



Area Environmental & Facility Programs
General Electric Company
100 Waterdown Avenue, Pittsfield, MA 01201

August 31, 1995

Mr. David A. Slowick
Section Chief, Emergency Response
Department of Environmental Protection
436 Dwight Street
Springfield, MA 01103

Ms. Anna Symington
Bureau of Waste Site Cleanup
Department of Environmental Protection
436 Dwight Street
Springfield, MA 01103

Re: **Immediate Response Action Plan (IRAP)**
GE Pittsfield Unkamet Brook, DEP SA 1-0148
Release Tracking Number 1-10380

GE HOUSATONIC
21.0
137536

Dear Mr. Slowick and Ms. Symington:

Condition 8 of DEP's Conditional Approval letter of August 17, 1995 for DEP Site 1-0148/EPA Area 1, GE/Unkamet Brook Phase II/RFI Proposal requires GE to submit an IRAP for SWMU 0-46 within 45 days of the date of the letter. Enclosed please find IRA Transmittal Form BWSC-005 for RTN 1-10380.

Yours truly,

Mark C. Phillips
Environmental Quality Engineer

- cc: R. Bell, DEP*
- J.R. Bieke, Esquire, Shea & Gardner*
- L. Bolduc, Pittsfield Health Department*
- State Representative D. Bosley
- R.F. Desgroseilliers, GE
- R.W. Gates, Lockheed Martin
- R.K. Goldman, Blasland & Bouck*
- M. Hoagland, EPA*
- State Representative C. J. Hodgkins
- S.F. Joyce, DEP
- State Representative S. P. Kelly
- A. Kurpaska, DEP*
- State Representative P. J. Larkin
- D.J. Luckerman, EPA*
- B. Olson, EPA*
- Mayor E.M. Reilly
- J.G. Ruebesam, GE*
- State Senator J. M. Swift
- A.J. Thomas, Esquire, GE*
- A. Weinberg, DEP*
- S.P. Winslow, Esquire, DEP*
- Housatonic River Initiative
- Public Information Repositories (ECL I-R-IV(A)(1) & (2))

*Enclosure



**IMMEDIATE RESPONSE ACTION (IRA)
TRANSMITTAL FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number
1-10380

A. RELEASE OR THREAT OF RELEASE LOCATION:

Release Name: (optional) Buried Drums
Street: 100 Woodlawn Avenue Location Aid: West of LM Bldg. OP-3 (SA1-0148)
City/Town: Pittsfield, MA ZIP Code: 01201

- Check here if a Tier Classification Submittal has been provided to DEP for this Release Tracking Number.
- Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114.
Specify Program: CERCLA HSWA Corrective Action Solid Waste Management RCRA State Program (21C Facilities)
- Related Release Tracking Numbers That This IRA Addresses: _____

B. THIS FORM IS BEING USED TO: (check all that apply)

- Submit an IRA Plan (complete Sections A, B, C, D, E, H, I, J and K).
 Check here if this IRA Plan is an update or modification of a previously approved written IRA Plan. Date Submitted: 8/18/94
- Submit an Imminent Hazard Evaluation (complete Sections A, B, C, F, H, I, J and K).
- Submit an IRA Status Report (complete Sections A, B, C, E, H, I, J and K).
- Submit a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard (complete Sections A, B, C, D, E, H, I, J and K).
- Submit an IRA Completion Statement (complete Sections A, B, C, D, E, G, H, I, J and K).

You must attach all supporting documentation required for each use of form indicated, including copies of any Legal Notices and Notices to Public Officials required by 310 CMR 40.1400.

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

Identify Media and Receptors Affected: (check all that apply) Air Groundwater Surface Water Sediments Soil
 Wetland Storm Drain Paved Surface Private Well Public Water Supply Zone 2 Residence
 School Unknown Other Specify: _____

Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that apply) 2 Hour Reporting Condition(s)
 72 Hour Reporting Condition(s) Substantial Release Migration Other Condition(s)

Describe: Additional excavations based on GPR conducted outside previously excavated area. Addressed in the 10/17/94 IRA completion statement.

Identify Oils and Hazardous Materials Released: (check all that apply) Oils Chlorinated Solvents Heavy Metals
 Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)

- Assessment and/or Monitoring Only
- Excavation of Contaminated Soils
 Re-use, Recycling or Treatment
● On Site ○ Off Site Est. Vol.: ~ 90 cubic yards
Describe: Soil excavated at areas identified by GPR
- Store ○ On Site ○ Off Site Est. Vol.: _____ cubic yards
- Landfill ○ Cover ● Disposal Est. Vol.: ~ 70 cubic yards
- Removal of Drums, Tanks or Containers
Describe: Excavation of locations identified by GPR
(Figure 2B)
- Deployment of Absorbent or Containment Materials
- Temporary Covers or Caps
- Bioremediation
- Soil Vapor Extraction
- Structure Venting System
- Product or NAPL Recovery
- Groundwater Treatment Systems
- Air Sparging
- Temporary Water Supplies

SECTION D IS CONTINUED ON THE NEXT PAGE.



IMMEDIATE RESPONSE ACTION (IRA)
TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

1-10380

H. LSP Opinion (continued):

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions of the conditions attached

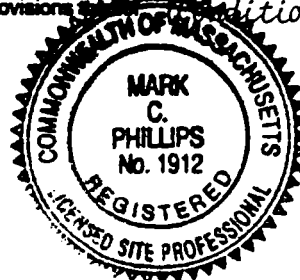
LSP Name: Mark Phillips LSP #: 1912 Stamp:

Telephone: (413) 494-3027 Ext.:

FAX: (optional) (413) 494-6707

Signature: Mark C Phillips

Date: 8/31/95



I. PERSON UNDERTAKING IRA:

Name of Organization: General Electric

Name of Contact: Jeff Ruebesam Title: Manager, Compliance & Remediation

Street: 100 Woodlawn Avenue

City/Town: Pittsfield State: MA ZIP Code: 01201

Telephone: (413) 494-3728 Ext.: FAX: (optional) (413) 494-5024

Check here if there has been a change in the person undertaking the IRA.

J. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA: (check one)

RP or PRP Specify: Owner Operator Generator Transporter Other RP or PRP

Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(f))

Any Other Person Undertaking IRA Specify Relationship:

K. CERTIFICATION OF PERSON UNDERTAKING IRA:

I, Jeffrey Ruebesam, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/are aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

By: Jeff Ruebesam Title: Manager, Site Compliance & Remediation

For: Date: 9/1/95

Enter address of the person providing certification, if different from address recorded in Section I:

Street:

City/Town: State: ZIP Code:

Telephone: Ext.: FAX: (optional)

YOU MUST COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Commonwealth of Massachusetts
Department of Environmental Protection
Western Regional Office
436 Dwight Street
Springfield, Massachusetts 01103
(413) 784-1100

United States
Environmental Protection Agency
New England Region
J.F. Kennedy Federal Building
Boston, Massachusetts 02203
(617) 565-3420

August 17, 1995

Ronald F. Desgroseilliers
General Electric Company
Area Environmental and Facility Operations
100 Woodlawn Avenue
Pittsfield, Massachusetts 01201

Re: DEP: 1-0148 Pittsfield; EPA: Area 1;
GE/Unkamet Brook; Phase II/RFI Proposal
comments and requirements for resubmittal,
schedule, and conditional PHEAP approval

Dear Mr. Desgroseilliers:

The Massachusetts Department of Environmental Protection (DEP) and the United States Environmental Protection Agency (EPA) (the Agencies) have reviewed the following documents:

MCP Interim Phase II Report and Current Assessment Summary for Unkamet Brook Area/US EPA Area 1 (CAS), January 1995, Volumes I through XIV, prepared by Blasland, Bouck & Lee for the General Electric Company (GE);

MCP Supplemental Phase II Scope of Work Proposal for RCRA Facility Investigation of Unkamet Brook Area/US EPA Area 1 (Phase II/RFI Proposal), January 1995, prepared by Blasland, Bouck & Lee for GE; and,

Preliminary Health and Environmental Assessment Proposal for the Unkamet Brook Area/EPA Area 1 Site (PHEAP), January 26, 1995, prepared by ChemRisk for GE.

The Phase II/RFI Proposal was submitted as required by DEP's and GE's May 1990 Administrative Consent Order, the Massachusetts Contingency Plan and EPA's Corrective Action Permit's Special Permit Condition IIA(1). The PHEAP was submitted as required by EPA's Correction Action Permit's Special Permit Condition IIA(7).

- a. Special Permit Condition II.A.1.e.(2) requires mechanical integrity testing of SWMU O-B. Section 3.5.1 of the Phase II/RFI Proposal indicates that a video reconnaissance of the clay tile pipe indicated that a specific section of the pipe was leaking and that the clay tile pipe was crushed and left in place, and was replaced with a new drainage pipe. However, other information indicates that the pipe may have been filled in place. See Comment # 12 above concerning the CAS. The Phase II/RFI Proposal further states that since the replacement of the pipe, there has been no indication of oil from the Building 51/59 oil plume entering the pipeline; therefore, no further integrity testing is necessary at this SWMU. The purpose of the request for integrity testing was to determine the potential for hazardous constituents to migrate from the pipe to the surrounding soil, not simply to determine whether oil was leaking into the pipe. It is acknowledged that since a video inspection of the pipe was conducted and the pipe has been either crushed or filled in place, further integrity testing cannot be conducted. However, since at least one leak was found in the pipe, soil sampling to evaluate releases of hazardous constituents will be required. Revise the text of the Phase II/RFI Proposal to indicate that the results of the video inspection of SWMU O-B will be included in the Phase II/RFI Report if available. In addition, revise the Phase II/RFI Proposal to include a plan for further investigating potential migration from this pipe and determining whether the pipe trench is acting as a preferential pathway. At a minimum, this plan shall include at least one soil boring at a low point downgradient of the eastern extent of the Building 51/59 oil plume, with sampling and analysis for Appendix IX+3 hazardous constituents (excluding herbicides and pesticides).
- b. Prior to 1990, oil entered the Building 51 drain line during periods of high water table. The drain line discharges to an oil/water separator, however, small amounts of oil could, at times bypass the separator and discharge to Unkamet Brook. Pending GE's clarification of whether this line was sealed or crushed, the Agencies reserve the right to require additional investigations for this unit to determine if it is acting as a preferential pathway for oil migration.

7. Building 119W Oil/Water Separator (SWMU G-17)

The Phase II/RFI Proposal provides a commitment to conducting visual inspections of SWMU G-17, but does not provide a commitment for further investigation if the visual inspection of SWMU G-17 indicates that it is likely that a release has occurred. Revise the Phase II/RFI Proposal to state that a soil boring and sampling program (and ground water monitoring if required) will be conducted at the unit if the integrity of the unit is found to be compromised during the visual inspection.

8. Buried Drum Area (SWMU O-46)

In June 1994, during excavation for installation of a steam line west of Building OP-3, GE found 19 buried drums. GE removed the drums and associated contaminated soil as an

IRA. The area where the drums were found was designated SWMU O-46. In November 1994, GE conducted a ground penetrating radar (GPR) survey to determine if any drums are remaining in this area. The "preliminary results" of this survey indicate that additional drums are buried in this area. As stated in the Phase II/RFI Proposal, GE proposes to excavate and remove any drums in this area and any associated contaminated soil in accordance with GE's Protocols for Management of Excavation Activities.

The CAS or the Phase II/RFI Proposal did not specify the details or the location of the GPR survey completed in this area. Additionally, no details were provided regarding the procedures for excavating and removing the drums. The Revised Phase II/RFI Proposal must include a map (scale not to exceed 1 inch to 50 feet) showing the exact locations of the GPR survey and the area where GE suspects remaining buried drums exist.

Since the removal of drums and contaminated soil is not considered assessment work their removal is not suitable to be completed as part of a Phase II/RFI. The proposed removal action should be completed as an IRA pursuant to the 310 CMR 40.0411 through 40.0429 of the MCP. As such, an IRA plan for removal of the buried drums and associated contaminated soil must be submitted for the Agencies review and approval within 45 days of the date of this letter. In addition to the sampling for disposal purposes, the IRA plan must include plans for sampling of soil left in place and ground water sampling of nearby existing wells, as necessary to characterize releases from this buried drum area. The Agencies reserve the right to require additional Phase II/RFI investigations of this area pending the findings of the IRA.

SWMU-specific Comments - Former/Active Tank Location SWMUs

Based on the Agencies' review of the CAS, contamination is likely to be present at the former underground storage tank (UST) locations described below and sampling completed at the locations has not been shown to be sufficient to determine the extent of contamination and the Phase II/RFI Proposal did not include plans to sample at their former locations. Most of the former tank locations were SWMUs. The SWMU number is provided for all former UST locations which are considered SWMUs.

9. Tank OP3-A1 (SWMU O-45)

Tank OP3-A1 was formerly located adjacent to the southern wall of Building OP-3 and formerly contained wastewater containing metals. The tank was constructed of fiberglass and had a 750 gallon capacity. The tank was taken out of service in 1967 and removed in 1992. During removal of the tank soil samples were collected and analyzed for PCBs using Method 8080, volatile organic compounds (VOCs) using Method 8240 and metals by Toxicity Characteristic Leaching Procedure (TCLP). The results indicate the presence of metals that are leaching at concentrations up to 0.5 parts per million (ppm) for cadmium and up to 0.2 ppm for lead and chromium. PCBs and VOCs were not detected in the soil samples. Ground water was observed in the tank pit during removal operations. Soil excavated from around the tank was backfilled in the tank excavation pit.

**Re: IRA Plan
RTN 1-10380
SA 1-0148
US EPA Area 1
GE Pittsfield**

Objective and Background

The objective of this Immediate Response Action Plan (IRAP) is to evaluate a threat of release (potential buried drums) based on the excavation in June 1994 of 19 such drums during construction of a steam pipeline. Removal of those drums is detailed in an IRA completion statement filed for release tracking number 1-10380 on October 17, 1994. At that time GE proposed to conduct additional searching for drums with appropriate geotechnic procedures as part of the ongoing MCP and RCRA C/A Phase II/CAS process.

In its August 17, 1995 conditional approval of GE's Unkamet Brook Phase II/RFI proposal, the Massachusetts Department of Environmental Protection (MDEP) and USEPA have ordered at Condition 8 under "Agencies Determination: Phase II/RFI Proposal Comments..." that an IRA plan for "removal of the buried drums and associated contaminated soil must be submitted for the agencies review and approval within 45 days of the date of this letter [August 17, 1995]." This IRAP is in response to Condition 8.

The site of the proposed work is within the 100-year floodplain under an area of maintained (periodically mowed) grass. A triangular shaped piece of approximately 1/4 acre is shown on a marked-up copy of Figure 1-2 from the January 1995 "MCP Interim Phase II Report and Current Assessment Summary for Unkamet Brook Area/USEPA Area 1." Figure 2-4 from the same report is a 1990 aerial photograph showing the surrounding receptors. Less than 100 feet north is Merrill Road and immediately across the road is Unkamet Brook and associated wetlands. To the east is Lockheed Martin's (formerly operated by GE) building OP3. A driveway to the little-used paved parking area at the rear of OP3 is bordered by a fence preventing access to the building. West of the site is Unkamet Brook with a commercial office building (presently unoccupied) on the far side.

Groundwater depth is approximately seven-feet below grade. A monitoring well (MW-39) was installed within the site as part of the steam line construction program. MW-39 was developed and sampled in January 1994, and well construction details and test results were sent to MDEP on March 11, 1994. MW-39 had a PCB concentration of 0.0007 mg/L, in excess of the 0.0005 mg/L method 3 UCL at 310 CMR 40.0996(4). Tetraethyldithiopyrophosphate was also detected at a concentration of .0013 mg/L. During the steam line construction project, groundwater that was removed for work to proceed was tankered to GE's groundwater treatment plant at Building 64G for processing to NPDES standards.

Boring L-39, 30 feet to the north of MW-39, showed soil contamination levels of toluene and total xylenes (0.1 and 1.5 ppm respectively) at 6 to 8 foot depth. There were no detectable levels of volatile or semi-volatile compounds or PCBs within the top six feet of soil.

In November 1994, GE's contractor, Blasland & Bouck, completed a ground penetrating radar survey of the area. A summary of their report (Figure 2B) is attached. It shows 30 "potential" targets and one "unusual feature." The work plan covers the steps to be taken to investigate each of these anomalies.

Work Plan

The potential targets are estimated at depths varying from two to eight feet. An area of approximately five feet square will be excavated to the approximate depth at each location with the soils, based on characterization (see next paragraph), placed on plastic near the excavation or trucked to the parking area at the rear of OP3. If a drum is encountered, excavation will be expanded to permit trained operators to enter the area for its removal. Where targets are closely spaced, the excavation may proceed in a linear fashion.

Based on the work done in 1994 for the steam line installation, the soil above the targets is expected to be clean, unregulated soil. To confirm this, four borings will be made, two from zero to six feet and two samples from the zero to four feet, samples to be collected in two-foot increments for PCB and screened by PID (Figure 2B). Where PID readings exceed 10 ppm, the soil sample will be submitted for volatiles by Method 8240. Assuming favorable results, this top increment will be set aside and used for backfill without further testing unless visual contamination is encountered during actual excavation. Excavation below the clean material will be segregated for sampling and, should a drum or drums be uncovered, surrounding soils will form another segregated pile. GPR survey target depths are shown in Figure 2C.

Drums, if found, will be carefully removed and transferred to overpack barrels. Samples will be taken of material in the drum(s) for proper waste profiling. The drums will then be transported to GE's RCRA/TSCA short-term storage facility pending disposal. Significantly damaged drums (drum pieces) will be placed on plastic inside tote bins for handling.

Visually contaminated soils will be removed and stockpiled with soil removed from the area of drums. Should a drum be located in groundwater, no further Excavation will be made after removal of the drum. Any groundwater that has to be removed to allow drum removal will be pumped to a tanker for transport to GE's groundwater treatment plant, Building 64G.

The groundwater table in this area is relatively flat and should be influenced by the close proximity of Unkamet Brook. To determine if the potential targets have impacted groundwater characteristics, collection of water sample(s) is required. Other than MW 39, previously discussed, wells 17B, 82B, 84B and 85B were evaluated as potential sampling locations. The evaluation determined that 17B had been destroyed, 82B and 84B were approximately 500 feet side gradient of the area and 85B about 750 feet downgradient. For these reasons none of these

wells were selected. As previously discussed, MW 39 was installed and tested during the steam line installation and is located within the area of investigation. To determine groundwater conditions downgradient from the area of investigation, a piezometer well will be installed (Figure 2B). In addition, MW 39 will be sampled to determine if groundwater conditions have changed since the analytical results reported to MDEP on March 11, 1994. A groundwater sample collected in the piezometer well and MW 39 will be analyzed for the same constituents measured in 1994 (VOC, SVOC, metals, PCB, and pesticides). Prior to sample collection MW 39 will be redeveloped.

The contractor selected for the work will employ 40-hour trained personnel and shall comply at a minimum with GE's "General Facility Health & Safety Plan, June 1993." The contractor will be required to prepare his own health & safety plan specific to this project.

A protective barrier will enclose the work site. In addition to required notifications contained at 310 CMR 40.1400, the Pittsfield Police and Fire Departments will be briefed on the project at least seven days in advance of excavation beginning. Lockheed Martin's security force will periodically observe the site for appropriate security during the off-shifts.

Mitigating actions will include provisions for dust control, although it is unlikely to be required. Excavated soils not returned to the excavation at the end of the shift will be securely covered with plastic.

Prior to commencing work, Lockheed Martin and GE's plant facility personnel will review and mark any buried utilities in the area.

Permits required: Pittsfield Conservation Commission

Permission from Conrail will be required to investigate the three targets shown within 30' of the Conrail branch line railroad tracks (southernmost targets on lines 9, 11, and 12). It is GE's intent to have the necessary permits and permissions in place so the work can be accomplished before ground freeze up in mid-November 1995. Based on prior experience, Conrail approval may not be received within that time frame and, if such is the case, GE will move ahead on all save those targets.

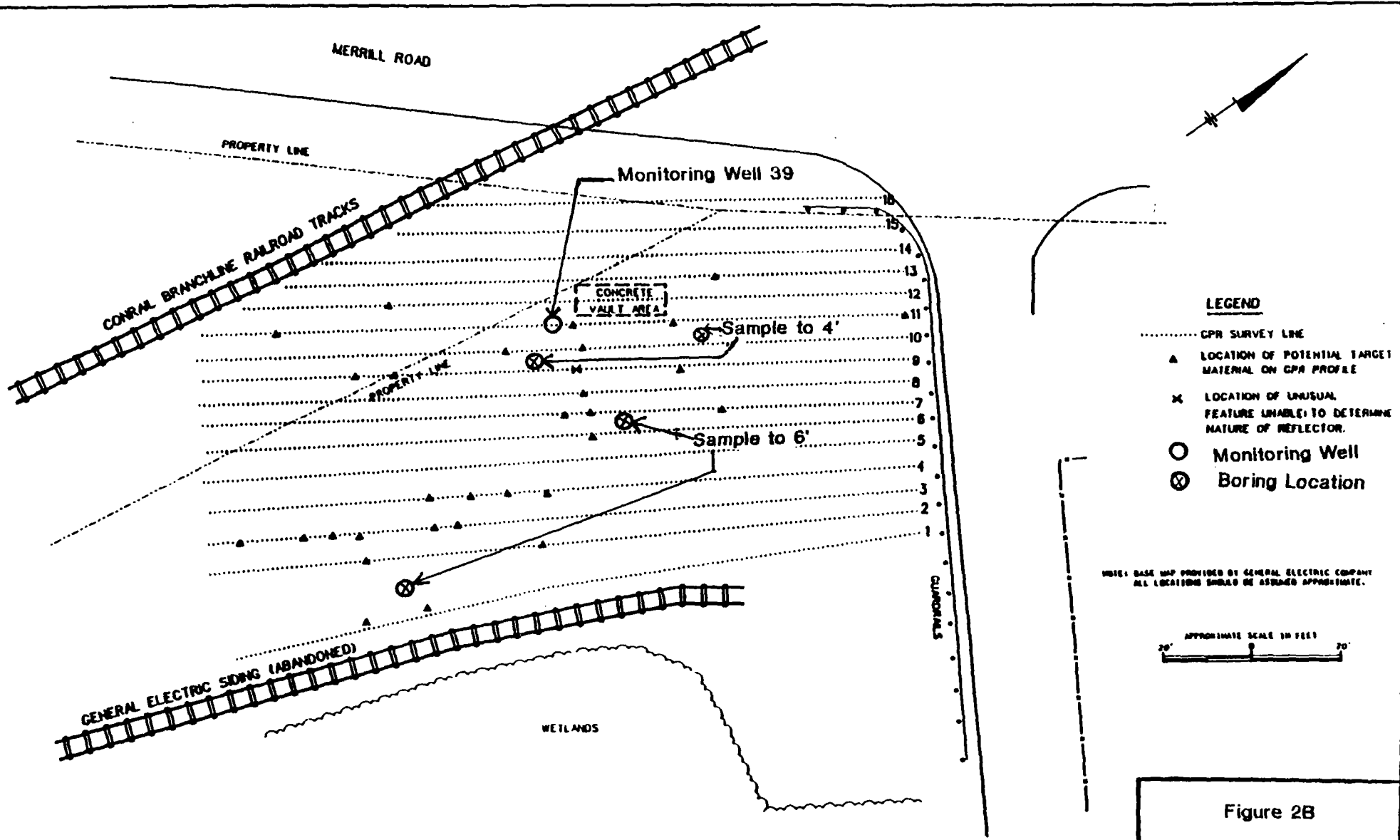
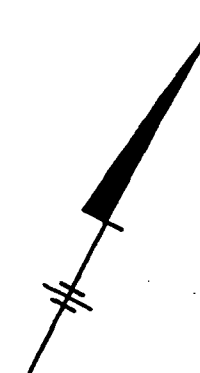
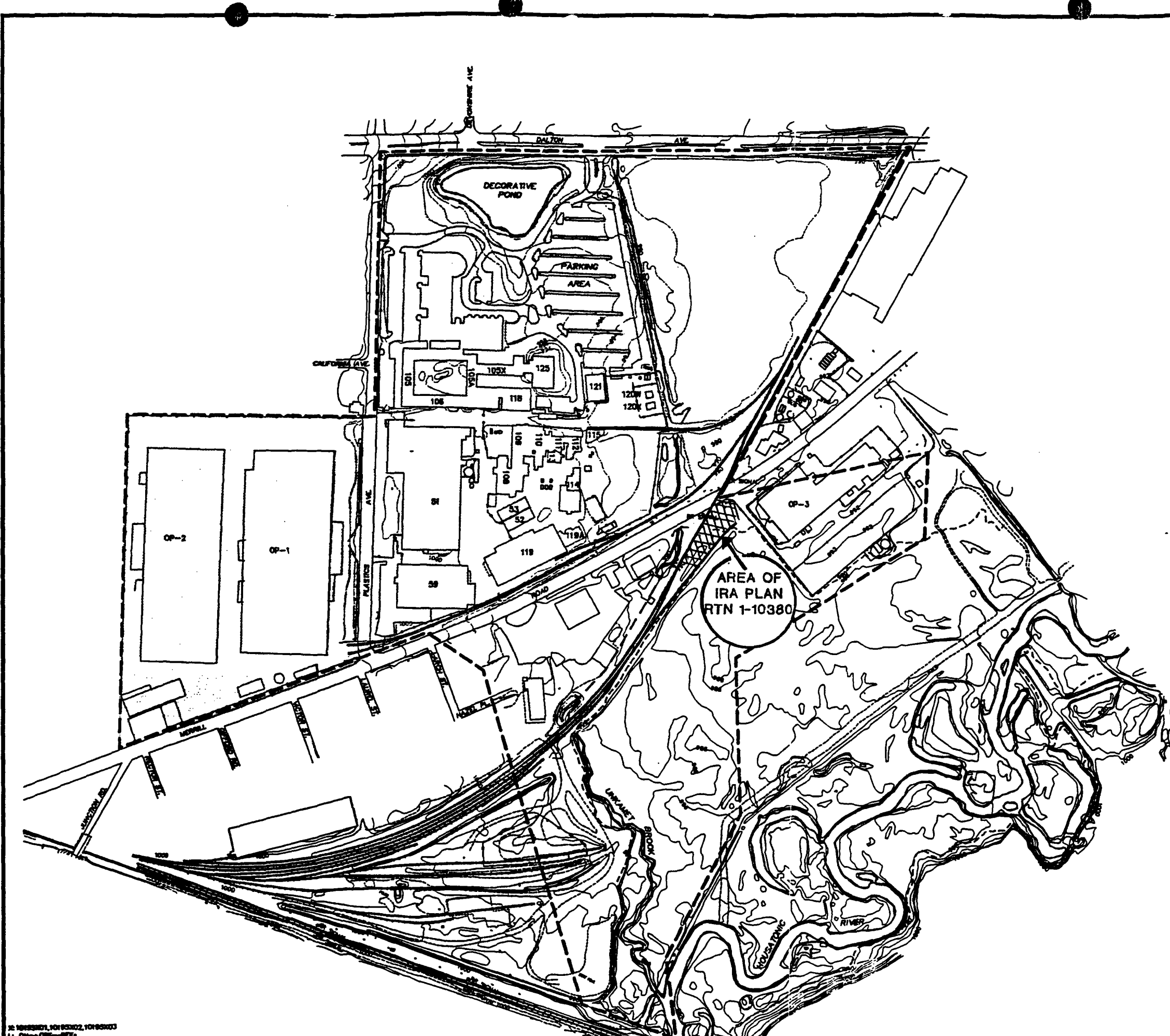


Figure 2B

Summary of GPR Survey

Layers: ALL ON
 11/21/94 34-RCB
 01/RCB/proj/cats. gpr/vlp/20119/2011900.DGN



LEGEND:

- APPROXIMATE SITE BOUNDARY
- SITE PROPERTY CURRENTLY OWNED BY GENERAL ELECTRIC CO.
- APPROXIMATE HOUSATONIC RIVER 10-YEAR FLOODPLAIN
- ELEVATION CONTOUR
- FENCING

NOTES:

1. MAPPING IS BASED ON PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC.—FLOWN IN APRIL 1990, AND DATA PROVIDED BY GENERAL ELECTRIC COMPANY.
2. NOT ALL PHYSICAL FEATURES SHOWN.
3. THE LIMIT OF FLOODPLAIN REPRESENTS THE APPROXIMATE 10-YEAR FLOODPLAIN OF THE HOUSATONIC RIVER. DELINEATION OF 10-YEAR FLOODPLAIN IS BASED ON HEC-2 HYDRAULIC MODELING PERFORMED BY BLASLAND AND BOUCK ENGINEERS, P.C. (1991) AND AVAILABLE TOPOGRAPHIC MAPPING.



APPROXIMATE SCALE: 1" = 400'



BLASLAND, BOUCK & LEE, INC.
 ENGINEERS & SCIENTISTS
 GENERAL ELECTRIC COMPANY, PITTSFIELD, MASSACHUSETTS
MCP INTERIM PHASE II REPORT/CAS FOR UNKAMET BROOK AREA/USEPA AREA 1

SITE PLAN

FIGURE 1-2

10188807, 10188802, 10188803
 L: 08-01-97-REF
 1/27/95 84-PMC DWP
 10188800/10188804.DWG



AREA OF
IRA PLAN
RTN 1-10380



LEGEND:

--- APPROXIMATE USEPA
AREA 1 BOUNDARY

NOTE: AERIAL PHOTOGRAPH
TAKEN ON APRIL 23, 1990



APPROX. SCALE: 1" = 330'



BLASLAND, BOUCK & LEE, INC.
ENGINEERS & SCIENTISTS

GENERAL ELECTRIC COMPANY • PITTSFIELD, MASSACHUSETTS
MCP INTERIM PHASE II REPORT FOR UNKAMET
BROOK AREA AND CURRENT ASSESSMENT
SUMMARY FOR USEPA AREA 1