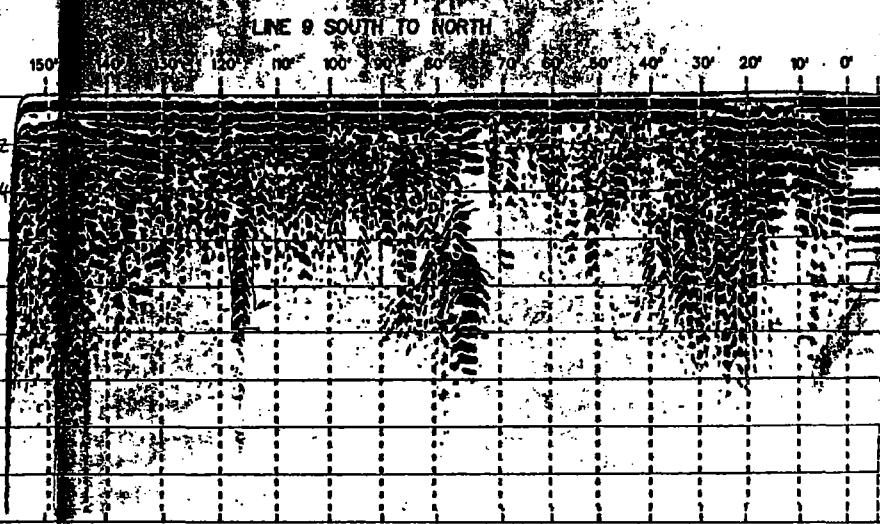
TION OF POTENTIAL TARGET
RIAL ON GPR PROFILE.

ITION OF UNUSUAL FEATURE;
LE TO DETERMINE NATURE
REFLECTOR.

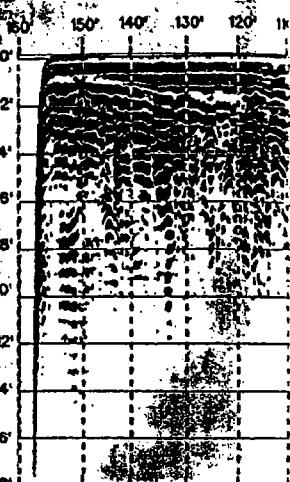




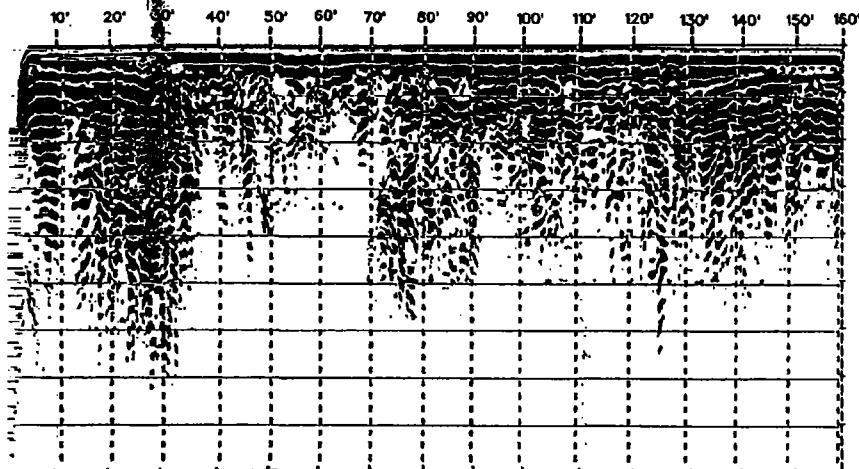
APPROXIMATE DEPTH BELOW SURFACE IN FEET



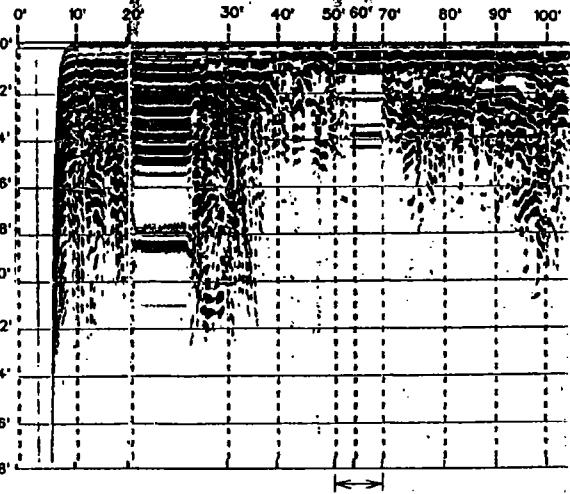
APPROXIMATE DEPTH BELOW SURFACE IN FEET



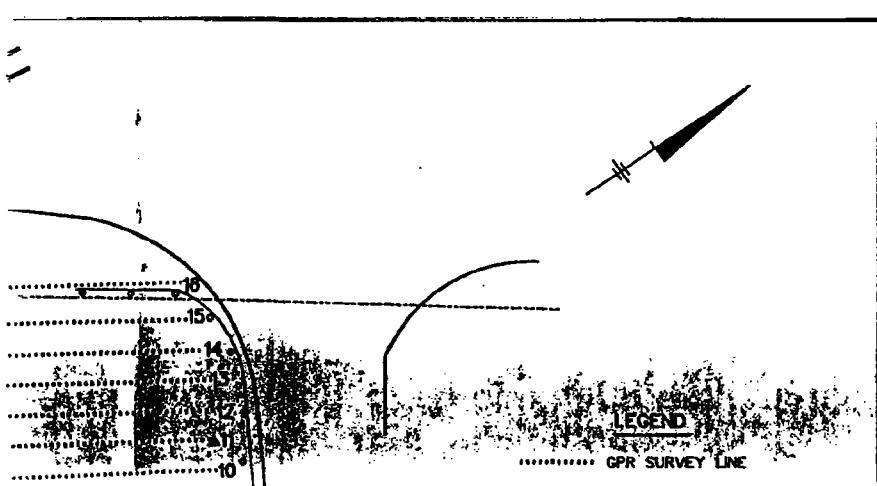
LINE 10 NORTH TO SOUTH



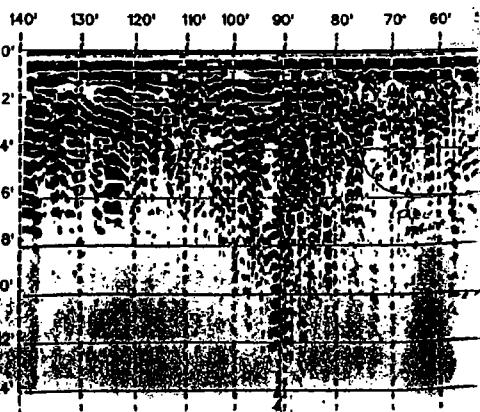
APPROXIMATE DEPTH BELOW SURFACE IN FEET



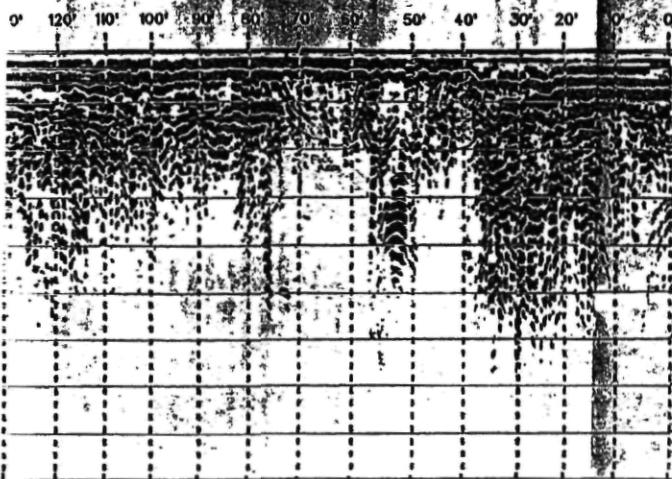
LINE 13 SOUTH TO NORTH



APPROXIMATE DEPTH BELOW SURFACE IN FEET



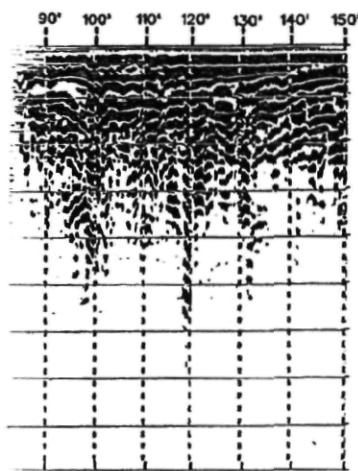
LINE 11 SOUTH TO NORTH



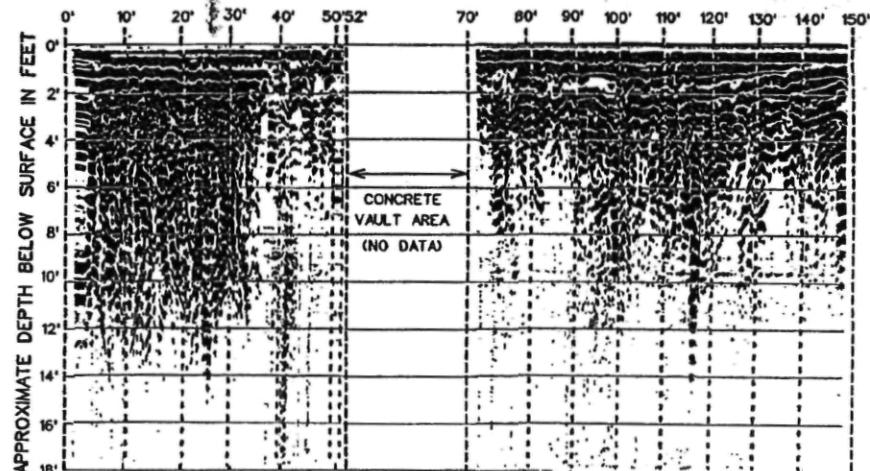
RERUN LINE 11 SOUTH TO NORTH



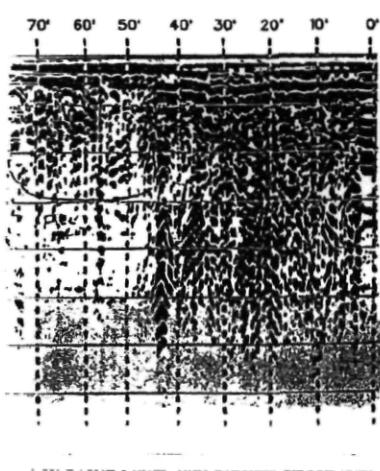
> SOUTH



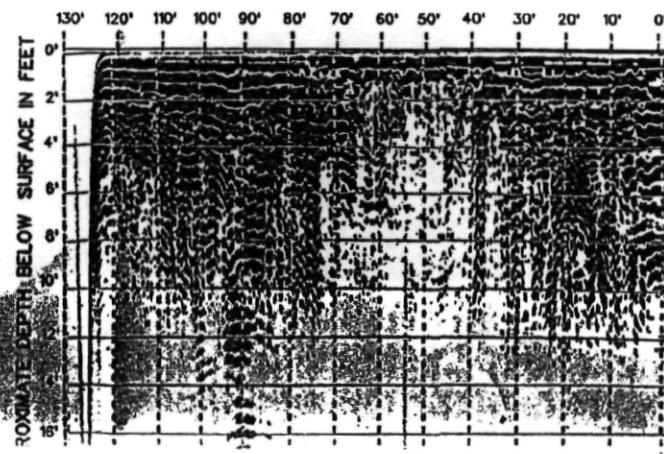
LINE 12 NORTH TO SOUTH



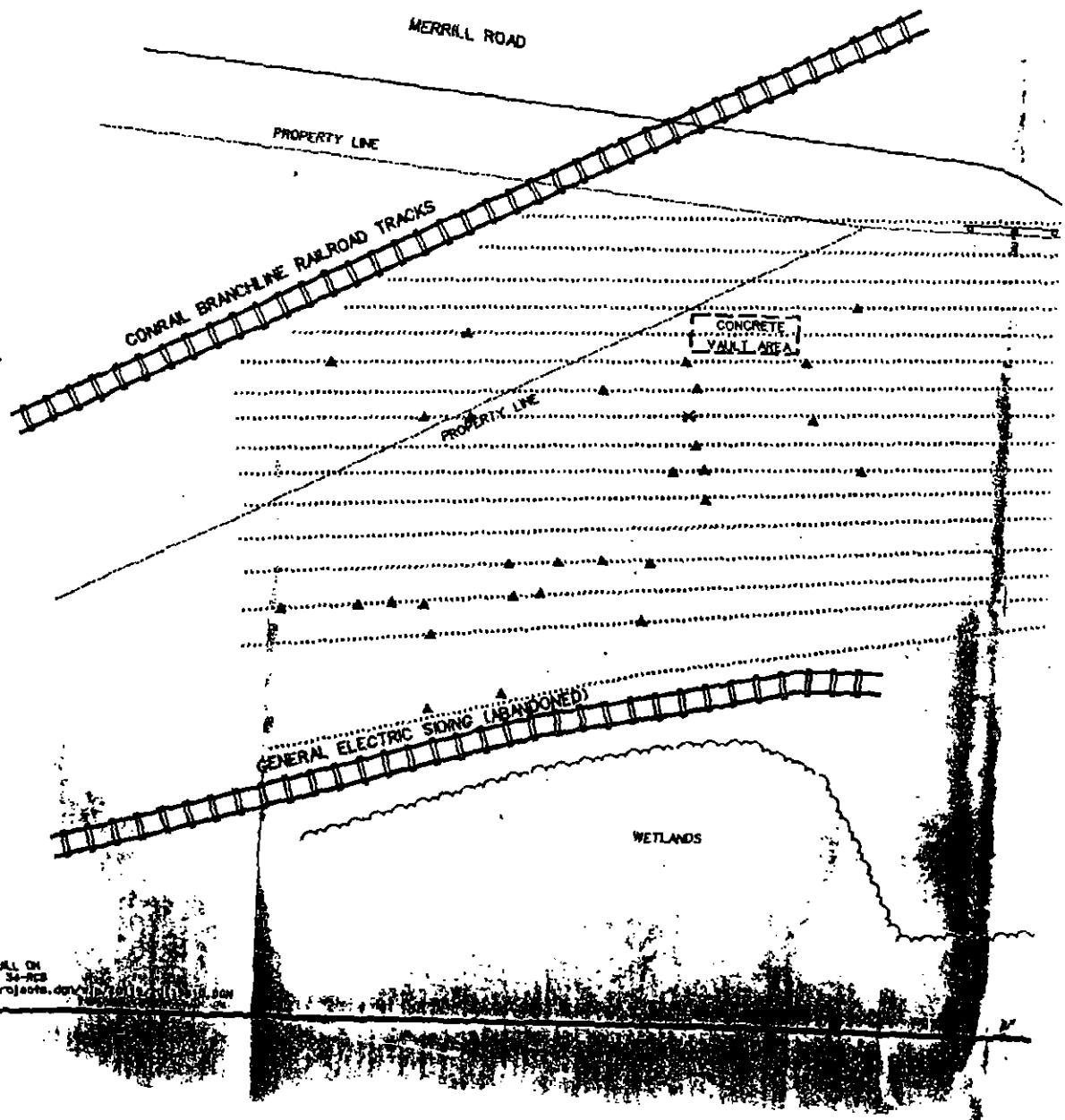
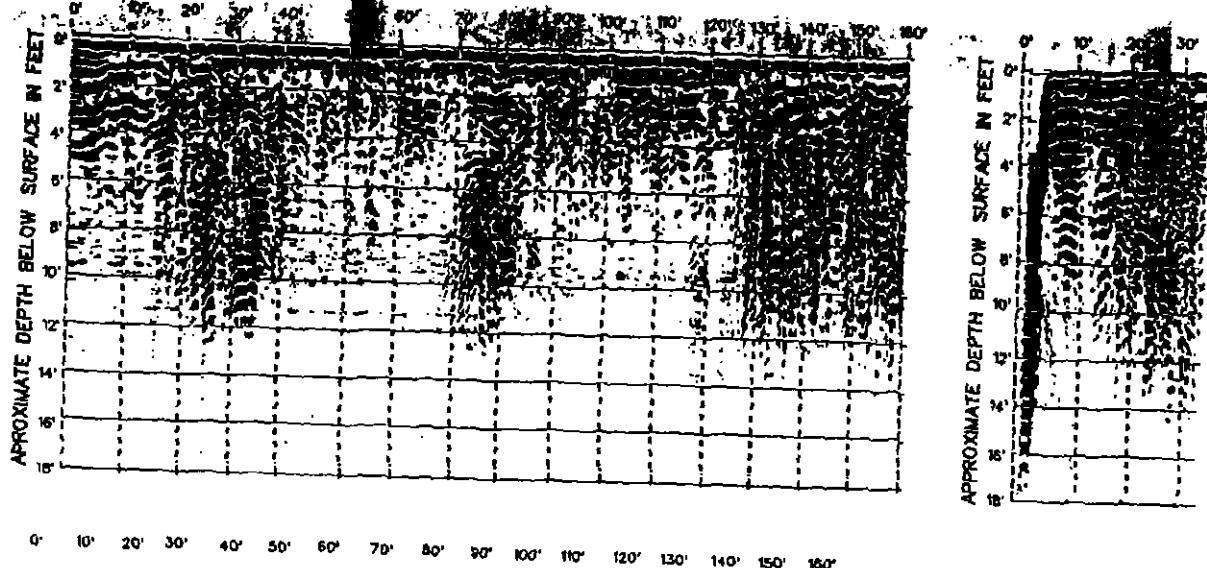
TO NORTH



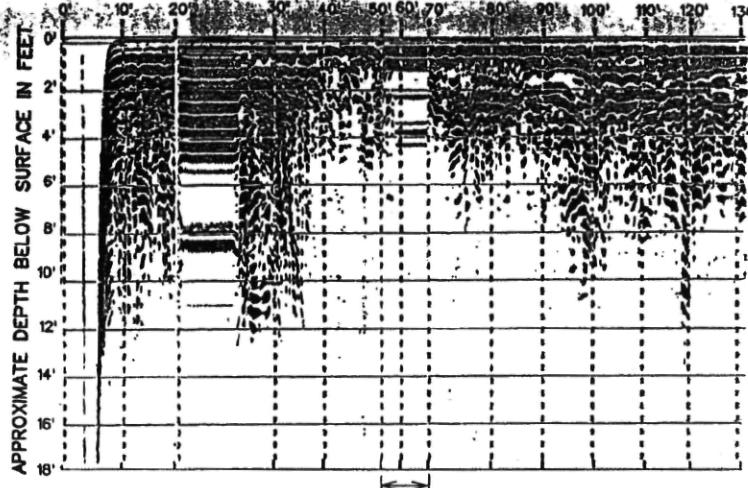
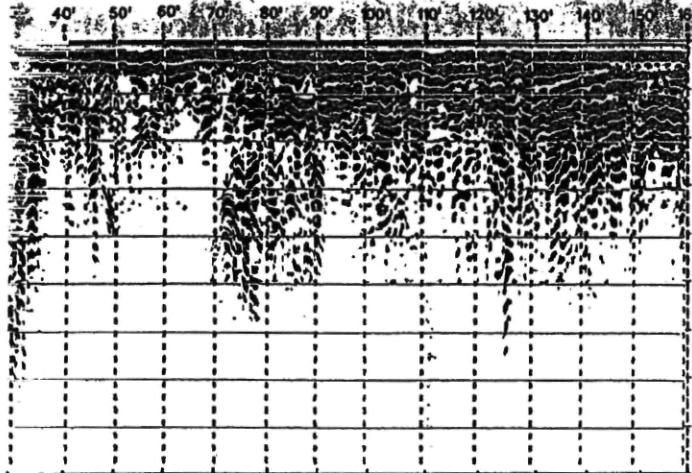
LINE 14 SOUTH TO NORTH



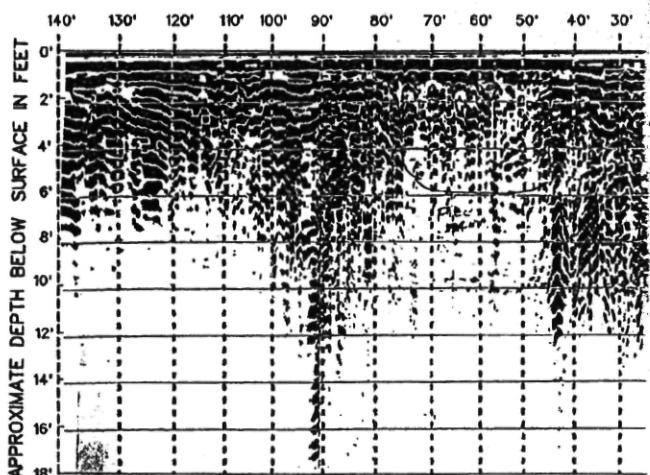
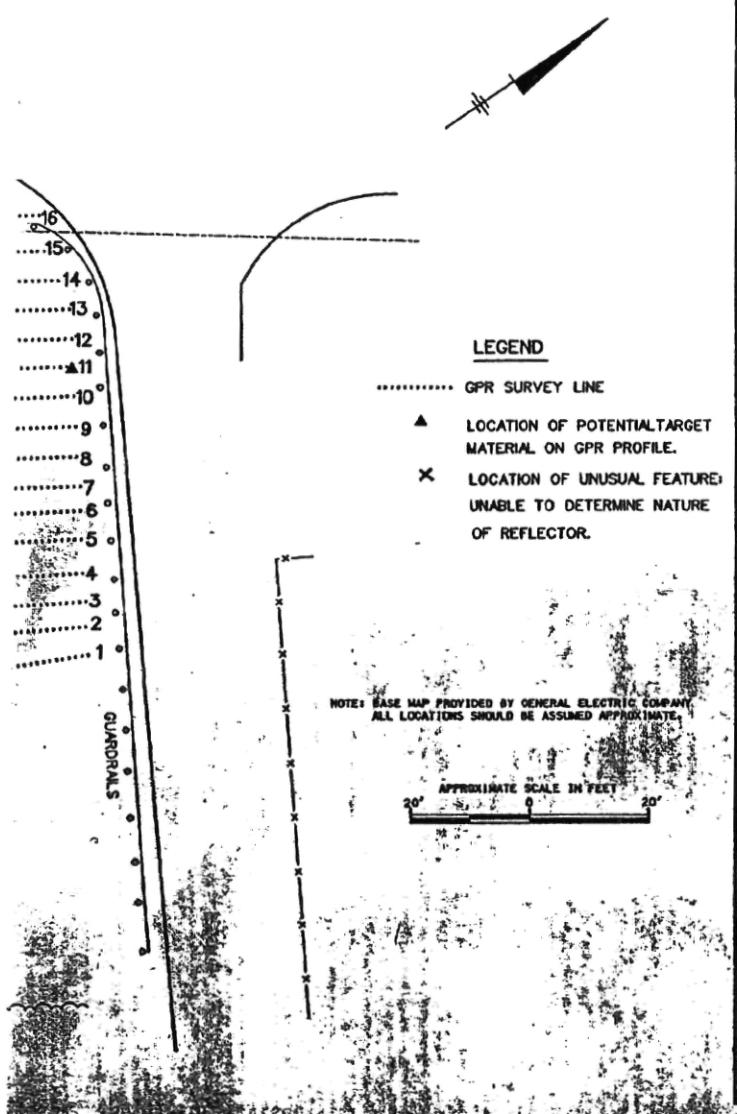
LINE B NORTH TO SOUTH



LINE 14 NORTH TO SOUTH

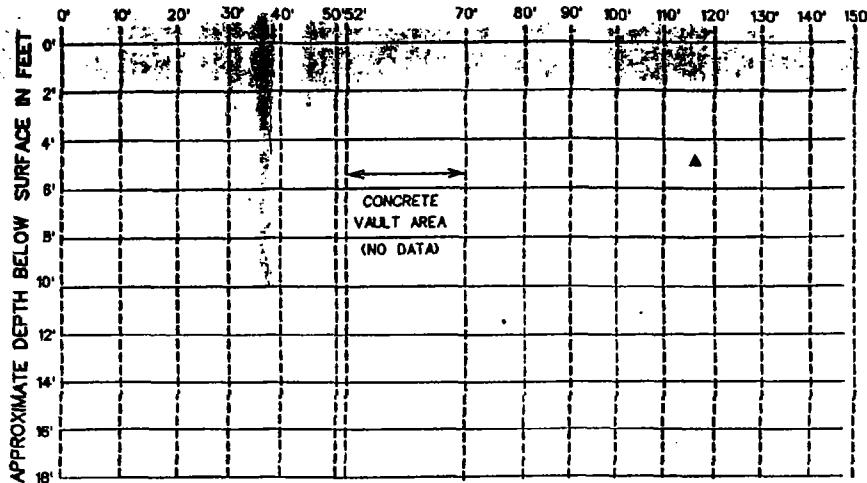
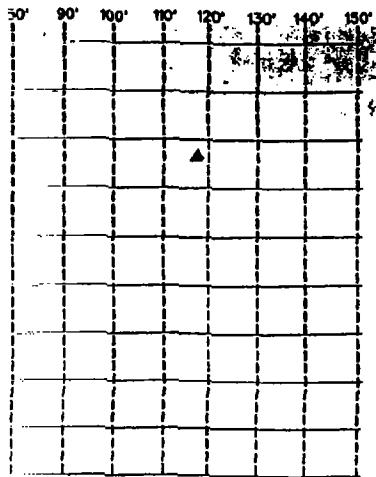


LINE 13 SOUTH TO NORTH

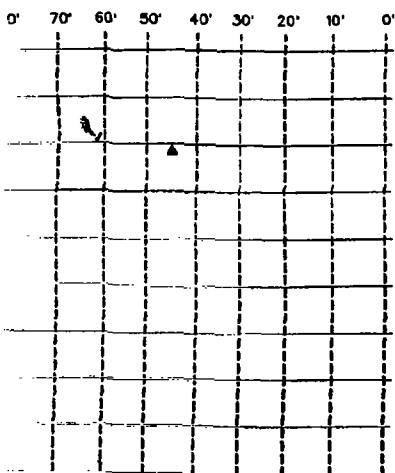


LEGEND

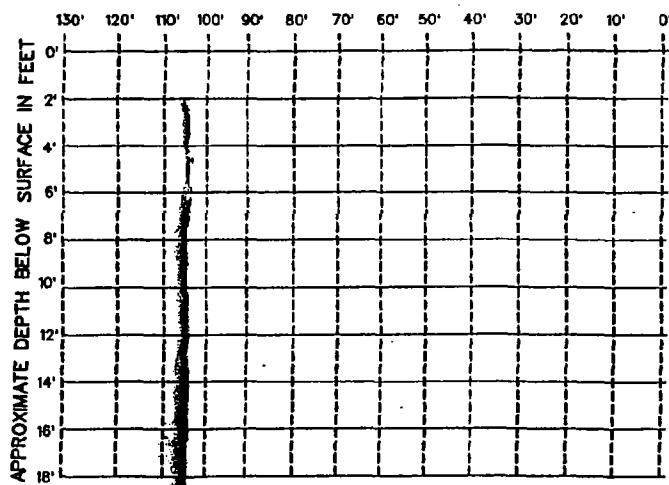
- ▲ LOCATION OF POTENTIAL TARGET MATERIAL ON GPR PROFILE.
- ✗ LOCATION OF UNUSUAL FEATURE UNABLE TO DETERMINE NATURE OF REFLECTOR.



1H TO NORTH



LINE 14 SOUTH TO NORTH



NOTE: GPR PROFILES SHOWN,
ARE 50% ACTUAL TAPE SIZE.

END

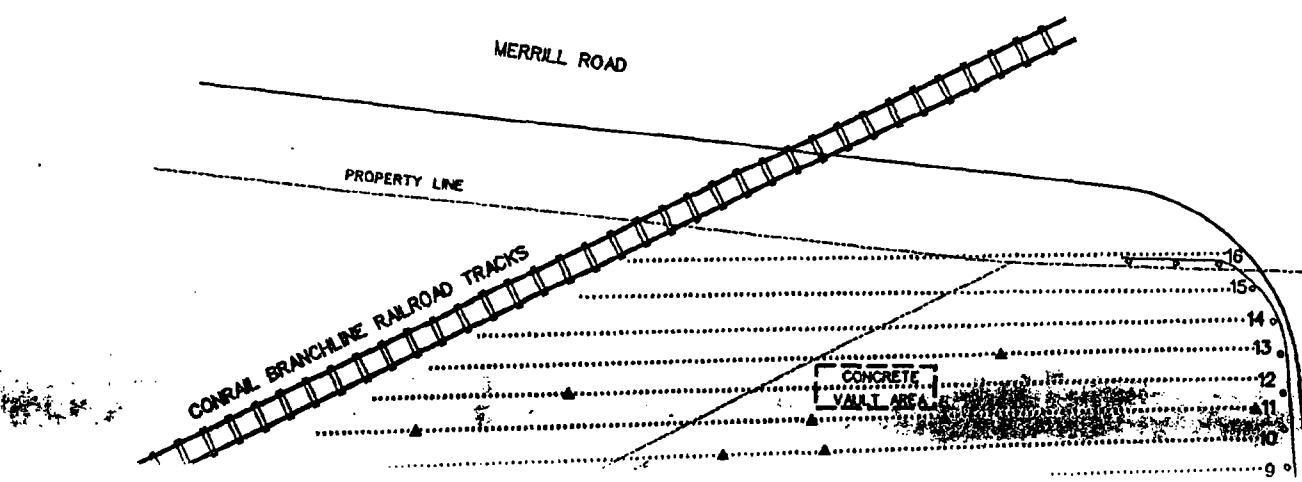
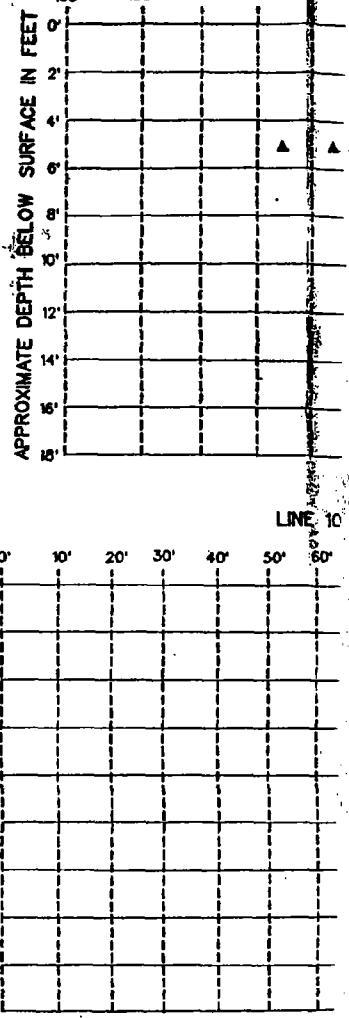
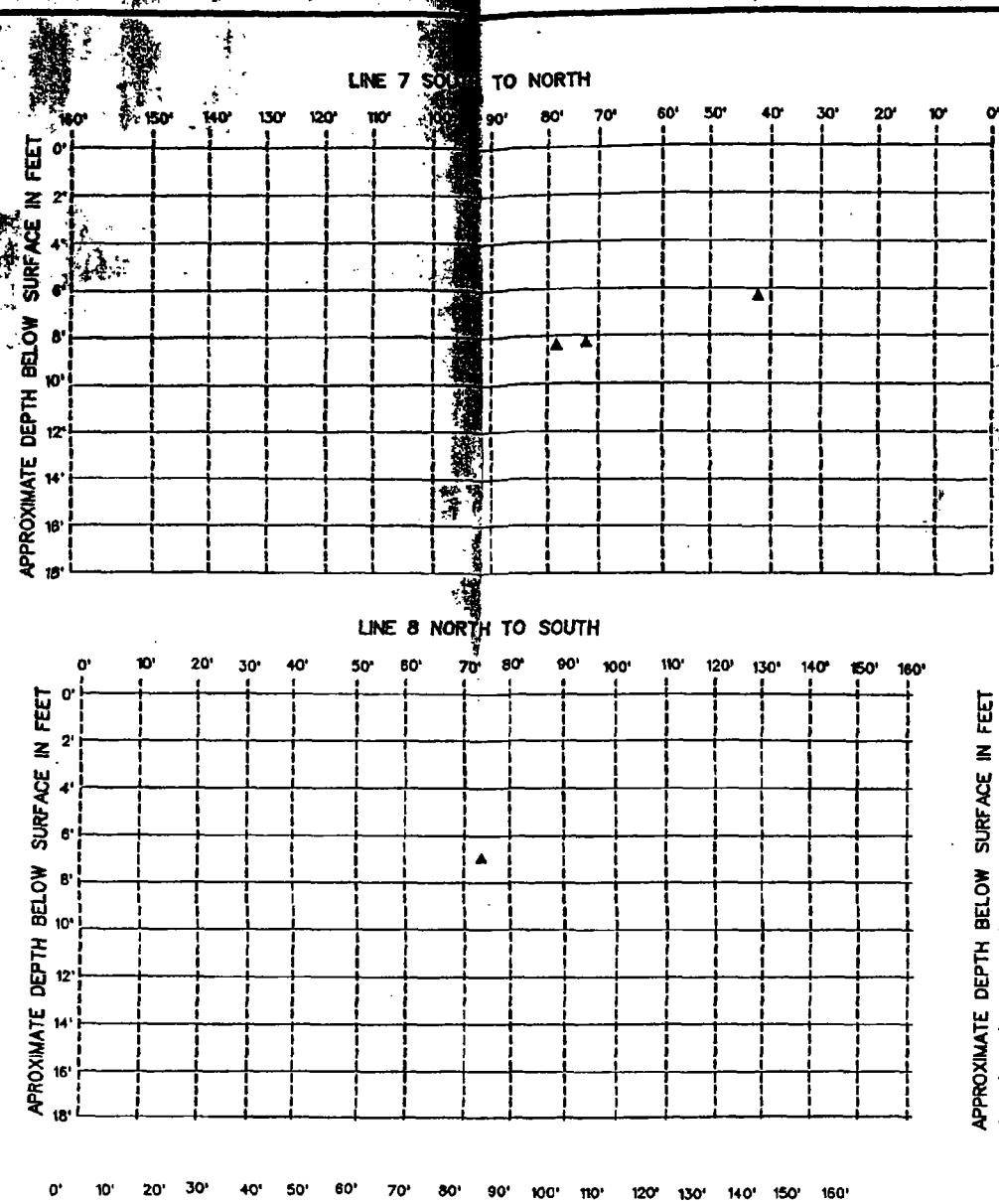
OF POTENTIAL TARGET
ON GPR PROFILE.

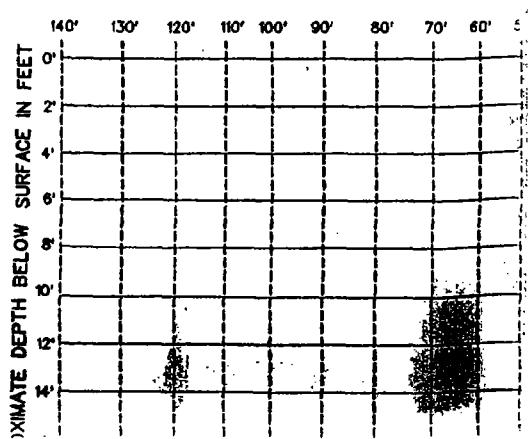
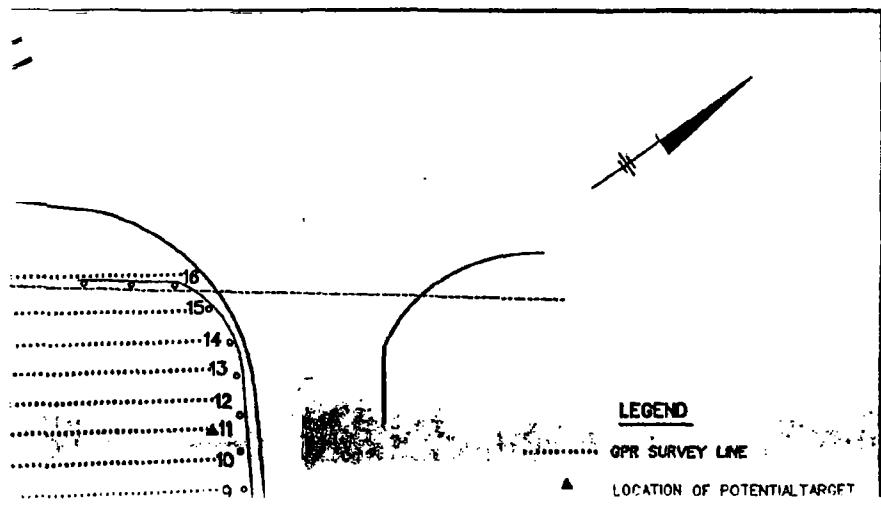
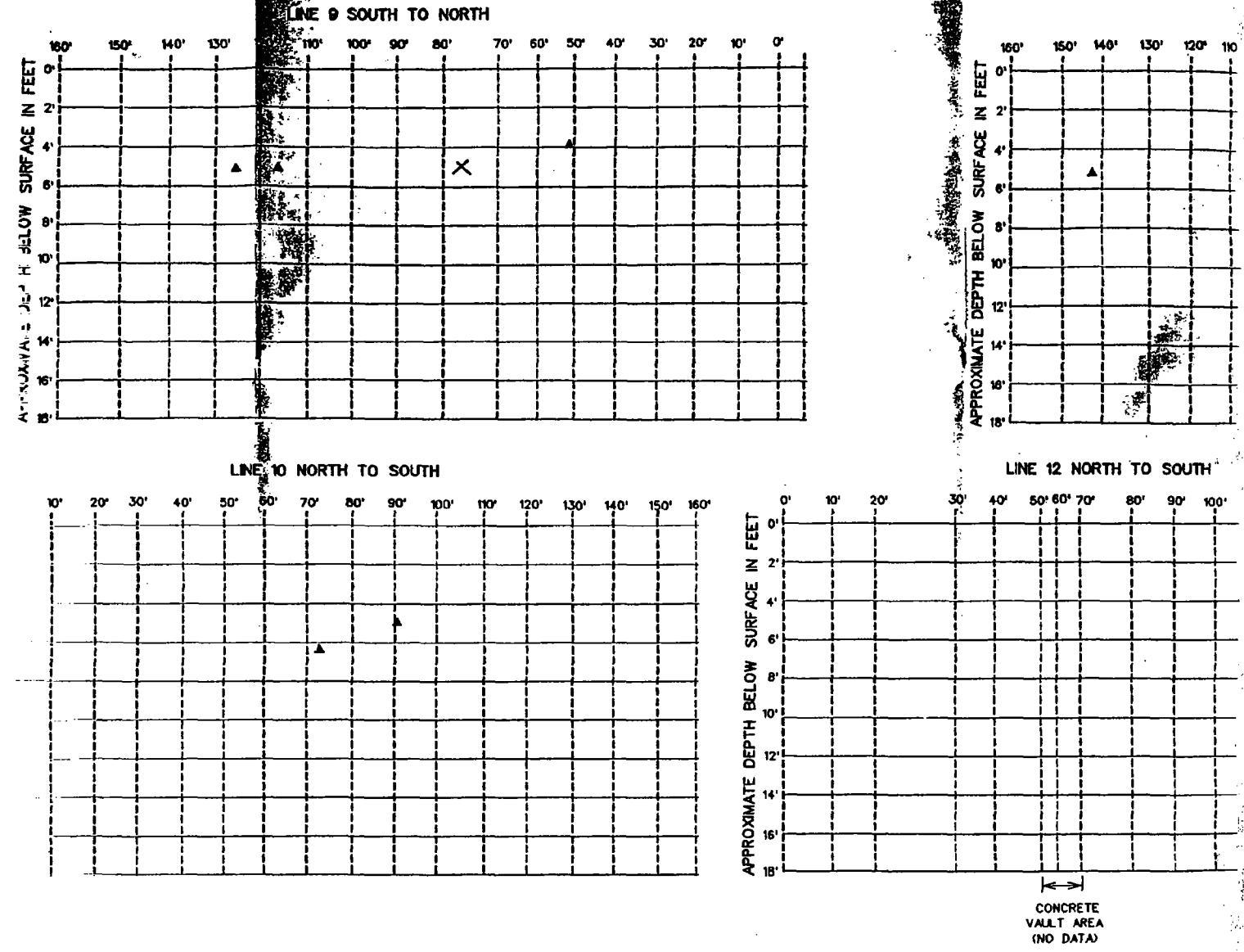
OF UNUSUAL FEATURE;
D DETERMINE NATURE
CTOR.

BBL
BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

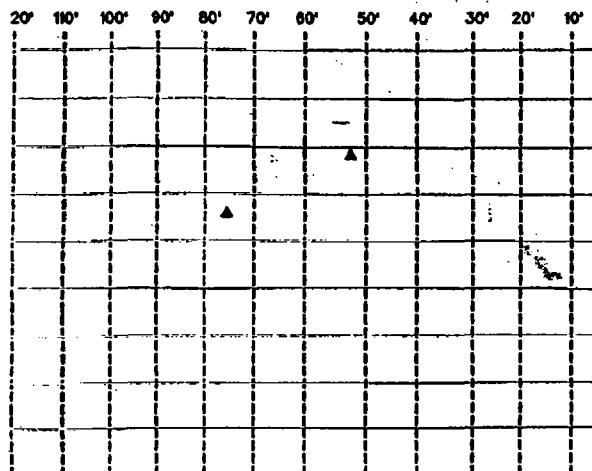
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
OP-3 AREA (SOUTH)

GPR SURVEY AREA | FIGURE
LOCATION MAP & PROFILES | 2C

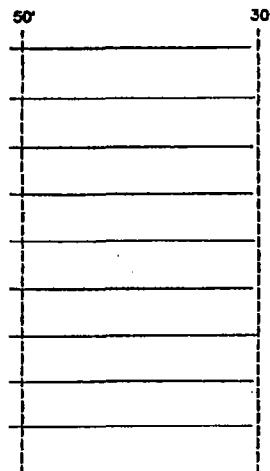




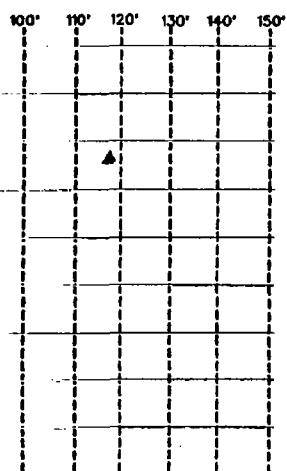
LINE 11 SOUTH TO NORTH



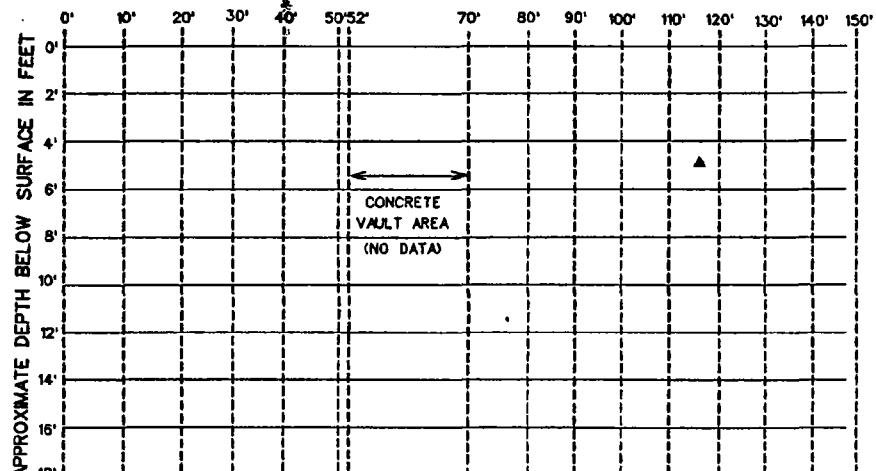
RERUN LINE 11 SOUTH TO NORTH



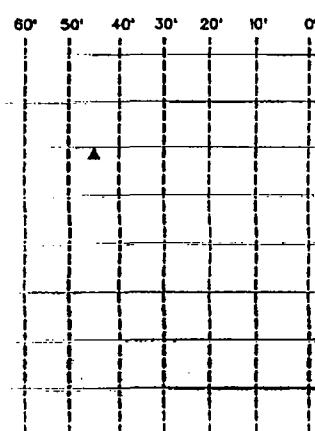
JTH



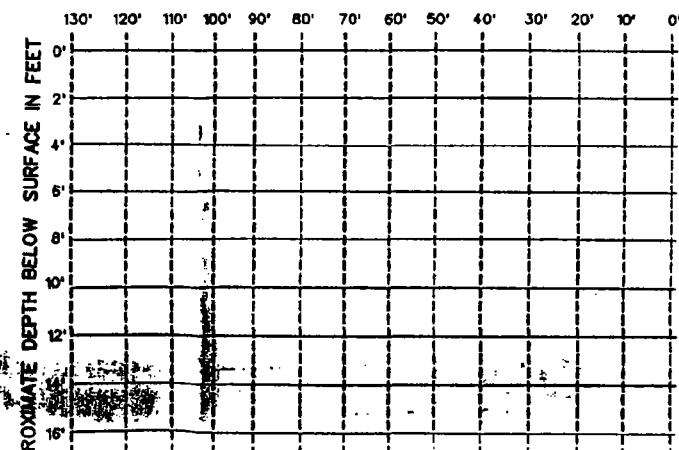
LINE 12 NORTH TO SOUTH

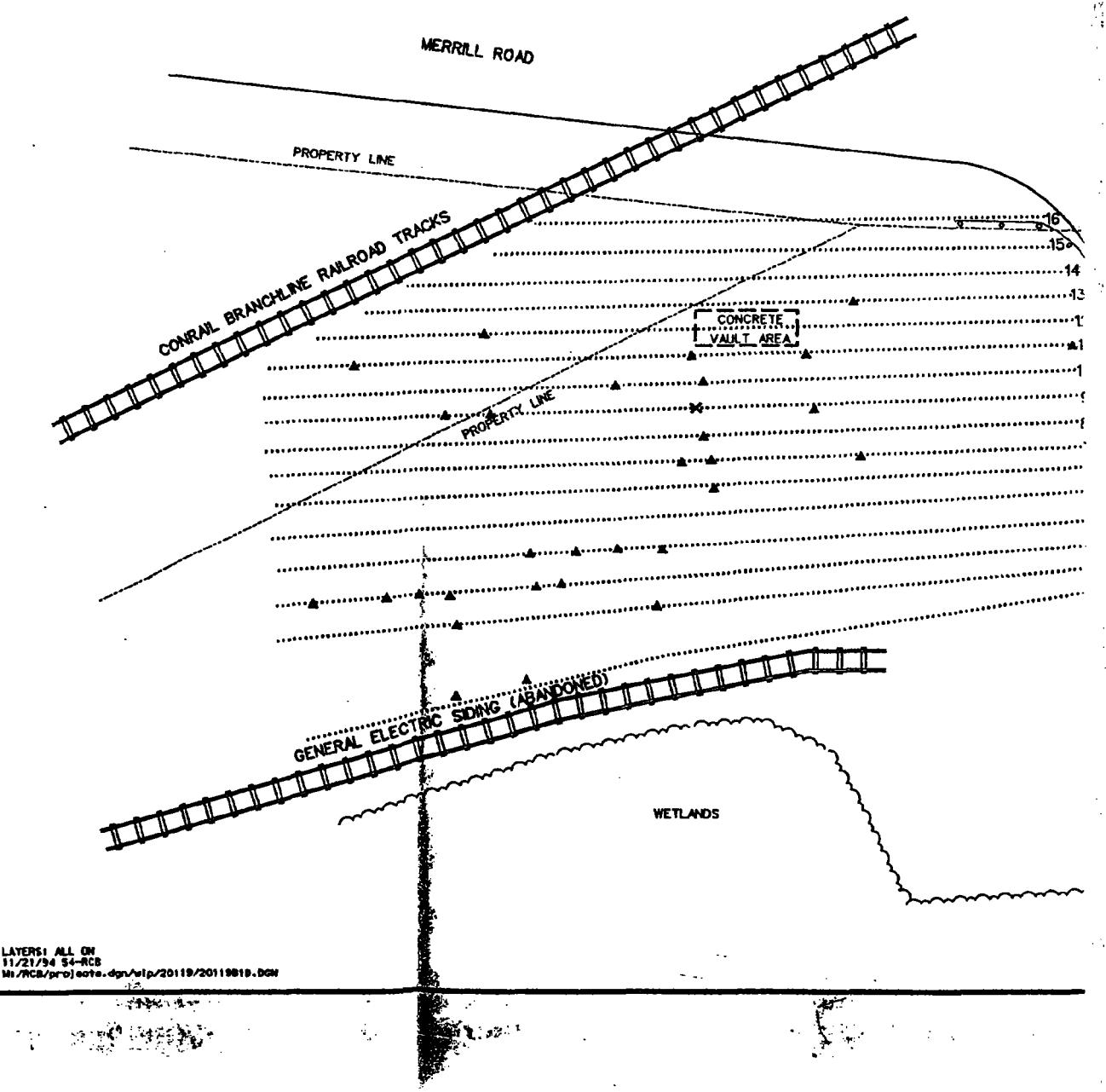
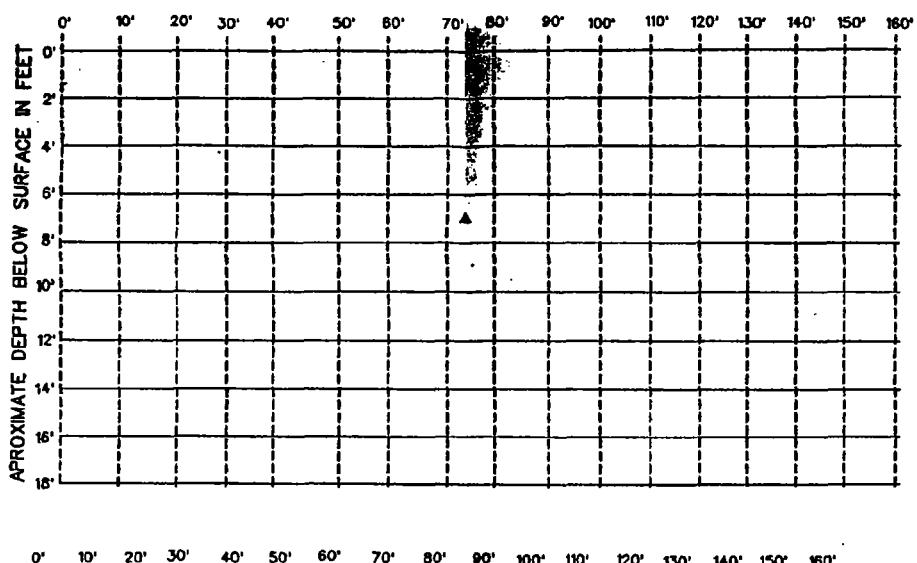


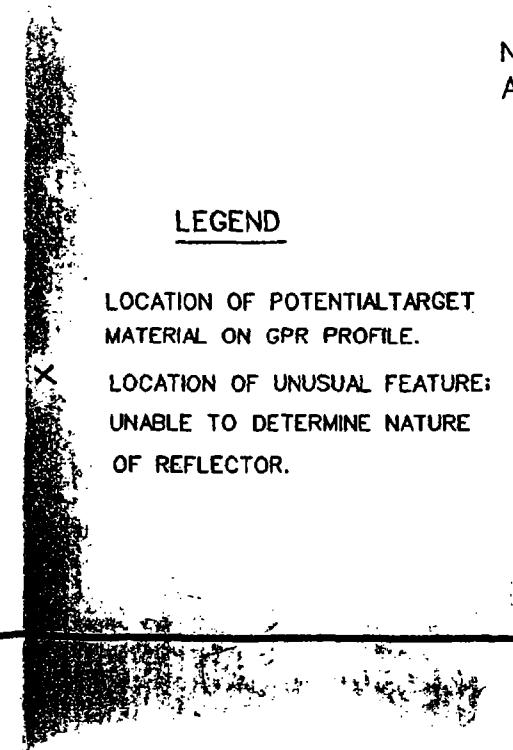
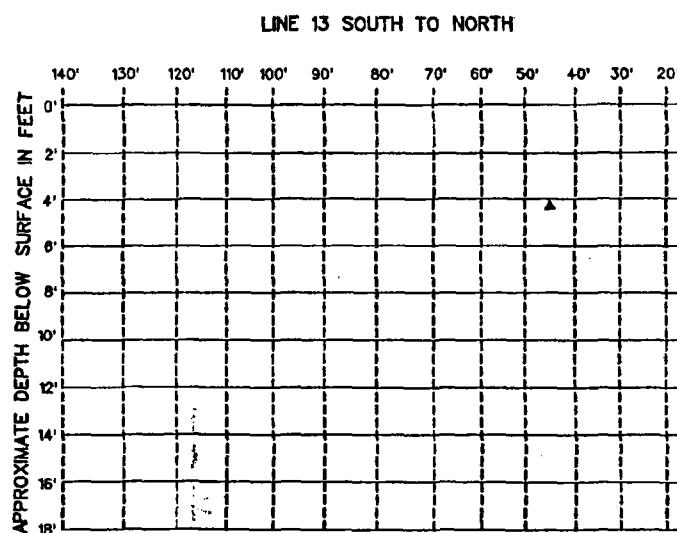
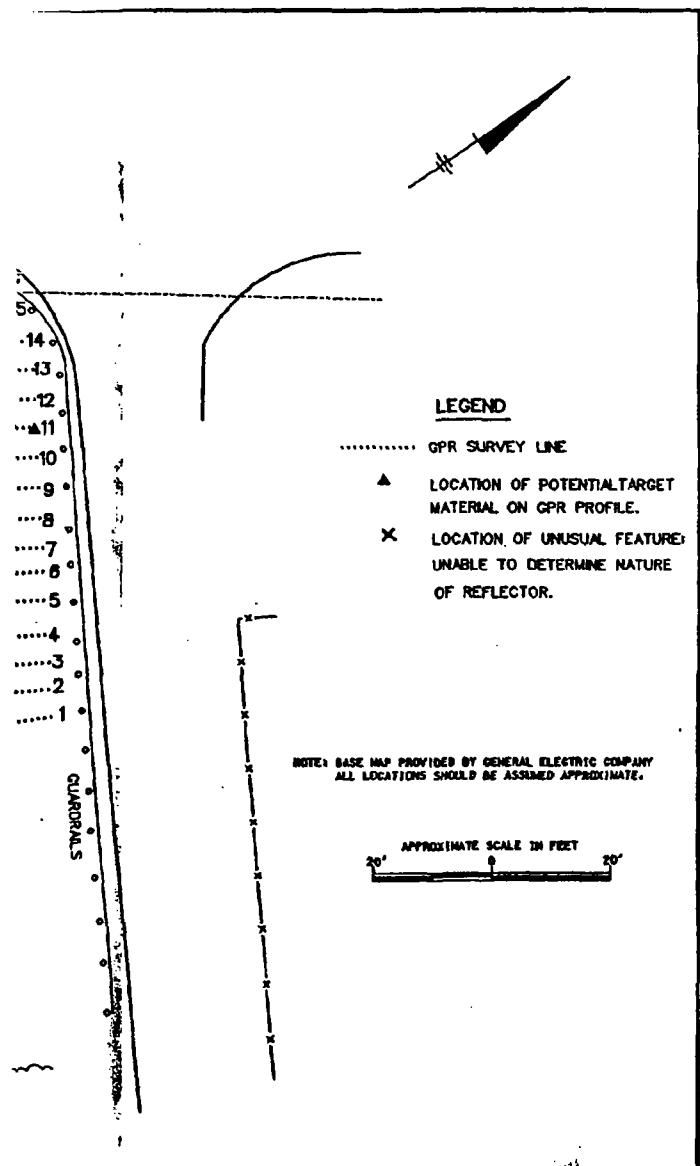
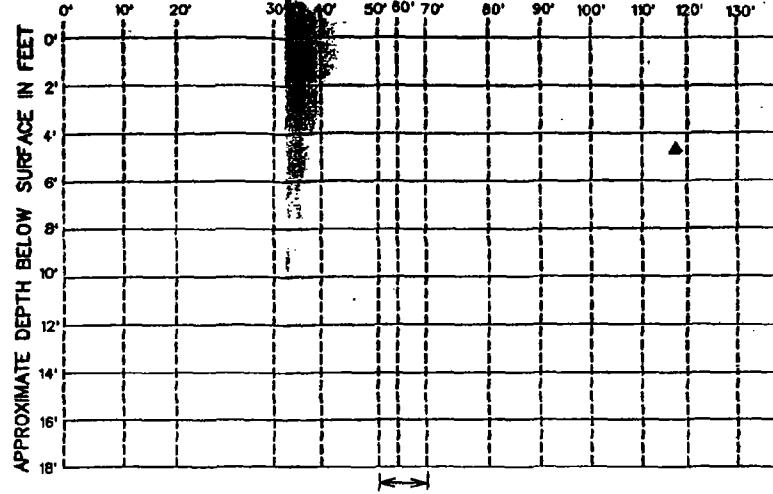
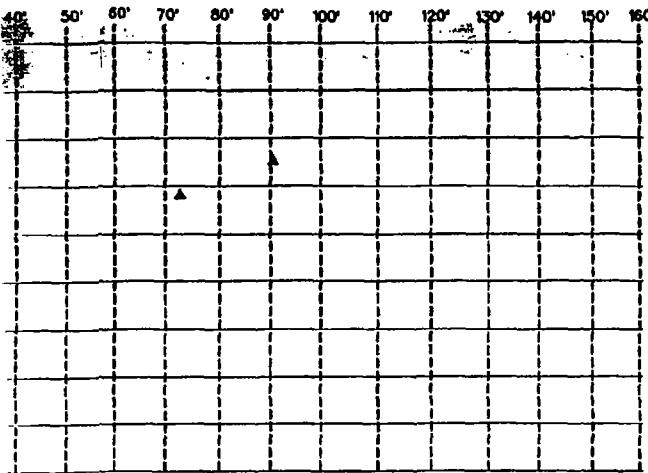
NORTH

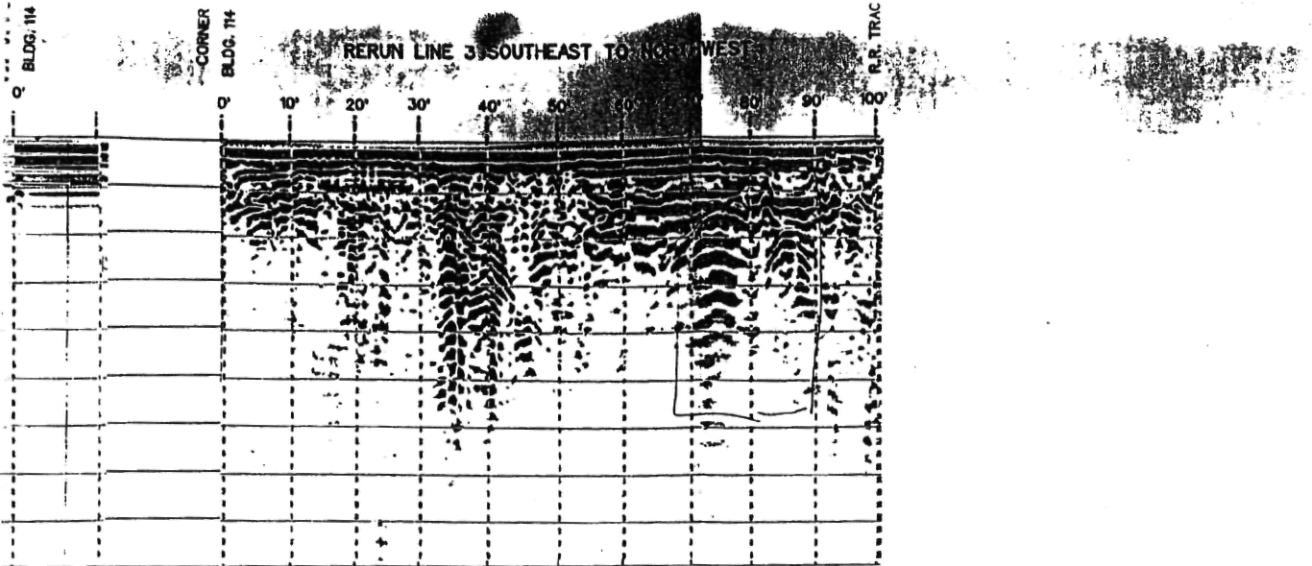


LINE 14 SOUTH TO NORTH









TE: GPR PROFILES SHOWN,
E 50% OF ACTUAL TAPE SIZE

ND

ON OF POTENTIAL
PIPE



BLASLAND, BOUCK & LEE, INC.

ENGINEERS & SCIENTISTS

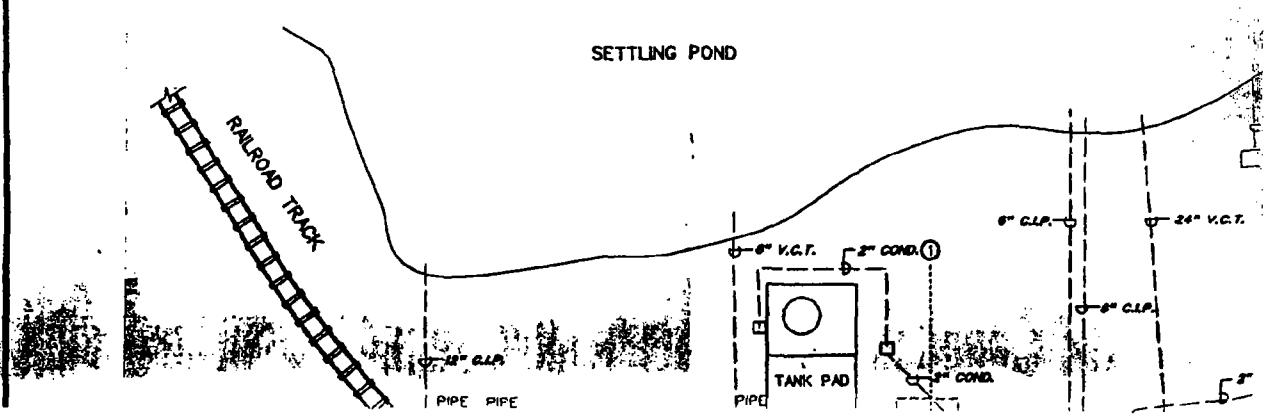
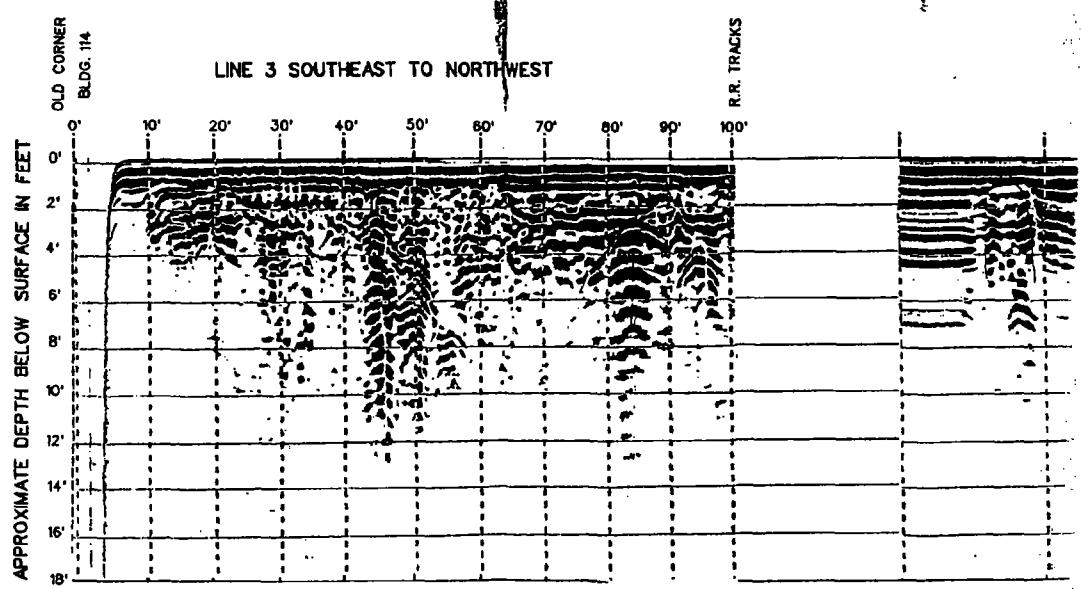
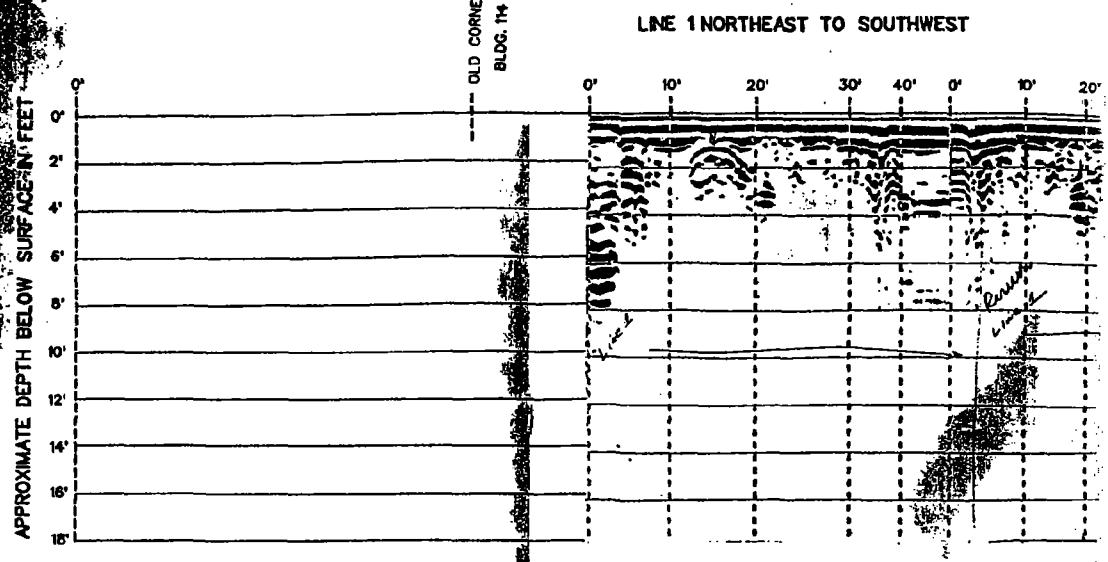
GENERAL ELECTRIC COMPANY

PITTSFIELD, MASSACHUSETTS

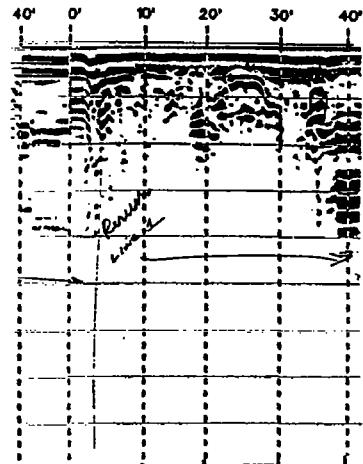
BUILDING 114 AREA

GPR SURVEY AREA
LOCATION MAP & PROFILES

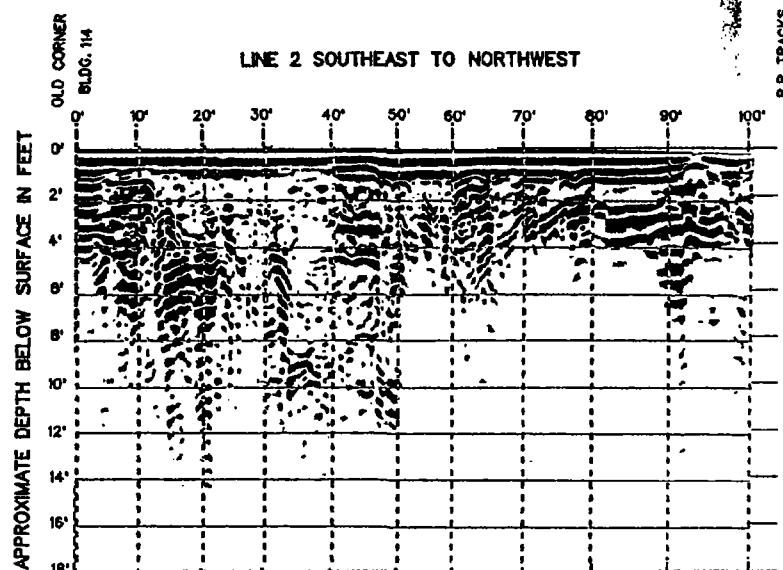
FIGURE
3



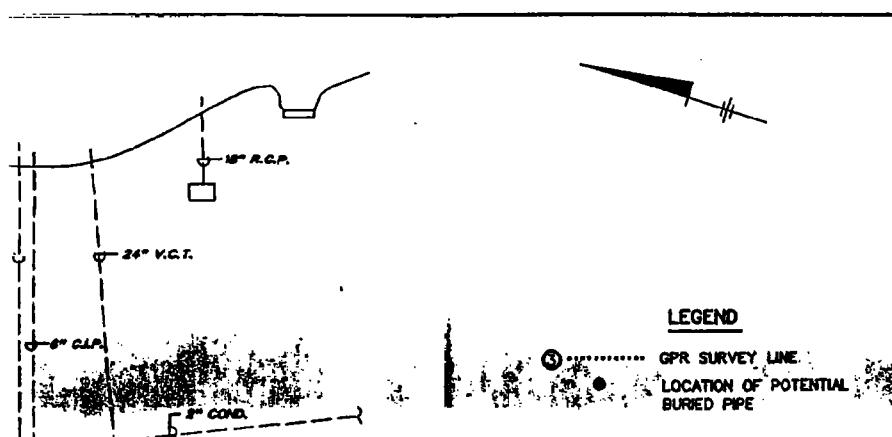
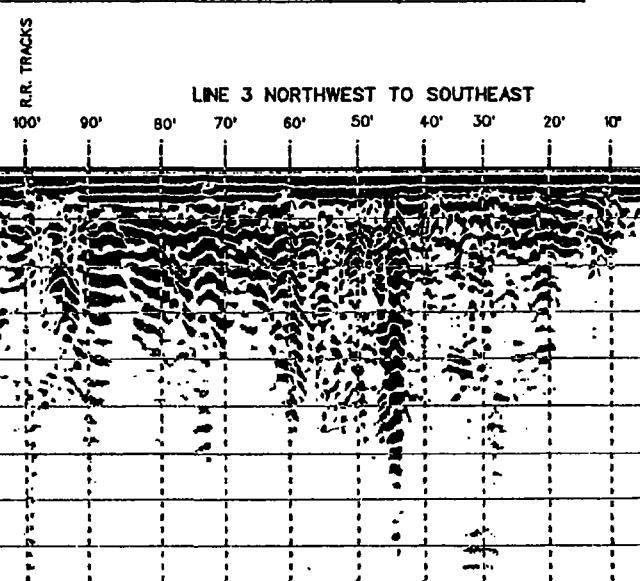
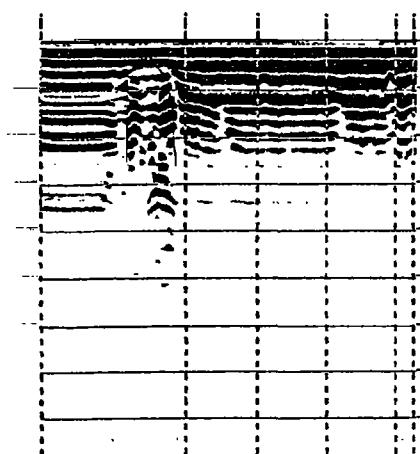
NORTHWEST



LINE 2 SOUTHEAST TO NORTHWEST

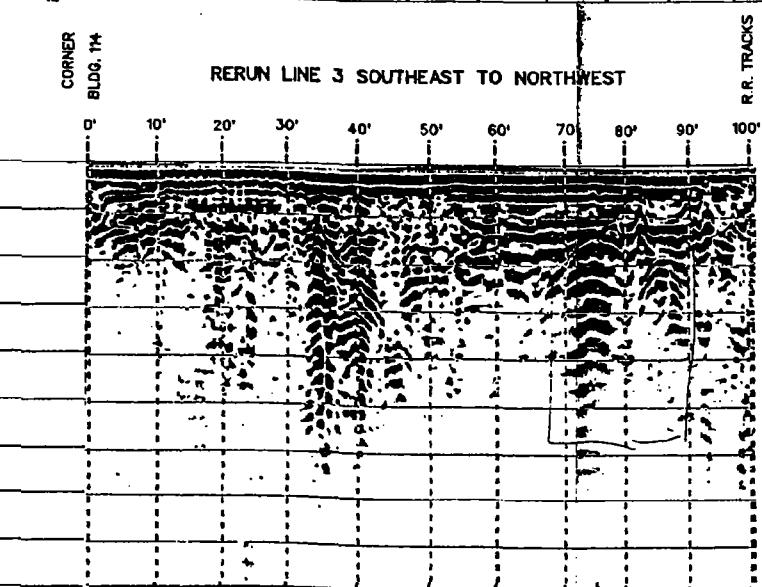
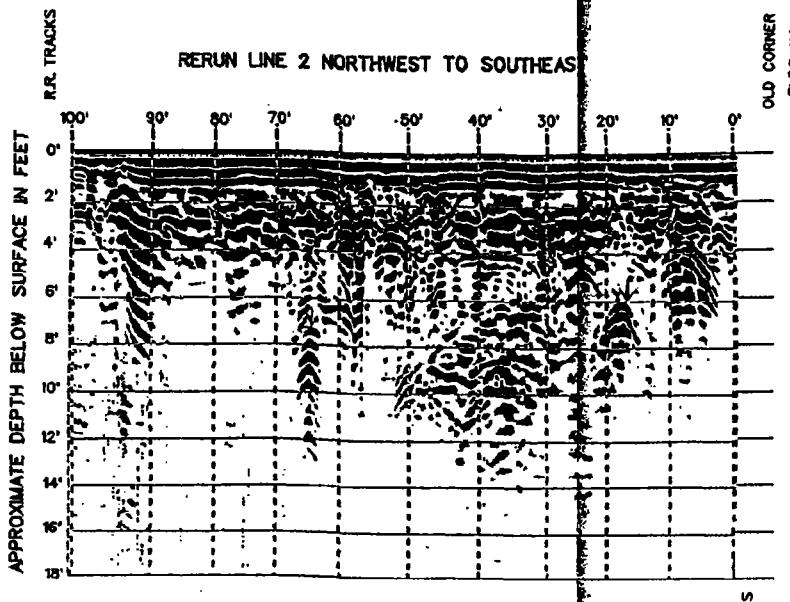


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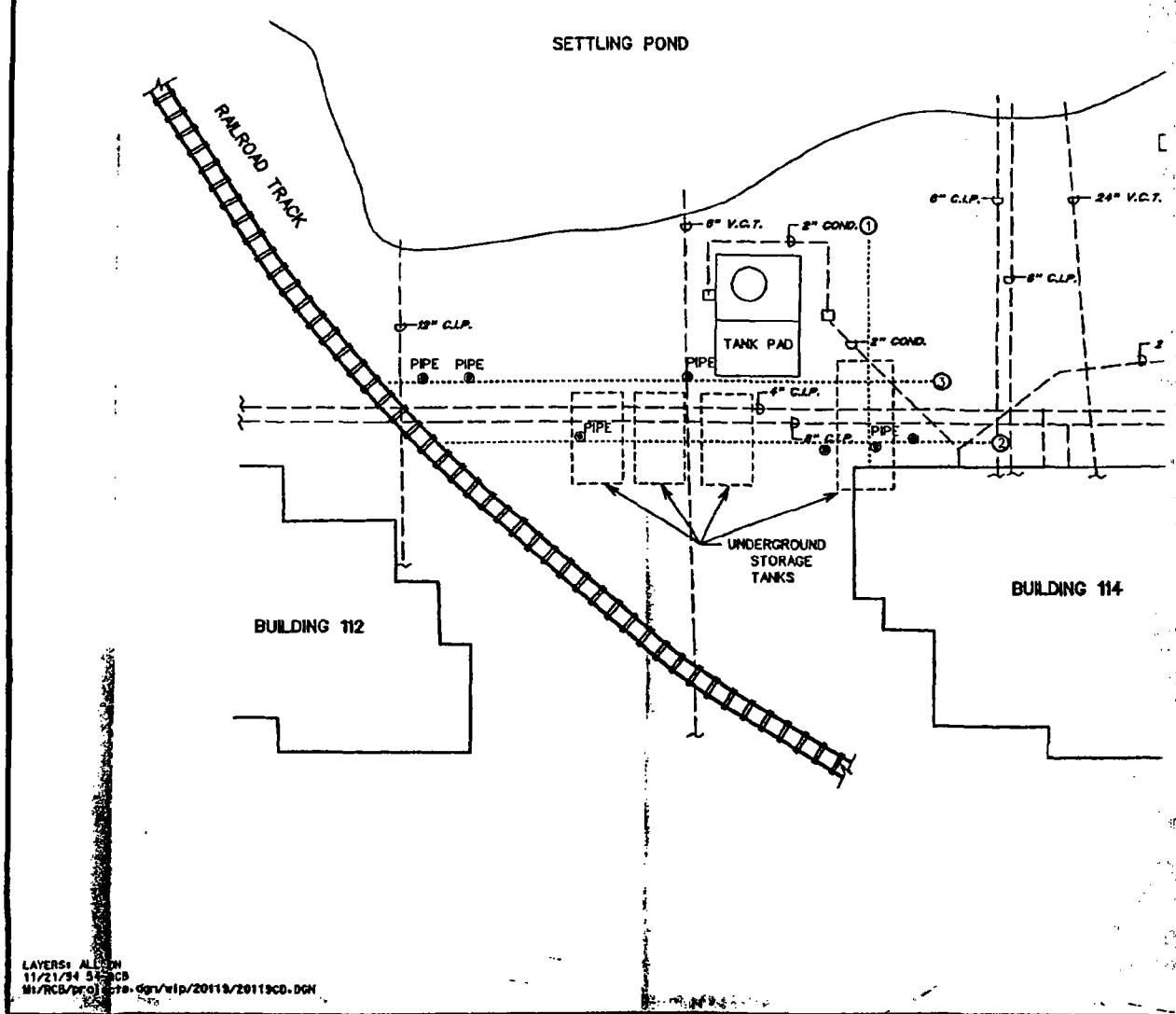
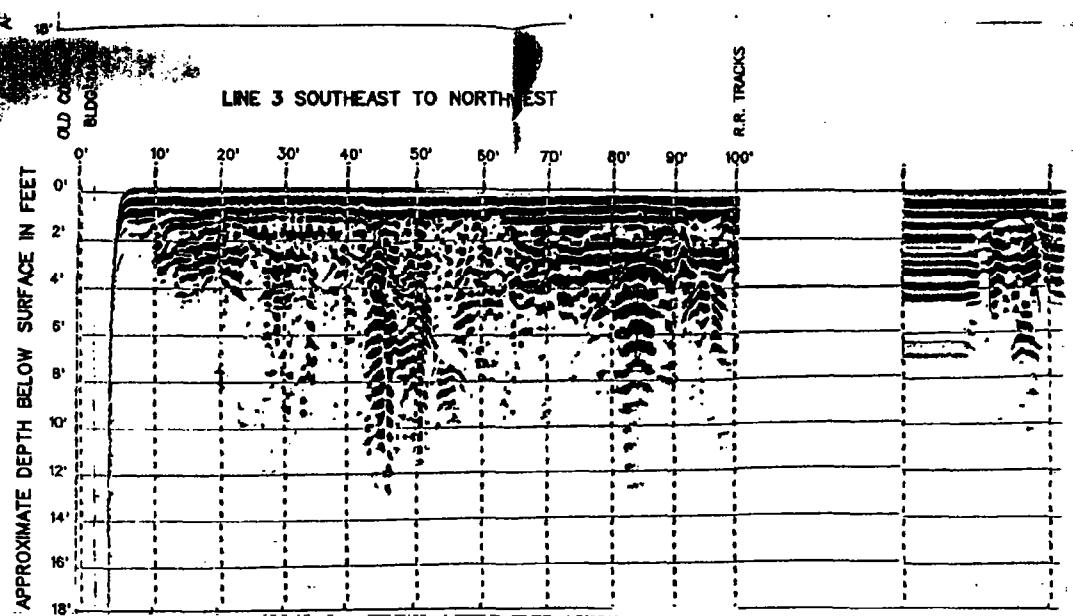


NOTE: GPR
ARE 50% C

LEGEND



GPR PROFILES SHOWN,
10% OF ACTUAL TAPE SIZE



LINE 3 (CONTINUED)

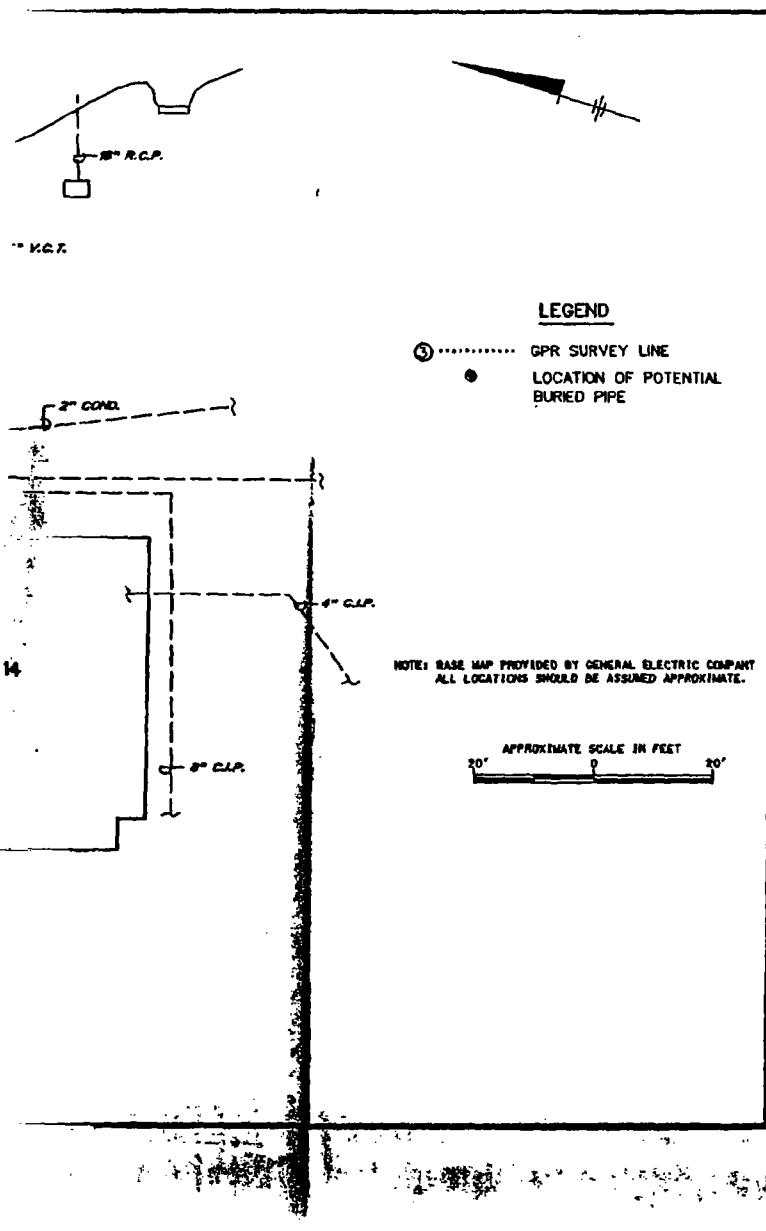
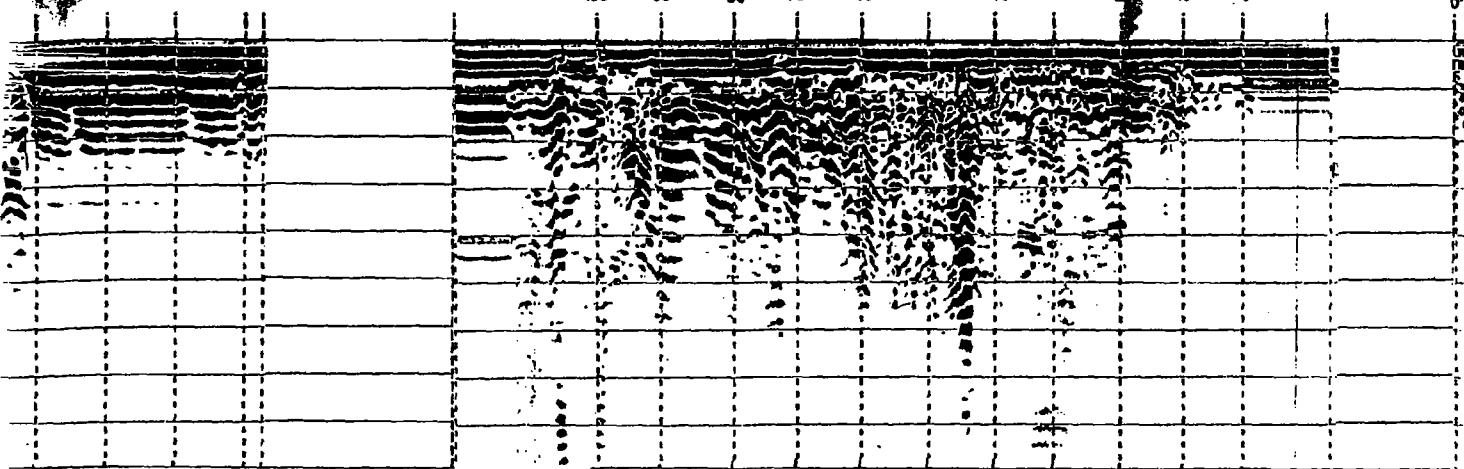
LINE 3 NORTHWEST TO SOUTHEAST

RR TRACKS

100' 90' 80' 70' 60' 50' 40' 30' 20'

OLD CORNER
BLDG. 14

CORNER
BLDG. 114



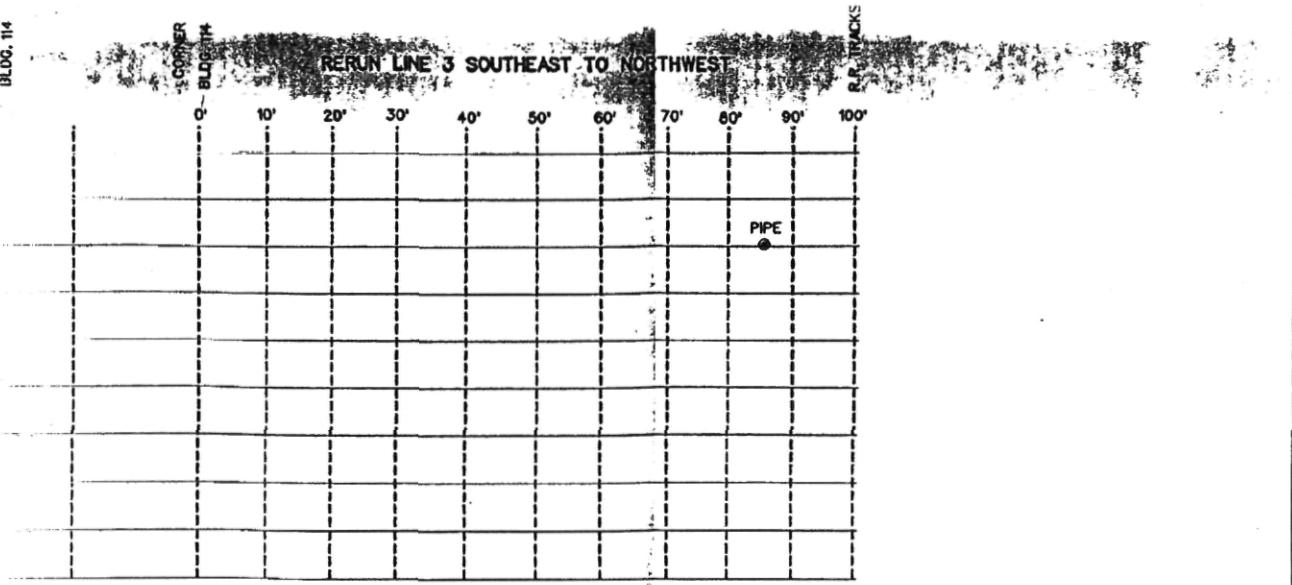
NOTE: GPR PROFILE
ARE 50% OF ACTL

LEGEND

- GPR SURVEY LINE
- LOCATION OF POTENTIAL BURIED PIPE

LEGEND

- LOCATION OF POTENTIAL BURIED PIPE



GPR PROFILES SHOWN,
50% OF ACTUAL TAPE SIZE

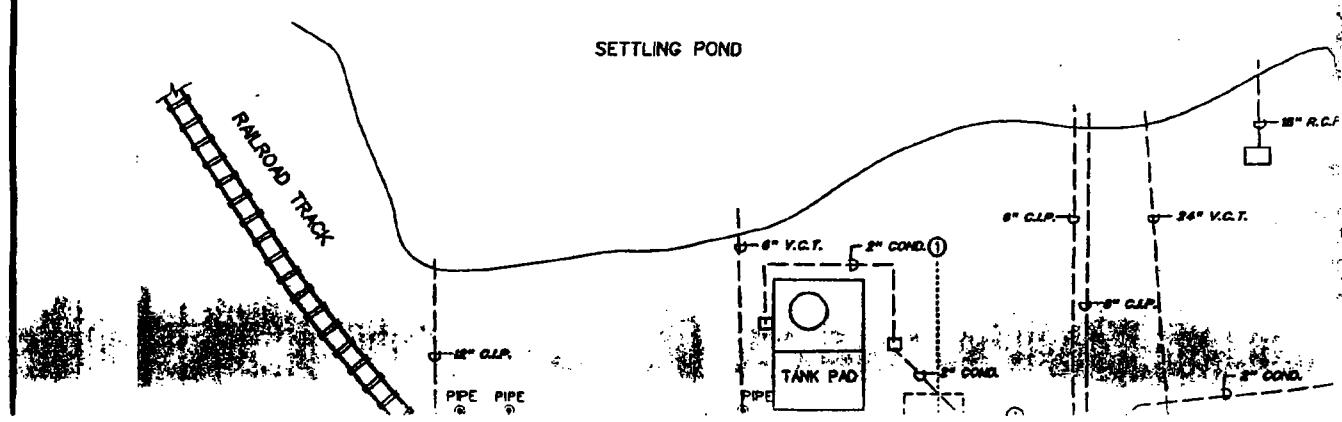
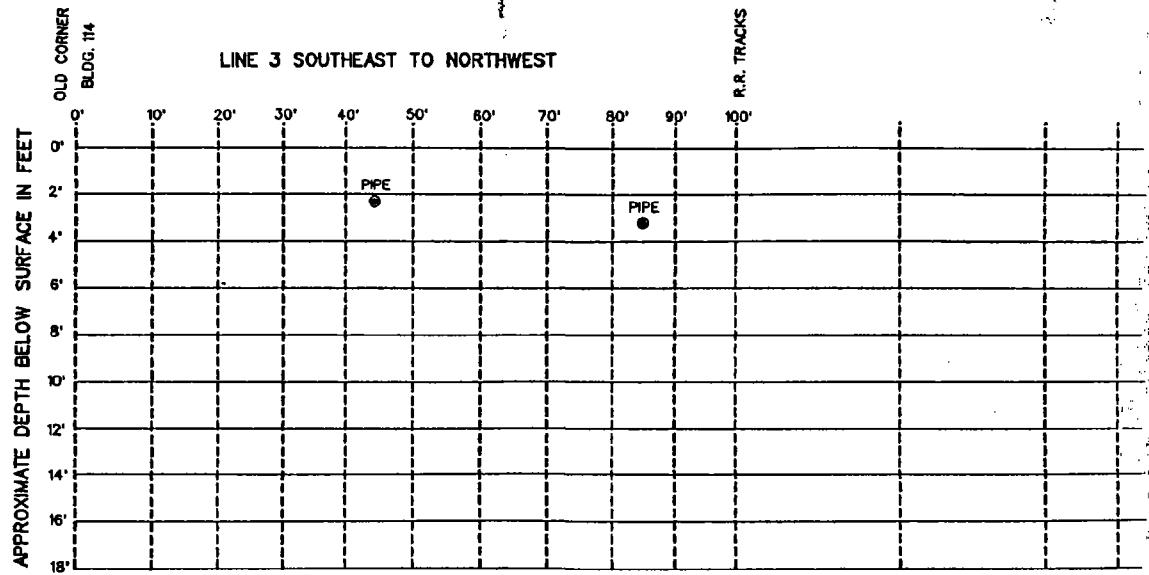
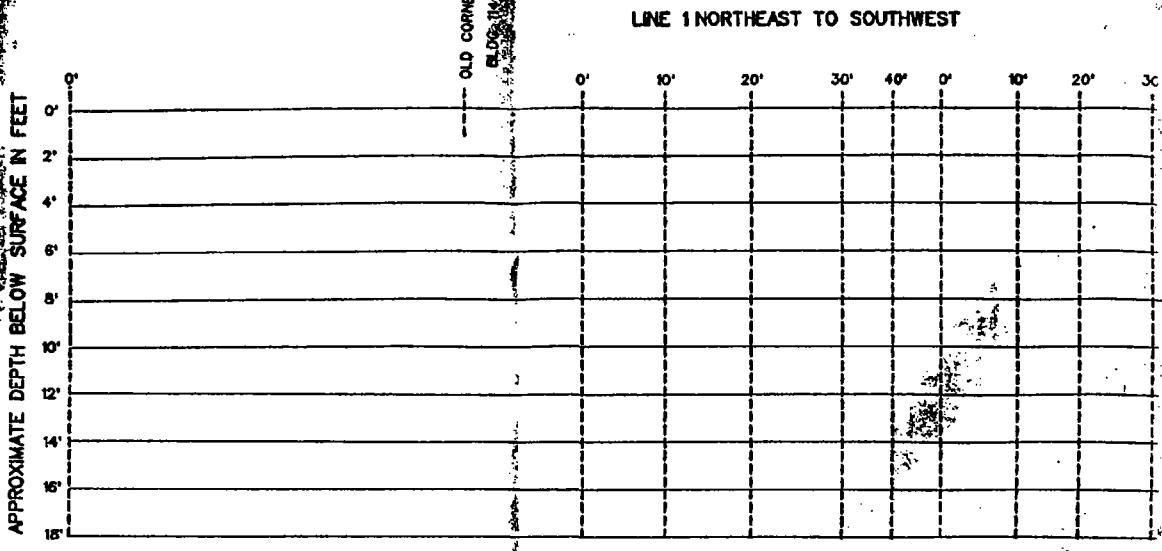
OF POTENTIAL
PIPE



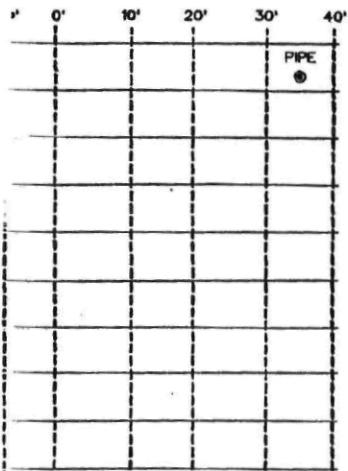
BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
BUILDING 114 AREA

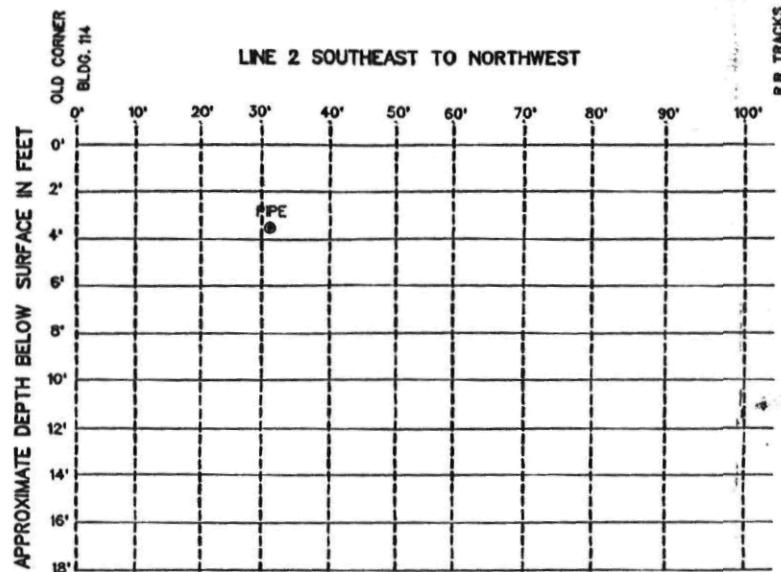
GPR SURVEY AREA | FIGURE
LOCATION MAP & PROFILES | 3A



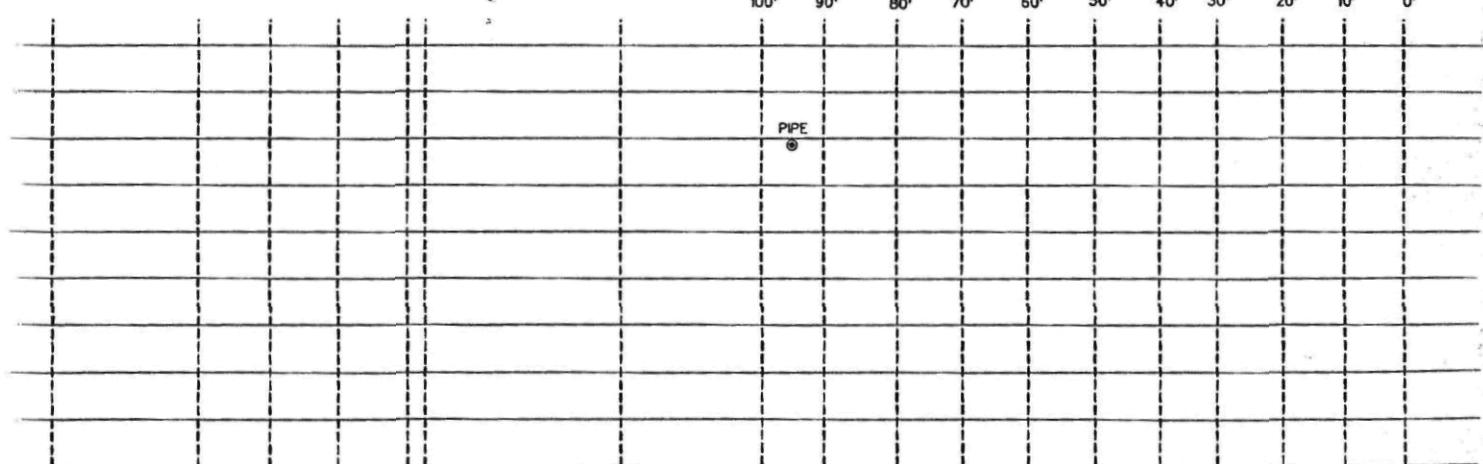
WEST



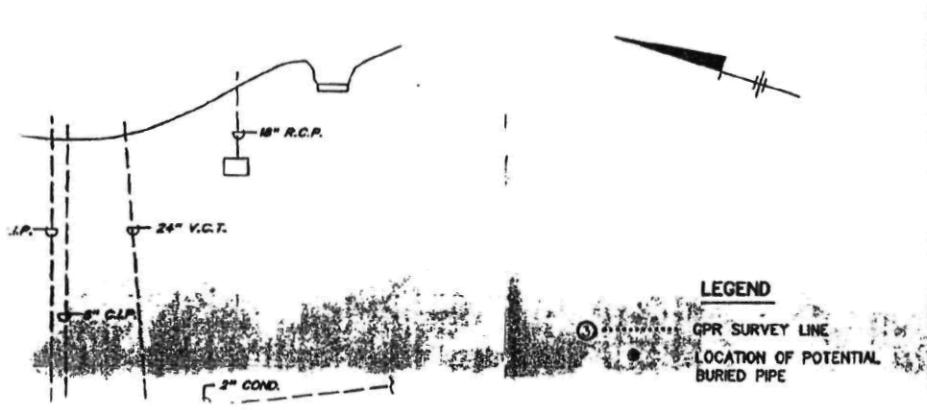
LINE 2 SOUTHEAST TO NORTHWEST



LINE 3 (CONTINUED)

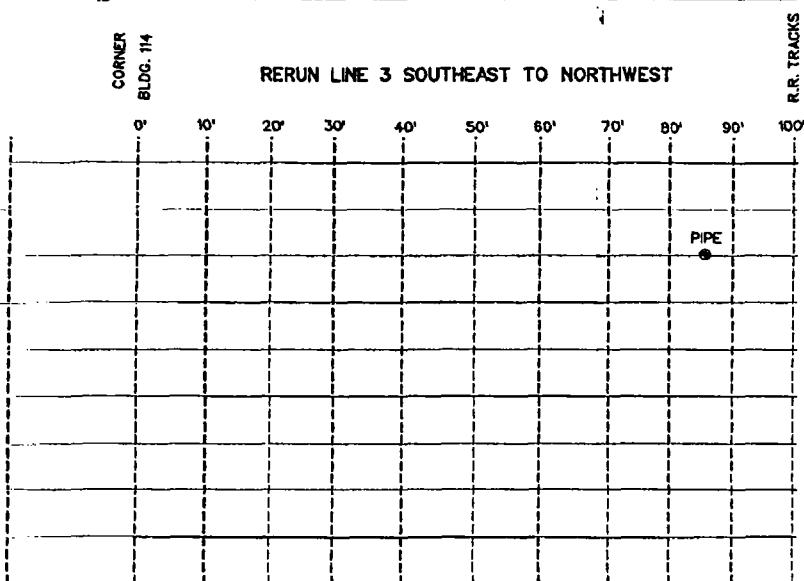
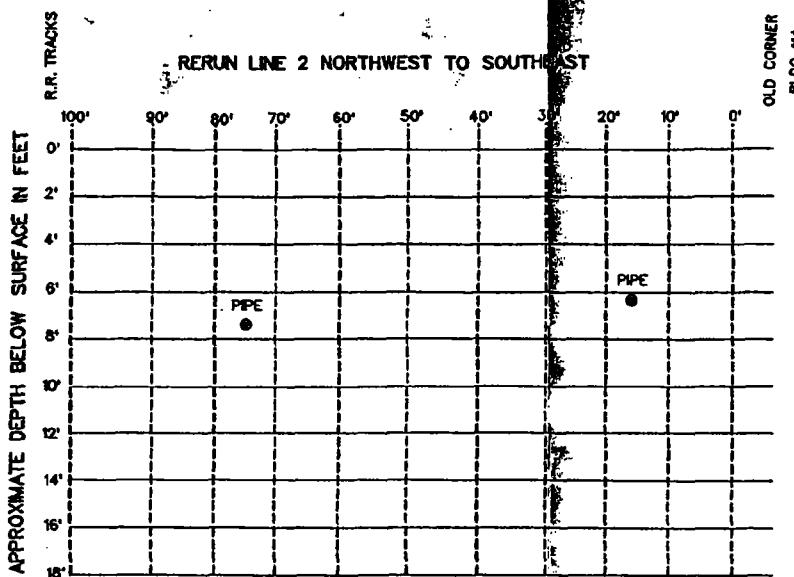


NOTE: GP
ARE 50%

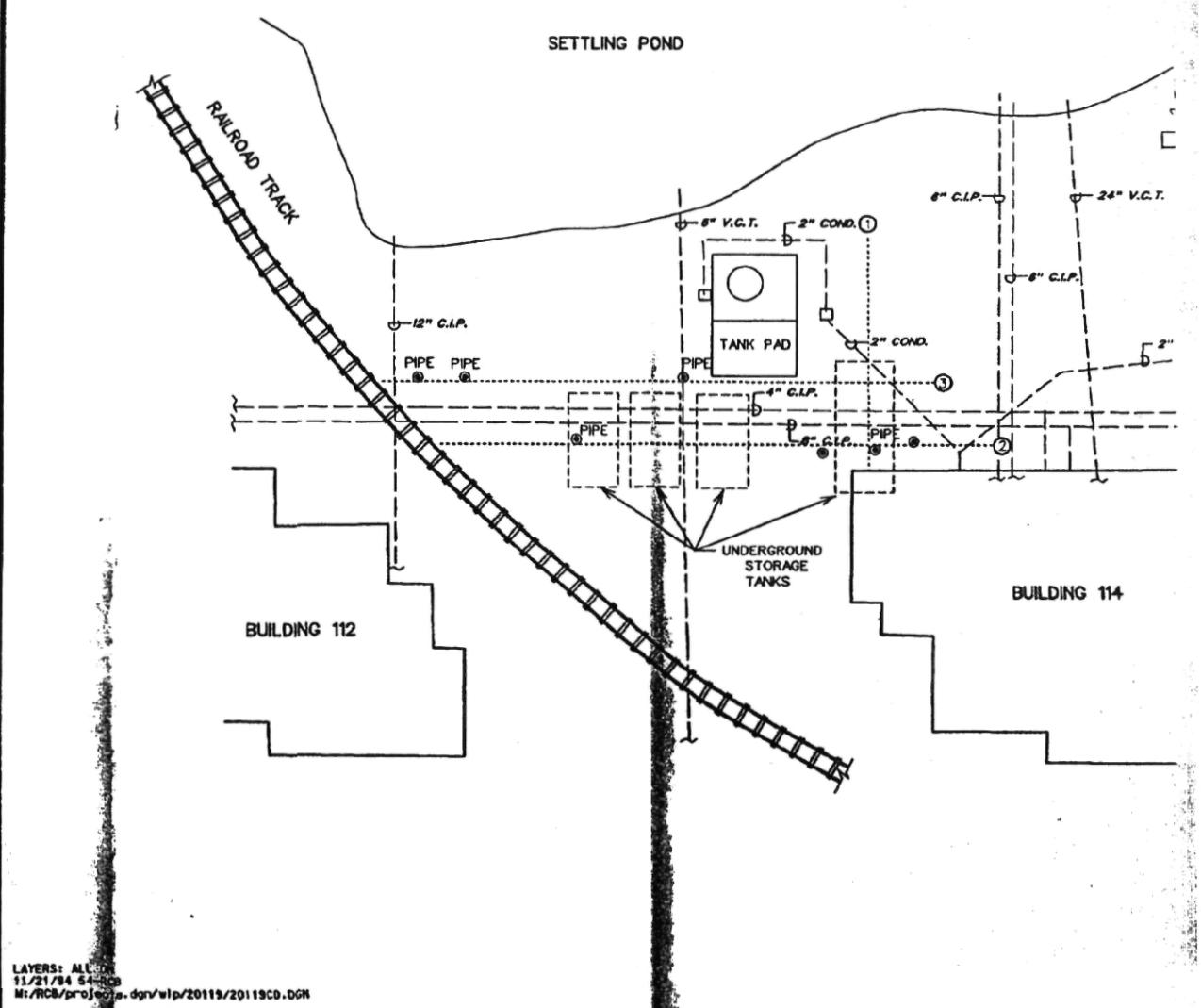
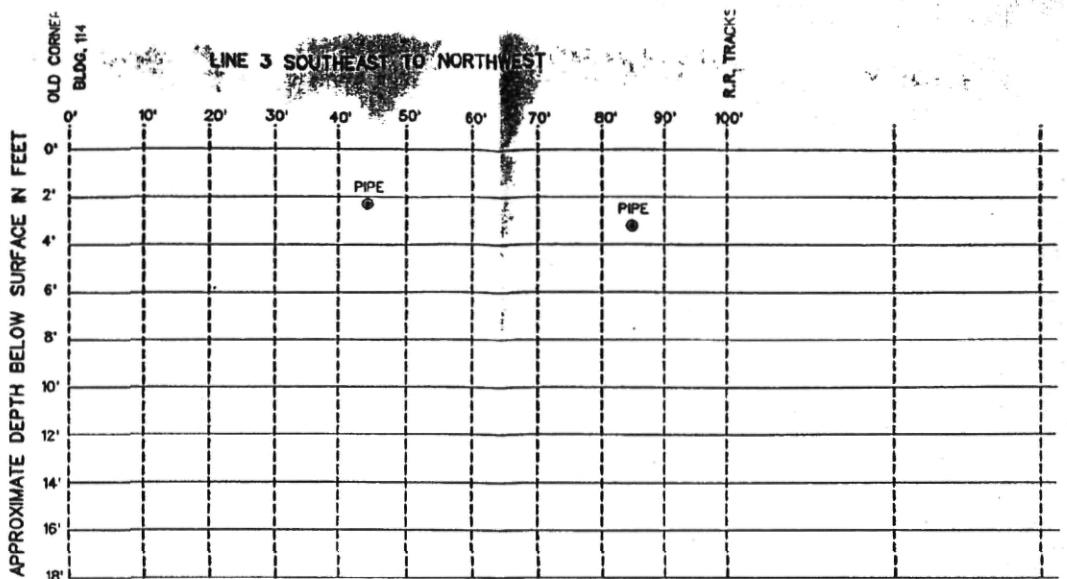


LEGEND
GPR SURVEY LINE
LOCATION OF POTENTIAL
BURIED PIPE

LEGEND



GPR PROFILES SHOWN,
>0% OF ACTUAL TAPE SIZE



LAYERS: ALL
11/21/84 54-10B
M:/RCB/projects.dgn/wip/20119/20119CD.DGN

PGE00212110

LINE 3 (CONTINUED)

R.R. TRACKS

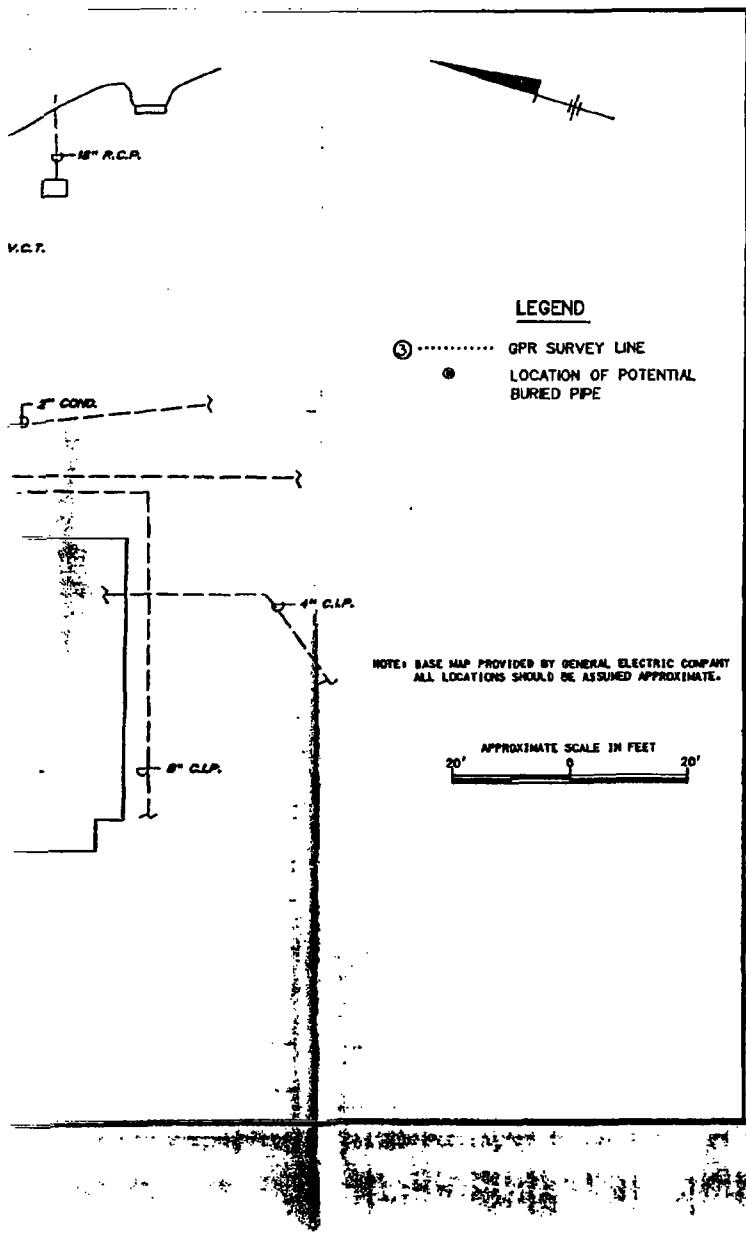
LINE 3 NORTHWEST TO SOUTHEAST

PIPE

100' 90' 80' 70' 60' 50' 40' 30' 20' 10' 0'

OLD CORNER
BLDG. 114

CORNER
BLDG. 114



NOTE: GPR PROFILE ARE 50% OF ACTUAL

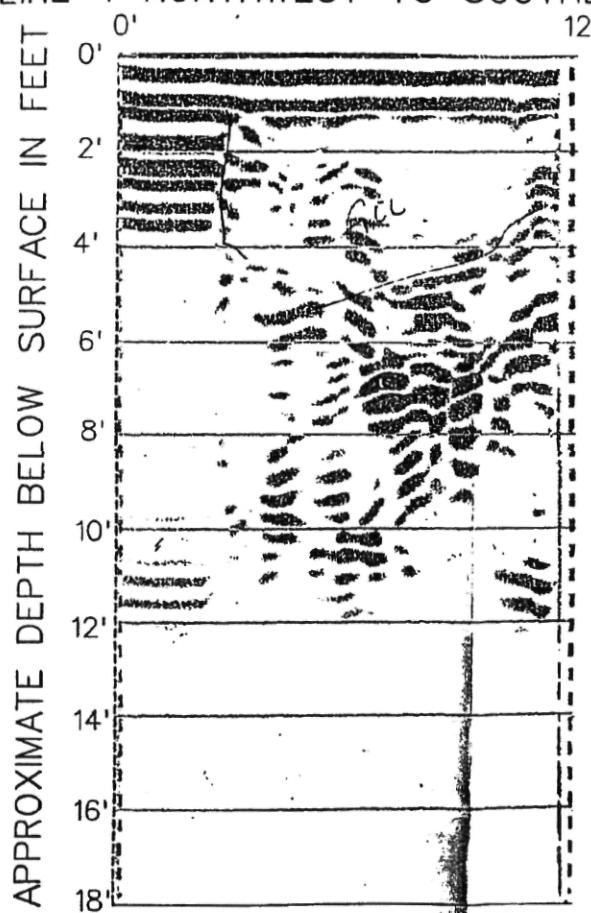
LEGEND

- ③ GPR SURVEY LINE
- LOCATION OF POTENTIAL BURIED PIPE

LEGEND

- LOCATION OF POTENTIAL BURIED PIPE

LINE 4 NORTHWEST TO SOUTHEAST



BLASLAND, BOUCK & LEE, INC.

ENGINEERS & SCIENTISTS

GENERAL ELECTRIC COMPANY

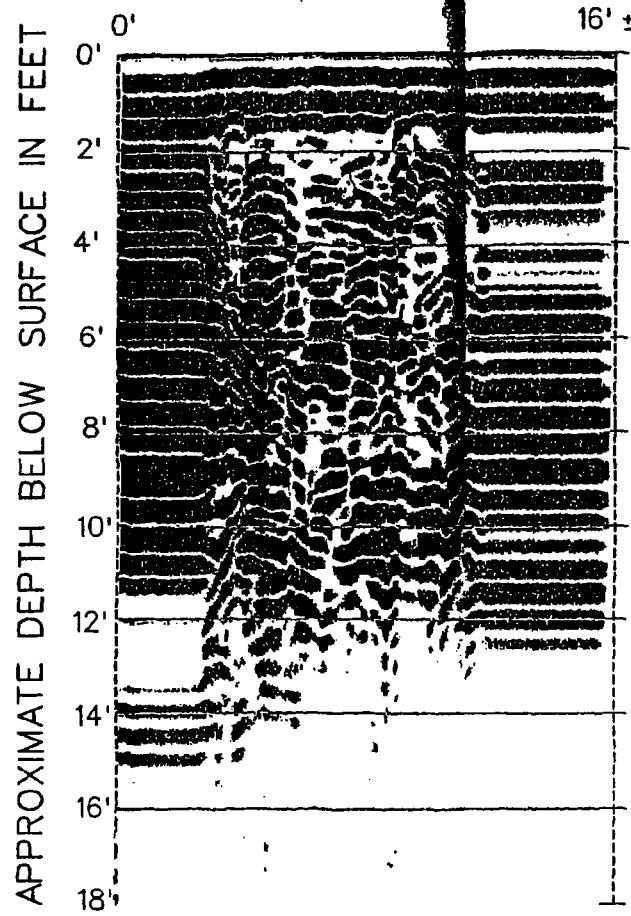
PITTSFIELD, MASSACHUSETTS

BUILDING 51 AREA

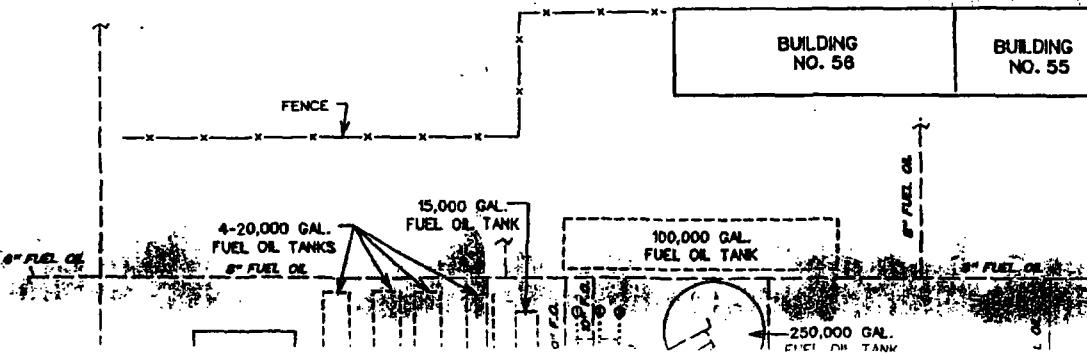
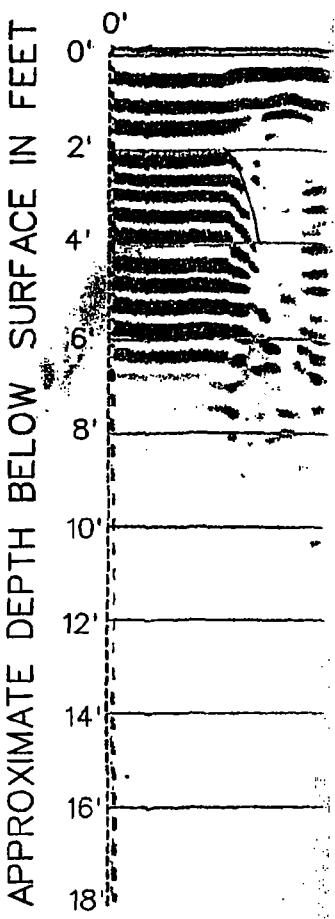
CPR SURVEY AREA
LOCATION MAP & PROFILES

FIGURE
4

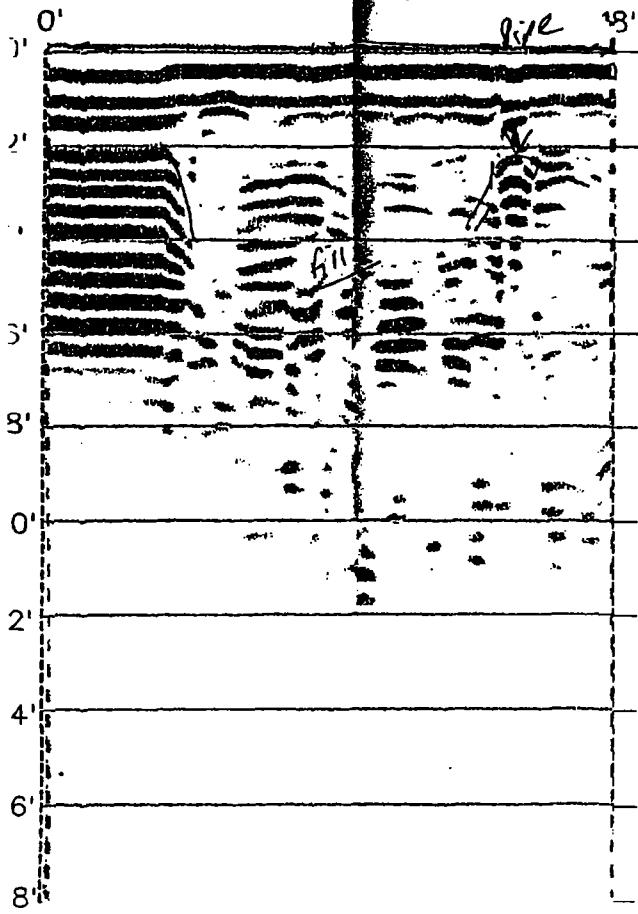
LINE 1 SOUTHWEST TO NORTHEAST



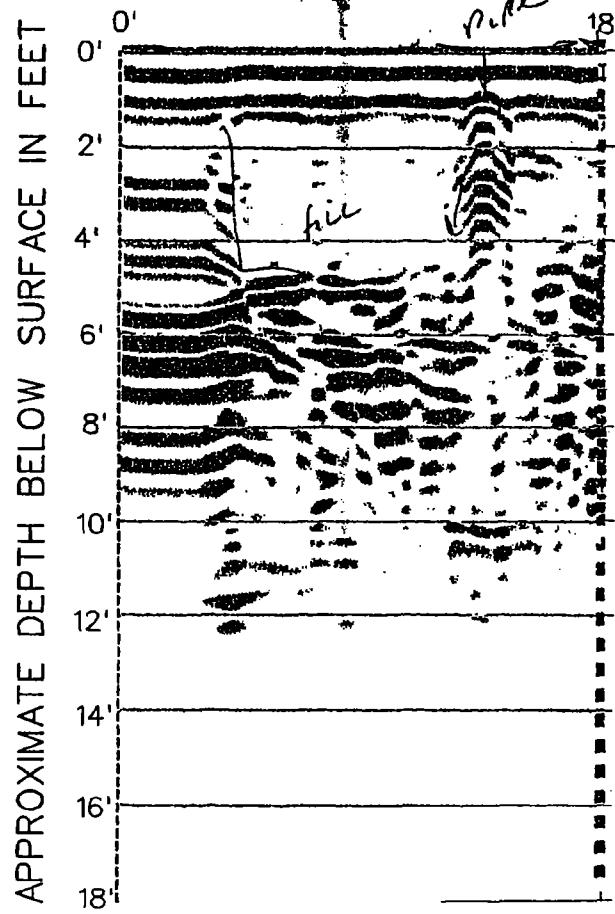
RERUN LINE 1 SOUT



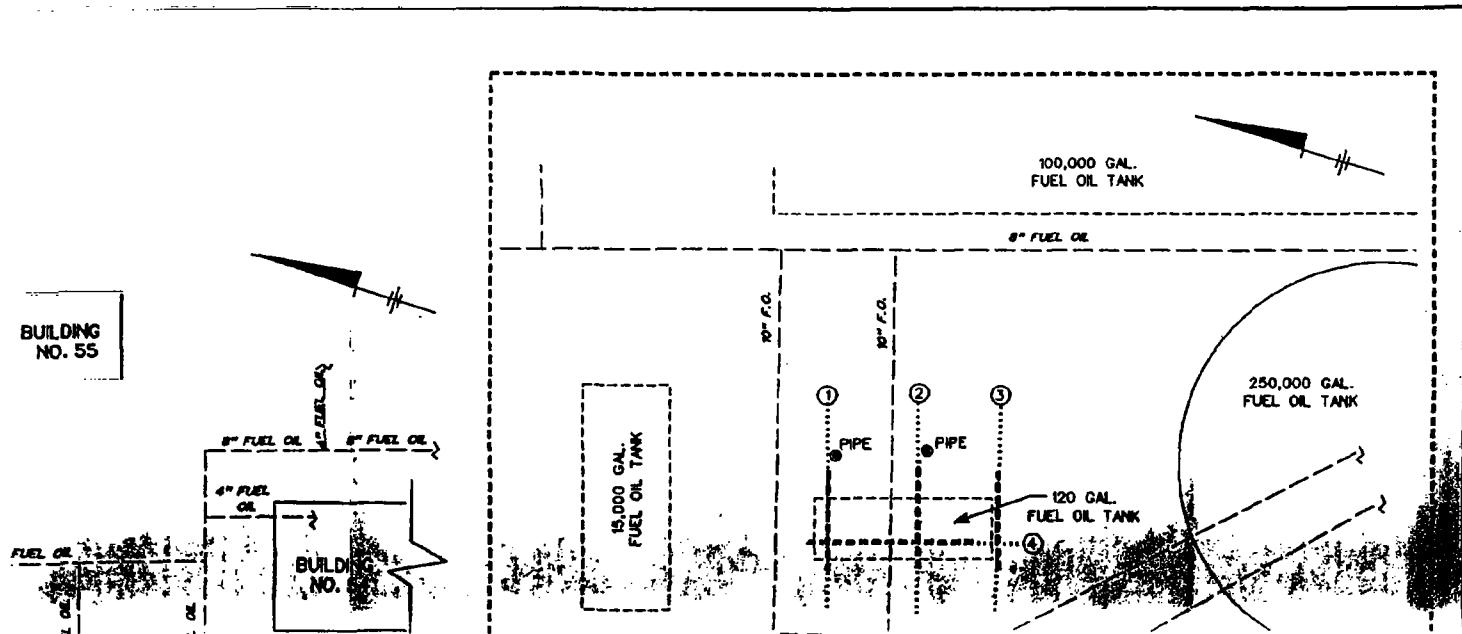
↓ LINE 1 SOUTHWEST TO NORTHEAST



LINE 2 SOUTHWEST TO NORTHEAST

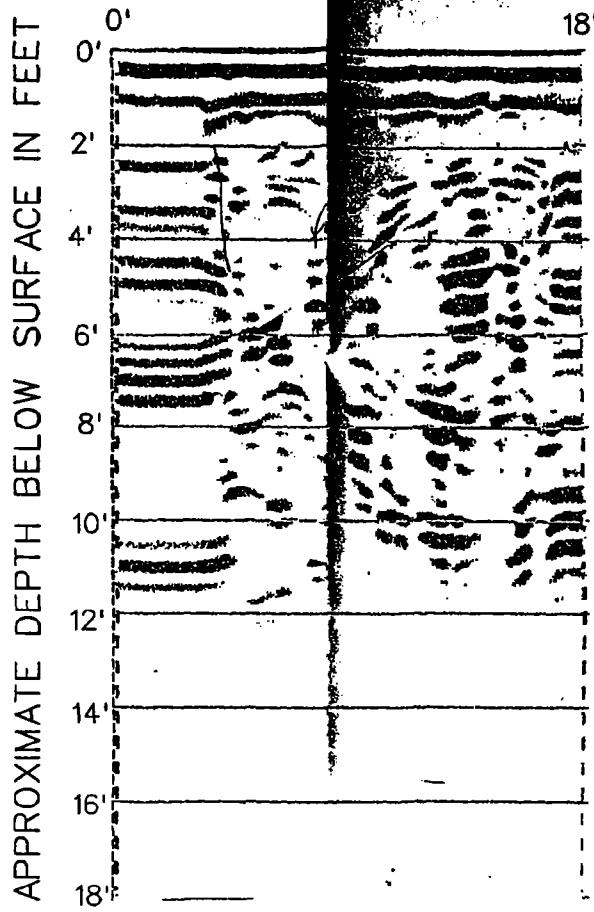


APPROXIMATE DEPTH BELOW SURFACE IN FEET

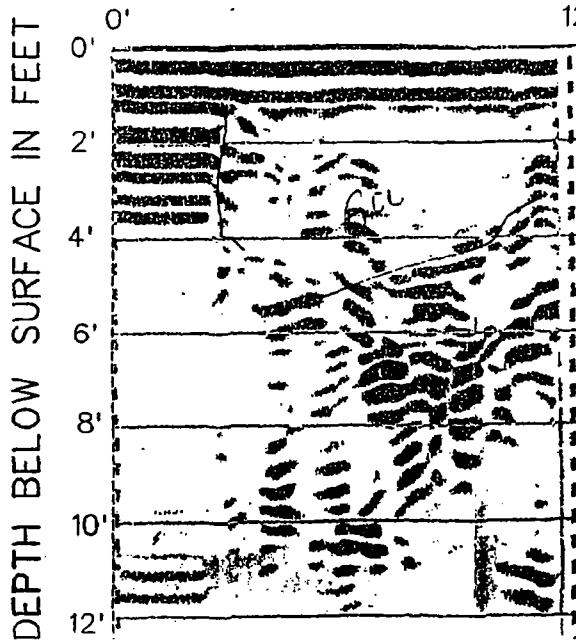


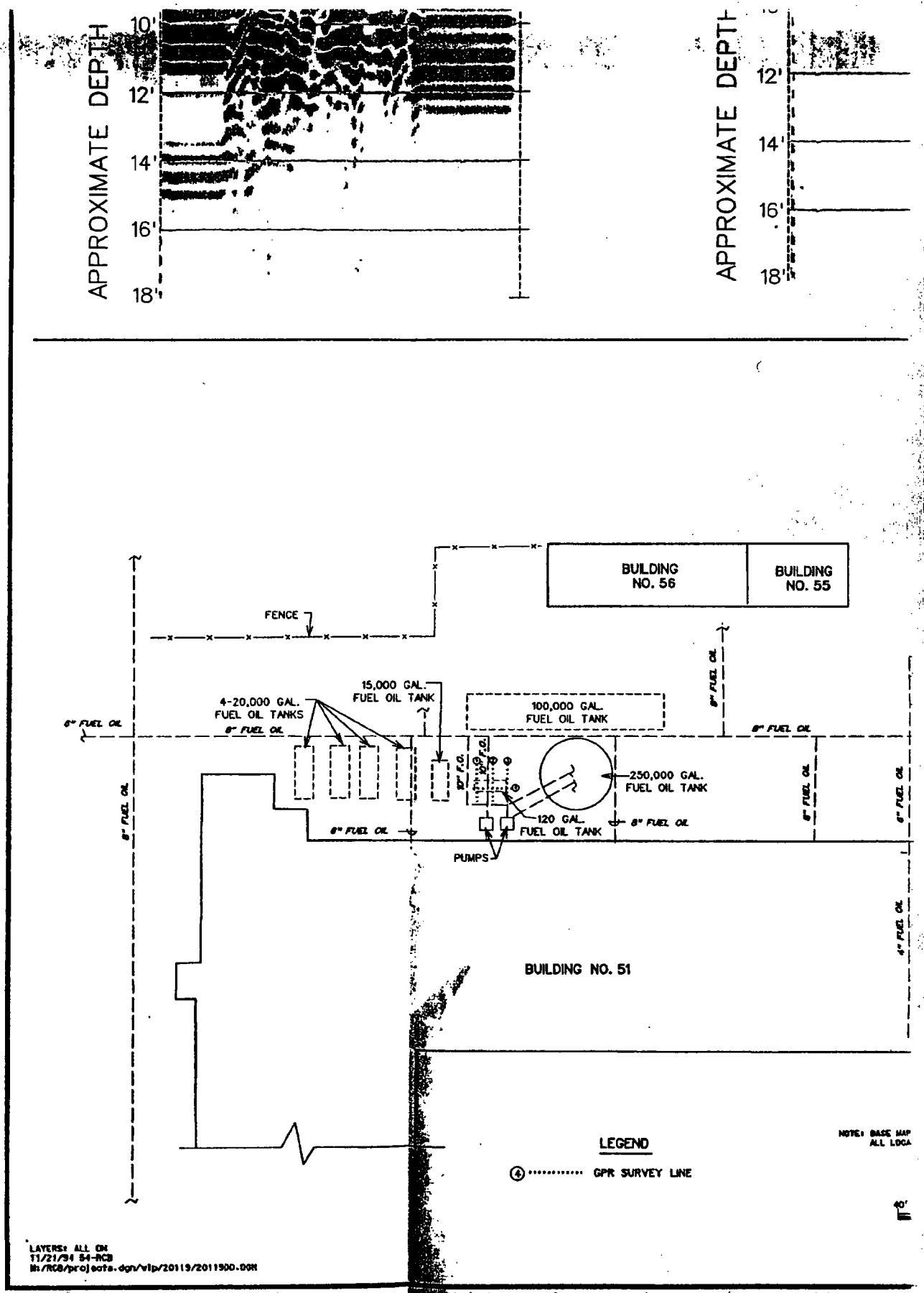
EAST

LINE 3 SOUTHWEST TO NORTHEAST



LINE 4 NORTHWEST TO SOUTHEAST





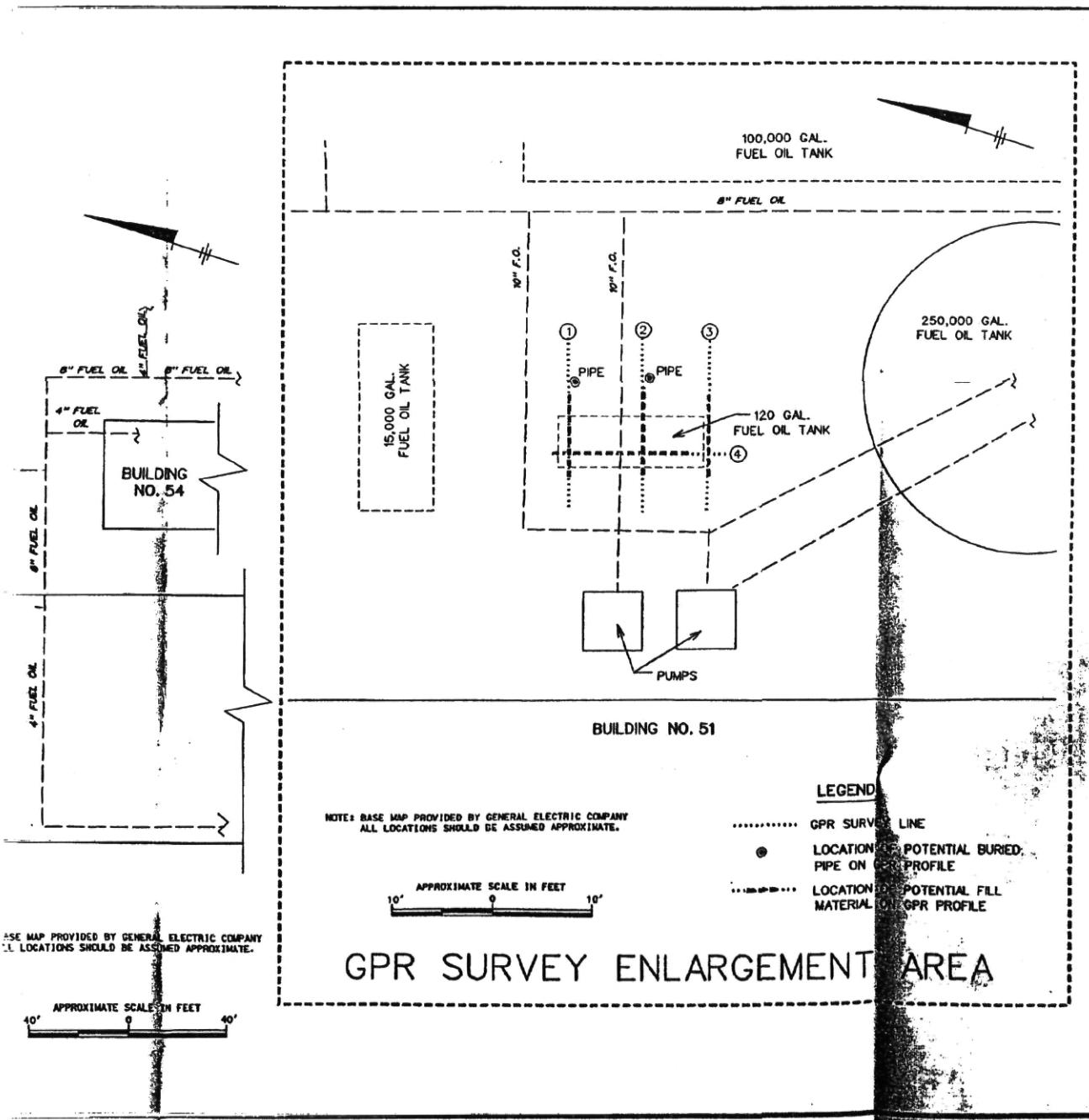
PGE00212116

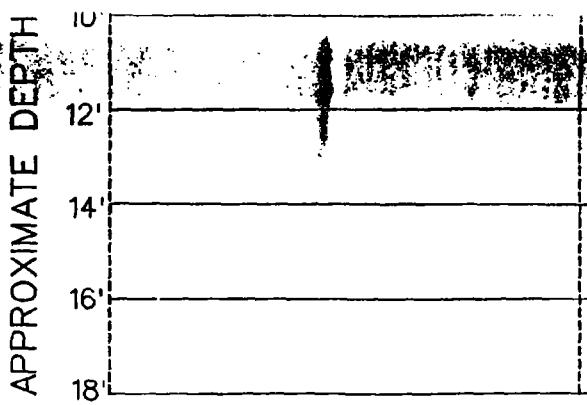
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APPROXIMATE DEPTH BELOW SURFACE IN FEET

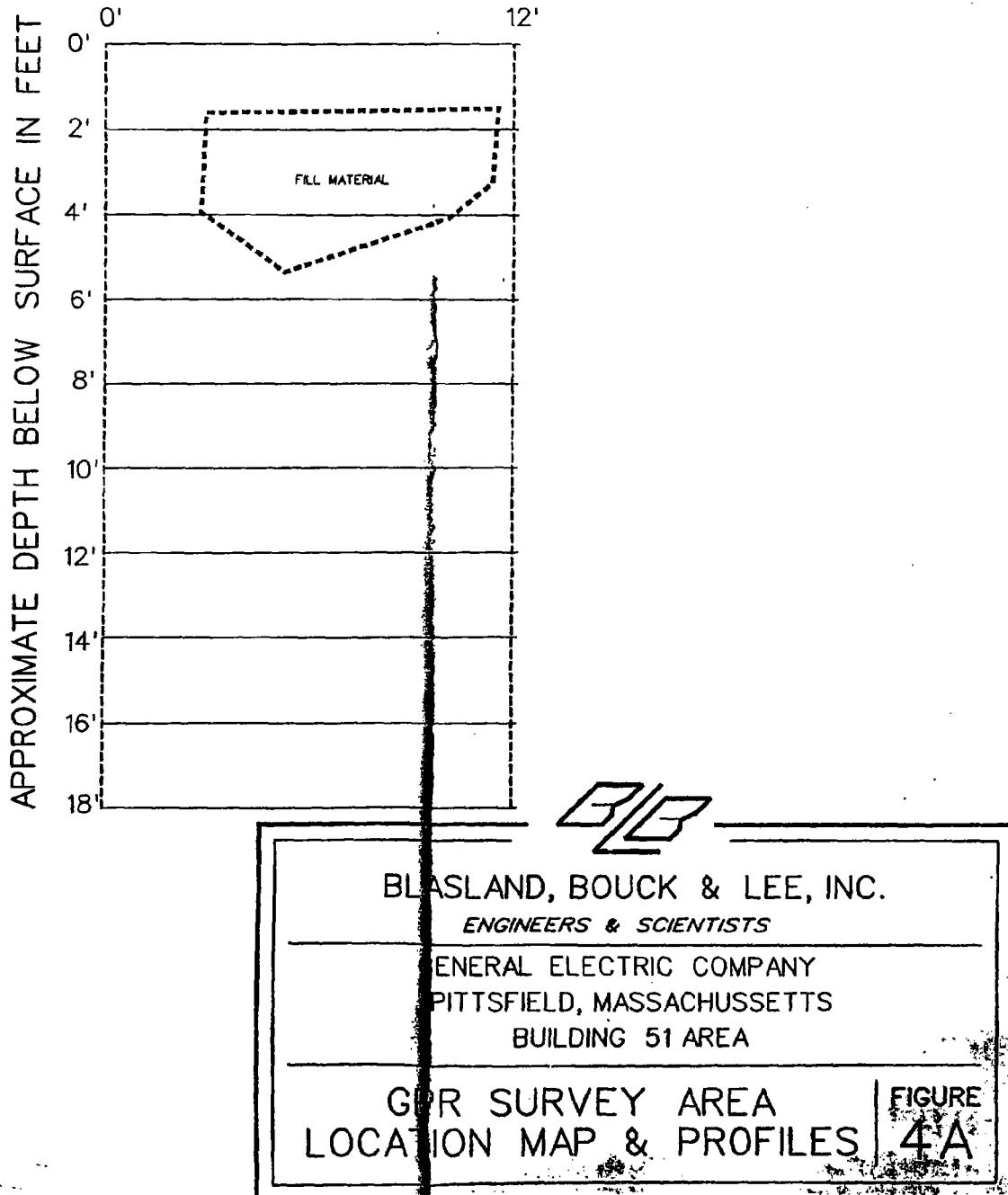
APPROXIMATE DEPTH

12'
14'
16'
18'

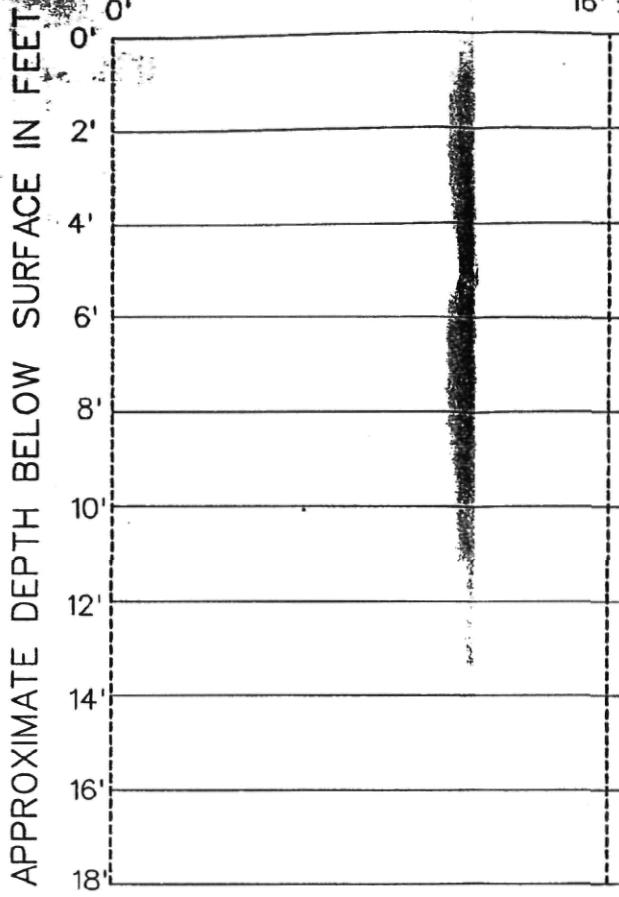




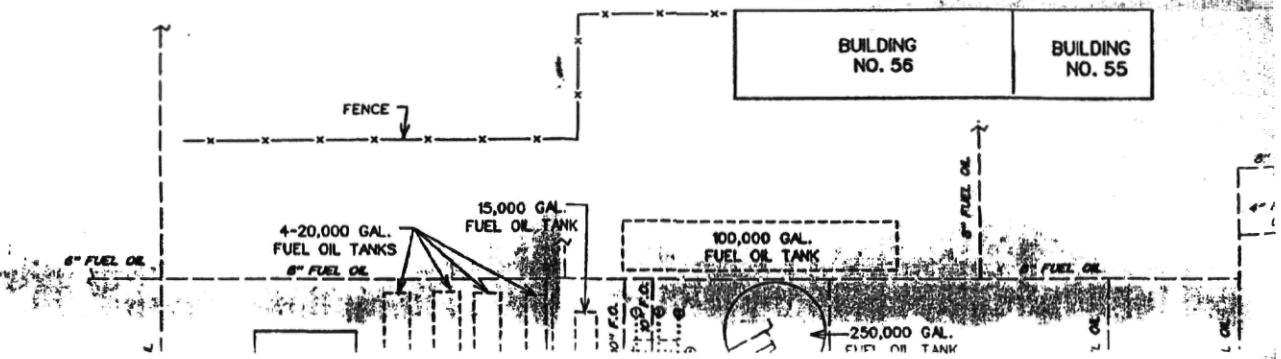
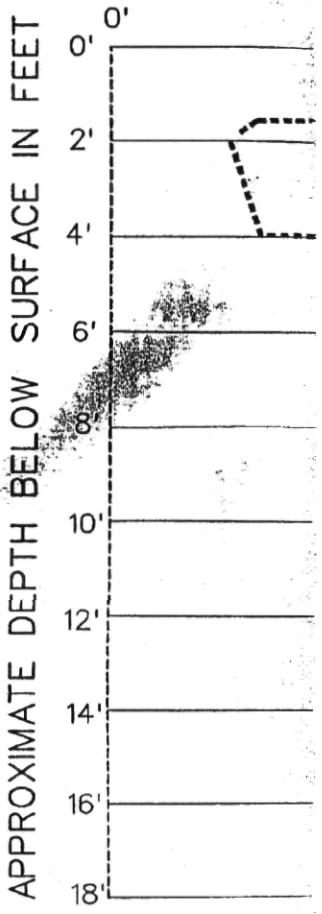
LINE 4 NORTHWEST TO SOUTHEAST



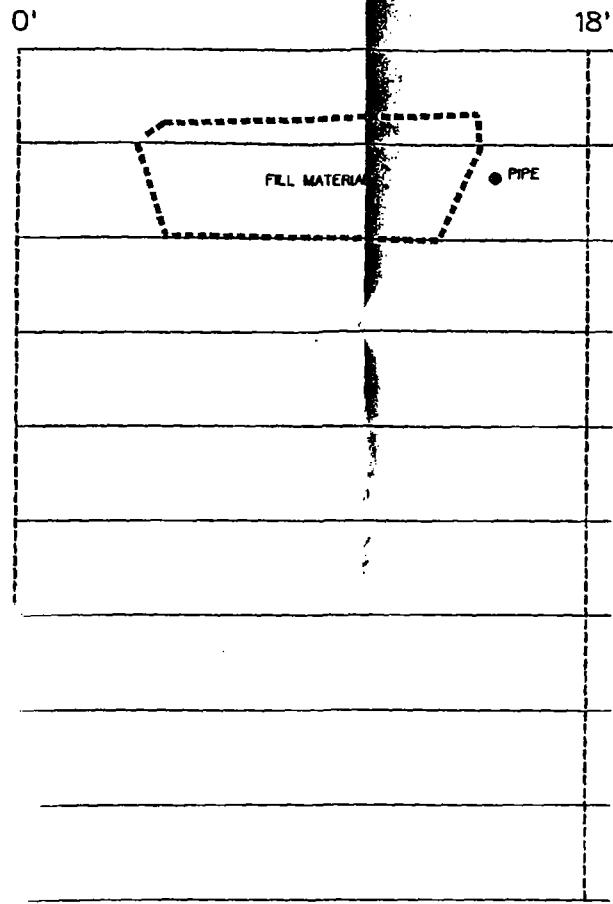
LINE 1 SOUTHWEST TO NORTHEAST



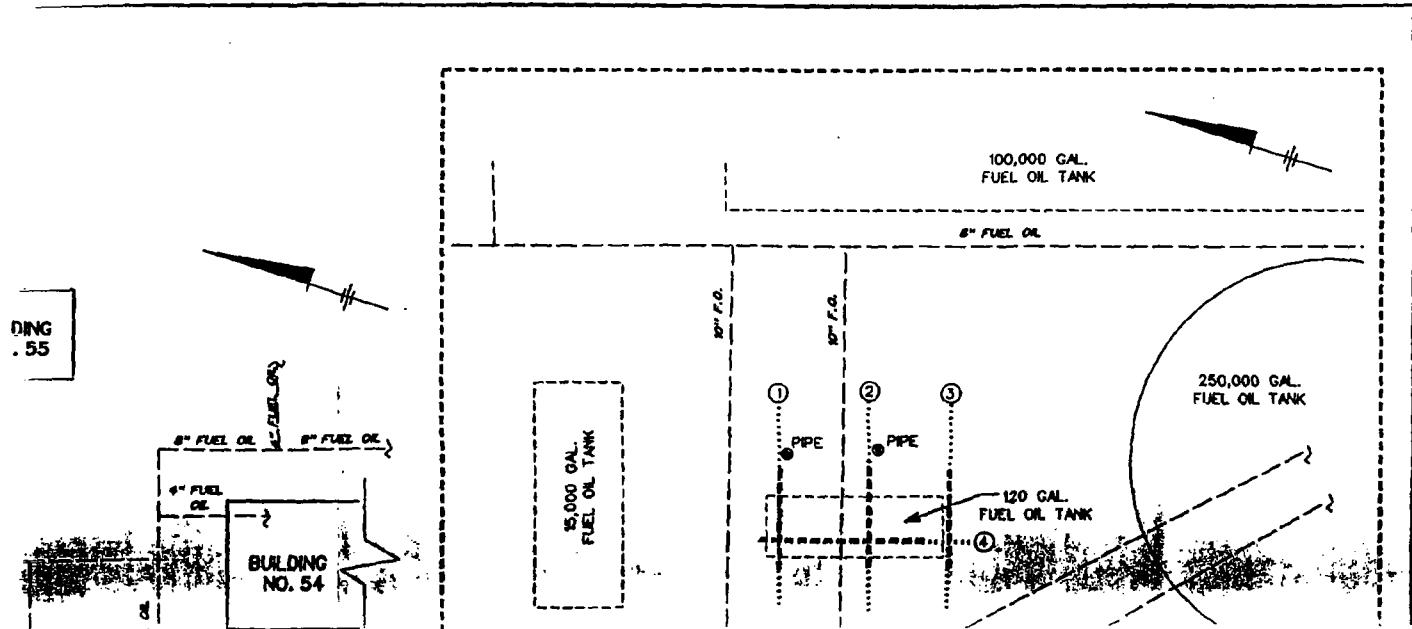
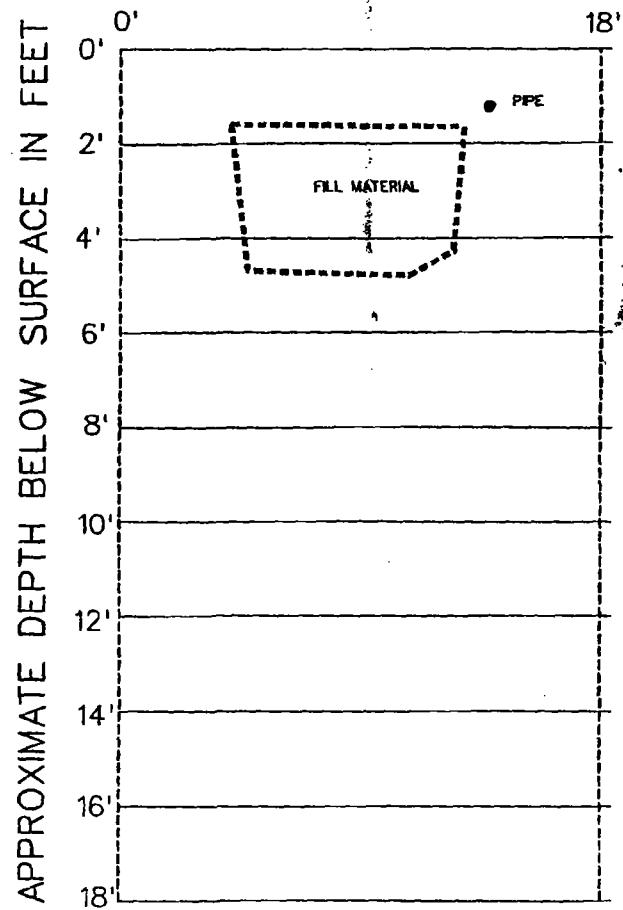
RERUN LINE 1 SOUTHWEST TO NORTHEAST



LINE 1 SOUTHWEST TO NORTHEAST

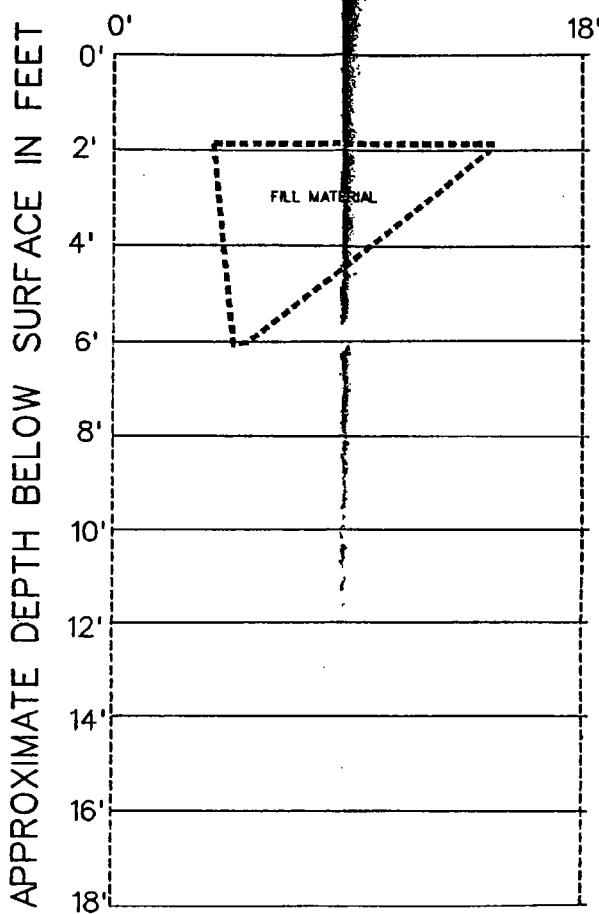


LINE 2 SOUTHWEST TO NORTHEAST

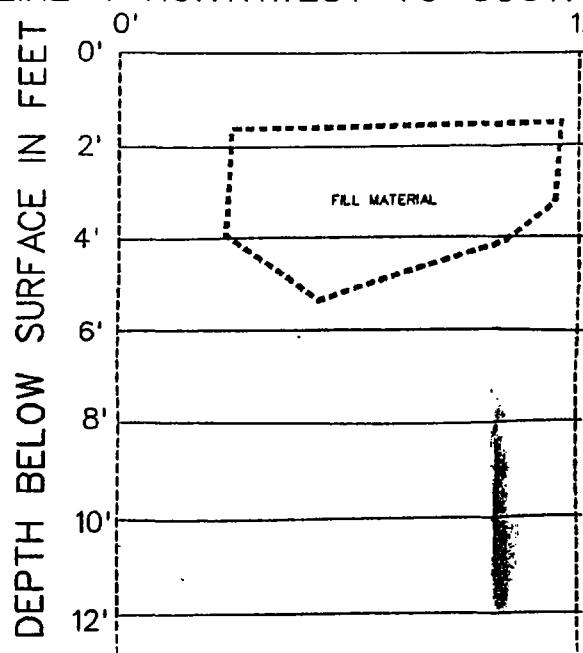


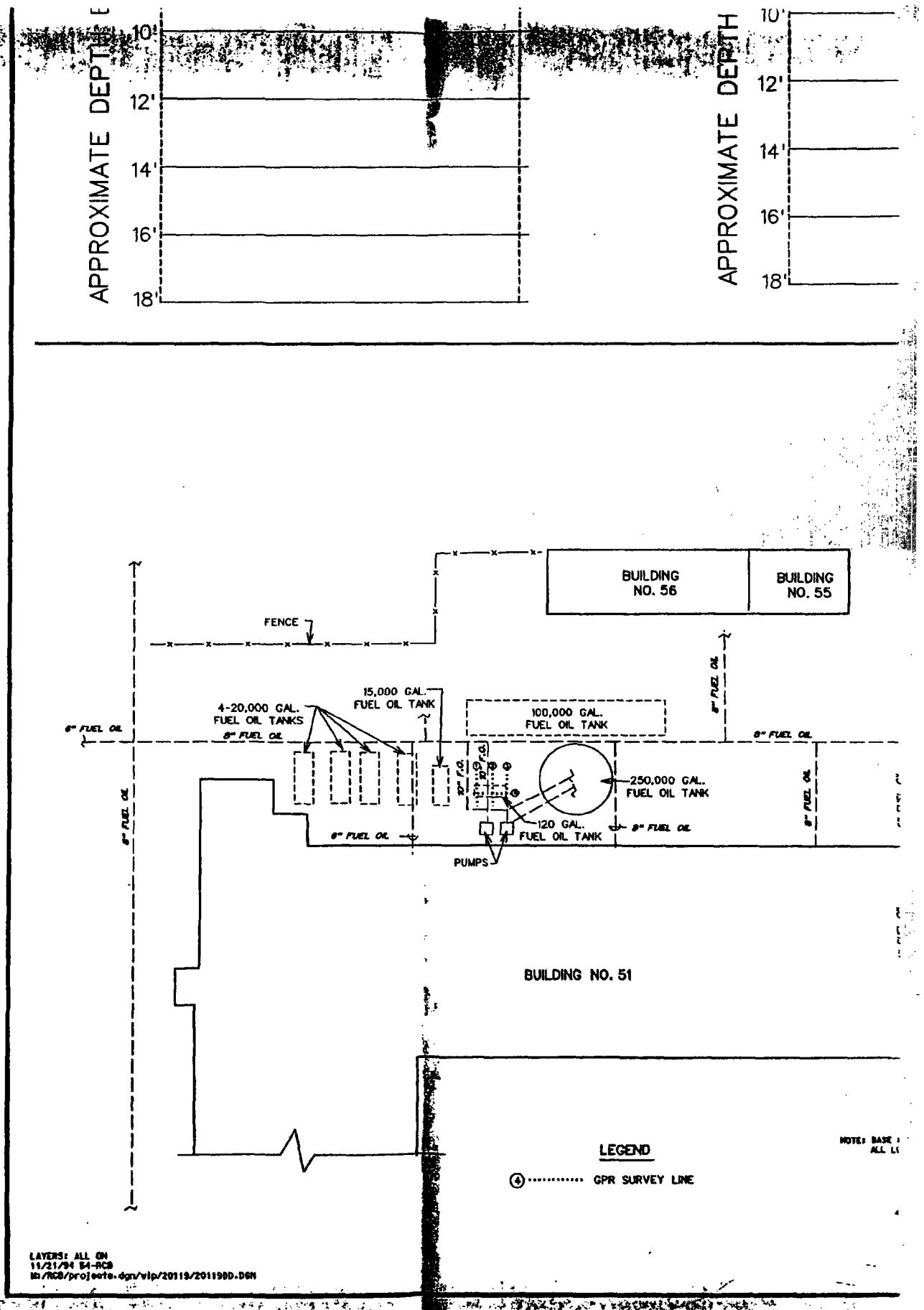
LAST

LINE 3 SOUTHWEST TO NORTHEAST



LINE 4 NORTHWEST TO SOUTHEAST

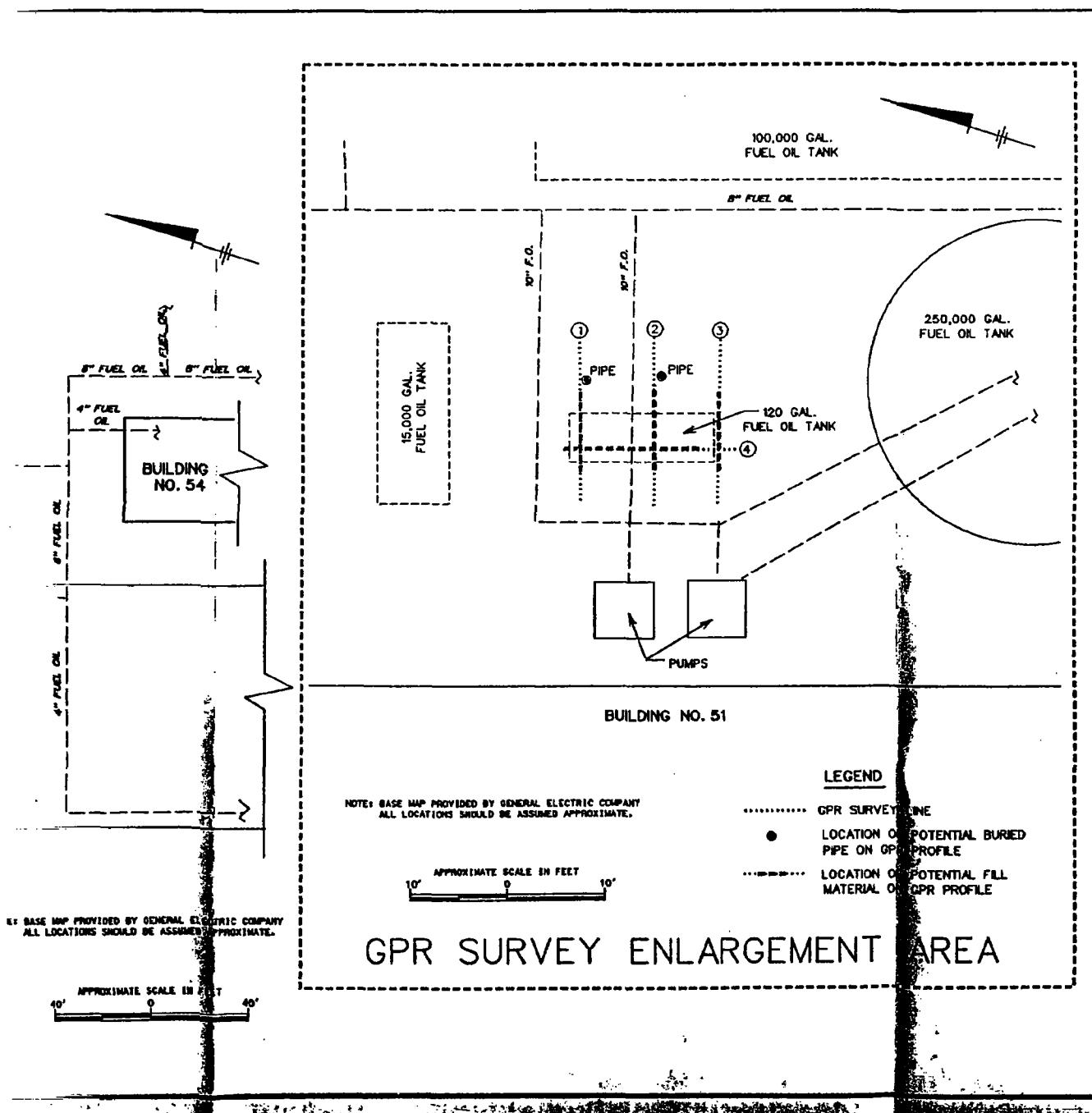
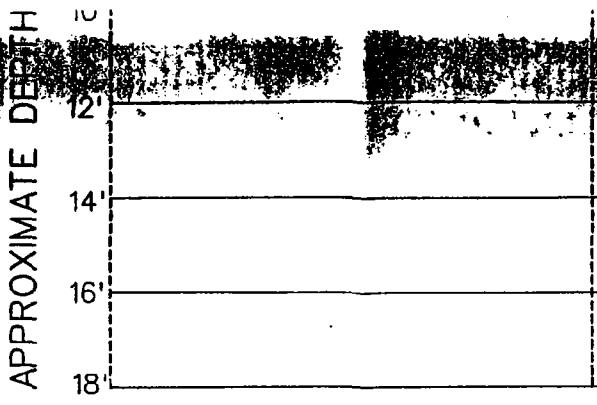




LAYERS: ALL ON
11/21/84 84-RGB
B:\RCB\projects\dgn\vlp\201190D.DGN

PGE00212122

APPROXIMATE DEPTH FROM SURFACE IN FEET



NOTE: BASE MAP PROVIDED BY GENERAL ELECTRIC COMPANY
ALL LOCATIONS SHOULD BE ASSUMED APPROXIMATE.

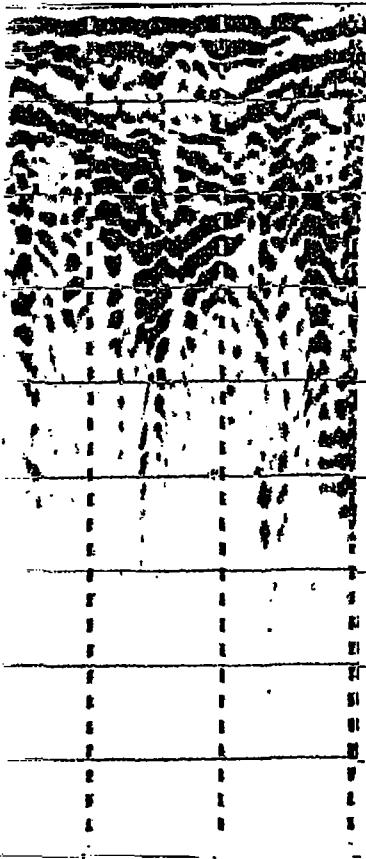
APPROXIMATE SCALE IN FEET

PGE00212123

Excavation

NORTHWEST TO SOUTHEAST

10' 20' 30'



LEGEND



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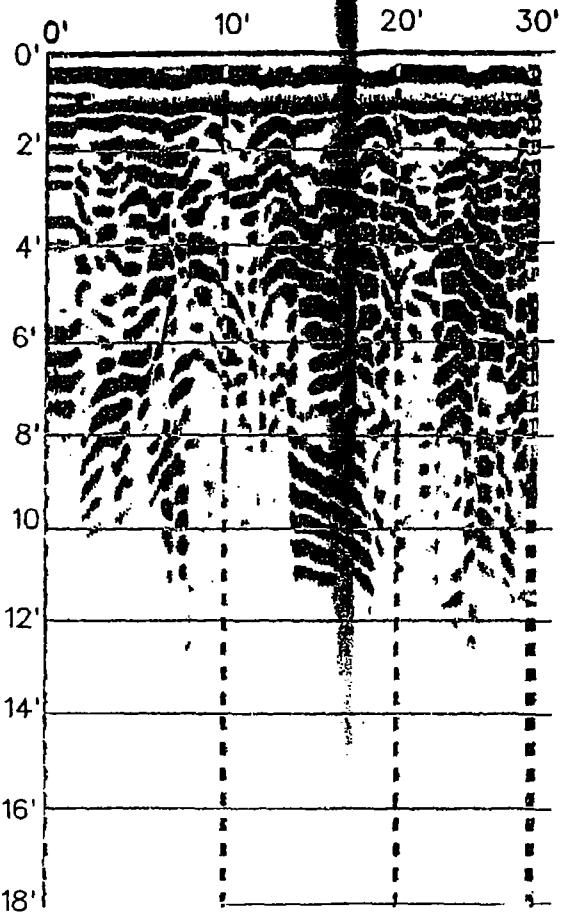
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
BUILDING 119 AREA

GPR SURVEY AREA
LOCATION MAP

FIGURE
5

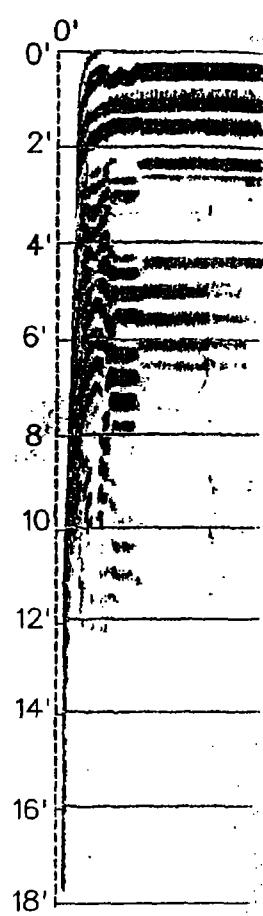
LINE 1 NORTHEAST TO SOUTHWEST

APPROXIMATE DEPTH BELOW SURFACE IN FEET

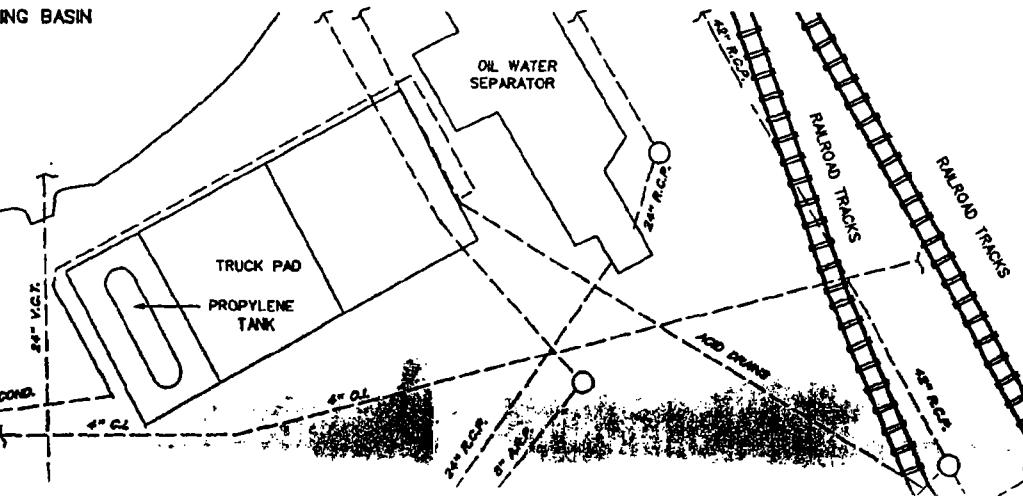


LINE

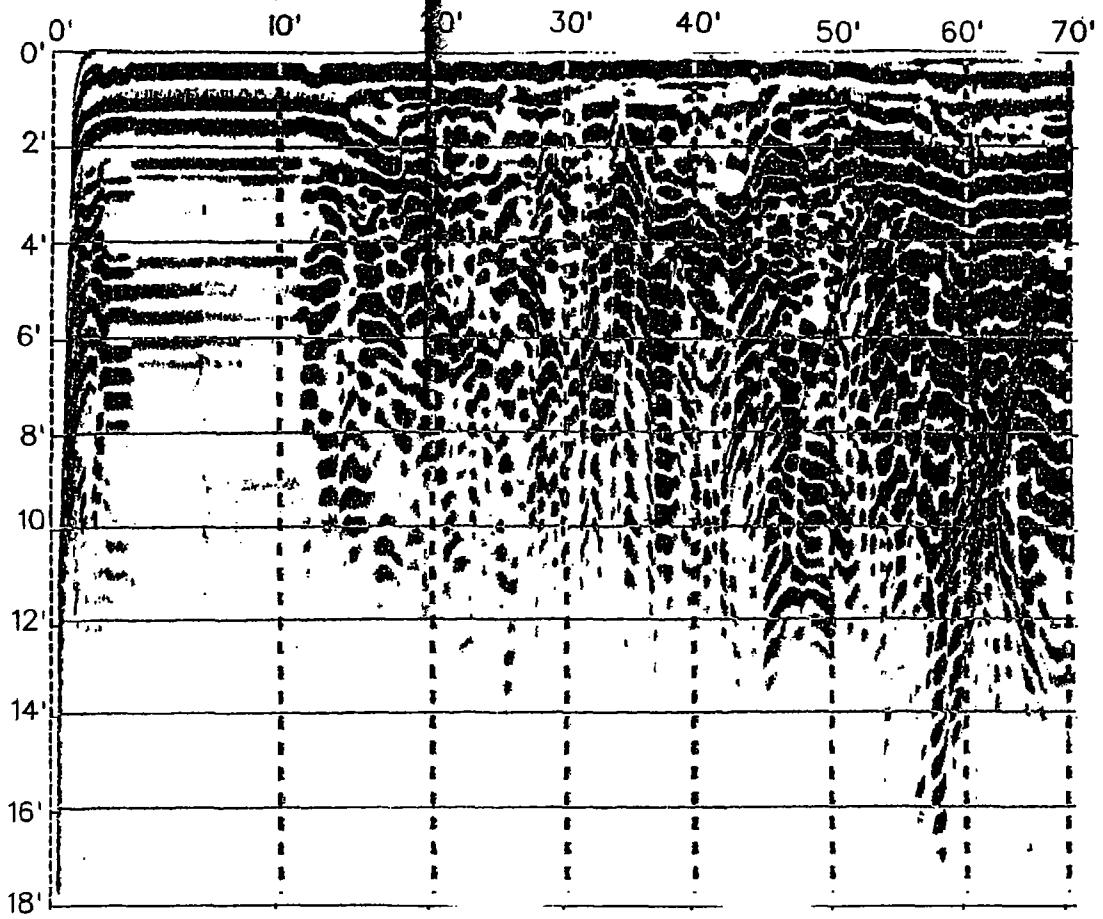
APPROXIMATE DEPTH BELOW SURFACE IN FEET



SETTLING BASIN



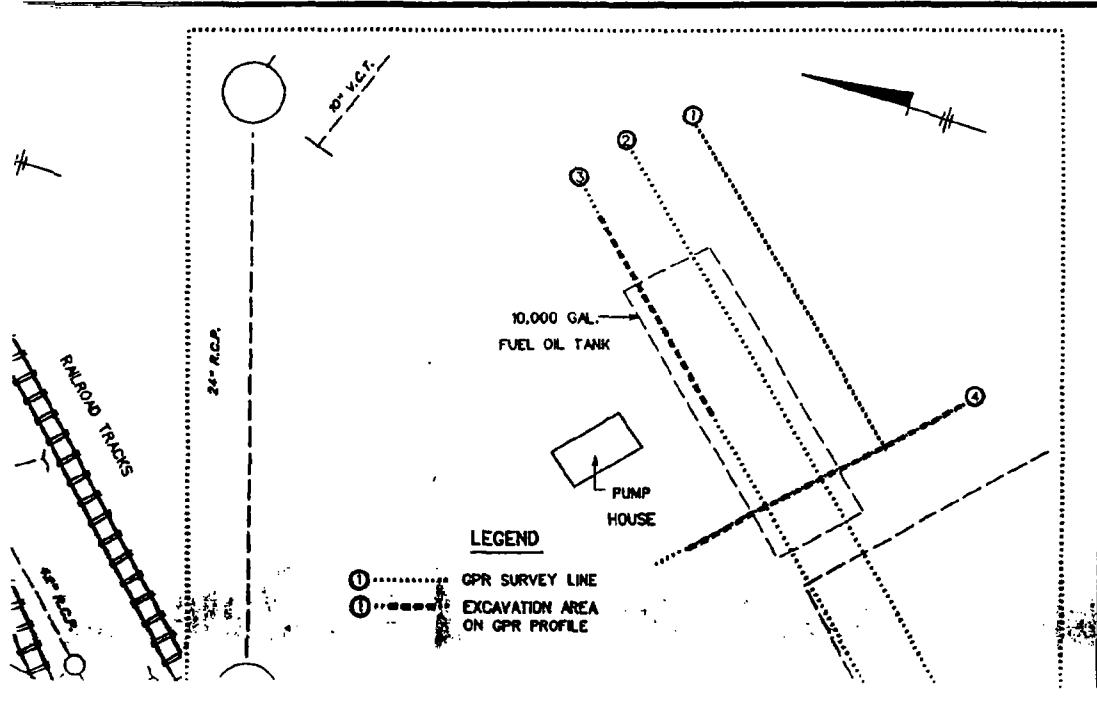
LINE 2 NORTHEAST TO SOUTHWEST



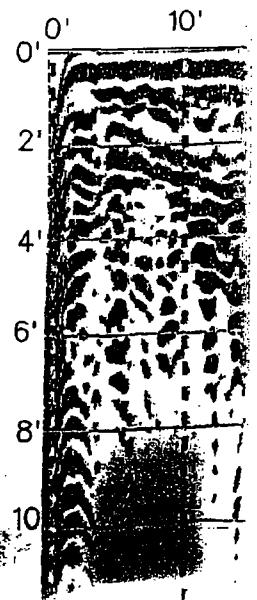
LINE 3 NO



LINE 4 NORTHWEST

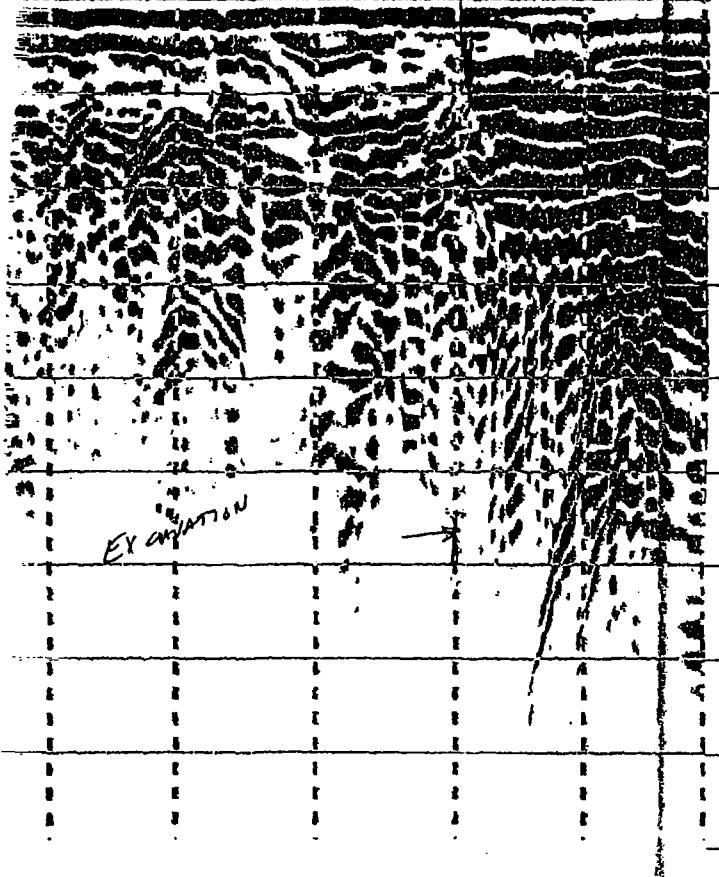


PTH BELOW SURFACE IN FEET



3 NORTHEAST TO SOUTHWEST

10' 20' 30' 40' 50' 60'



1 WEST TO SOUTHEAST

10' 20' 30'



LEGEND



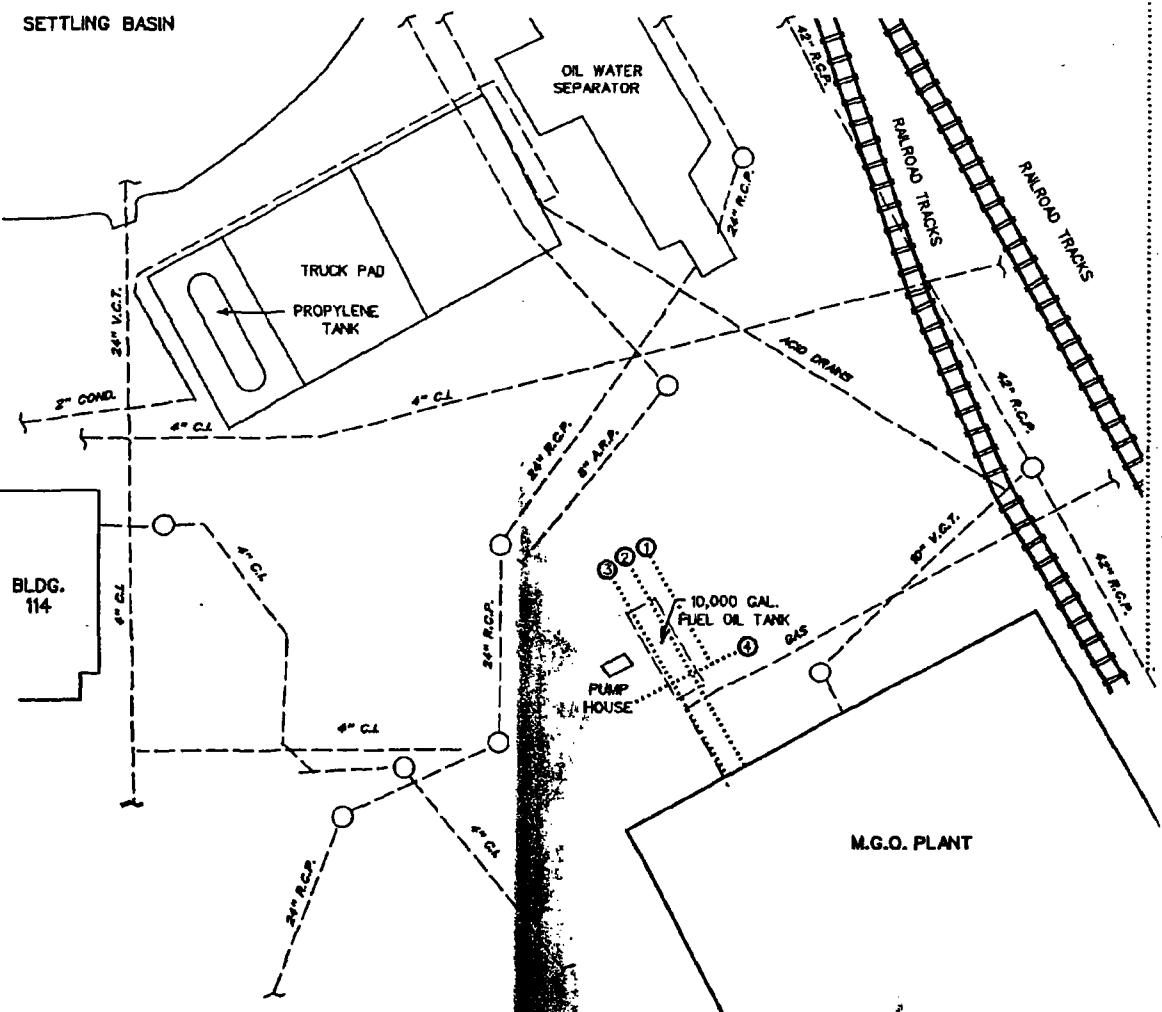
APPROXIMATE DEPT

14'
16'
18'

APPROXIMATE DEPT

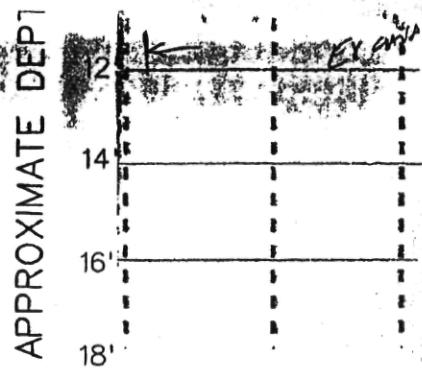
14'
16'
18'

SETTLING BASIN

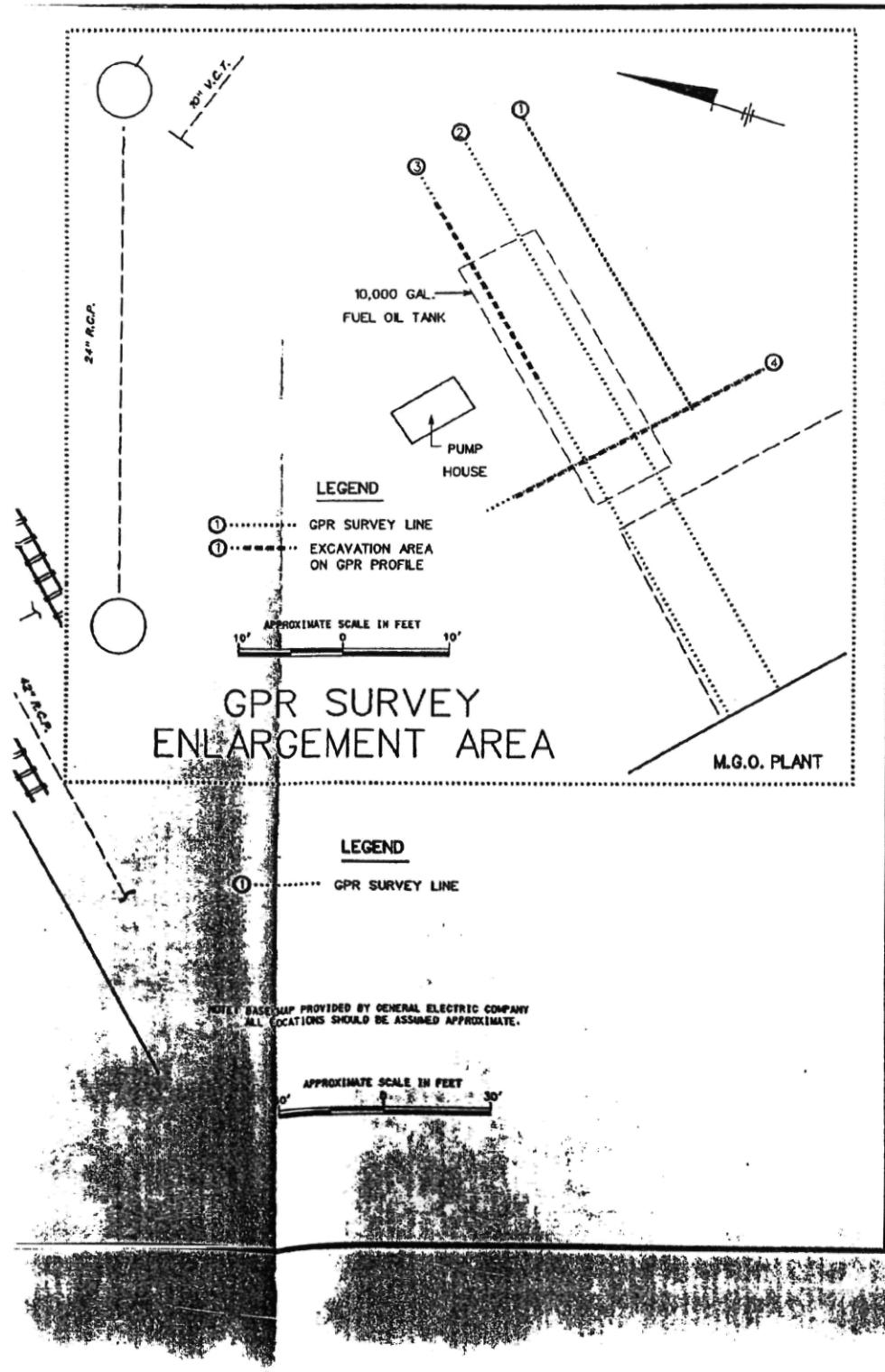
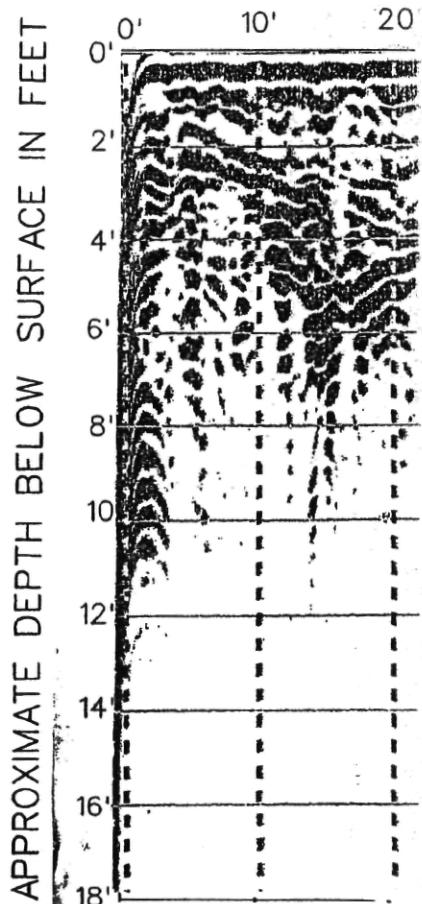


LAYERS: ALL ON
11/21/94 54-RCB
M/R/CB/project.sde.6gv/vip/20119/20119ED.DGN

PGE00212128



LINE 4 NORTHWEST TO



I TO SOUTHEAST

20' 30'

EXCAVATION AREA

LEGEND

 EXCAVATION AREA
ON GPR PROFILE



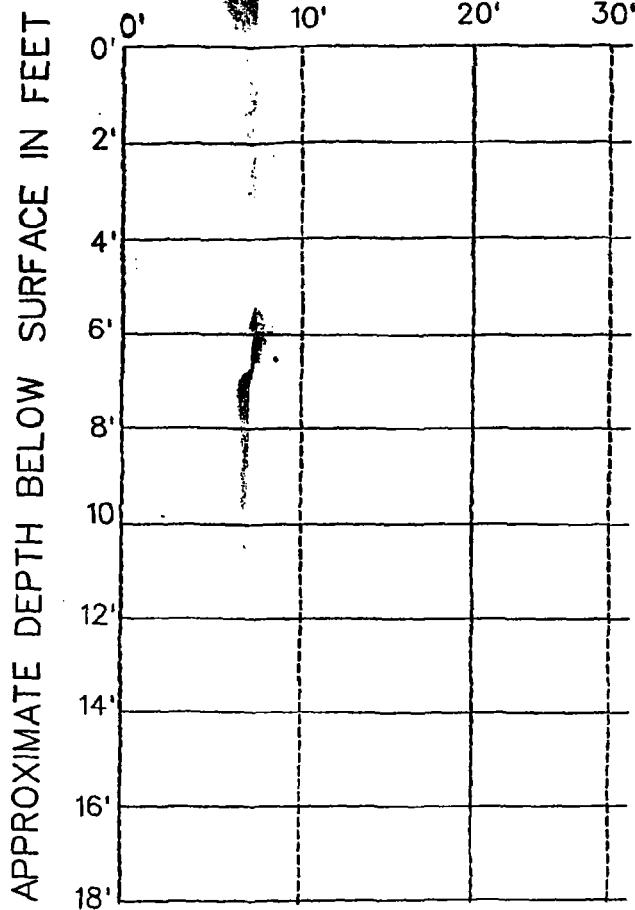
BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
BUILDING 119 AREA

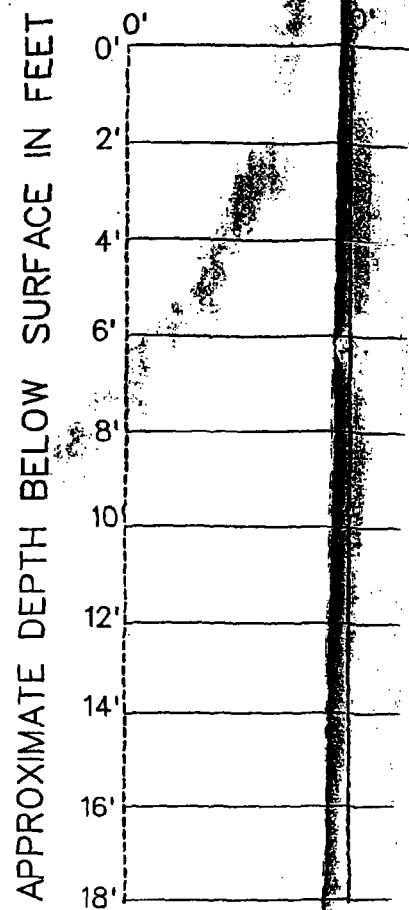
GPR SURVEY AREA
LOCATION MAP

FIGURE
5A

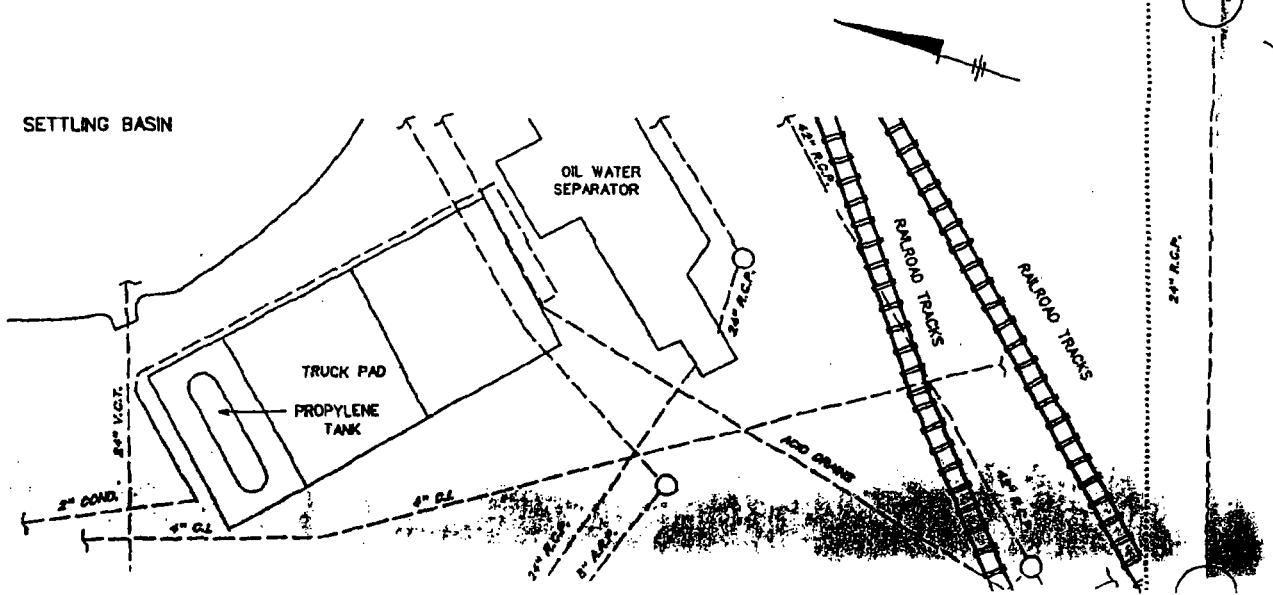
LINE 1 NORTHEAST TO SOUTHWEST



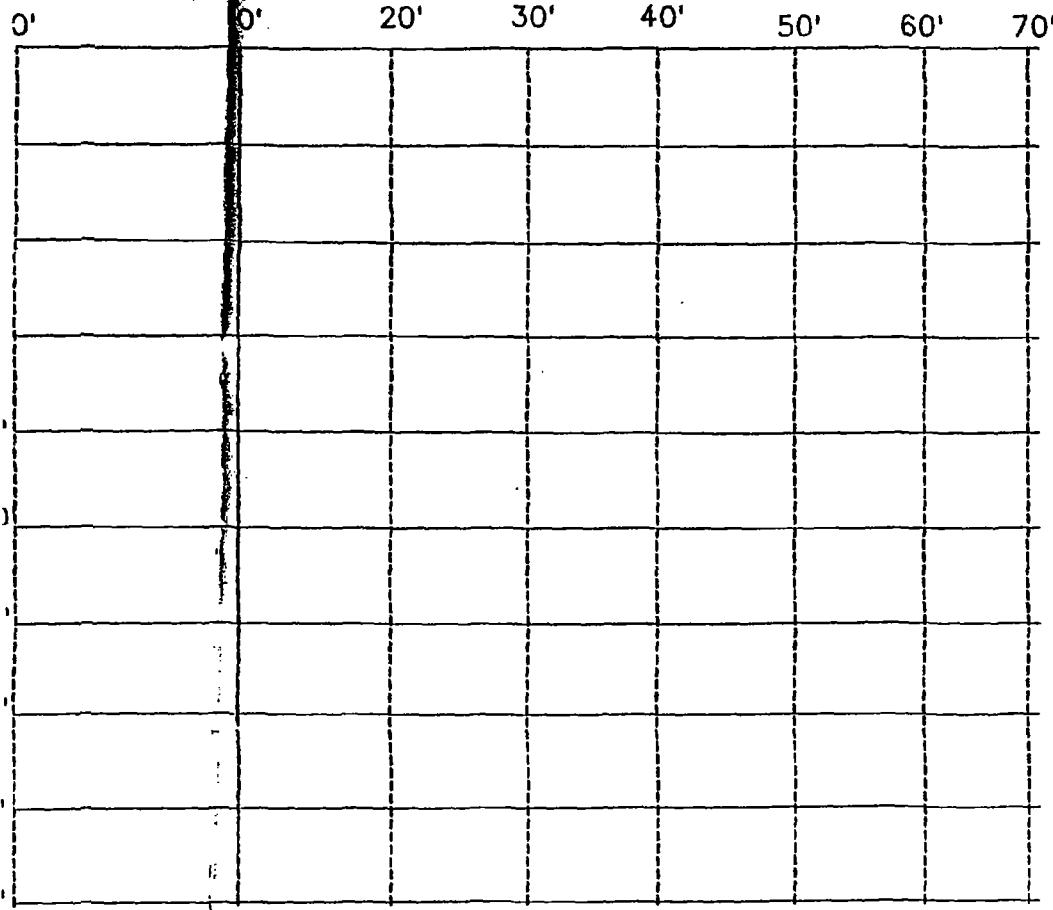
LINE 2



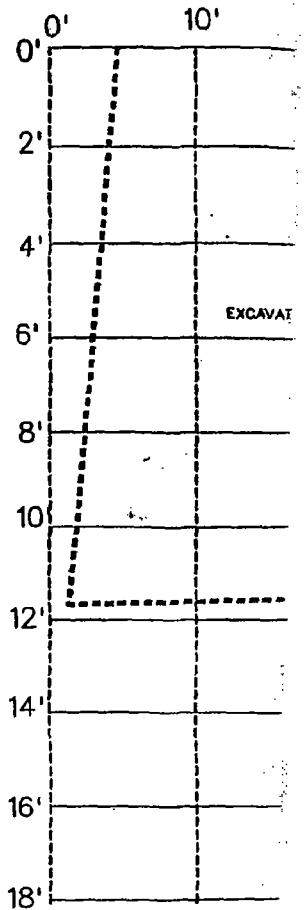
SETTLING BASIN



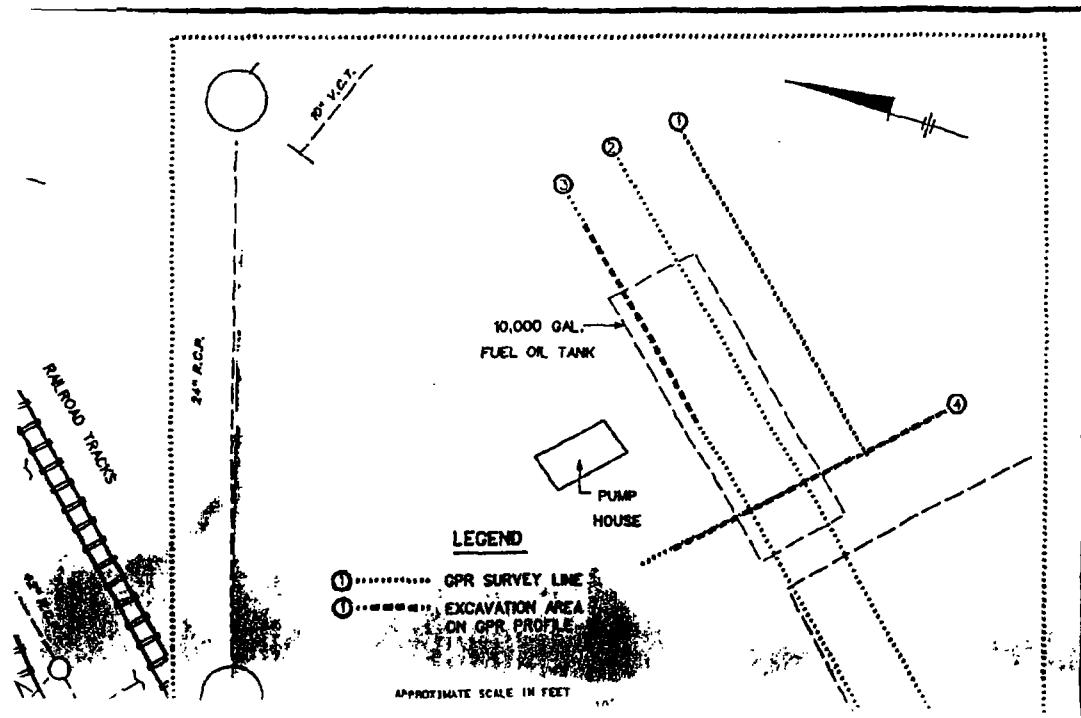
LINE 2 NORTHEAST TO SOUTHWEST



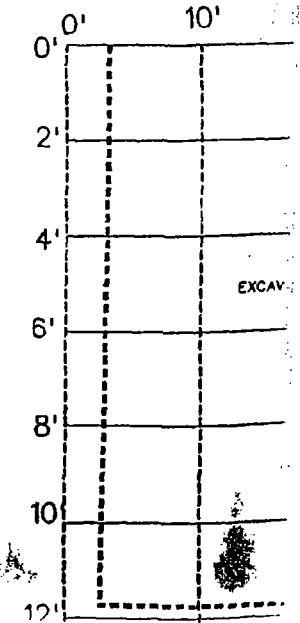
LINE 3 NORT



APPROXIMATE DEPTH BELOW SURFACE IN FEET

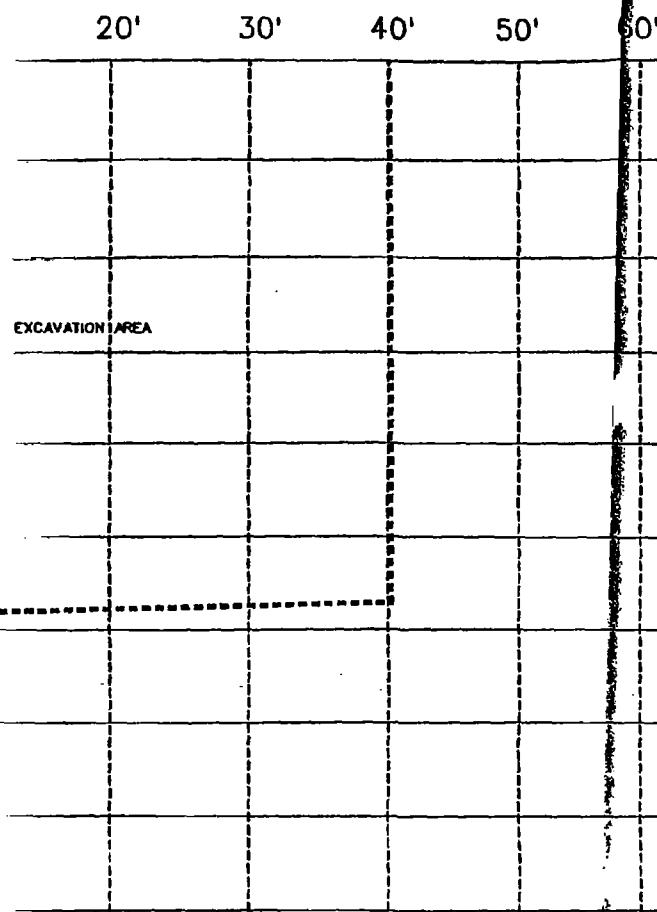


LINE 4 NORTHWEST

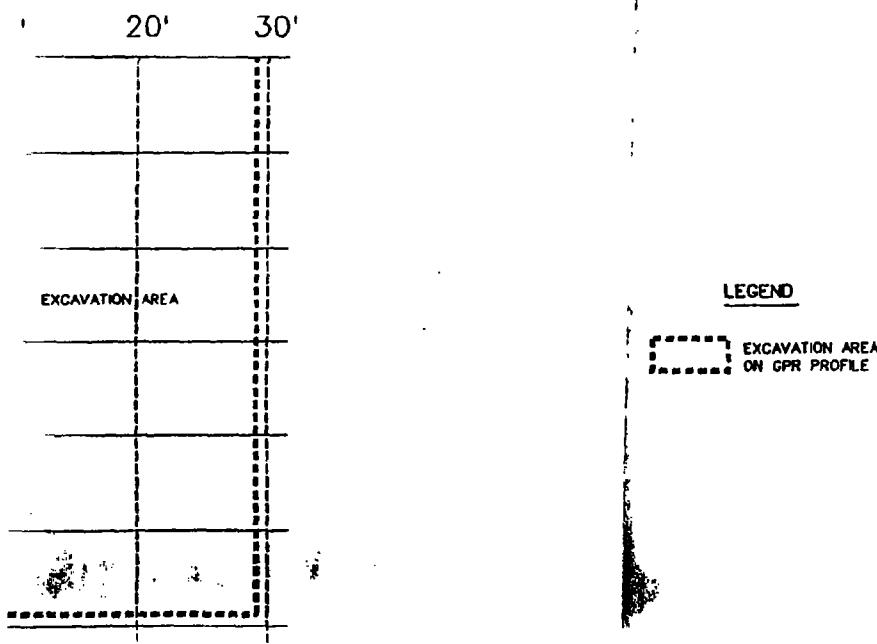


DEPTH BELOW SURFACE IN FEET

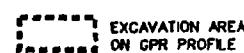
NORTHEAST TO SOUTHWEST



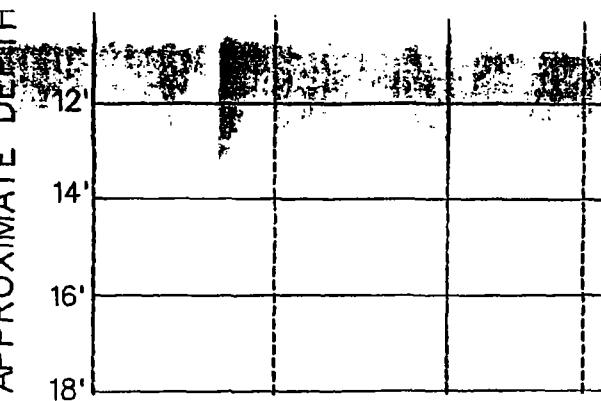
WEST TO SOUTHEAST



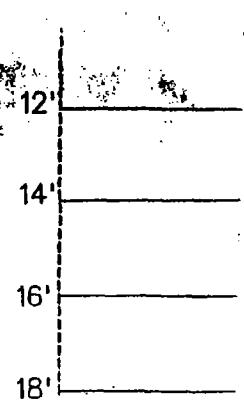
LEGEND



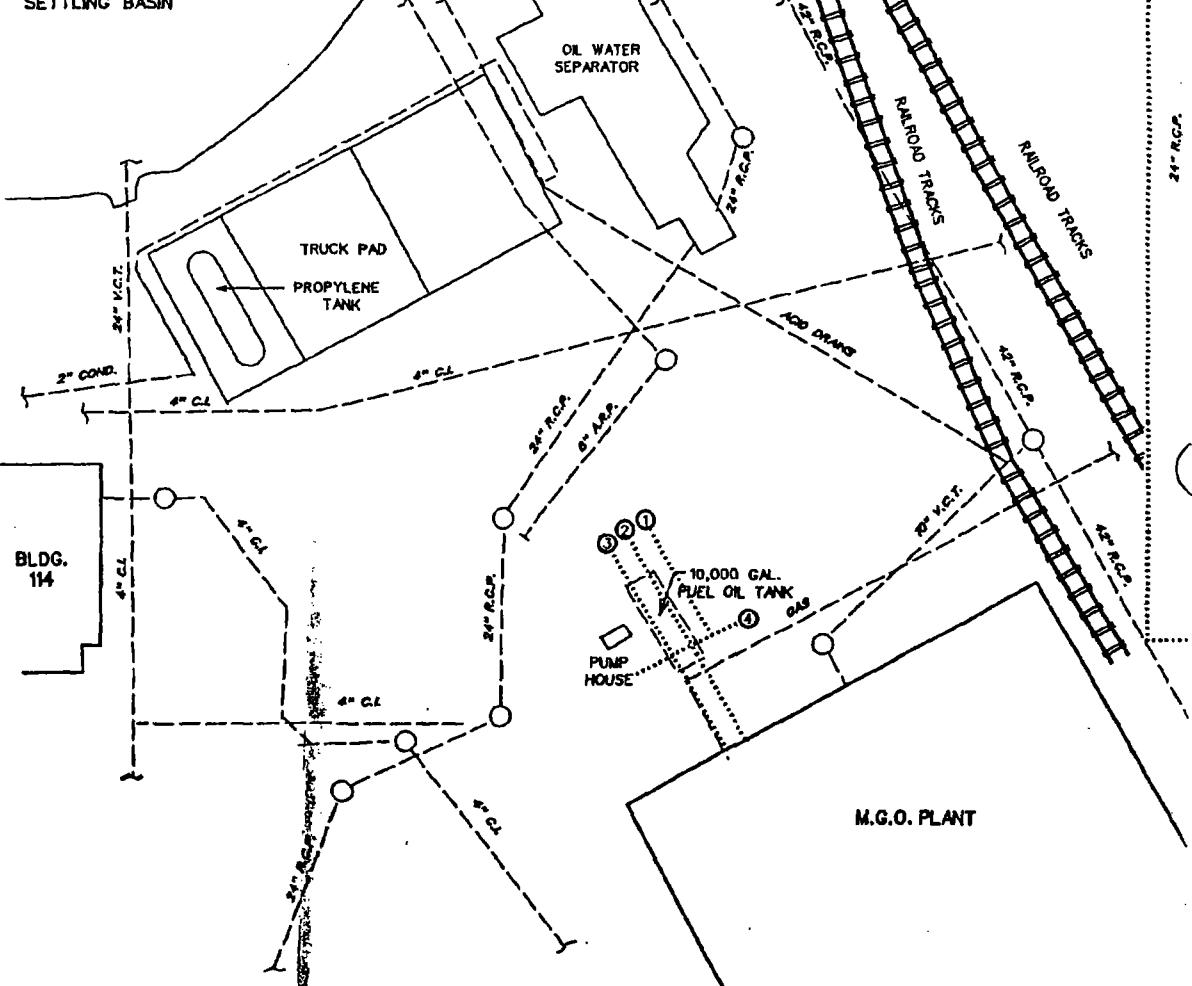
APPROXIMATE DEPTH



APPROXIMATE DEPTI

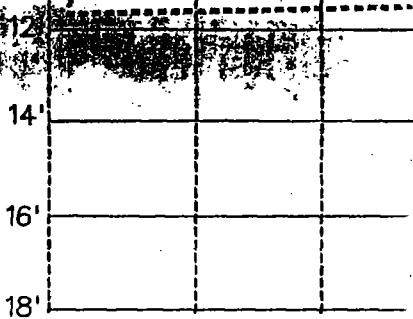


SETTLING BASIN



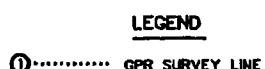
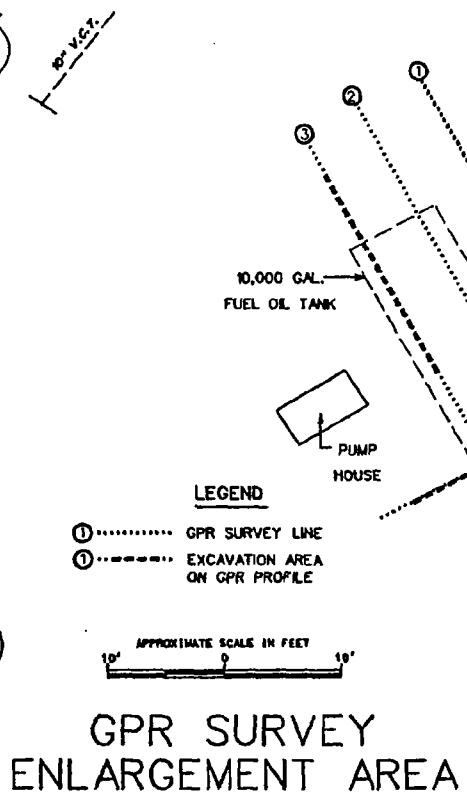
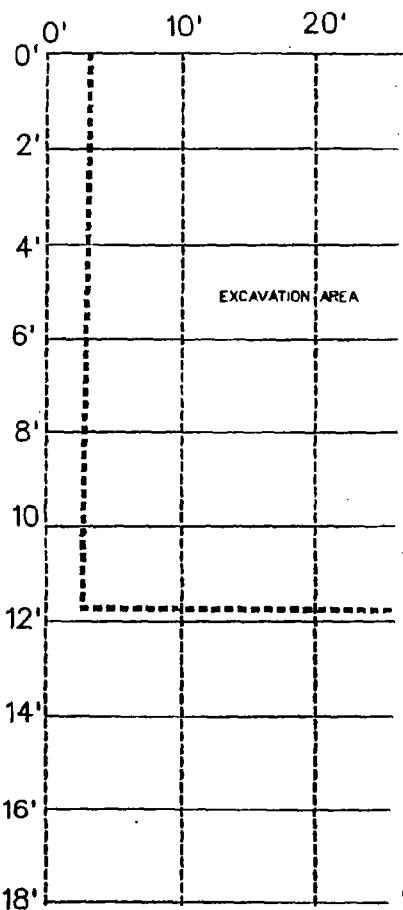
LAYERS: ALL ON
11/21/94 84-RCB
M1/RCB/projects-dgn/wip/20119/20119ED-DGN

APPROXIMATE DEPTH



LINE 4 NORTHWEST TO SC

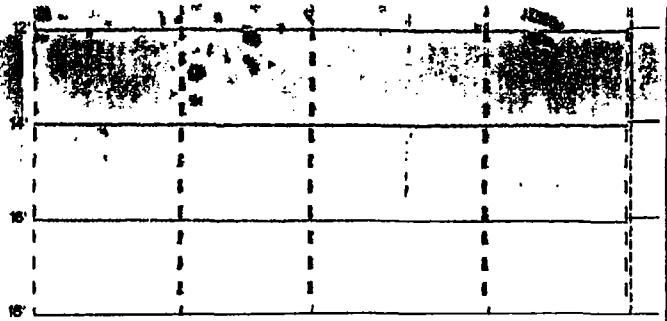
APPROXIMATE DEPTH BELOW SURFACE IN FEET



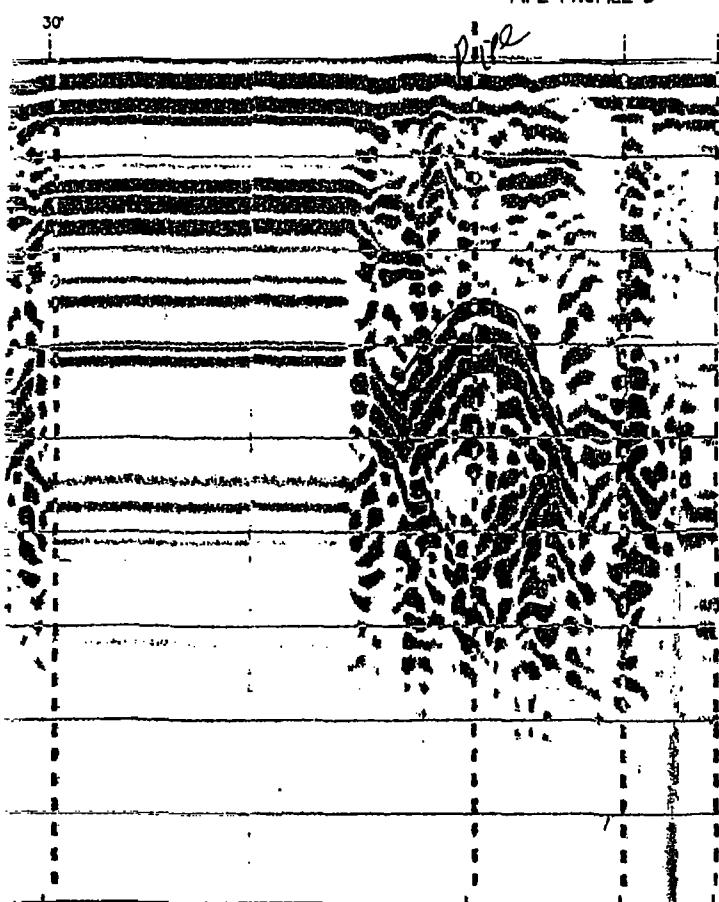
NOTE: BASE MAP PROVIDED BY GENERAL ELECTRIC COMPANY
ALL LOCATIONS SHOULD BE ASSUMED APPROXIMATE.

APPROXIMATE SCALE IN FEET

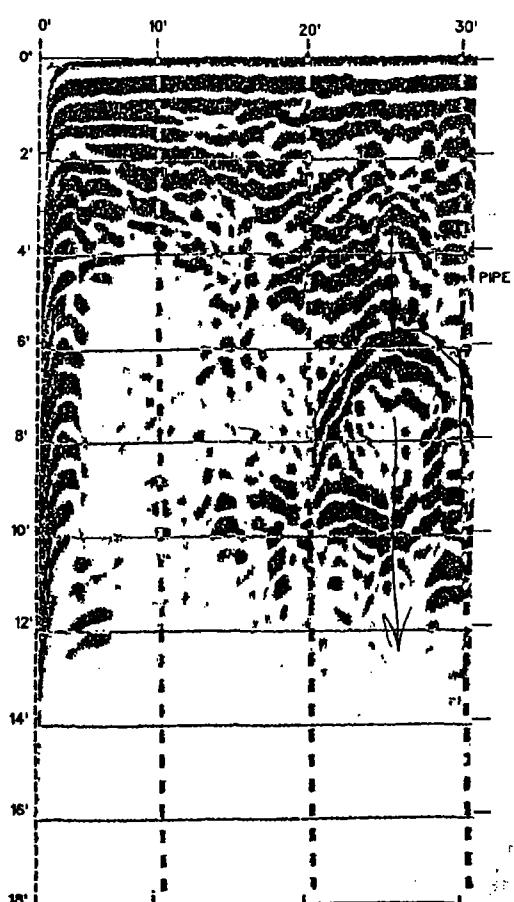
10' 20' 30'



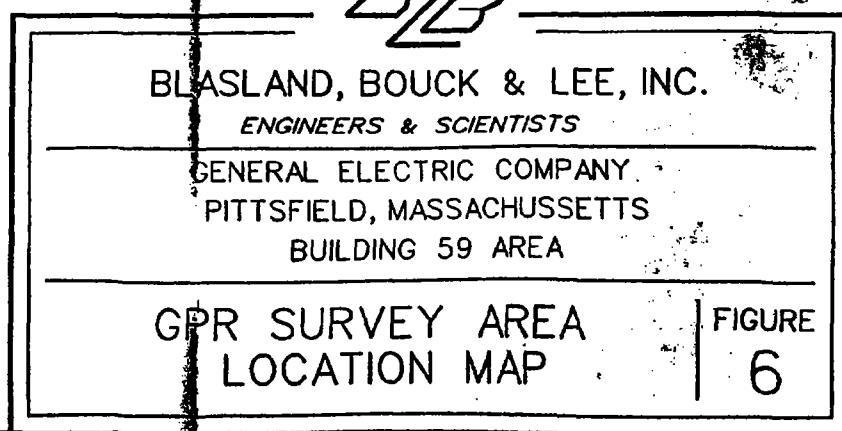
PIPE PROFILE D



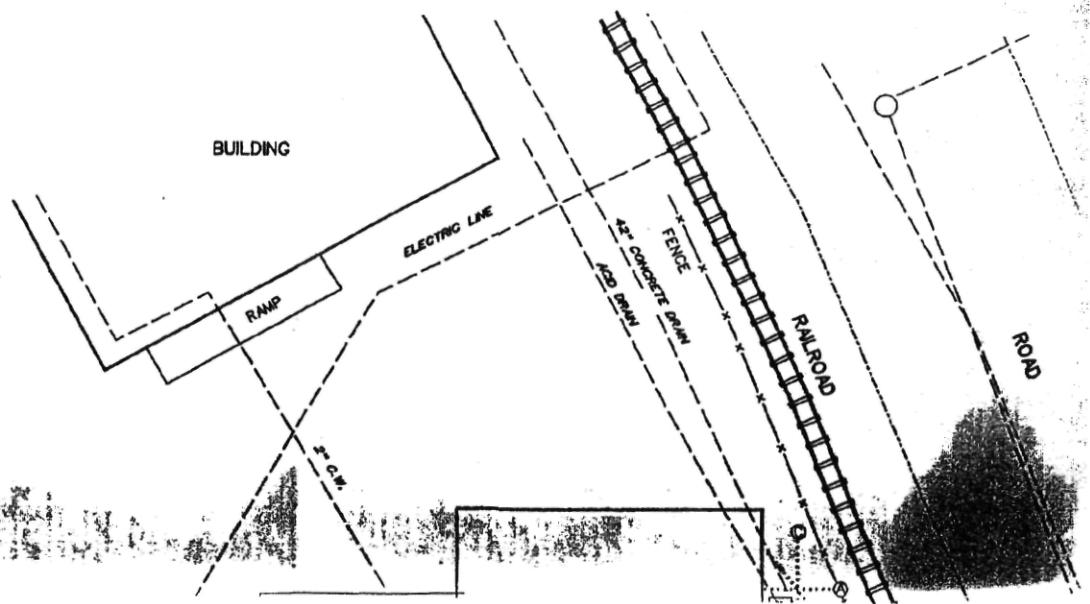
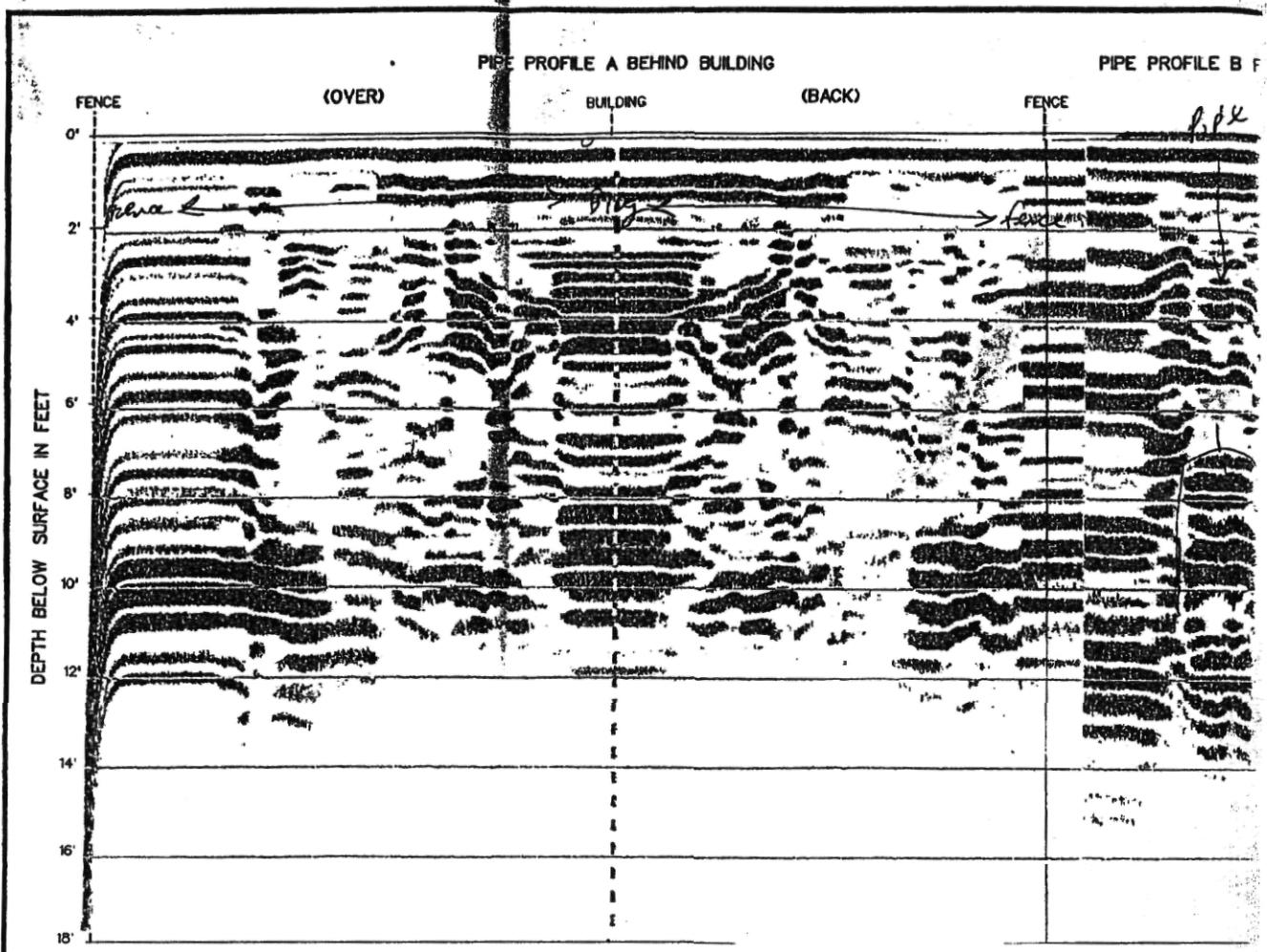
PIPE PROFILE E



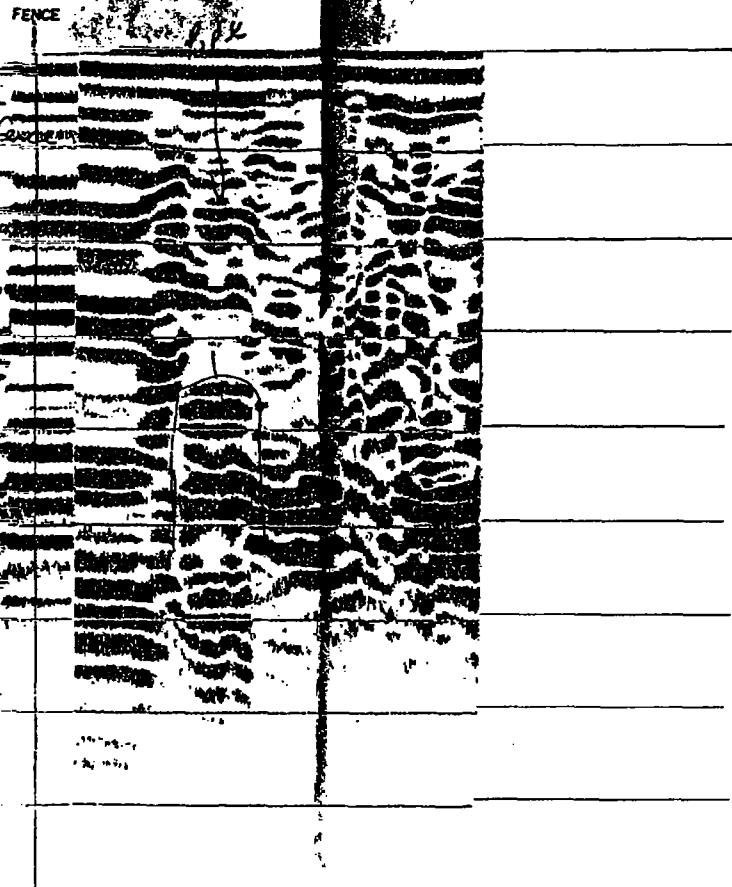
DEPTH BELOW SURFACE IN FEET



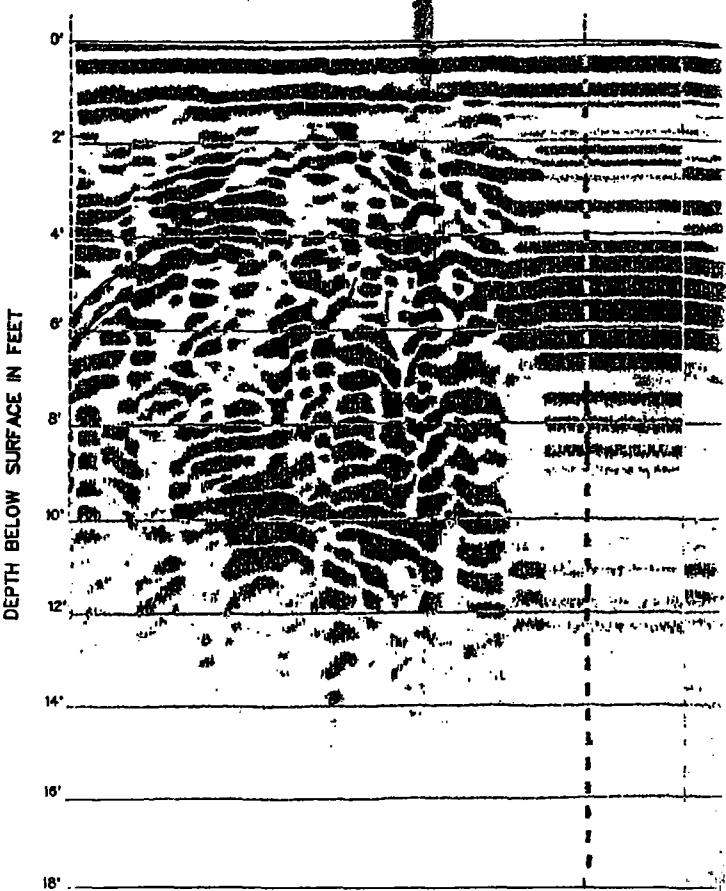
PIPE



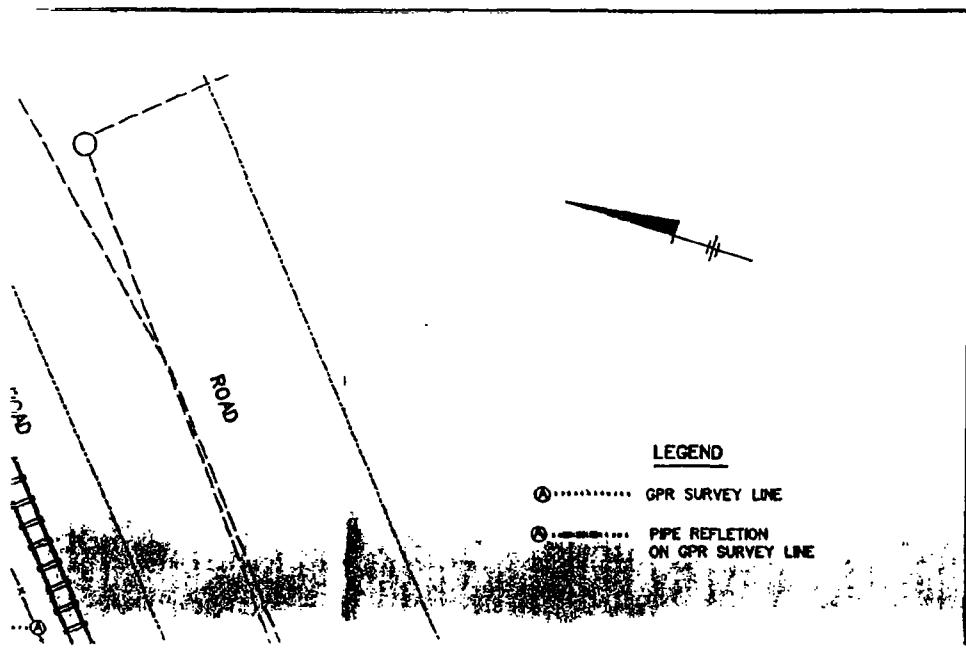
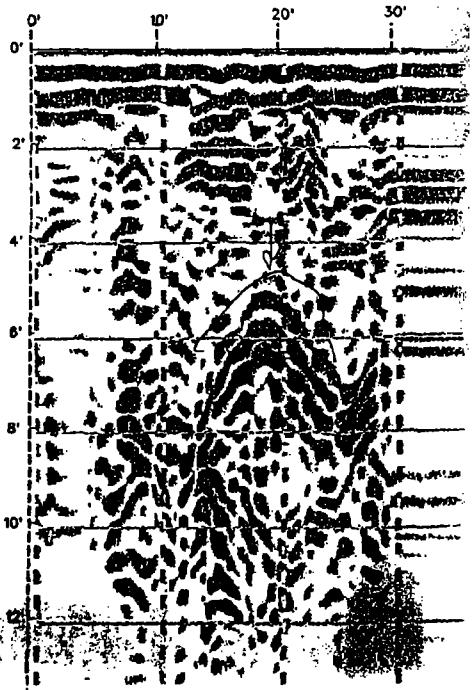
PIPE PROFILE B FROM FENCE-CORNER IN OPEN AREA



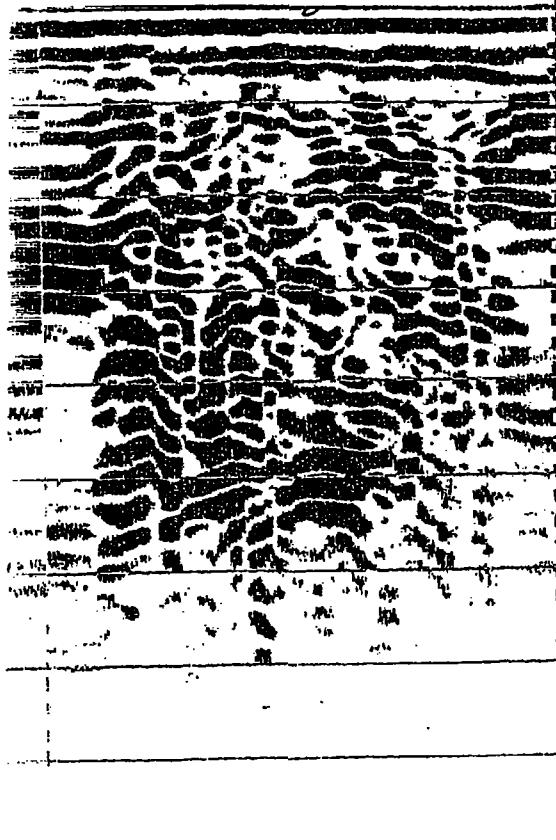
PIPE PROFILE C BEHIND BUILDING 59
ALONG STEPS



PIPE PROFILE D

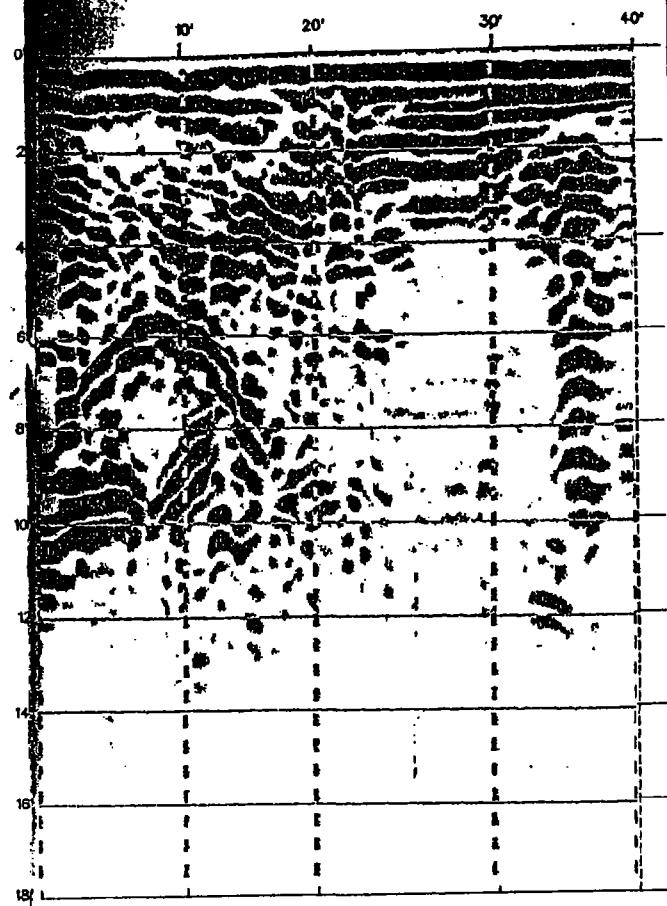


PIPE PROFILE C BEHIND BUILDING 59
ALONG STEPS

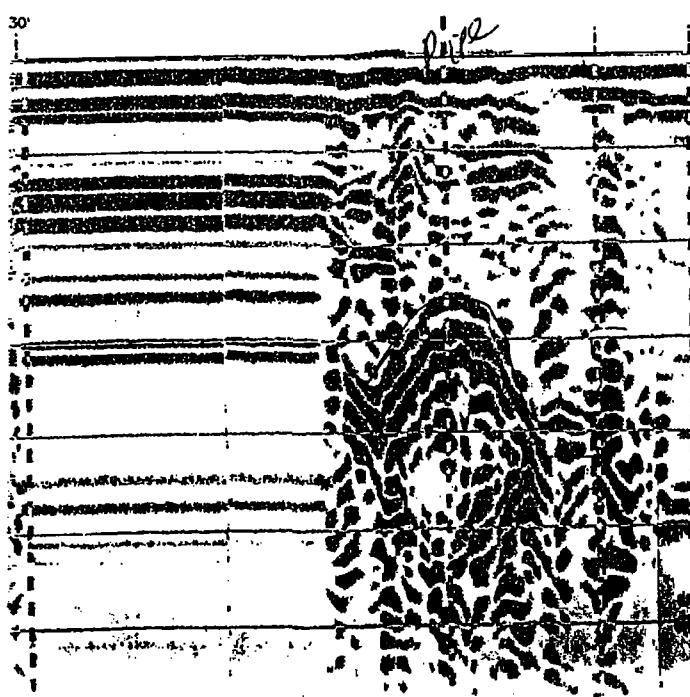


DEPTH BELOW SURFACE IN FEET

PIPE PROFILE D

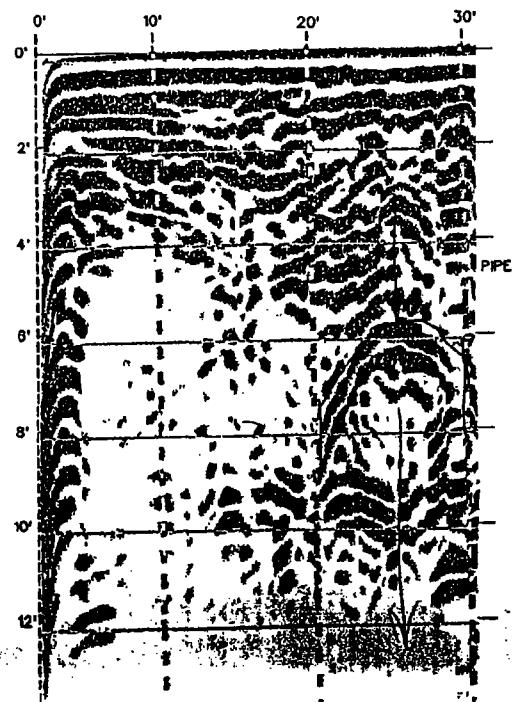


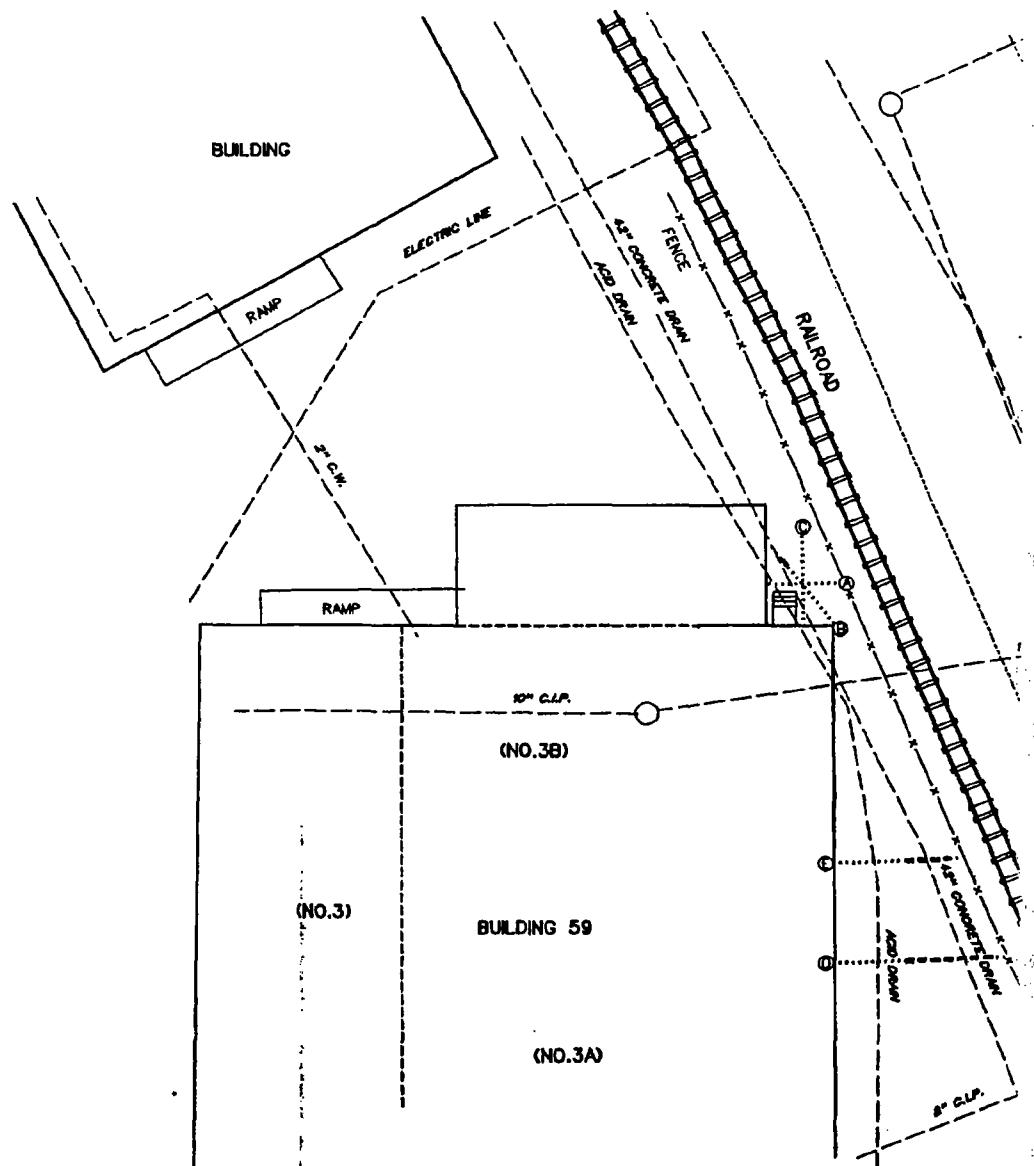
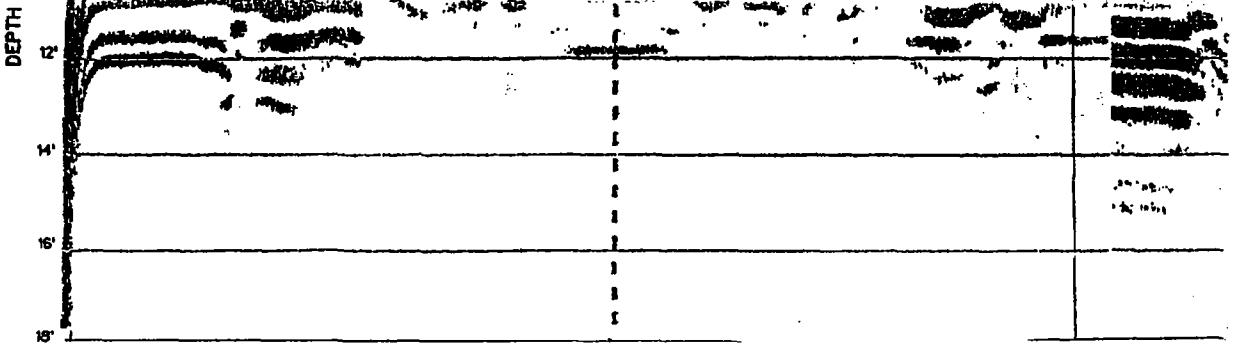
PIPE PROFILE D



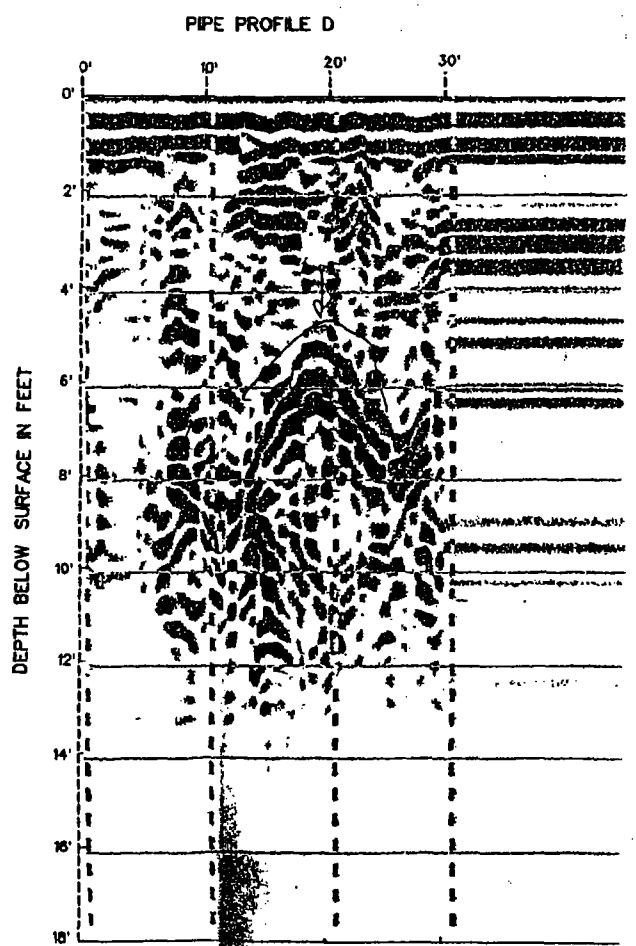
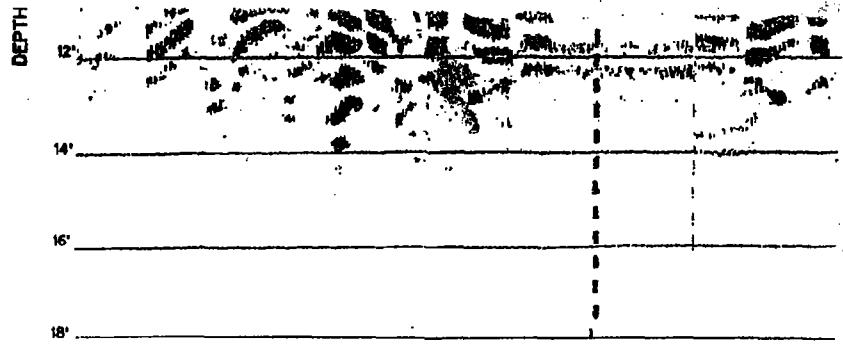
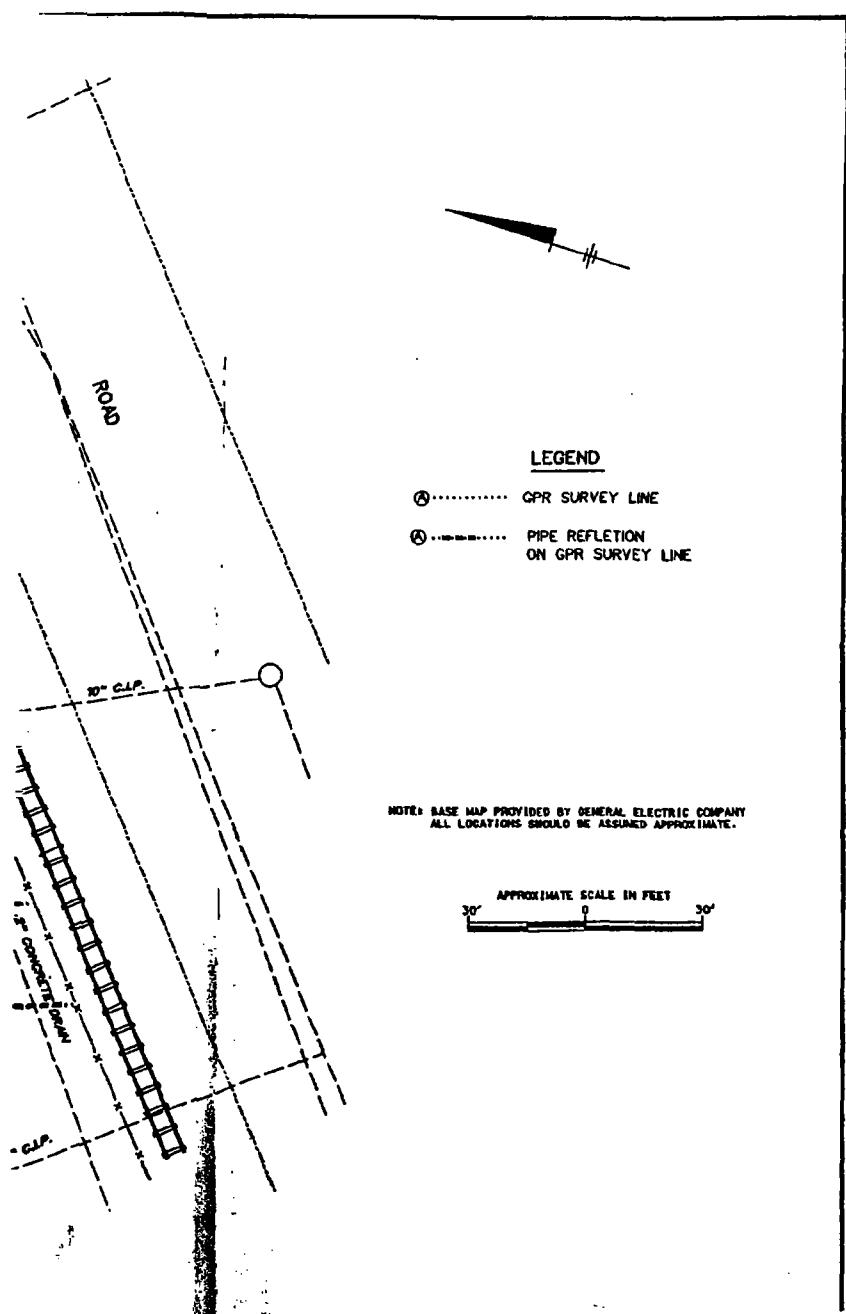
DEPTH BELOW SURFACE IN FEET

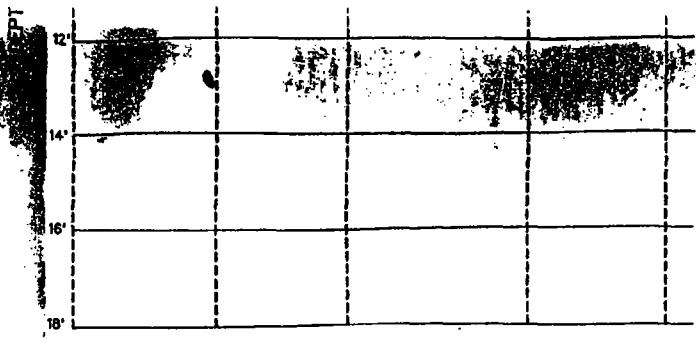
PIPE PROFILE E



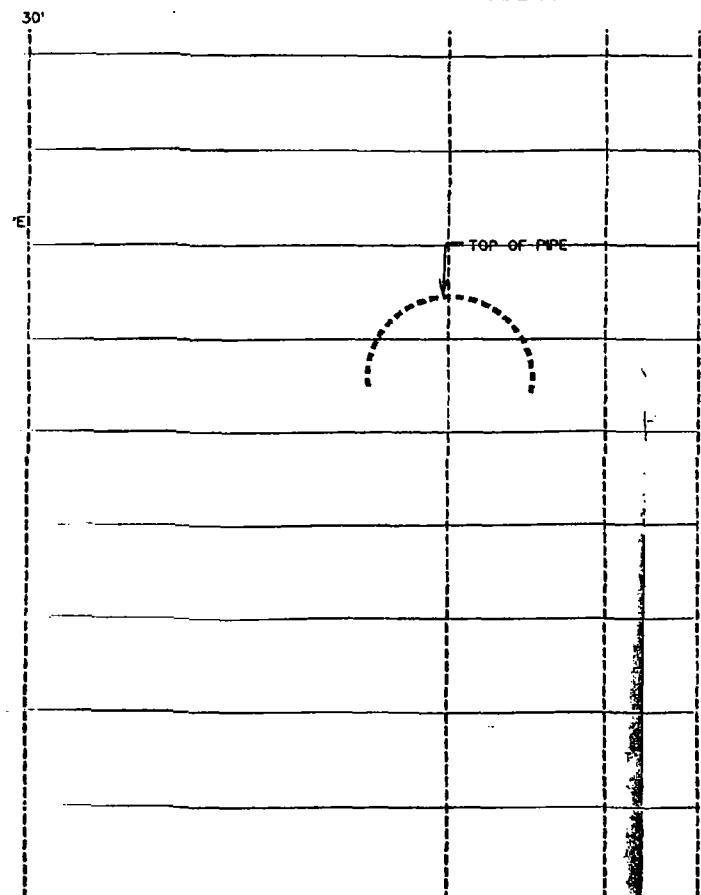


LAYERS1 ALL ON
11/21/94 54-RCB
M:\RCB\projects.dgn\vip\20119\20119EF.DGN

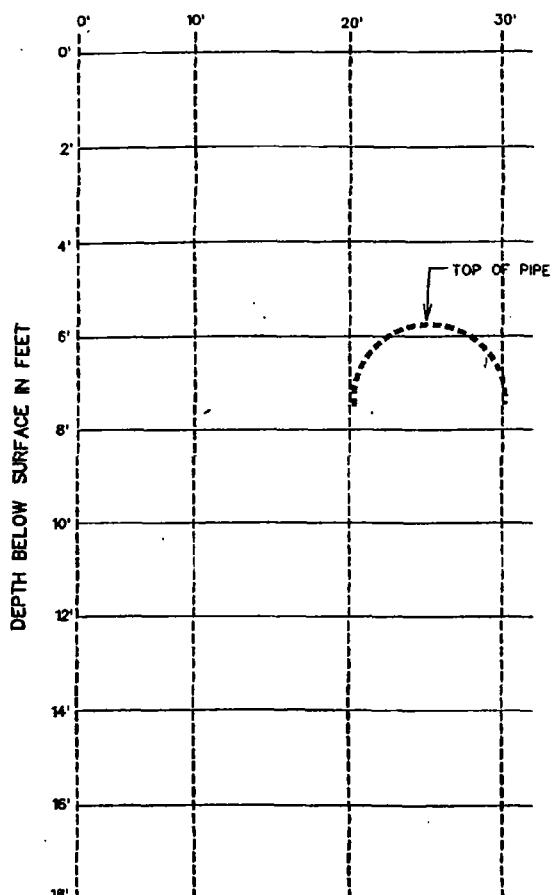




PIPE PROFILE D



PIPE PROFILE E

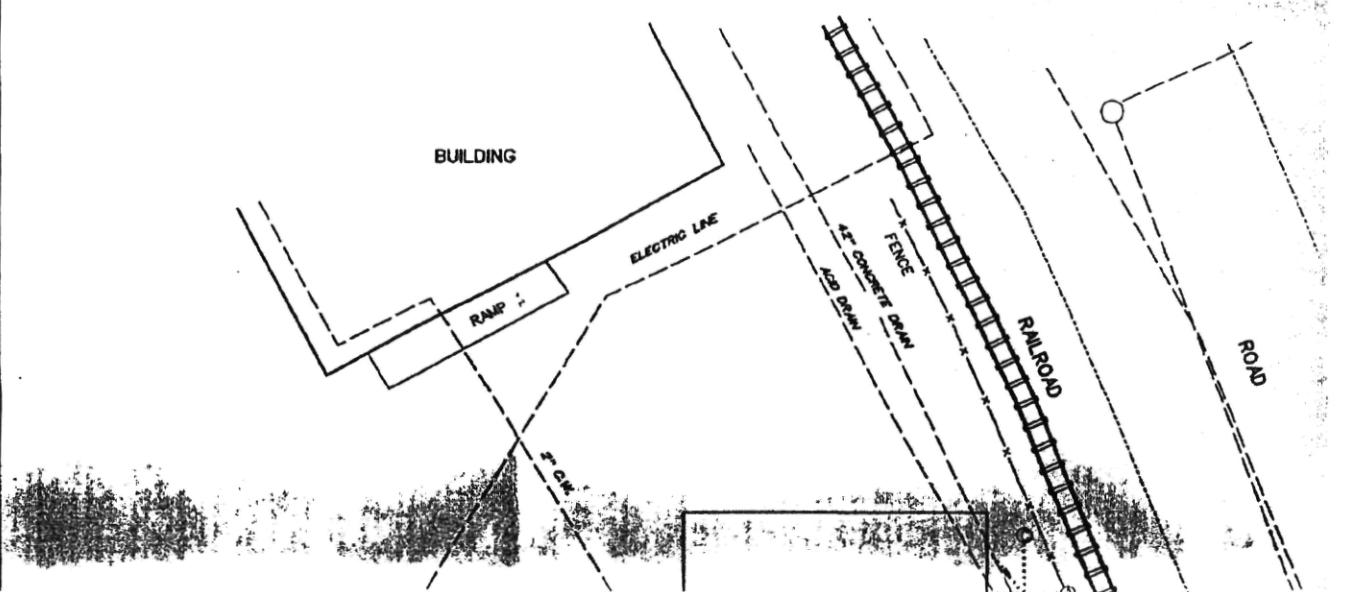
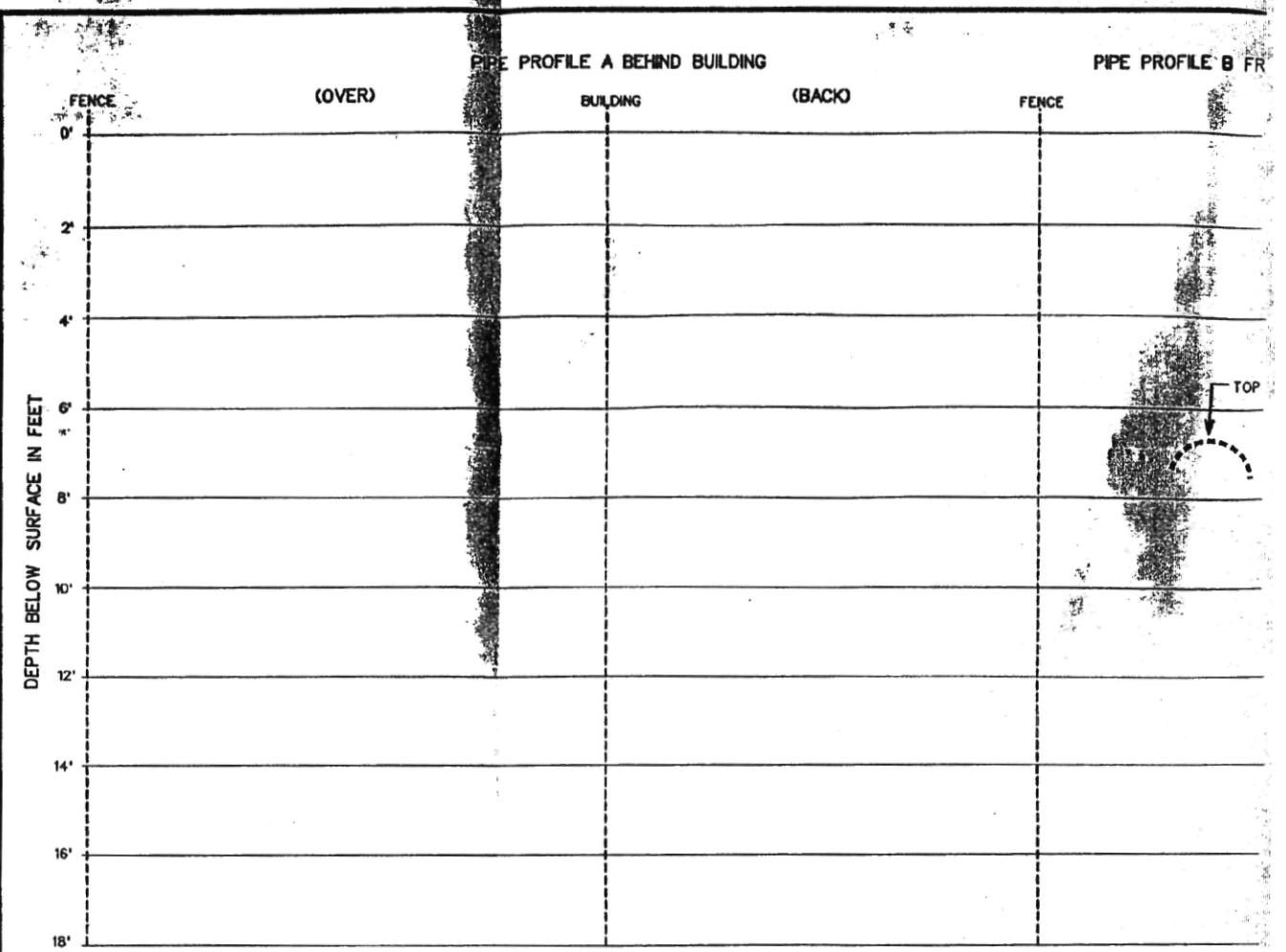


BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

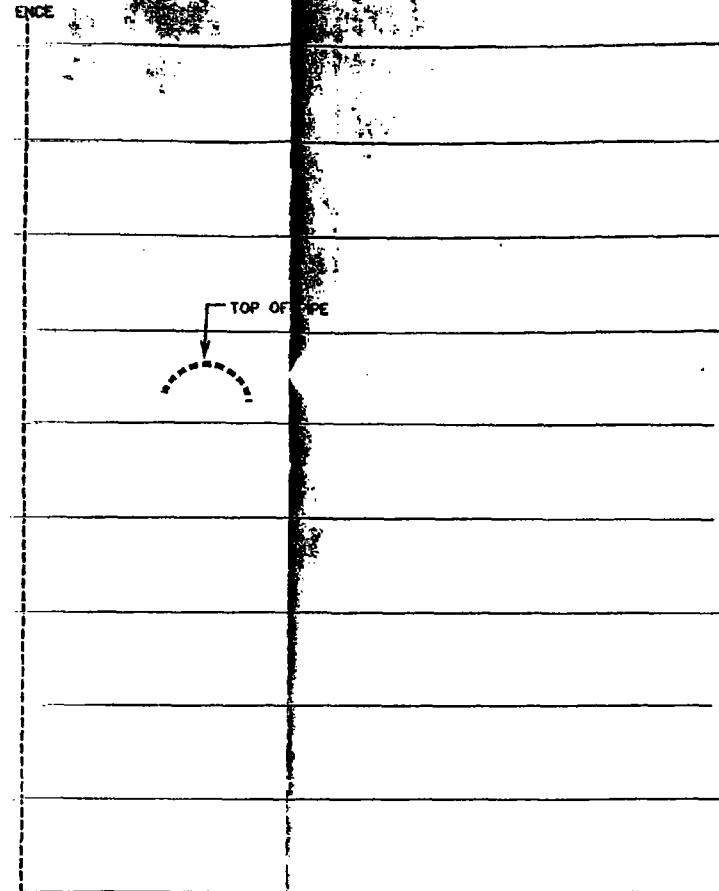
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
BUILDING 59 AREA

GPR SURVEY AREA
LOCATION MAP

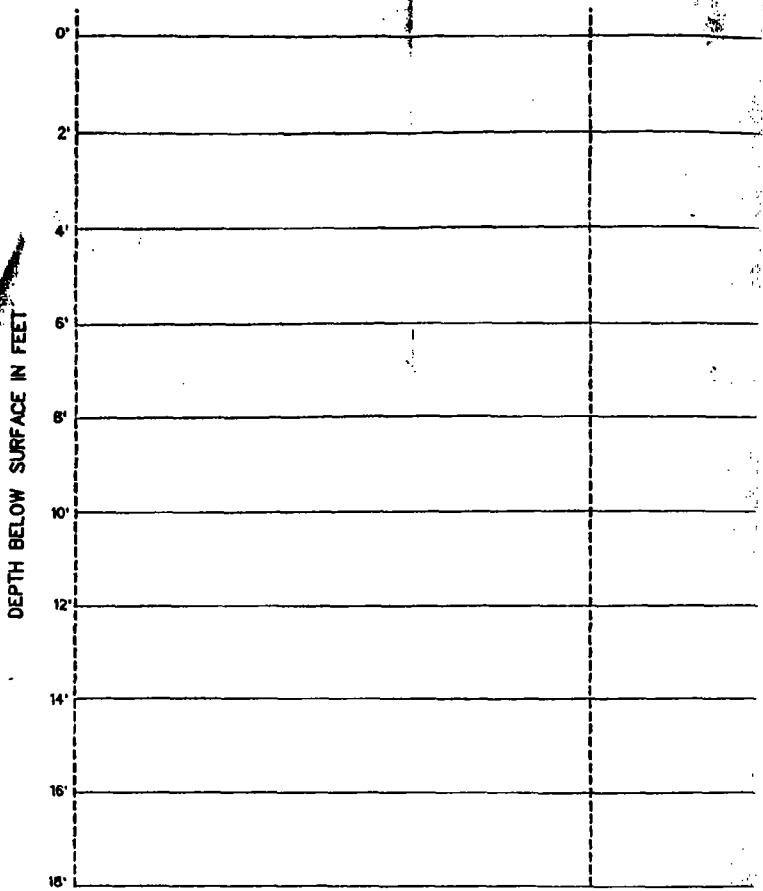
FIGURE
6A



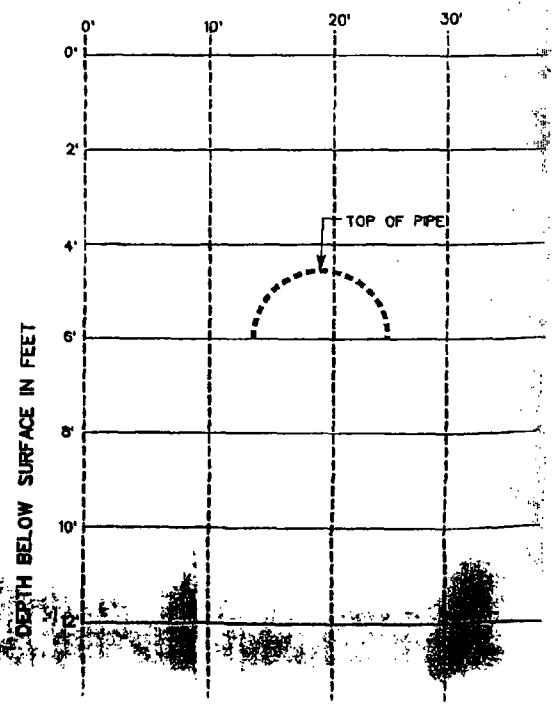
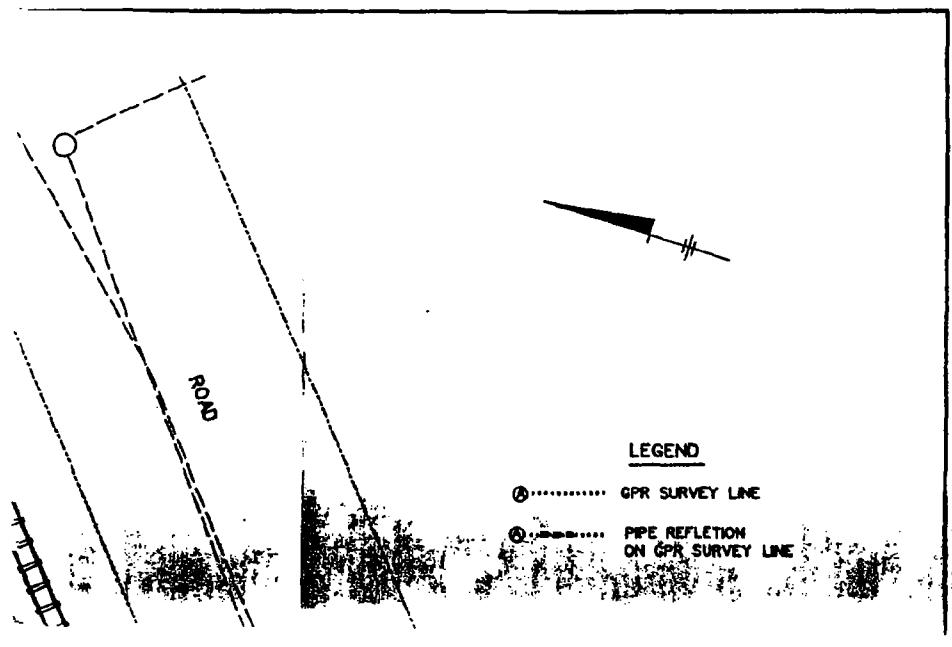
PIPE PROFILE B FROM FENCE CORNER IN OPEN AREA



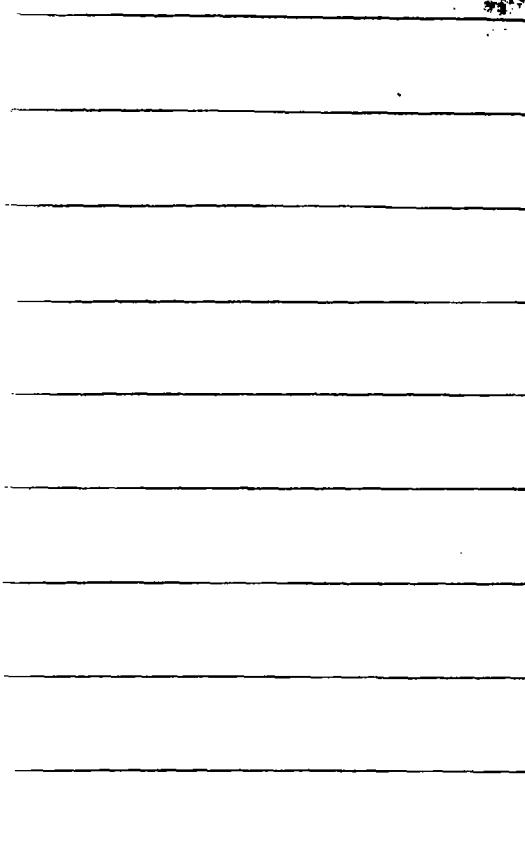
PIPE PROFILE C BEHIND BUILDING 59
ALONG STEPS



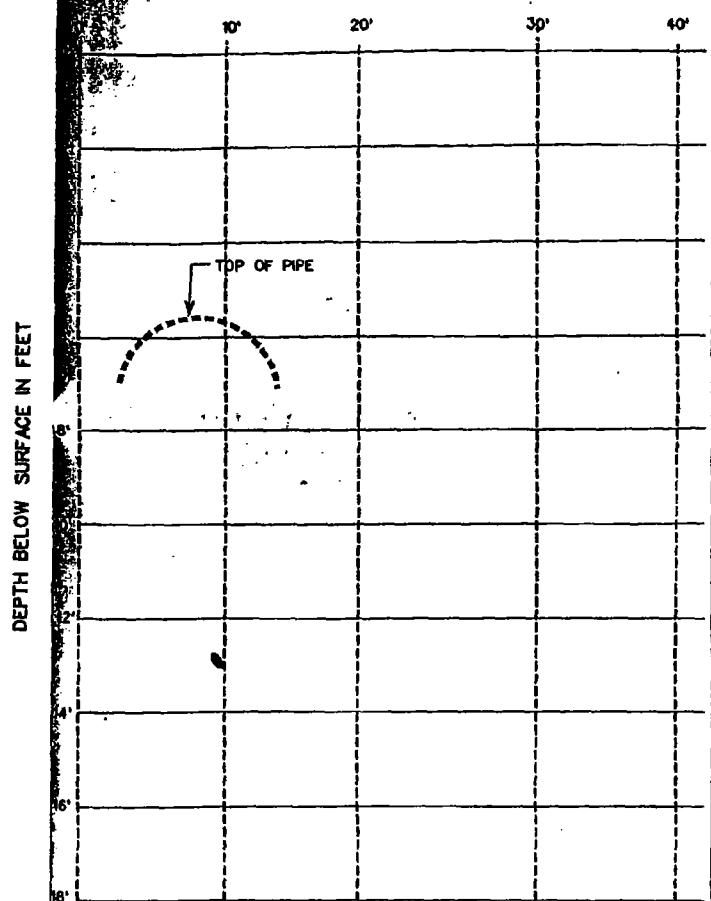
PIPE PROFILE D



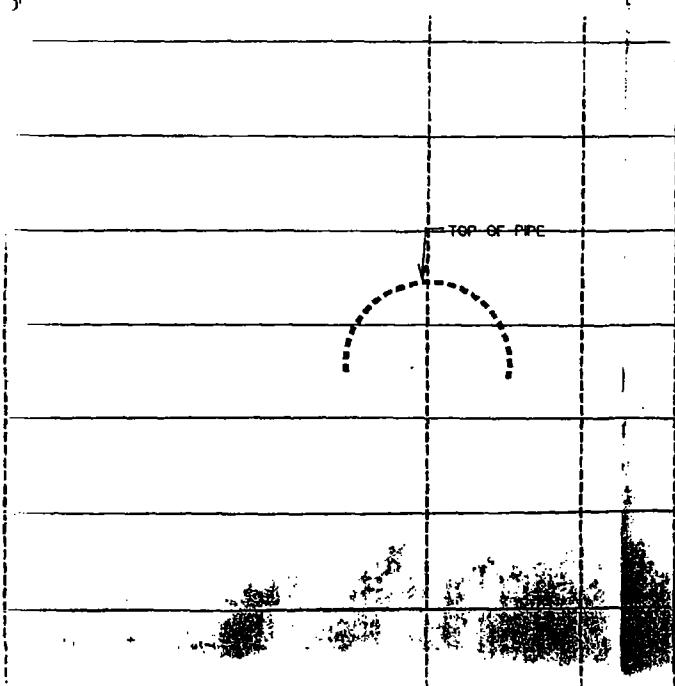
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ALONG STEPS



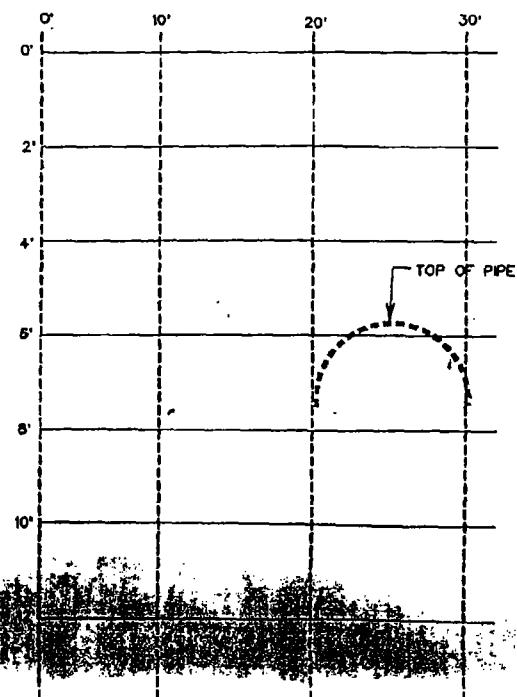
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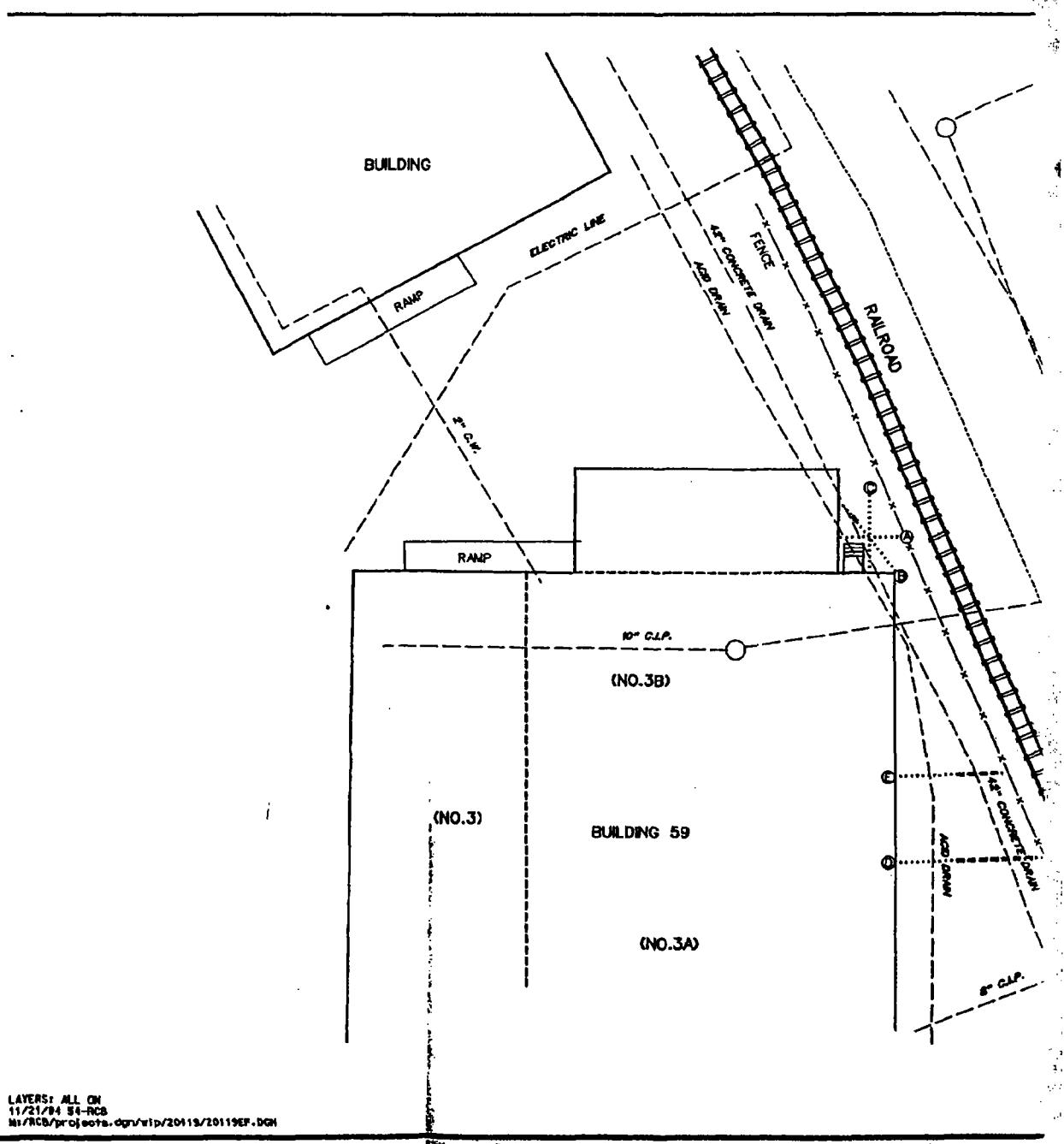
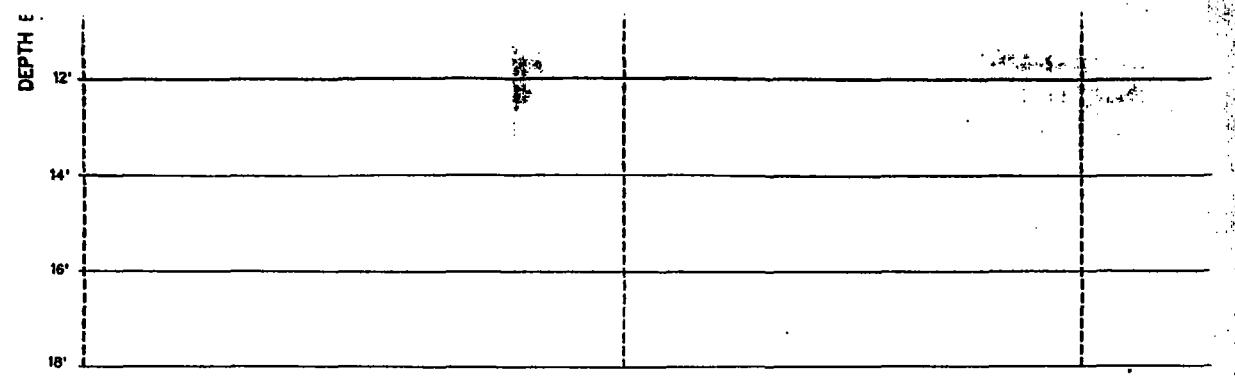


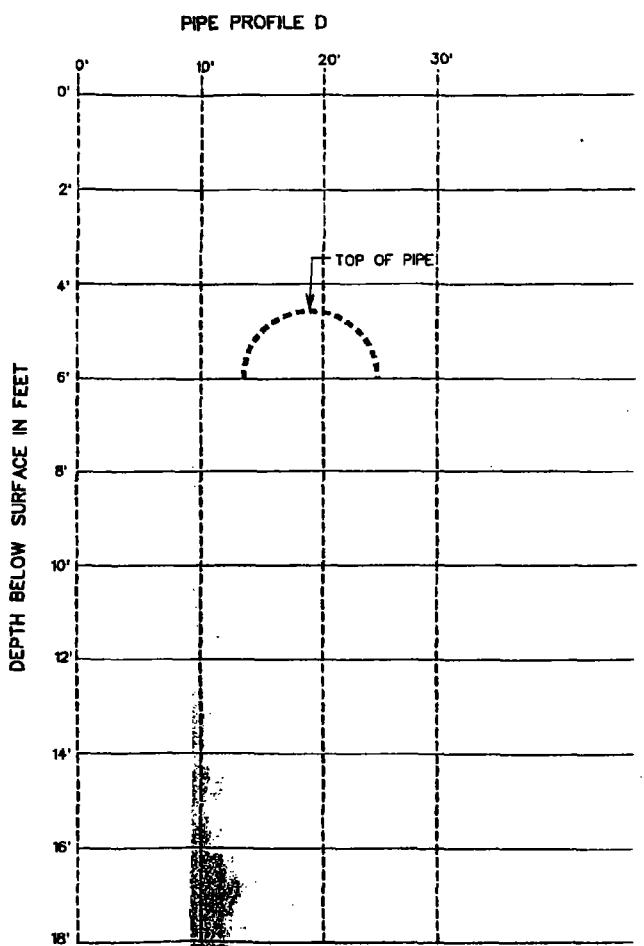
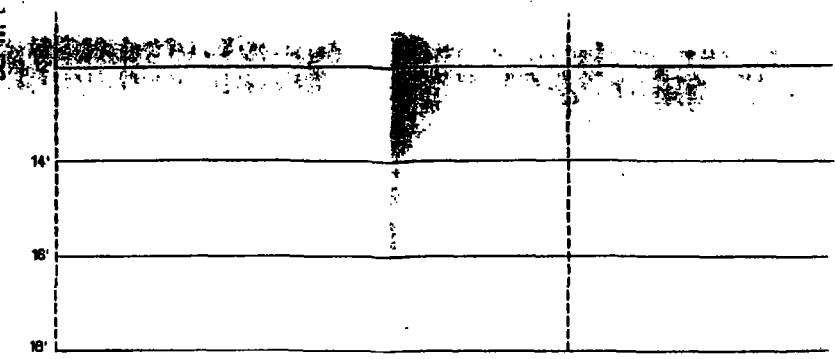
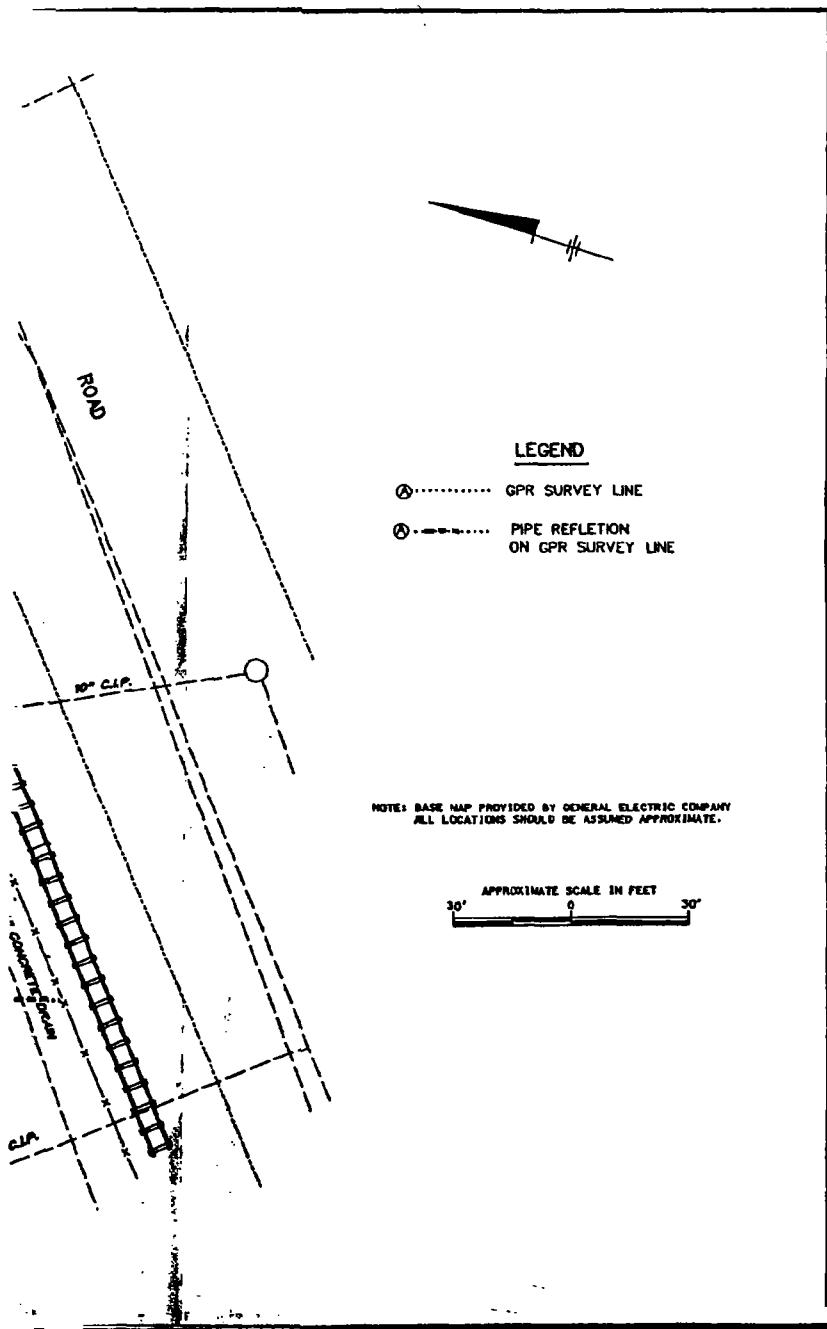
PIPE PROFILE D



PIPE PROFILE E







LEGEND

TOP OF PIPE