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RFW: 00-0353

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**Subject:** Conceptual Work Plan for Future On-Plant Consolidation Areas

Enclosed is the draft *Conceptual Work Plan for Future On-Plant Consolidation Areas*.

We look forward to discussing the contents of the enclosed draft with you.

# TECHNICAL REPORT

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DRAFT  
CONFIDENTIAL - FOR  
MEDIATION PURPOSES

## *Conceptual Work Plan for Future On-Plant Consolidation Areas*

General Electric Company  
Pittsfield, Massachusetts

March 1999

**BBL**  
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# 1. Introduction

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## 1.1 General

In September 1998, the General Electric Company (GE) reached a settlement in principle with the United States Environmental Protection Agency (USEPA), the Massachusetts Department of Environmental Protection (MDEP), and several other government agencies (referred to collectively as the Agencies) regarding the performance of future response actions (and related activities) for several areas at the Pittsfield/Housatonic River Site in Pittsfield, Massachusetts. The settlement established, among other things, the response actions that GE would perform to address polychlorinated biphenyls (PCBs) and other hazardous constituents present in soils, sediment, and groundwater. Since the settlement in principle, GE and the Agencies have worked together to develop a Consent Decree (CD), a Statement of Work (SOW), and other documents to embody the settlement, and to establish specific Performance Standards and response actions for several Removal Action Areas (RAAs) within the Pittsfield/Housatonic River Site. To date, the CD and SOW have not been finalized, and GE and the Agencies continue to work together toward this goal.

Separate from the ongoing development of the CD and SOW, GE has conducted certain activities in anticipation of future response actions within the Pittsfield/Housatonic River Site, including:

- Preparation and submittal of a document entitled *Removal Action Work Plan - Upper ½-Mile Reach of Housatonic River* (Upper ½-Mile Work Plan), which describes the proposed response actions for certain Housatonic River sediments and bank soils located between Newell Street and Lyman Street;
- Performance of several investigations related to the presence of non-aqueous phase liquids (NAPLs) within the subsurface soils located along both sides of the upper ½-mile reach of the river;
- Design and submittal of proposals for supplemental containment/recovery for NAPLs within portions of the East Street Area 2 - South and Lyman Street Area RAAs; and
- Preparation and submittal of a pre-design work plan for the Allendale School Property that proposes additional soil investigations to support future Removal Design / Removal Action (RD/RA) activities at that property.

Several response actions associated with the activities, proposals, and work plans identified above may be performed in 1999. These activities may include sediment and bank soil response actions for a portion of the upper ½-mile reach of the Housatonic River and soil removal/replacement at the Allendale School Property, subject to receiving USEPA

approvals and resolution of issues relating to an appropriate legal vehicle, acceptable to GE and the Agencies, under which the activities could be carried out. In addition to the above activities, GE may demolish some buildings within its facility as part of its Brownfields re-development agreement with the City of Pittsfield.

The activities identified above would result in the removal of materials (e.g., soils, sediments, demolition debris, etc.) that will require disposition at a location separate from their point of origin. Under the settlement agreement between GE and the Agencies, such materials may be permanently placed (subject to several conditions) into one or more consolidation areas located within the GE Plant Area. As a result, concurrent with the response actions described above, GE has identified and evaluated several potential consolidation areas within the GE Plant Area. This *Conceptual Work Plan for Future On-Plant Consolidation Areas* (Conceptual Work Plan) summarizes the results of these activities, selects three areas as future on-plant consolidation areas, identifies two of those areas for near-term use in connection with potential 1999 removal activities, and provides preliminary information concerning the design, construction, operation, closure, post-closure care, and groundwater monitoring of those two on-plant consolidation areas. Following USEPA approval of this Conceptual Work Plan, GE will develop and submit a more detailed RD/RA Work Plan for those two areas.

## **1.2 Purpose and Content of Work Plan**

This Conceptual Work Plan summarizes the activities that have been conducted to date regarding the identification, evaluation, selection, and preliminary design of on-plant consolidation areas to support future response actions related to the Pittsfield/Housatonic River Site. As described herein, three specific areas at the GE Plant Area have been selected to date as future on-plant consolidation areas. Further, two of those areas -- the former Hill 78 landfill area and the Building 71 area -- have been selected for near-term development in anticipation of the potential performance of certain removal actions in 1999.

In general, this Conceptual Work Plan contains the following information:

- Background information, including construction, use, closure and post-closure requirements for on-plant consolidation areas;
- Preliminary volume estimates regarding future on-plant consolidation needs; and

- Identification and evaluation of potential on-plant consolidation area locations and basis for selection of such locations.

Based on the evaluations summarized herein and as indicated above, GE has identified two specific on-plant consolidation areas for initial use. For those two areas, this Conceptual Work Plan also includes the following:

- Preliminary design and construction information;
- Proposed pre-design investigations and other activities;
- General requirements and protocols concerning future operations;
- An overview of post-closure inspection and maintenance activities;
- General description of future groundwater monitoring;
- Anticipated contents of the future RD/RA Work Plan; and
- A schedule for near-term activities.

Apart from the selection of the on-plant consolidation area locations, the information presented in this Conceptual Work Plan is subject to modification as future RD/RA activities are conducted at the Pittsfield/Housatonic River Site.

## **2. Background Information**

### **2.1 General**

This section summarizes the information that served as the basis for initial evaluations concerning the consolidation of materials within the GE Plant Area. Presented herein is a summary of information regarding the type(s) of material that will be acceptable for future on-plant consolidation, materials that will be prohibited from on-plant consolidation (and therefore require off-site disposition), and requirements concerning the future construction and operation of any new on-plant consolidation areas. This section also provides preliminary estimates concerning the volume of materials that may be subject to removal and subsequent on-plant consolidation as part of the response actions to be performed within the Pittsfield/Housatonic River Site. Finally, GE has utilized several criteria to assist in the initial identification of potential on-plant consolidation areas. These criteria are also presented in this section of the Conceptual Work Plan.

### **2.2 General Requirements for On-Plant Consolidation Areas**

Under the settlement in principle between GE and the Agencies, certain requirements and conditions apply to the use of consolidation areas within the GE Plant Area. With certain exceptions, materials generated as part of the overall response actions (as well as debris from building demolition activities) can be permanently consolidated at the former Hill 78 landfill area and at other, new on-plant consolidation areas. The consolidation of materials (e.g., soils, sediment, surface cover materials, debris, vegetation, etc.) at such designated areas within the GE Plant Area is subject to certain limitations. Specifically, materials to be placed at the Hill 78 consolidation area must be limited to materials that are not regulated under the Toxic Substances Control Act (TSCA) and do not constitute hazardous waste under USEPA's regulations pursuant to the Resource Conservation and Recovery Act (RCRA). Also, materials to be placed in any on-plant consolidation area may not include liquids or free product, full or partially filled drums, intact capacitors, or related equipment (if such equipment could potentially contain PCBs). Such materials, if any, must be sent to an appropriate off-site licensed disposal facility.

In addition, under the settlement in principle, any new on-plant consolidation areas must be suitably prepared prior to the placement of consolidation materials. Specifically, any new areas to be used for on-plant consolidation must include appropriate subbase preparation (e.g., pavement); however, a liner and leachate collection system are not required for such areas.

### 2.3 Preliminary Volume Estimates

A key component of the evaluations conducted to date regarding on-plant consolidation is the volume of material that may result from future response actions within the Pittsfield/Housatonic River Site. To provide a preliminary assessment of this volume, the soils data available for each RAA were compared to the requirements established by the settlement. In addition, the volume of material associated with demolition activities to be conducted by GE as part of its separate Brownfields agreement with the City has been estimated, as well as the volume of soil and sediment that may be removed by the USEPA as part of the removal actions for the 1 ½-Mile Reach of the Housatonic River (between the Lyman Street Bridge and the confluence of the East and West Branches of the River).

Using: 1) the information available for each RAA; 2) GE's understanding of the response action requirements established in the settlement; 3) information provided by the USEPA; and 4) several assumptions (summarized below), the volume of materials potentially subject to on-plant consolidation is estimated to be approximately 230,000 cubic yards (cy). Of this total, it is currently estimated that approximately half of the materials would be regulated under TSCA, while the other half would be considered non-TSCA material containing less than 50 ppm PCBs.

Although the above volume estimates are preliminary and subject to modification, they are suitable for use in evaluating potential on-plant consolidation areas. In reviewing these preliminary estimates, the following qualifications should be noted:

- The preliminary volume estimates utilize information that is currently available for each RAA. However, prior to the performance of any response actions, pre-design investigations and detailed RD/RA activities will be performed. Therefore, the volume estimates are subject to modification based on additional information and results of future evaluations for each RAA.
- With the exception of building demolition debris, the preliminary estimates are based on anticipated response actions to address the presence of PCBs in soil and sediment. Removal volumes associated with the presence of non-PCB constituents in soils and sediments (if such response actions are needed) have not been estimated.
- For the removal actions to be performed by USEPA in the 1 ½ Mile Reach of the Housatonic River, it is difficult to make any reliable estimate of the volume of materials to be subject to removal, since USEPA has not yet proposed the removal actions for that reach. Nevertheless, based on discussions with the USEPA, and

assuming that the consolidation areas will be constructed as described in this work plan, GE has assumed a maximum removal volume of 50,000 cy for USEPA's use in the on-plant consolidation areas in connection with response actions for this reach.

- The preliminary estimates concerning materials potentially subject to TSCA (i.e., containing greater than 50 ppm PCBs) take into account the available data, where such data are sufficient to support this estimate. Otherwise, the volume of TSCA and non-TSCA materials for a given RAA has been assumed to be of equal proportion.
- No estimate has been made as to the materials that may be classified as hazardous waste under RCRA. For present purposes, it is assumed that the non-TSCA material will not constitute hazardous waste under RCRA.

## 2.4 Initial Evaluation and Screening Criteria

Several areas within the GE Plant Area could potentially serve as future consolidation areas. However, upon further assessment of these potential locations, it is evident that some areas are more favorable than others for a number of reasons, including the size of the area, current and foreseeable future uses, etc. Therefore, the initial step in identifying possible consolidation areas was to review potential locations against several screening criteria, including the relative size and current/future uses of a potential area and its location relative to the 100-year floodplain of the Housatonic River, Silver Lake, or Unkamet Brook.

Through the application of the initial screening process described above, a total of eight areas were selected for further evaluation, as described in Section 3 of this Conceptual Work Plan. Note that the initial screening criteria identified above are general and intended to support only an initial screening of potential on-plant consolidation areas. Note also that exclusion of certain areas within the GE Plant Area based on the above screening criteria does not preclude their future evaluation as potential consolidation areas.

### **3. Summary of Evaluations of Potential On-Plant Consolidation Area Locations**

#### **3.1 General**

Based on the information presented in Section 2 of this Conceptual Work Plan, several possible consolidation areas within the GE Plant Area were identified and further evaluated. These evaluations initially involved a review of each candidate location (discussed below) and an assessment of its potential consolidation volume. Using this information, and the preliminary volume estimates previously presented in this Conceptual Work Plan, a comparative evaluation among the candidate locations was performed. This section summarizes the results of these preliminary evaluations.

#### **3.2 Candidate On-Plant Consolidation Locations**

Using the initial screening criteria discussed in Section 2.4 of this Conceptual Work Plan, numerous potential consolidation areas within the GE Plant Area were identified. Of these, a total of eight candidate areas were subject to further evaluation. These areas are listed below and shown on Figure 1:

- 40's Complex Area
- 30's Complex Area
- 20's Complex Area
- New York Avenue / Merrill Road Area
- Merrill Road Area
- Former Hill 78 Landfill Area
- Building 71 Area
- "Lower" Ordnance Parking Lot Area

In addition to the above locations, certain subgrade basements/building foundations of existing on-plant buildings will likely be utilized for the final disposition of building materials generated during future building demolition and/or refurbishment activities. At this point in time, it is uncertain whether such use of building foundations/basements would constitute on-plant consolidation areas. As part of the ongoing negotiations concerning the CD and SOW, GE and the Agencies are discussing this topic, including potential disposition requirements and future response



Figures 2 through 4 illustrate the conceptual design parameters summarized above. Using available information concerning the selected consolidation area, footprint, surface topography, and assumptions regarding the components and physical configuration of the final consolidation areas, preliminary capacity estimates were estimated for each candidate location. Table 1 of this Conceptual Work Plan summarizes the parameters that were utilized for each consolidation area, and the resulting preliminary capacity estimates. These results, in combination with the preliminary volume information presented in Section 2 of this Conceptual Work Plan, were considered in the selection of consolidation area locations from among the eight candidate locations evaluated. This selection process is further described below.

### 3.4 Selection of On-Plant Consolidation Areas

Using information concerning: 1) preliminary estimates of the volume of material subject to future on-plant consolidation, 2) the anticipated consolidation volumes of several candidate locations, and 3) several technical and non-technical considerations, a comparative evaluation of the potential consolidation areas was conducted. These evaluations resulted in the preliminary selection of three locations for future use as on-plant consolidation areas. Consistent with the settlement agreement, one of these areas is the former Hill 78 landfill area. The other two locations are the Building 71 area and the area located at the northeast corner of the New York Avenue/Merrill Road intersection. Figure 5 identifies these areas. Also, as stated previously, subsurface basements and building foundations are currently being evaluated for placement of building materials generated during building demolition and/or refurbishment activities.

The preliminary selection of these three on-plant consolidation areas has been based on the following comparative advantages (relative to the other candidate locations):

- The past use of the Hill 78 landfill area for the disposition of materials generated from within the GE Plant Area is consistent with its future use as a consolidation area. This consistency between past and future use was recognized by GE and the Agencies during the settlement negotiations, and resulted in the identification of this area (in the settlement agreement) as a future on-plant consolidation area.
- The selected areas generally consist of open space and relatively flat surface topography.

are initiated for other RAAs within the Pittsfield/Housatonic Site, the preliminary volume estimates presented in this Conceptual Work Plan will be reviewed and modified as appropriate.

To provide additional on-plant consolidation area capacity in future years, the other selected area (i.e., the northeast corner of the New York Avenue/Merrill Road intersection) will be utilized, as necessary. Prior to use of this area, specific design activities will be presented to the USEPA for approval. Moreover, as additional information becomes available on the necessary volumes for response actions at the Site, and refinements are made to the volume estimates for the Hill 78 and Building 71 consolidation areas, GE will consider and evaluate the need for, size of, and appropriate location for additional on-plant consolidation areas and/or the expansion (either horizontally or vertically) of existing on-plant consolidation areas.

## **4. Preliminary Design and Construction Information**

### **4.1 General**

This section presents conceptual information concerning the anticipated design and construction of the Hill 78 and Building 71 consolidation areas. Included is a discussion of the anticipated final configuration of each consolidation area (e.g., the area to be occupied, and the height and slope of each area), as well as the various components involved in the design and construction of each area. As previously indicated, the preliminary volume and design information presented in this Conceptual Work Plan is preliminary and subject to modification. Such modifications may occur in the near-term future based on the results of the pre-design activities (described in Section 5), the results of more detailed design activities to be conducted as part of the detailed RD/RA Work Plan, and/or discussions with the Agencies regarding this Conceptual Work Plan or the CD and SOW. In addition, modifications to the information presented in this Conceptual Work Plan may result from the future pre-design and RD/RA activities that will be performed for the various RAAs within the Pittsfield/Housatonic River Site. As these activities proceed over the next few years, estimates regarding the volume of material potentially subject to on-plant consolidation may change.

### **4.2 General Design Parameters**

The preliminary evaluations of potential candidate consolidation areas within the GE Plant Area utilized several assumptions regarding the physical configuration of each potential area. This section provides additional information concerning the anticipated physical configuration of the Hill 78 and Building 71 consolidation areas. Specifically, this section provides general information concerning the horizontal limits of each consolidation area, the need for and type of base liner system, technical considerations affecting the final shape and contours of each consolidation area, and the components and configuration of the final cover system. Based on these general design parameters, a more specific (although still preliminary) evaluation of each proposed consolidation area has been conducted and is summarized in Section 4.3 of this Work Plan.

Please note that the majority of the information presented herein is related to the final configuration of each consolidation area (i.e., the configuration after each area has been utilized for consolidation, has achieved its volume capacity, and has been subject to the placement of a final cover). Also note that the information presented in this section incorporates several assumptions, some of which will be confirmed or modified within the RD/RA Work Plan based on the results of the pre-design activities.

#### 4.2.1 Horizontal Limits of Proposed Consolidation Areas

Figures 6 through 8 identify the current site conditions and anticipated horizontal limits of the consolidation areas proposed for the Hill 78 and Building 71 areas. (Figure 6 also indicates the portions of such areas that would be used for the initial consolidation activities that may be conducted in 1999.) The horizontal limits of these areas have been selected based on a number of considerations, including current surface features and topography, information concerning past use of each area, available site mapping, and visual observations obtained during field reconnaissance. The potential future "footprints" of the Hill 78 and Building 71 consolidation areas provide a key component in estimating preliminary consolidation volume and conducting preliminary design activities.

For the Hill 78 area, the estimated horizontal footprint of the proposed consolidation area covers approximately 6 acres, which incorporates and expands upon the current landfill. This increase in size (relative to the existing landfill) is based on several considerations:

- First, the side slopes of the current landfill area are relatively steep and will need to be modified (i.e., reduced) to support the construction and operation of the future consolidation area. Expansion of the existing landfill will allow for the construction of less steep side slopes without requiring the removal and regrading of existing materials in the landfill.
- Second, the increased area of the proposed consolidation area will increase its capacity over the capacity of the existing landfill footprint. This increase will lessen the need for the construction of additional new on-plant consolidation areas.
- Third, for those areas into which the proposed consolidation area will expand (primarily extending to the south and west into GE-owned property), previous soil investigations have shown elevated levels of PCBs in the subsurface soil. Given that pre-existing contamination, these areas are suitable for use as part of the on-plant consolidation area.

For the Building 71 consolidation area, the estimated horizontal footprint, based on the configuration shown on Figures 6 and 8, is approximately 5 acres. That configuration assumes a distinct physical and visual separation between the Hill 78 and Building 71 consolidation areas, as shown on Figure 6. However, GE is also evaluating an alternative configuration which would also for consolidation of materials with the "trough" that would otherwise exist

between the Hill 78 and Building 71 consolidation areas, but which would still maintain the physical separation between these areas, so as to endure that the Hill 78 consolidation area is used only for non-TSCA, non-RCRA materials. This alternative configuration is illustrated on Figures 9 and 10. This alternative would maintain the current conceptual design information presented in this Conceptual Work Plan concerning the subgrade and final cover components and other key design parameters (e.g., maximum side and top slopes) for each consolidation area. However, by allowing for consolidation in the "trough" that would otherwise exist between the areas, this alternative would result in a potential increase in overall consolidation capacity or a reduction in the horizontal footprint of the Building 71 consolidation area (while maintaining the same consolidation capacity). Moreover, this alternative would result in the final visual appearance of a single consolidation area, although in fact the two consolidation areas would be physically separate. While the remainder of this Conceptual Work Plan focuses on the visually separate configuration described above (as well as other possible alternative configurations) for this consolidation area.

To supplement the foregoing information and support the remaining preliminary design activities, assumptions regarding the thickness of the base liner system (as required) and final cover system, and allowable configuration of the final consolidation area (i.e., maximum slopes for the top and sides of each area), were established and are summarized below.

#### **4.2.2 Base Liner System**

Under the settlement agreement, the subbase of any *new* on-plant consolidation area must be suitably prepared, although a liner and leachate collection system are not required. This agreement is applicable to the new Building 71 consolidation area. However, based on considerations related to this specific area (and not to any other new consolidation areas), GE has elected to enhance the subbase preparation activities to include additional containment and demarcation prior to the placement of materials in the Building 71 consolidation area. Specifically, following the performance of site preparation activities (e.g., removal of vegetation and grading of the existing surface), a multi-component base liner system with perimeter collection will be installed, as shown on Figure 2. Such a system is intended to provide a vertical separation between future consolidation materials and the native soils in this area, and to provide a mechanism to contain, collect, and convey any residual water that may be entrained in the materials placed in the consolidation area, or water that may enter the consolidation area via rainfall or snowmelt. For the purposes of conducting preliminary design activities, including estimates regarding the volume capacity of the proposed Building 71 consolidation area, it has been assumed that the thickness of the proposed base liner system is 6 inches.

### 4.2.3 Final Cover System

Issues relating to the components and configuration of the final cover system for the on-plant consolidation areas are currently under discussion with the Agencies as part of the ongoing development of the CD and SOW. For present purposes, GE proposes use of the multi-layered final cover system depicted on Figure 3 for closure of the Hill 78 and Building 71 consolidation areas. However, GE has recently received and is evaluating preliminary comments from USEPA regarding the cover system presented on Figure 3. Although the specific design of a final cover system for each of these areas will be based on site-specific considerations and future discussions with the Agencies, and will be specified in detail as part of RD/RA activities, a nominal final cover thickness of two feet has been assumed for the present evaluation. It should be noted that the final cover system illustrated on Figure 3 will satisfy the requirements of the Massachusetts Contingency Plan (MCP) for the construction and performance of engineered barriers (310 CMR 40.0996(4)(c)) and is consistent with the pertinent technical standards under RCRA and state hazardous waste regulations for final landfill cover design and construction (40 CFR 264.310(a) and 310 CMR 30.633(1)). This final cover, in tandem with the proposed drainage and barrier layers, will provide a cover system capable of collecting and conveying any precipitation that may infiltrate the cover soils during the post-closure period.

### 4.2.4 Final Consolidation Area Geometry

Although there are several technical issues that will be addressed as part of the detailed design activities for each consolidation area, two specific technical components were considered in the preliminary design activities and were incorporated into the preliminary volume capacity estimates for each area -- the top and side slopes of the final consolidation areas. Regarding the slope and configuration of the final surface of the top of the consolidation area, a minimum slope of 4% has been selected to promote the surface drainage of rainfall or snowmelt runoff. With respect to the side slopes of the final consolidation areas, a maximum slope of 33% has been selected. This slope is anticipated to result in conditions that: 1) are sufficient for stability and protection against future slope failure, 2) minimize the potential of cover soil erosion due to runoff, and 3) allow future maintenance and inspection activities to occur without special needs or precautions.

### 4.3 Application of General Design Parameters

Based on the general design parameters identified, preliminary design information and a maximum consolidation volume estimate have been estimated for the Hill 78 and Building 71 consolidation areas. A summary is provided below.

#### 4.3.1 Hill 78 Area

As discussed above, the estimated horizontal footprint of the proposed expanded consolidation area at the former Hill 78 landfill is approximately 6 acres. Once the horizontal extent of the future consolidation area was established, the maximum height of the final consolidation area was estimated and compared against the preliminary design criteria previously identified (i.e., the allowable side and top slopes). A maximum elevation of approximately 25 feet was selected. This maximum elevation is generally consistent with or lower than the elevation of other high profile installations in this area (i.e., the sound barrier wall and building roof lines associated with the U.S. Generating Company facilities), and is consistent with the current tree line located north of the Hill 78 area along Tyler Street Extension. Based on currently available information, the final elevation of the proposed consolidation area would be approximately 25 feet higher than the current surface elevation of the Hill 78 landfill, whose current surface elevation is approximately 15 feet above the ground surface of the surrounding area. This height/elevation is compatible with the technical design criteria regarding the allowable slopes of the final consolidation area.

Assuming that the Hill 78 consolidation area is constructed to the elevations described above, and includes an approximate two-foot thick final cover system, the estimated volume of material that can be consolidated within this area is approximately 140,000 cy. Under the settlement, only those materials that are not regulated by TSCA and are not considered to be hazardous waste pursuant to RCRA can be consolidated at this location. The current and preliminary estimate of materials that would not be regulated under TSCA is approximately 115,000 cy, and it is assumed for present purposes that these materials would not constitute hazardous waste under RCRA. Based on these estimates and assumptions, the proposed configuration of the Hill 78 consolidation area would provide sufficient capacity for the non-TSCA, non-RCRA materials that will be subject to on-plant consolidation.

#### 4.3.2 Building 71 Area

As also stated above, the estimated horizontal footprint of the proposed Building 71 consolidation area is approximately 5 acres (although GE is continuing to evaluate the alternative configuration shown on Figures 9 and 10). For this phase of the preliminary design, a maximum elevation of approximately 30 feet was selected. This elevation was selected based on the topography of the surrounding area, as well as the elevation that was selected for the Hill 78 consolidation area. Construction of the proposed Building 71 consolidation area to a height of 30 feet would result in a final elevation that is approximately 10 feet less than the final elevation associated with the proposed Hill 78 consolidation area. In addition, the areas surrounding the north and east sides of the proposed area are GE-owned parking lots that are at an elevation approximately 10 to 15 feet above the ground surface elevation adjacent to Building 71. As a result, relative to these adjacent areas, the maximum height of the proposed Building 71 consolidation area would be 15 to 20 feet above the surrounding paved areas.

Assuming that the Building 71 consolidation area is constructed to the elevations/heights described above, including a six-inch thick base liner system and a two-foot thick final cover system, the estimated volume of material that can be consolidated within this area is approximately 115,000 cy.

## **5. Pre-Design Investigations and Activities**

### **5.1 General**

In preparation for the development of the RD/RA Work Plan, and ultimately the construction and use of on-plant consolidation areas at the Hill 78 and Building 71 areas, GE is currently conducting a number of evaluation and design-related activities. A summary of ongoing and proposed pre-design investigations and activities specifically related to these proposed on-plant consolidation areas is presented below.

### **5.2 Supplemental Soil Investigations**

Consistent with the settlement and recent discussions with the Agencies, GE will conduct a supplemental soil sampling and analysis program for the areas associated with the Hill 78 and Building 71 consolidation areas. Such sampling will be conducted at locations appropriately distributed over the two areas, as shown on Figure 11. These sampling locations have been selected to supplement the previously collected soil sampling data for these areas. The locations of the prior sampling activities are also shown on Figure 11, and the results of those investigations are summarized in Tables 2 through 6.

At each proposed supplemental sampling location, a boring will be installed and samples will be collected to represent the following depth intervals: 0 to 1 foot, 1 to 6 feet, and 6 to 15 feet. Each sample will be analyzed for PCBs. In addition, approximately one-third of the soil samples will also be analyzed for those non-PCB constituents listed at Appendix IX of 40 CFR 264, plus 2-chloroethyl vinyl ether, benzidene, and 1,2-diphenylhydrazine (Appendix IX+3), excluding herbicides and pesticides. The specific samples subject to analysis for Appendix IX+3 constituents will be field determined, but will generally be distributed approximately evenly between the surface and subsurface increments subject to PCB analysis. Sample collection procedures will be consistent with GE's Sampling and Analysis Plan/Data Collection and Analysis Quality Assurance Plan (SAP/DCAQAP) (draft dated October 1998, pending approval by the USEPA). Compositing of soil samples from individual sample increments to represent the targeted depth intervals will follow the general procedures that were implemented for the investigations reported in the *Source Control Investigation Report - Upper Reach of Housatonic River (First 1/2-Mile)* (HSI GeoTrans, February 1999).

Following USEPA approval of the proposed supplemental soil investigations, GE will initiate the field work as soon as practicable. The results of these activities will be presented in the RD/RA Work Plan and will be considered (as appropriate) in the design of the Building 71 and Hill 78 consolidation areas.

### 5.3 Supplemental Groundwater Sampling

In connection with the operation and post-closure care of the Hill 78 and Building 71 consolidation areas, GE will conduct a groundwater monitoring program to assess potential future impacts on groundwater from those on-plant consolidation areas. That groundwater monitoring program is discussed in Section 8 below. To provide "baseline" information on existing groundwater conditions at and near these on-plant consolidation areas, GE will conduct one round of groundwater sampling prior to construction of the consolidation areas. This groundwater sampling will be conducted at the same monitoring wells that will be used in the long-term groundwater monitoring program.

As discussed in Section 8, the future groundwater monitoring program associated with the Hill 78 and Building 71 consolidation areas will involve 10 monitoring wells, including three existing wells (78-1, 78-6, and NY-4) and seven new wells. The locations of these wells are shown on Figure 12. These locations have been selected to encompass: (a) areas immediately downgradient of the on-plant consolidation areas; (b) areas upgradient of the consolidation areas (to assess upgradient groundwater conditions or potential radial flow conditions); and (c) areas located cross-gradient to the consolidation areas (to provide spatial representation).

Following USEPA approval of this Conceptual Work Plan, the seven new monitoring wells depicted on Figure 12 will be installed. Well installations will commence following the conclusion of the supplemental soil investigations described in Section 5.2 and Figure 11 of this work plan, to allow for possible variation in the well locations based on visual observations obtained during the soil boring program. Well installation procedures will be consistent with the protocols established in the SAP/DCAQAP and will be screened in the shallow overburden aquifer present in this area of the facility (generally present between 5 and 15 feet below ground surface). Following installation of the new wells, groundwater samples will be collected from each of the monitoring wells shown on Figure 12, and will be submitted for analysis of Appendix IX+3 constituents (excluding herbicides and pesticides). The procedures and methods for such sampling and analysis will follow those described in GE's SAP/DCAQAP. In addition, GE will measure the groundwater elevation at each monitoring well to further expand current information on the direction of groundwater flow in this area.

Depending on timing and schedule, the results of this groundwater investigation will be included in the RD/RA Work Plan. If the results are not yet available at the time of submission of the RD/RA Work Plan, they will be provided to the Agencies in a separate submittal as soon as possible after submission of the RD/RA Work Plan.

#### **5.4 Other Activities**

GE has recently conducted a detailed topographic survey of the Hill 78 and Building 71 areas. This survey included the identification/location of existing above- and below-grade utilities and structures, current surface cover types and conditions, presence and type of vegetation, easements and right-of-ways, and surface topography (one-foot contours). The results of this survey will allow refinement of the preliminary consolidation volume estimates presented in this Conceptual Work Plan, and support the performance of detailed technical design activities in the RD/RA Work Plan.

## **6. Operation of Consolidation Areas**

### **6.1 General**

This section presents the general requirements and protocols concerning the operation of the Hill 78 and Building 71 consolidation areas. During preparation of the RD/RA Work Plan, this operations plan may be amended to incorporate site-specific, design-related operational conditions, and to provide more details related to operation of the on-plant consolidation areas.

### **6.2 Operational Controls**

Several operational controls will be established at the initiation of the consolidation activities. This section provides information concerning the following operational controls:

- Site Security;
- Site Health and Safety;
- Air Monitoring; and
- Contingency Actions.

#### **6.2.1 Site Security**

Access to the consolidation areas during either their active or post-closure condition will be controlled by the existing security fence at the perimeter of the GE Plant and will be limited to authorized personnel only. Other site security measures that may be implemented during the consolidation activities will be discussed in a Site Security Plan to be prepared as part of RD/RA Work Plan. The Site Security Plan will describe security operations intended to prevent physical contact with materials to be consolidated, structures, or equipment within designated portions of the consolidation areas. The plan will also provide for means to control entry through gates or other entrances to the designated portions of the consolidation areas, and/or posting of designated areas with appropriate signage.

### 6.2.2 Site Health and Safety

Currently, a General Facility Health and Safety Plan (HASP, June 1993) is used by GE to establish minimum health and safety requirements and procedures for all environmental activities conducted within the Pittsfield/Housatonic River Site. The following health and safety components are addressed in the existing HASP:

- Introduction/General Site Background;
- Project Health and Safety Management;
- Site Evaluation and Control;
- Site-Specific and Task-Specific Safety and Health Risk Analysis;
- Employee Information and Training;
- Personal Protective Equipment Requirements;
- Site Monitoring;
- Medical Surveillance;
- Cleaning Procedures;
- Emergency Procedures;
- Engineering Controls and Work Practices;
- Site Control;
- Record keeping; and
- Hazard Communication.

On-plant consolidation activities will be performed in accordance with the applicable sections of this HASP. Prior to its inclusion in the RD/RA Work Plan, this plan will be reviewed and updated/modified as necessary to cover the tasks addressed in the RD/RA Work Plan, and to incorporate any appropriate updates.

The updated HASP will be referenced in the RD/RA Work Plan and will contain the minimum health and safety standards and procedures applicable to all parties involved. It is intended that the contractor(s) retained by GE for the on-plant consolidation activities will supplement the information presented in the HASP with a contractor-specific HASP. The contractor-specific HASP(s) will consider not only the general information and minimum requirements contained in the updated HASP, but also the specific information related to the consolidation activities to be performed.

### 6.2.3 Air Monitoring

Ambient air monitoring will be conducted during active consolidation activities to assess ambient particulate matter levels. Real-time particulate monitoring will be performed during all construction-related activities, beginning with the initial phase of construction (regrading and/or base liner installation). Such monitoring will be conducted at two stations -- one at an appropriate location downwind of active consolidation activities and another at an appropriate upwind location. The specific locations for these stations will be selected based on the location and nature of the consolidation activities, predominant wind direction, location of potential receptors, availability of power, site accessibility, site security, and existing ambient air monitoring data. These monitoring locations (and potential alternate locations) will be presented in the RD/RA Work Plan.

At each station, real-time particulate monitoring will be performed using a real-time particulate monitor to monitor and record concentrations of particulate matter with a mean diameter less than 10 micrometers (PM<sub>10</sub>). Monitoring will be conducted for approximately 10 hours daily, from 7 am to 5 pm, during consolidation activities. Particulate data will be recorded and averaged by the instruments' datalogger for each hour of the day.

For each day of monitoring, the particulate data from the downwind monitor will initially be compared with the data from the upwind monitor. If the average 10-hour PM<sub>10</sub> concentration at the downwind monitor exceeds the average concentration at the upwind monitor, the downwind concentrations will then be compared with a notification level of 120 µg/m<sup>3</sup> (micrograms per cubic meter) -- which represents 80 percent of the current 24-hour National Ambient Air Quality Standard (NAAQS) for PM<sub>10</sub> (150 µg/m<sup>3</sup>). This level has been selected to allow notice to GE before concentrations reach the level of the 24-hour NAAQS. Any exceedances of the notification level or the NAAQS will be reported to the USEPA to determine the need for and type of mitigation activities.

### 6.2.4 Contingency Plan

A Contingency Plan will be prepared as part of the RD/RA Work Plan. This plan will address the appropriate actions to be taken in the case of emergencies or unexpected, non-routine events during operation of the consolidation areas. The Contingency Plan will be designed to minimize potential risks or hazards to worker and public health and the environment from any unplanned sudden or non-sudden events related to the consolidation areas.

This plan will include a list of all emergency equipment that should be available at each consolidation area, including fire extinguishing equipment, spill control equipment, communications and alarm systems (internal and external) and decontamination equipment. The Contingency Plan will be amended whenever: 1) there are changes in design, construction activities, operation or maintenance, or other conditions occur which could materially increase the potential for releases; 2) the list of emergency coordinators changes; or 3) the list of emergency equipment changes.

The Contingency Plan will also provide contingency measures for potential spills and discharges from materials handling and/or transportation. It will also present the following:

- a description of the means, methods and facilities required to minimize impacts to soil, water, air, structures, equipment or materials resulting from a spill or release;
- equipment and personnel to perform emergency measures required to contain any spill/release and to remove and properly dispose of any impacted media; and
- equipment and personnel to perform cleaning measures that may be required for impacted structures, equipment, or material.

The Contingency Plan will also describe the organization and coordination agreements among emergency agencies, including police departments, fire departments, state and federal emergency response teams, hospitals and contractors.

### **6.3 Consolidation Area Operations and Management**

This section presents a discussion of the activities that will be performed as part of the consolidation area operations. Such activities include:

- waste characterization;
- waste transport and placement;
- vehicle and equipment cleaning;
- site controls;
- cover placement; and
- construction documentation and reporting.

### 6.3.1 Waste Characterization

Waste characterization (including TSCA and RCRA characterization) will be performed for the materials to be removed from each RAA, as appropriate, prior to waste transport to the consolidation area in order to determine the proper disposal location. Once materials are adequately characterized, materials will be transported to the appropriate on-plant consolidation area (i.e., the Hill 78 or Building 71 area) or off-site for proper disposal, as needed. During placement at the on-plant consolidation area, site personnel will record the material type, composition, and approximate quantity.

### 6.3.2 Vehicle Access

Vehicles transporting consolidation materials will access the on-plant consolidation areas using the existing plant roadways. Where necessary, additional temporary roads will be constructed within GE property to gain access to the consolidation areas. These roads may be incorporated into the consolidation area as they are no longer needed, or removed upon closure of the consolidation area.

### 6.3.3 Material Placement/Progression

Materials will be placed in the on-plant consolidation areas in a manner that minimizes the daily working area and provides flexibility for material segregation (e.g., building debris). Under this approach, materials will be placed in lifts progressing, in sequence, across the consolidation area. Additional lifts will be added until final grade is achieved. Placing the consolidation materials in lifts will provide flexibility and allow for the following operational conditions:

- The working face can be reduced to the outer slope of the active lift;
- Stormwater can be managed within the area and away from the working face;
- Completed lifts can be covered with daily/interim cover materials to minimize erosion;
- Materials can be compacted to minimize voids, and reduce potential for differential settlement and slope failure;  
and
- Non-soil/non-sediment wastes (e.g., building debris) can be segregated, processed, and managed in separate portions of the area, if that is determined to be appropriate.

Each consolidation area will be filled in accordance with a pre-determined fill progression plan, to be included in the RD/RA Work Plan. This progression plan will be developed based on the configuration of the consolidation area, proposed final grades, and surface water management considerations. The progression plan will incorporate provisions to allow for interim closure, as needed, at the end of each construction season.

### **6.3.4 Construction Equipment**

The appropriate construction equipment will be used and stored at the on-plant consolidation areas during active consolidation activities. It is expected that the equipment will consist of bulldozers, compactors, and possibly payloaders and/or excavators. Other equipment that may be used during consolidation activities include dump trucks (or other appropriate transport vehicles) and water trucks for dust control.

### **6.3.5 Vehicle and Equipment Cleaning**

Equipment cleaning will be utilized to prevent the transport of PCBs or other potential site materials that may be present on any equipment used for consolidation activities. The contractor(s) will be responsible for establishing and implementing specific equipment cleaning procedures, which are anticipated to include the following.

- Establishment of an equipment cleaning area that will be constructed of an impermeable barrier that is sloped to a collection sump.
- Visual inspection of each transport vehicle prior to leaving the unloading area. Accumulations of soil or sediment on the vehicle tires or other exterior surfaces will be removed manually or, if necessary, by using a high-pressure water spray in the equipment cleaning area.
- Cleaning of material handling equipment that has been used to move PCB-containing soils or sediments in the equipment cleaning area before it enters non-work areas, handles "clean" materials (e.g., daily cover materials, etc.), or leaves the site. Equipment cleaning will likely be performed utilizing a high-pressure, low volume water spray.
- Collection, treatment and proper disposal of liquid materials (and other residual material collected during equipment cleaning).

- Wipe sampling of heavy equipment following final equipment cleaning prior to demobilization from the site.

### **6.3.6 Surface Water Management**

Surface water run-off generated by precipitation or snow melt will be managed throughout the consolidation activities, as well as following closure of the consolidation areas. During material placement, temporary diversion berms, swales, silt fencing and/or hay bales may be used to direct surface water run-off away from the active portion of the consolidation area. In addition, daily and interim cover systems will be utilized to direct any surface water run-off to the perimeter of the consolidation areas. Following closure of the consolidation areas, permanent measures will be used to control surface water run-off. These measures may include berms, swales, ditches and/or underground drainage structures (as necessary). Surface water run-off will then be routed to current controls located at the GE Plant (i.e., ditches, piping networks, drains, etc.).

### **6.3.7 Erosion Control**

The potential for erosion at the consolidation areas will be controlled throughout the consolidation activities, as well as after closure, using a variety of measures (both temporary and permanent). During the consolidation activities, erosion may be controlled with a combination of temporary, small earthen berms, silt fencing, and hay bales. These controls will be established at critical areas along the consolidation area, and relocated/supplemented as necessary during construction activities. Following closure of the consolidation areas, permanent vegetative measures including seeding and landscaping plantings (as necessary) will be used. Permanent structural measures (i.e., swales, ditches, and downchutes) may also be required to control erosion in some areas. The potential scope and type of erosion control measures will be evaluated during the preparation of the RD/RA Work Plan.

### **6.3.8 Odor Control**

The materials to be consolidated at the on-plant consolidation areas are not expected to contain significant amounts of organic wastes that could produce undesirable odors. However, daily, interim, and final covers will be used throughout fill progression activities to minimize generation of odors, as provided in Section 6.3.10.

### 6.3.9 Dust Control

The potential for dust generation at the consolidation areas will be controlled throughout the consolidation activities, as well as after closure, using a variety of mitigative measures (both temporary and permanent). During the consolidation activities, dust will be controlled by the use of limited quantities of water (as necessary) and temporary silt fencing (as wind barriers). Additionally, daily and interim covers will be used, as warranted, throughout fill progression activities which will minimize dust generation. Ambient air monitoring for particulate matter will be conducted during all construction and consolidation activities, as described in Section 6.2.3 above. Following closure of the consolidation area, permanent vegetative measures on the final cover, including seeding and landscaping plantings (as necessary), will be used to minimize dust.

### 6.3.10 Consolidation Area Covers and Final Closure

A variety of cover systems may be installed over the consolidation areas throughout the consolidation activities. Cover materials will depend on the operational status of the consolidation area and nature of the fill materials. A daily cover will be installed over the active portion of the consolidation area at the end of each working day. Daily covers will likely consist of polyethylene sheeting or similar materials.

Once a portion of the consolidation area reaches the final design height, but is not large enough to warrant installation of a final cover, an interim cover consisting of a thin layer of soil may be installed over that area. If an interim cover is used, it would provide cover for the underlying consolidated materials, and potentially serve as a subbase for the final cover system.

Once a consolidation area has been filled to its final design capacity, a final cover system (discussed in Section 4 of this Conceptual Work Plan) will be installed over the entire area. The establishment of vegetation on the surface of the cover, particularly at the Hill 78 consolidation area (which will be subject to habitat enhancements), will be described separately in the SOW.

### 6.3.11 Interim and Final Restoration Activities

As part of the closure/capping for each consolidation area, the surface of the final cover system will be vegetated as generally described in Section 6.3.10 of this work plan. Such restoration activities will include the planting of

vegetative species that will provide suitable erosion control, without interfering with the integrity of the surface cover. Areas adjacent to the consolidation areas will also be restored as necessary, including the removal of temporary access roads, and the repair/restoration of areas disturbed by the construction, use, and closure of the consolidation areas.

In addition to restoration of those areas affected by the on-plant consolidation activities, GE will also perform certain activities to possibly preserve and maintain areas that are located adjacent to, but not directly affected by, the consolidation areas. For example, to the extent practicable, GE will refrain from removing trees and other vegetation that may provide a visual barrier from off-plant locations. Furthermore, GE will evaluate possible measures that could be implemented prior to or during initial use of the consolidation areas, or upon closure of those areas, that could provide a visual barrier or other aesthetic value (e.g., planting of appropriate trees and other vegetation in areas offset from but along the outer perimeter of the consolidation areas). The Final RD/RA Work Plan will further address this potential activity.

#### **6.4 Construction Documentation**

Construction activity reports will be completed on a daily basis to document construction activities. The daily reports will include the following information:

- Date;
- Weather and temperature;
- Description of the activities performed;
- Listing of the equipment and labor used;
- Estimate of the amount of material placed on that date based on the number of trucks;
- Description of the material placed on that date; and
- Description of any problems encountered, as well as the mitigative measures implemented.

In addition, upon closure of each consolidation area, a Closure Report will be prepared, providing a description of the consolidation activities, the results of any sampling, quantities of materials consolidated, general consolidation procedures, documentation of any difficulties encountered (if applicable), and record drawings depicting post-closure site conditions. Also, this report will document deviations from the approved RD/RA Work Plan (if any).

## **7. Post-Closure Inspection and Maintenance of Consolidation Areas**

Following the closure of the Hill 78 and Building 71 consolidation areas, GE will continue to inspect and maintain those consolidation areas, and to perform repair/replacement activities as needed, to ensure that the consolidation areas are performing as designed. These activities will include regular periodic inspections and maintenance of the final cover system, other components of the consolidation areas (i.e., the surface water drainage system and perimeter collection structures associated with the base liner system), and certain ancillary components (e.g., fences, warning signs). Any noted deficiencies or other potential problems with these components will be repaired or replaced as necessary.

The specific procedures and frequency for these post-close inspection and maintenance activities, as well as the submission of reports on these activities, will be in accordance with the pertinent requirements to be set forth in the SOW. Additional details will be specified in a Post-Removal Site Control Plan for these consolidation areas.

## **8. Groundwater Monitoring Program**

### **8.1 General**

This section describes the groundwater monitoring program that GE will implement in connection with the operation and post-closure care of the Hill 78 and Building 71 consolidation areas. The overall purpose of this program is to assess potential changes in groundwater conditions due to on-plant consolidation activities at these areas. In addition, the results of this groundwater monitoring program will provide a groundwater data set that can, if necessary, support evaluations concerning the need for further response actions or modifications to future monitoring activities.

The initial monitoring wells to be included in this program were identified in Section 5.3, which described the "baseline" groundwater monitoring that GE will conduct prior to construction of these on-plant areas. A total of 10 monitoring wells will be included in this network, including three existing upgradient wells (78-1, 78-6, and NY-4) and seven new downgradient/cross-gradient wells to be installed. The locations of these wells are shown on Figure 12, and the basis for the selection of these locations was presented in Section 5.3. It should be noted that the seven new wells to be installed downgradient or cross-gradient of the on-plant consolidation areas have been located specifically to assess potential impacts from the consolidation areas, and should not be considered "perimeter" monitoring wells for purposes of the overall groundwater monitoring program for the GE Plant Area, to be described in the SOW.

The remaining subsections of this Section 8 describe, respectively, the groundwater monitoring that GE will perform during active on-plant consolidation activities at the consolidation areas and the post-closure groundwater monitoring following termination of active consolidation activities and closure of the consolidation areas.

### **8.2 Groundwater Monitoring During Active Consolidation Activities**

Following receipt of the results of the "baseline" groundwater investigation described in Section 5.3, GE will provide the results to the Agencies (in the RD/RA Work Plan or a separate submittal), together with a specific proposal for the groundwater monitoring program to be conducted during active use of the consolidation areas. The purposes of

this monitoring are to: (a) supplement the existing groundwater data base; and (b) assess the potential impact (if any) of consolidation operations on area groundwater.

GE's proposal for this monitoring program will propose the particular monitoring wells to be sampled, the frequency of groundwater monitoring for these wells, and any modifications to the list of Appendix IX+3 constituents for which the groundwater samples will be analyzed. This program may include a phased approach, in which a subset of the monitoring wells identified on Figure 12 will be monitored initially to evaluate potential impacts from the initial consolidation activities in discrete portions of the consolidation areas, while the other wells will be added to the program as consolidation activities proceed to other portions of the consolidation areas.

GE's proposal will also present the proposed procedures and criteria for evaluating the sampling data from each monitoring event. These procedures will include a statistical comparison of the monitoring data from each event, on a location-by-location basis, with the prior monitoring data, including the "baseline" data, to identify instances in which the current data indicate an increase in the concentrations of dissolved-phase constituents relative to prior conditions. GE's proposal will also specify the response actions that GE will consider and propose to USEPA, as appropriate, in the event that a statistically significant increase in dissolved-phase constituents is detected in the sampling results from a given event, relative to prior data. In addition, GE's proposal will provide for the specific evaluation of data for the groundwater monitoring wells that monitor groundwater meeting the MCP criteria for GW-2 groundwater -- i.e., groundwater located 15 feet or less from the ground surface and within 30 feet of an existing occupied building or structure (310 CMR 40.0932(6)). It will provide for the comparison of the sampling data from each such well to the Method 1 GW-2 standards in the MCP, and will specify the response action that GE will consider and propose to USEPA, as appropriate, in the event that the current data indicate an exceedance of those standards in GW-2 groundwater.

Following USEPA's approval of this proposed groundwater monitoring program and upon commencement of on-plant consolidation activities, GE will initiate the groundwater monitoring program in accordance with the USEPA's approval. Following each monitoring event, GE will prepare and submit to USEPA a summary report describing the field activities, presenting the sampling results, and presenting the results of the required evaluations of the monitoring data. In such reports, GE may also propose modifications to the groundwater monitoring program, including, but not limited to, changes in the wells to be monitored or constituents to be analyzed for. GE

will continue this monitoring program, with any modifications approved by USEPA, until after completion of consolidation activities at the Hill 78 and Building 71 consolidation areas and the closure of those areas.

### **8.3 Post-Closure Groundwater Monitoring Program**

Following the completion of consolidation activities at the on-plant consolidation areas and closure of those areas, GE will submit a proposal to USEPA for a post-closure groundwater monitoring program for the on-plant consolidation areas. That proposal will include a statistical assessment of all prior monitoring data, and will present an evaluation of, and proposed plan for, post-closure future groundwater monitoring. It will also identify, for the post-closure monitoring program, the specific monitoring well locations, the frequency of future monitoring and reporting, the constituents slated for analysis, the procedures for evaluation of the groundwater data, and the criteria for further response actions.

## **9. RD/RA Work Plan and Schedule**

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### **9.1 General**

Following USEPA review and approval of this Conceptual Work Plan, GE will commence performance of the proposed pre-design investigations described in Section 5. Concurrent with these activities, GE will continue to perform technical design activities associated with each consolidation area. The results of these activities will be presented in the RD/RA Work Plan to be submitted to USEPA for review and approval. Given the need to expedite the initiation of on-site activities related to the construction of the Hill 78 and Building 71 consolidation areas, it is anticipated that the RD/RA Work Plan will provide all necessary information regarding the design, construction, operation and closure of those areas in order to obtain USEPA approval. Specifically, the following information will be presented in that document:

- Updated site mapping incorporating the results of the detailed survey recently conducted by GE;
- The results of pre-design investigations (including “baseline” groundwater monitoring data, if available) and any related evaluations pertinent to the design or construction of these consolidation areas;
- An update, to the extent available, regarding the anticipated overall volume of material subject to removal and consolidation;
- Updated consolidation volume estimates based on revised site topographic mapping and other technical considerations;
- Design assumptions and parameters;
- Technical plans, specifications, and implementation details concerning the construction of these on-plant consolidation areas;
- Additional information regarding operation of these on-plant consolidation areas, including the plans described in Section 6;

- Final cover design for closure of these on-plant consolidation areas;
- Additional information (if any) regarding future inspections and maintenance of these on-plant consolidation areas;
- A specific proposal for the groundwater monitoring program to be conducted during active on-plant consolidation activities (if the "baseline" groundwater monitoring data are not available by the time the RD/RA Work Plan is submitted; this proposal would be included in a separate submittal);
- Process for selection of Response Action Contractor, if not already selected;
- An updated Schedule; and
- Project closeout requirements.

The technical design components of the RD/RA Work Plan will generally include, but not be limited to: (a) slope stability analyses; (b) hydrogeologic evaluations of the existing surface water drainage conditions in the vicinity of the consolidation areas, as well as any additional stormwater management systems for the areas at different stages of use (i.e., during construction, operation and post-closure); (c) an evaluation and selection of the consolidation area subbase and daily, interim, and final cover system components; (d) identification of both interim and final access road locations for each consolidation area; and (e) a determination of the final site restoration conditions for each consolidation area, including sideslope grades, cover system vegetation, perimeter vegetation buffers, and security fencing.

## 9.2 Schedule

If the Hill 78 and Building 71 areas are to be used for consolidation of materials resulting from removal actions (if any) conducted in 1999, those consolidation areas (or portions within these areas) would need to be ready for use by approximately July 1, 1999. This would require that the design and construction activities proceed as expeditiously as possible. GE proposes to complete the supplemental soil investigations and "baseline" groundwater monitoring activities described in this Conceptual Work Plan, as well as the necessary additional technical design work, as soon as practicable after the USEPA's approval of this Conceptual Work Plan, and to submit the RD/RA Work Plan within

one month after USEPA's approval of this Conceptual Work Plan. Simultaneously with USEPA's review of the RD/RA Work Plan, GE will carry out the necessary contractor selection process and other coordination activities, so that it should be possible to prepare these two on-plant consolidation areas for initial use within approximately one month after USEPA's approval of the RD/RA Work Plan.

# Tables

BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*

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TABLE 1

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SUMMARY OF POTENTIAL CONSOLIDATION AREAS AND VOLUMES

Candidate Location	Horizontal Extent of Area (acres)	Maximum Height Above Existing Grade (ft)	Maximum Consolidation Capacity (cy)
20's Complex Area	6.9	37	215,100
30's Complex Area	3.0	30	61,600
40's Complex Area	2.1	20	31,400
Former Hill 78 Landfill Area	6.2	25	140,000
New York Avenue / Merrill Road Area	1.7	10 to 30	23,800
Merrill Road Area	2.6	25	34,600
"Lower" Ordnance Parking Lot Area	3.3	20	63,400
Building 71 Area	5.2	30	115,000

**Notes:**

1. Consolidation areas to consist of material placement and final cover construction within the general limits shown on Figure 1.
2. The maximum sideslope of the consolidation areas is assumed to be 33%, while the top of the areas are assumed to be graded at 4%.
3. Potential locations and preliminary capacities are subject to modification based on the results of field activities, including identification of subsurface utilities (i.e., water, storm, electric, gas, etc.) and other site features/conditions that may effect final design configurations.
4. The maximum height includes the base liner and final cover systems. The base liner system is assumed to be 6-inches thick; the final cover system is assumed to be 2-feet thick.

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SAMPLE ANALYSES REQUIRED FOR PROPOSED SAMPLE LOCATIONS

Sample Location (1)	Sample Depth Interval (ft)	PCB Sample Required?	Appendix IX+3 Sample Required? (2)
<b>Hill 78 Consolidation Area</b>			
1	0-1	Yes	Yes
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
2	0-1	Yes	Yes
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
3	0-1	Yes	No; not required for spatial distribution
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
H78B-20	0-1	No; sample previously collected (4)	No; not required for spatial distribution
	1-6	No; sample previously collected (4)	No; not required for spatial distribution
	6-15	No; sample previously collected (4)	No; sample previously collected (5)
H78B-24	0-1	No; sample previously collected (4)	No; not required for spatial distribution
	1-6	No; sample previously collected (4)	No; sample previously collected (5)
	6-15	No; sample previously collected (4)	No; not required for spatial distribution
H78B-8/8R and H78SS-2	0-1	No; sample previously collected (4)	No; sample previously collected (5)
	1-6	No; sample previously collected (4)	No; sample previously collected (5)
	6-15	No; sample previously collected (4)	No; sample previously collected (5)
<b>Building 71 Consolidation Area</b>			
4	0-1	Yes	Yes
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
5	0-1	Yes	No; not required for spatial distribution
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
6	0-1	Yes	Yes
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
7	0-1	Yes	No; not required for spatial distribution
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
8	0-1	Yes	Yes
	1-6	Yes	No; not required for spatial distribution
	6-15	Yes	No; not required for spatial distribution
H78B-21	0-1	No; sample previously collected (4)	No; not required for spatial distribution
	1-6	No; sample previously collected (4)	No; sample previously collected (5)
	6-15	No; sample previously collected (4)	No; not required for spatial distribution
H78B-18	0-1	No; sample previously collected (4)	No; not required for spatial distribution
	1-6	No; sample previously collected (4)	No; not required for spatial distribution
	6-15	No; sample previously collected (4)	No; sample previously collected (5)
H78B-19 and H78SS-3	0-1	No; sample previously collected (4)	No; sample previously collected (5)
	1-6	No; sample previously collected (4)	No; sample previously collected (5)
	6-15	No; sample previously collected (4)	No; not required for spatial distribution
H78B-28/28R	0-1	No; sample previously collected (4)	No; not required for spatial distribution
	1-6	Yes	No; not required for spatial distribution
	6-15	No; sample previously collected (4)	No; sample previously collected (5)
H78B-10, H78B-11, and H78B-12	0-1	No; sample previously collected (4)	No; sample previously collected (5)
	1-6	No; sample previously collected (4)	No; sample previously collected (5)
	6-15	No; sample previously collected (4)	No; sample previously collected (5)

(See notes on page 2)

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SAMPLE ANALYSES REQUIRED FOR PROPOSED SAMPLE LOCATIONS

Notes:

- (1) Refer to Figure 11, "Proposed Pre-Design Soil Investigations," for the proposed sample locations, and locations of existing surface and subsurface samples.
- (2) The total number of Appendix IX+3 sample analysis is at least one-third of the number of PCBs samples collected. The Appendix IX+3 samples are distributed amongst the depth intervals and sampling locations at an approximate distribution of 50% for the surface interval (0-1), and 50% for the subsurface intervals (1-6 and 6-15).
- (4) PCB data previously collected at existing soil sample locations are presented in Table 3.
- (5) Appendix IX+3 data previously collected at existing soil sample locations are presented in Tables 4 through 6.

TABLE 3

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SUMMARY OF SOIL BORING PCB DATA COLLECTED JULY, AUGUST, SEPTEMBER AND NOVEMBER 1996 AND JUNE 1997

(Results are presented in dry-weight parts per million, ppm)

Sample ID	Sample Depth (feet)	Date Collected	PCB-1248	PCB-1254	PCB-1260	Total PCBs
H78B-8/H78B-8R	0 - 0.5	07/16/96	ND(0.038)	ND(0.038)	7.3	7.3
H78B-8/H78B-8R	0.5 - 2	07/16/96	ND(0.035)	ND(0.035)	12	12
H78B-8/H78B-8R	2 - 4	07/16/96	ND(0.035)	ND(0.035)	13 P	13 P
H78B-8/H78B-8R	4 - 6	07/16/96	ND(0.037)	ND(0.037)	7.0 P	7.0 P
H78B-8/H78B-8R	6 - 8	07/16/96	ND(0.72)	ND(0.72)	110	110
H78B-8/H78B-8R	8 - 10	07/16/96	ND(0.70)	ND(0.70)	95 P	95 P
H78B-8/H78B-8R	10 - 12	07/16/96	ND(0.035)	ND(0.035)	7.2 P	7.2 P
H78B-8/H78B-8R	12 - 14	07/16/96	ND(0.035)	ND(0.035)	7.1	7.1
H78B-8/H78B-8R	14 - 16	07/16/96	ND(0.36)	ND(0.36)	16 P	16 P
H78B-8/H78B-8R	16 - 18	07/16/96	ND(0.036)	ND(0.036)	5.6	5.6
H78B-8/H78B-8R	18 - 20	07/16/96	ND(0.38) [ND(0.38)]	ND(0.38) [ND(0.38)]	110 P [95 P]	110 P [95 P]
H78B-8/H78B-8R	20 - 20.5	07/16/96	ND(0.035)	ND(0.035)	11 P	11 P
H78B-8/H78B-8R	20 - 22	11/07/96	ND(0.40)	ND(0.40)	130 P	130 P
H78B-8/H78B-8R	22 - 24	11/07/96	ND(0.38)	ND(0.38)	34 P	34 P
H78B-8/H78B-8R	24 - 26	11/07/96	ND(0.044)	ND(0.044)	29 P	29 P
H78B-8/H78B-8R	26 - 28	11/07/96	ND(0.038) [ND(0.20)]	ND(0.038) [ND(0.20)]	6.2 P [31 P]	6.2 P [31 P]
H78B-8/H78B-8R	28 - 30	11/07/96	ND(0.056)	ND(0.056)	11 P	11 P
H78B-10	0 - 0.5	07/19/96	ND(0.035)	ND(0.035)	3	3
H78B-10	0.5 - 2	07/19/96	ND(0.036)	ND(0.036)	1.0 P	1.0 P
H78B-10	2 - 4	07/19/96	ND(0.036)	ND(0.036)	0.044 P	ND(0.036)
H78B-10	4 - 6	07/19/96	ND(0.038)	ND(0.038)	0.044 P	0.044 P
H78B-10	6 - 8	07/19/96	ND(0.036)	ND(0.036)	0.023 J	0.023 J
H78B-10	8 - 10	07/19/96	ND(0.036)	ND(0.036)	ND(0.036)	ND(0.036)
H78B-11	0 - 0.5	07/17/96	ND(0.038)	ND(0.038)	23	23
H78B-11	0.5 - 2	07/17/96	ND(0.037)	ND(0.037)	2.0	2.0
H78B-11	2 - 4	07/17/96	ND(0.038)	ND(0.038)	0.5	0.5
H78B-11	4 - 6	07/17/96	ND(0.038)	ND(0.038)	0.17	0.17
H78B-11	6 - 8	07/17/96	2100	ND(1.8)	330 P	2430 P
H78B-11	8 - 10	07/17/96	3.5 P	ND(0.036)	0.57 P	4.07 P
H78B-11	10 - 12	07/17/96	0.62 P	ND(0.037)	0.11 P	0.73 P
H78B-12	0 - 0.5	07/18/96	ND(0.036)	ND(0.036)	7.5	7.5
H78B-12	0.5 - 2	07/18/96	ND(0.037)	ND(0.037)	2.0	2.0
H78B-12	2 - 4	07/18/96	ND(0.036)	ND(0.036)	0.039 JP	0.039 JP
H78B-12	4 - 6	07/18/96	ND(0.036)	ND(0.036)	0.033 JP	0.033 JP
H78B-12	6 - 8	07/18/96	ND(0.037) [ND(0.037)]	ND(0.037) [ND(0.037)]	ND(0.037) [0.053 J]	ND(0.037) [0.053 J]
H78B-12	8 - 10	07/18/96	ND(0.038)	ND(0.038)	0.034 JP	0.034 JP
H78B-18	0 - 0.5	07/22/96	ND(0.039)	ND(0.039)	0.79	0.79
H78B-18	0.5 - 2	07/22/96	ND(0.038)	ND(0.038)	14	14
H78B-18	2 - 4	07/22/96	ND(0.037)	ND(0.037)	45	45
H78B-18	4 - 6	07/22/96	ND(0.036)	ND(0.036)	0.039 JP	0.039 JP
H78B-18	6 - 8	07/22/96	ND(0.036)	ND(0.036)	0.022 J	0.022 J
H78B-18	8 - 10	07/22/96	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.38)
H78B-18	10 - 12	07/22/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-18	12 - 14	07/22/96	ND(0.042)	ND(0.042)	ND(0.042)	ND(0.042)
H78B-18	14 - 16	07/22/96	ND(0.046)	ND(0.046)	0.048 J	0.048 J
H78B-18	16 - 18	07/22/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-18	18 - 20	07/22/96	ND(0.037) [ND(0.039)]	ND(0.037) [ND(0.039)]	ND(0.037) [0.021 JP]	ND(0.037) [0.021 JP]

(See notes on page 2)

TABLE 3

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SUMMARY OF SOIL BORING PCB DATA COLLECTED JULY, AUGUST, SEPTEMBER AND NOVEMBER 1996 AND JUNE 1997

(Results are presented in dry-weight parts per million, ppm)

H78B-19	0 - 0.5	07/19/96	ND(0.039)	ND(0.039)	0.22	0.22
H78B-19	0.5 - 2	07/19/96	ND(0.036)	ND(0.036)	0.077	0.077
H78B-19	2 - 4	07/19/96	ND(0.038)	ND(0.038)	0.035 J	0.035 J
H78B-19	4 - 6	07/19/96	ND(0.036)	ND(0.036)	0.64 P	0.64 P
H78B-19	6 - 8	07/19/96	ND(0.18)	ND(0.18)	0.44 P	0.44 P
H78B-19	8 - 10	07/19/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-19	10 - 12	07/19/96	ND(0.18)	ND(0.18)	0.037 JP	0.037 JP
H78B-19	12 - 14	07/19/96	ND(0.18)	ND(0.18)	ND(0.18)	ND(0.18)
H78B-19	14 - 16	07/19/96	ND(0.19)	ND(0.19)	0.03 J	0.03 J
H78B-19	16 - 18	07/19/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-19	18 - 20	07/19/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-19	24 - 26	07/19/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-20	0 - 0.5	09/06/96	ND(0.036)	ND(0.036)	1.4	1.4
H78B-20	0.5 - 2	09/06/96	ND(0.036)	ND(0.036)	0.9	0.9
H78B-20	2 - 4	09/06/96	ND(0.04)	ND(0.04)	1.7	1.7
H78B-20	4 - 6	09/06/96	ND(0.037) [ND(0.38)]	ND(0.037) [ND(0.38)]	1.0 P [0.37 P]	1.0 P [0.37 P]
H78B-20	6 - 8	09/06/96	ND(0.04)	ND(0.04)	1.3 P	1.3 P
H78B-20	8 - 10	09/06/96	ND(0.066)	ND(0.066)	0.39 P	0.39 P
H78B-20	10 - 12	09/06/96	ND(0.038)	ND(0.038)	0.031 J	0.031 J
H78B-21	0 - 0.5	07/19/96	ND(0.038)	ND(0.038)	0.22	0.22
H78B-21	0.5 - 2	07/19/96	ND(0.037) [ND(0.038)]	ND(0.037) [ND(0.038)]	0.014 JP [0.024 JP]	0.014 JP [0.024 JP]
H78B-21	2 - 4	07/19/96	ND(0.037)	ND(0.037)	0.018 JP	0.018 JP
H78B-21	4 - 6	07/19/96	ND(0.038)	ND(0.038)	0.73	0.73
H78B-21	6 - 8	07/19/96	ND(0.038)	ND(0.038)	0.59	0.59
H78B-21	8 - 10	07/19/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-21	10 - 12	07/19/96	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
H78B-21	12 - 14	07/19/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-24	0 - 0.5	07/17/96	ND(0.38)	ND(0.38)	7.0	7.0
H78B-24	0.5 - 2	07/17/96	ND(0.036)	ND(0.036)	0.81	0.81
H78B-24	2 - 4	07/17/96	ND(0.034)	ND(0.034)	0.051	0.051
H78B-24	4 - 6	07/17/96	ND(0.039)	ND(0.039)	ND(0.039)	ND(0.039)
H78B-24	6 - 8	07/17/96	ND(0.037)	ND(0.037)	ND(0.037)	ND(0.037)
H78B-24	8 - 9	07/17/96	ND(0.036)	ND(0.036)	0.037 P	0.037 P
H78B-28	0 - 0.5	07/22/96	ND(0.034)	ND(0.034)	0.55 P	0.55 P
H78B-28	6 - 8	07/22/96	ND(2.0)	ND(2.0)	480 P	480 P
H78B-28	18 - 20	07/22/96	ND(0.038)	ND(0.038)	ND(0.038)	ND(0.038)
H78B-28	20 - 22	07/22/96	ND(0.037)	ND(0.037)	0.0085 JP	0.0085 JP
H78B-28	22 - 24	07/22/96	ND(0.038)	ND(0.038)	0.059 P	0.059 P
H78SS-2	0 - 0.5	08/20/96	ND(0.037) [ND(0.036)]	ND(0.037) [ND(0.036)]	0.19 P [0.099]	0.19 P [0.099]
H78SS-3	0 - 0.5	08/20/96	ND(0.037)	ND(0.037)	0.16	0.16

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of PCBs.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. P - Indicates dual column percent difference value exceeded 25 percent.
5. ND - Compound was not detected, associated detection limit presented in parentheses.
6. Results of duplicate samples are presented in brackets.
7. Sample H78B-28 (0.5 - 2 ft., 2 - 4 ft., 4 - 6 ft., 8 - 10 ft., 10 - 12 ft., 12 - 14 ft., 14 - 16 ft., 16 - 18 ft.) was not analyzed for PCBs.
8. Total PCBs include J and P qualified data.

TABLE 4

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SUMMARY OF SOIL BORING INORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997

(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID: Sample ID: Sample Depth (feet): Date Collected:	H78B-8 H8B 16 - 18 07/16/96	H78B-10 H10B 4 - 6 07/19/96	H78B-11 H11B 6 - 8 07/17/96	H78B-12 H12B 0 - 0.5 07/18/96	H78B-18 H18B 12 - 14 07/22/96	H78B-19 H19B 4 - 6 07/19/96	H78B-20 H20B 8 - 10 09/06/96	H78B-21 H21B 4 - 6 07/19/96	H78B-24 H24B 4 - 6 07/17/96	H78B-28 H28B 6 - 8 07/22/96	H78SS-2 0 - 0.5 08/20/96	H78SS-3 0 - 0.5 08/20/96
Antimony		0.33 J*N	0.27 J*N	ND(0.23) N	0.33 J*N	0.51 J*N	0.42 J*N	0.49 J N	0.34 J*N	0.37 J*N	0.46 J*N	0.25 J* N [ND (0.24) N]	0.29 J* N
Arsenic		5.0	3.4	2.0	2.8	3.6	5.9	9.5	3.0	5.0	5.5	5.3 N [2.4 N]	5.4 N
Barium		19.7 J*	34.9	23.1	80.3	42.3	45.5	37.7 J	33.3	40.2	37.7	62.9 [66.4]	29
Beryllium		0.20 J*	0.26 J*	0.17 J*	0.21 J*	0.38 J*	0.34 J*	0.54 J	0.27 J*	0.30 J*	0.34 J*	0.33 J* [0.35 J*]	0.24 J*
Cadmium		ND(0.03)	ND(0.03)	ND(0.03)	ND(0.03)	ND(0.04)	ND(0.03)	ND(0.06)	ND(0.03)	ND(0.03)	ND(0.04)	0.86[0.80]	0.66
Chromium		7.3	10.8	6.4	7.5	12.0	10.1	13.6	9.4	11.3	8.2	4.9 [15.4]	8.7
Cobalt		8.3 E	9.7 E	5.3 J*E	8.2 E	8.6 E	9.3 E	15.6 E	8.3 E	12.5 E	6.5 E	9.6 E [10.1 E]	9.4 E
Copper		25.2	17.8	14.8	23.5	19.5	19.9	41.0 N	15.6	33.3	15	22.3 [23.2]	25.3
Lead		7.9 E	10.7 E	5.9 E	11.2 E	9.4 E	10.3 E	14.4 E	7.3 E	9.5 E	10.8 E	8.9 EN [8.5 EN]	58.4 EN
Mercury		ND(0.12)	ND(0.12)	ND(0.11)	ND(0.11)	ND(0.11)	0.14	ND(0.20)	ND(0.12)	ND(0.10)	0.29	ND (0.11) [ND (0.11)]	ND (0.12)
Nickel		15.1 E	17.6 E	10.2 E	13.3 E	18.0 E	17.5 E	27.7 E	15.2 E	23.1 E	13.2 E	18.0 E [18.2 E]	16.5 E
Selenium		ND(0.33)	ND(0.35)	ND(0.32)	ND(0.32)	ND(0.37)	ND(0.32)	ND(0.60)	ND(0.32)	ND(0.34)	ND(0.36)	ND (0.34) N [ND (0.33) N]	0.46 J* N
Silver		ND(0.07)	ND(0.07)	ND(0.06)	ND(0.06)	ND(0.07)	ND(0.06)	ND(0.12)	ND(0.06)	ND(0.06)	ND(0.07)	ND (0.07) N [ND (0.07) N]	ND(0.07) N
Thallium		ND(0.34)	ND(0.36)	ND(0.33)	ND(0.33)	ND(0.38)	ND(0.33)	ND(0.62)	ND(0.34)	ND(0.35)	ND(0.34)	ND (0.35) [ND (0.34)]	ND(0.35)
Tin		1.6 J*	2.3 J*	1.8 J*	1.9 J*	2.4 J*	2.1 J*	4.6 J*	2.1 J*	1.4 J*	2.7 J*	3.6 J* [3.7 J*]	2.6 J*
Vanadium		5.6	8.9	5.3 J*	8.0	11.5	9.9	13.8	7.8	9.0	9.7	19.3 E [20.1 E]	14.6 E
Zinc		60.9	54.6	36.4	47.6	56.9	52.4	98.4	44.2	98.1	41.6	52.4 E [53.0 E]	74.2 E

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc. for analysis of Appendix IX + 3 inorganics.
2. Only parameters detected in at least one sample are shown.
3. Laboratory duplicate analysis exceeded control limits for arsenic and lead.
4. J\* - Indicates the reported value is less than the CLP-required detection limit (CRDL), but greater than the instrument detection limit (IDL).
5. E - Indicates inductively coupled plasma (ICP) serial dilution analysis was outside control limits.
6. N - Indicates sample matrix spike analysis was outside control limits.
7. ND - Compound was not detected, associated detection limit presented in parentheses.
8. Results of duplicate samples are presented in brackets.
9. \* - Indicates the laboratory duplicate analysis exceeded control limits.

TABLE 5

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SUMMARY OF SOIL BORING SEMIVOLATILE ORGANICS DATA COLECTED JULY-SEPTEMBER 1996 AND JUNE 1997

(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID: Sample ID: Sample Depth (feet): Date Collected:	H78B-8/H78B-8R H8B 16 - 18 07/16/96	H78B-10 H10B 4 - 6 07/19/96	H78B-11 H11B 6 - 8 07/17/96	H78B-12 H12B 0 - 0.5 07/18/96	H78B-18 H18B 12 - 14 07/22/96	H78B-19 H19B 4 - 6 07/19/96	H78B-20 HB20 8 - 10 09/06/96	H78B-21 H21B 4 - 6 07/19/96	H78B-24 H24B 4 - 6 07/17/96	H78B-28/28 H28B 6 - 8 07/22/96	H78SS-2 0 - 0.5 08/20/96	H78SS-3 0 - 0.5 08/20/96
1,2,4,5-Tetrachlorobenzene		ND(1.4)	ND(1.5)	0.58 J	ND(1.4)	ND(1.7)	ND(1.5)	ND(2.6)	ND(1.5)	ND(1.5)	ND(1.6)	ND(1.5) [ND(1.4)]	ND(1.5)
1,2,4-Trichlorobenzene		ND(0.60)	ND(0.64)	9.3 D	ND(0.59)	ND(0.71)	ND(0.62)	ND(1.1)	ND(0.64)	ND(0.62)	0.045 J	ND(0.62) [ND(0.60)]	ND(0.62)
1,2-Dichlorobenzene		ND(0.64)	ND(0.69)	0.058 J	ND(0.63)	ND(0.76)	ND(0.66)	ND(1.2)	ND(0.69)	ND(0.67)	ND(0.71)	ND(0.66) [ND(0.65)]	ND(0.66)
1,3-Dichlorobenzene		ND(0.55)	ND(0.60)	ND(0.55)	ND(0.55)	ND(0.65)	ND(0.57)	ND(1.0)	ND(0.59)	ND(0.50)	ND(0.61)	ND(0.57) [ND(0.56)]	ND(0.57)
1,4-Dichlorobenzene		ND(0.57)	ND(0.61)	0.062 J	ND(0.56)	ND(0.67)	ND(0.58)	ND(1.0)	ND(0.60)	ND(0.59)	0.23 J	ND(0.58) [ND(0.57)]	ND(0.58)
2-Methylnaphthalene		ND(0.91)	ND(0.98)	0.057 J	ND(0.90)	ND(1.1)	0.14 J	ND(1.7)	ND(0.98)	ND(0.95)	ND(1.0)	ND(0.94) [ND(0.92)]	ND(0.94)
3-Methylphenol		ND(1.4)	ND(1.5)	ND(1.4)	ND(1.4)	ND(1.7)	ND(1.5)	ND(2.6)	ND(1.5)	ND(1.5)	ND(1.6)	ND(1.5) [ND(1.4)]	ND(1.5)
4-Methylphenol		ND(1.4)	ND(1.5)	ND(1.4)	ND(1.4)	ND(1.7)	ND(1.5)	ND(2.6)	ND(1.5)	ND(1.5)	ND(1.6)	ND(1.5) [ND(1.4)]	ND(1.5)
Acenaphthene		ND(0.72)	ND(0.77)	ND(0.71)	ND(0.71)	ND(0.85)	0.091 J	ND(1.3)	ND(0.77)	ND(0.75)	ND(0.80)	ND(0.74) [ND(0.73)]	ND(0.74)
Acenaphthylene		ND(0.73)	ND(0.78)	ND(0.72)	ND(0.72)	ND(0.86)	0.13 J	0.14 J	ND(0.78)	ND(0.76)	ND(0.81)	ND(0.75) [ND(0.74)]	ND(0.75)
Aniline		ND(0.61)	ND(0.65)	ND(0.60)	ND(0.60)	ND(0.72)	ND(0.63)	ND(1.1)	ND(0.65)	ND(0.64)	ND(0.67)	ND(0.63) [ND(0.62)]	ND(0.63)
Anthracene		ND(0.80)	ND(0.86)	ND(0.80)	ND(0.79)	ND(0.95)	0.35 J	0.13 J	ND(0.86)	ND(0.84)	ND(0.89)	ND(0.83) [ND(0.81)]	ND(0.83)
Benzo(a)anthracene		ND(0.72)	ND(0.77)	ND(0.71)	0.037 J	ND(0.85)	0.79	0.58 J	ND(0.77)	ND(0.75)	ND(0.80)	ND(0.74) [ND(0.73)]	0.041 J
Benzo(a)pyrene		ND(0.72)	ND(0.77)	ND(0.71)	0.028 J	ND(0.85)	0.75	0.51 J	ND(0.77)	ND(0.75)	ND(0.80)	ND(0.74) [ND(0.73)]	0.05 J
Benzo(b)fluoranthene		ND(0.84)	ND(0.90)	ND(0.83)	0.05 XJ	ND(0.99)	1.1 X	0.80 XJ	ND(0.90)	ND(0.88)	0.05 XJ	ND(0.87) [ND(0.85)]	0.093 JX
Benzo(g,h,i)perylene		ND(0.67)	ND(0.72)	ND(0.67)	ND(0.66)	ND(0.79)	0.34 J	0.41 J	ND(0.72)	ND(0.70)	ND(0.75)	ND(0.70) [ND(0.68)]	ND(0.69)
Benzo(k)fluoranthene		ND(0.67)	ND(0.72)	ND(0.67)	0.055 XJ	ND(0.79)	1.2 X	0.57 XJ	ND(0.72)	ND(0.70)	0.055 XJ	ND(0.70) [ND(0.68)]	0.10 JX
bis(2-Ethylhexyl)phthalate		0.078 J	0.07 J	0.16 J	0.064 J	0.052 J	0.06 J	ND(1.5)	0.054 J	0.066 J	0.085 J	ND(0.84) [ND(0.82)]	ND(0.84)
Butyl benzyl phthalate		ND(0.74)	ND(0.79)	ND(0.16)	ND(0.73)	ND(0.062)	ND(0.76)	ND(1.3)	ND(0.79)	ND(0.77)	ND(0.82)	ND(0.76) [ND(0.75)]	ND(0.76)
Chrysene		ND(0.59)	ND(0.63)	ND(0.58)	ND(0.58)	ND(0.69)	0.82	0.85 J	ND(0.63)	ND(0.61)	ND(0.65)	ND(0.61) [ND(0.59)]	0.056 J
Di-n-octyl phthalate		ND(0.52)	ND(0.56)	ND(0.58)	ND(0.51)	ND(0.62)	ND(0.54)	ND(0.95)	ND(0.56)	ND(0.55)	ND(0.58)	ND(0.54) [ND(0.53)]	ND(0.54)

(See notes on page 2)

TABLE 5

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SUMMARY OF SOIL BORING SEMIVOLATILE ORGANICS DATA COLECTED JULY-SEPTEMBER 1996 AND JUNE 1997

(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID: Sample ID: Sample Depth (feet): Date Collected:	H78B-8/H78B-8R H8B 16 - 18 07/16/96	H78B-10 H10B 4 - 6 07/19/96	H78B-11 H11B 6 - 8 07/17/96	H78B-12 H12B 0 - 0.5 07/18/96	H78B-18 H18B 12 - 14 07/22/96	H78B-19 H19B 4 - 6 07/19/96	H78B-20 HB20 8 - 10 09/06/96	H78B-21 H21B 4 - 6 07/19/96	H78B-24 H24B 4 - 6 07/17/96	H78B-28/28 H28B 6 - 8 07/22/96	H78SS-2 0 - 0.5 08/20/96	H78SS-3 0 - 0.5 08/20/96
Dibenzo(a,h)anthracene		ND(0.47)	ND(0.50)	ND(0.46)	ND(0.46)	ND(0.55)	0.064 J	ND(0.85)	ND(0.50)	ND(0.49)	ND(0.52)	ND(0.48) [ND(0.47)]	ND(0.48)
Dibenzofuran		ND(0.75)	ND(0.81)	ND(0.74)	ND(0.74)	ND(0.88)	0.13 J	ND(1.4)	ND(0.80)	ND(0.78)	ND(0.83)	ND(0.78) [ND(0.76)]	ND(0.77)
Diethyl phthalate		0.094 J	ND(0.84)	ND(0.77)	ND(0.77)	ND(0.92)	ND(0.81)	ND(1.4)	ND(0.84)	ND(0.82)	ND(0.87)	ND(0.81) [ND(0.79)]	ND(0.81)
Dimethyl phthalate		ND(1.1)	ND(1.1)	ND(1.0)	ND(1.0)	ND(1.2)	ND(1.1)	ND(1.9)	ND(1.1)	ND(1.1)	ND(1.2)	ND(1.1) [ND(1.1)]	ND(1.1)
Fluoranthene		ND(1.0)	ND(1.1)	ND(0.99)	ND(0.051)	ND(1.2)	1.7	1.2 J	ND(1.1)	ND(1.0)	0.097 J	ND(1.0) [ND(1.0)]	0.10 J
Fluorene		ND(0.75)	ND(0.81)	ND(0.74)	ND(0.74)	ND(0.88)	0.35 J	0.21 J	ND(0.80)	ND(0.78)	ND(0.83)	ND(0.78) [ND(0.76)]	ND(0.77)
Hexachlorobenze		ND(0.840)	ND(0.90)	ND(0.83)	ND(0.83)	ND(0.99)	ND(0.86)	ND(1.5)	ND(0.9)	ND(0.88)	ND(0.93)	ND(0.87) [ND(0.85)]	ND(0.86)
Indeno(1,2,3-cd)pyrene		ND(0.50)	ND(0.54)	ND(0.49)	ND(0.49)	ND(0.59)	0.32 J	0.094 J	ND(0.53)	ND(0.52)	ND(0.55)	ND(0.52) [ND(0.51)]	ND(0.52)
Naphthalene		ND(0.72)	ND(0.77)	ND(0.71)	ND(0.71)	ND(0.85)	0.17 J	ND(1.3)	ND(0.77)	ND(0.75)	ND(0.80)	ND(0.74) [ND(0.73)]	ND(0.74)
Pentachlorobenzene		ND(0.72)	ND(0.77)	0.51 J	ND(0.71)	ND(0.85)	ND(0.74)	ND(1.3)	ND(0.77)	ND(0.75)	ND(0.80)	ND(0.74) [ND(0.73)]	ND(0.74)
Phenanthrene		ND(0.67)	ND(0.72)	ND(0.67)	ND(0.66)	ND(0.79)	1.6	1.6	ND(0.72)	ND(0.70)	0.11 J	ND(0.70) [ND(0.68)]	0.054 J
Phenol		ND(0.62)	ND(0.67)	0.15 J	ND(0.61)	ND(0.73)	ND(0.64)	ND(1.1)	ND(0.66)	ND(0.65)	ND(0.69)	ND(0.64) [ND(0.63)]	ND(0.64)
Pyrene		ND(0.79)	ND(0.85)	ND(0.78)	0.043 J	ND(0.94)	1.5	1.6	ND(0.85)	ND(0.83)	0.10 J	ND(0.82) [ND(0.80)]	0.10 J
<b>TOTAL SVOCs</b>		0.172	0.07	10.877	0.277	0.0052	11.605	8.694	0.054	0.066	0.772	ND[ND]	0.594

Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc. for analysis of Appendix IX + 3 semivolatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. X - Manual quantitation was performed to resolve benzo(b)fluoranthene and benzo(k)fluoranthene.
5. ND - Compound was not detected, associated detection limit presented in parentheses.
6. Results of duplicate samples are presented in brackets.
7. Total values include J and X qualified data, as applicable.

TABLE 6

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS

SUMMARY OF SOIL BORING VOLATILE ORGANICS DATA COLLECTED JULY-SEPTEMBER 1996 AND JUNE 1997  
(Results are presented in dry-weight parts per million, ppm)

Parameter	Location ID: Sample I Sample Depth (feet): Date Collected:	H78B-8/H78B-8R H8B 16 - 18 07/16/96	H78B-10 H10B 4 - 6 07/19/96	H78B-11 H11B 6 - 8 07/17/96	H78B-12 H12B 0 - 0.5 07/18/96	H78B-18 H18B 0 - 0.5 07/22/96	H78B-18 H18B 12 - 14 07/22/96	H78B-19 H19B 4 - 6 07/19/96	H78B-20 78B20 8 - 10 09/06/96	H78B-21 H21B 4 - 6 07/19/96	H78B-24 H24B 4 - 6 07/17/96	H78B-28/28R H28B 0 - 0.5 07/22/96	H78B-28/28R H28B 6 - 8 07/22/96	H78SS-2 0 - 0.5 08/20/96	H78SS-3 0 - 0.5 08/20/96
1,1,1-Trichloroethane		ND(0.022)	ND(0.024)	0.053	ND(0.022)	ND(0.024)	ND(0.026)	ND(0.022)	ND(0.040)	ND(0.023)	ND(0.023)	ND(0.021)	ND(0.024)	ND(0.022) [ND(0.022)]	ND(0.022)
1,2-Dibromo-3-chloropropane		ND(0.054)	0.003 J	ND(0.054)	ND(0.054)	ND(0.06)	ND(0.064)	ND(0.056)	ND(0.10)	ND(0.058)	ND(0.058)	ND(0.052)	ND(0.061)	0.002 JB [0.001 JB]	ND(0.056)
Acetone		0.006 JB	0.016 JB	0.012 JB	0.023 JB	0.017 JB	0.033 JB	0.034 JB	0.072 JB	0.031 JB	0.017 JB	0.016 JB	0.019 JB	0.029 JB [0.039 JB]	0.038 JB
Acetonitrile		0.03 J	ND(0.24)	ND(0.22)	ND(0.22)	ND(0.24)	ND(0.26)	ND(0.22)	0.036 JB	ND(0.23)	ND(0.23)	ND(0.21)	ND(0.24)	0.022 JB [0.018 JB]	0.03 JB
Ethylbenzene		ND(0.016)	ND(0.018)	0.002 J	ND(0.16)	ND(0.18)	ND(0.019)	ND(0.017)	ND(0.030)	ND(0.017)	ND(0.017)	ND(0.16)	ND(0.018)	ND(0.017) [ND(0.016)]	ND(0.017)
Methylene chloride		0.017 B	0.017 JB	0.016 B	0.017 B	0.028 B	0.033 B	0.023 B	0.021 B	0.02 B	0.014 JB	0.026 B	0.03 B	0.005 JB [0.008 JB]	0.005 JB
Tetrachloroethene		ND(0.016)	ND(0.018)	0.003 J	ND(0.16)	ND(0.13)	ND(0.019)	ND(0.017)	ND(0.030)	ND(0.017)	ND(0.017)	ND(0.010)	ND(0.018)	ND(0.017) [ND(0.016)]	ND(0.017)
Toluene		ND(0.016)	ND(0.018)	0.002 J	ND(0.016)	ND(0.018)	ND(0.019)	ND(0.017)	ND(0.030)	ND(0.017)	ND(0.017)	ND(0.016)	ND(0.018)	ND(0.017) [ND(0.016)]	ND(0.017)
Xylenes (Total)		ND(0.022)	ND(0.024)	0.012 J	ND(0.022)	ND(0.024)	ND(0.026)	ND(0.022)	ND(0.040)	ND(0.023)	ND(0.023)	ND(0.021)	ND(0.024)	ND(0.022) [ND(0.022)]	ND(0.022)
TOTAL VOCs		0.053	0.036	0.1	0.04	0.045	0.066	0.057	0.129	0.031	0.031	0.042	0.049	0.058 [0.066]	0.073

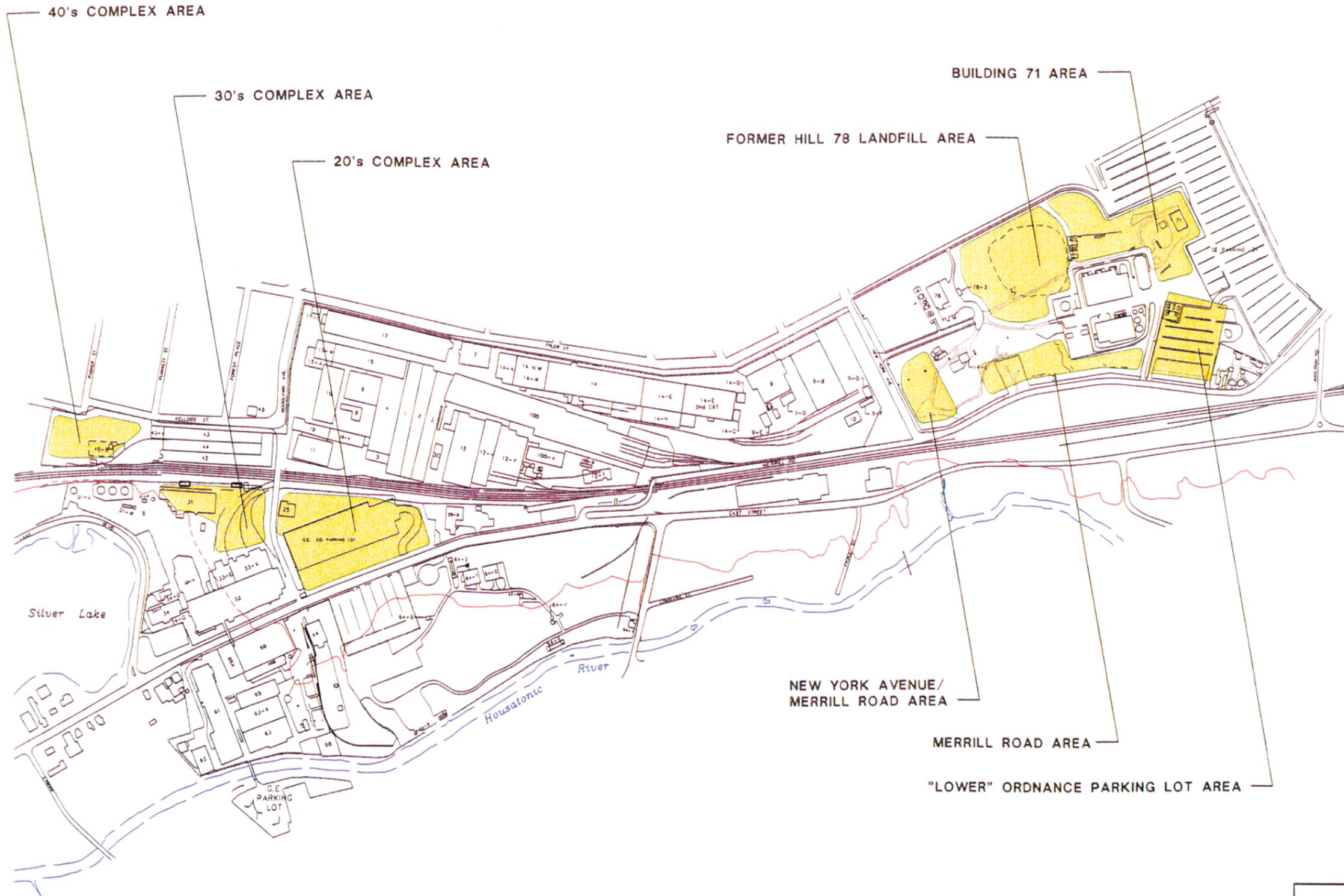
Notes:

1. Samples collected by Blasland, Bouck & Lee, Inc., and submitted to CompuChem, Inc., for analysis of Appendix IX + 3 volatile organics.
2. Only parameters detected in at least one sample are shown.
3. J - Indicates an estimated value less than the CLP-required quantitation limit.
4. B - Compound also detected in associated method blank sample.
5. ND - Compound was not detected, associated detection limit presented in parentheses.
6. Results of duplicate samples are presented in brackets.
7. Total values include J and B qualified data, as applicable.

# Figures

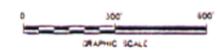
BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*

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- LEGEND:**
- APPROXIMATE AREA OF CANDIDATE CONSOLIDATION LOCATION
  - FENCE
  - 100-YEAR FLOODPLAIN BOUNDARY (DASHED WHERE INFERRED)
  - EDGE OF WATER

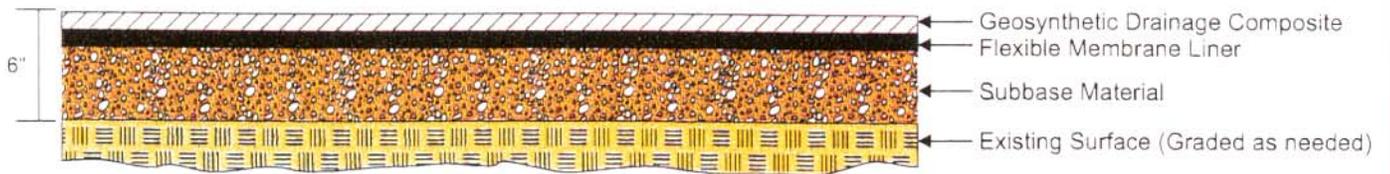
- NOTES:**
1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY; AND BLASLAND, BOUCK & LEE, INC. (BBL) CONSTRUCTION PLANS, AND ON OBSERVATIONS DURING A SITE VISIT BY BBL PERSONNEL ON DECEMBER 3, 1997.
  2. SITE BOUNDARIES ARE APPROXIMATE.
  3. NOT ALL PHYSICAL FEATURES SHOWN.



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MEDIATION PURPOSES

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS CONCEPTUAL WORK PLAN FOR FUTURE ON-PLANT CONSOLIDATION AREAS	
<b>CANDIDATE CONSOLIDATION LOCATIONS</b>	
<b>BBL</b>	BLASLAND, BOUCK & LEE, INC. <i>engineers &amp; scientists</i>
FIGURE <b>1</b>	

E: 20140X01  
L: ON\*\*, OFF=REF\*, RIVER-1, SHADE, USEPA  
P: STD-PCP/DL00302B  
3/29/99 SYR-54-RLP YCC GMS  
20140003/20140811 DWG



**BASE LINER SYSTEM**

**NOT-TO-SCALE**

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**MEDIATION PURPOSES**

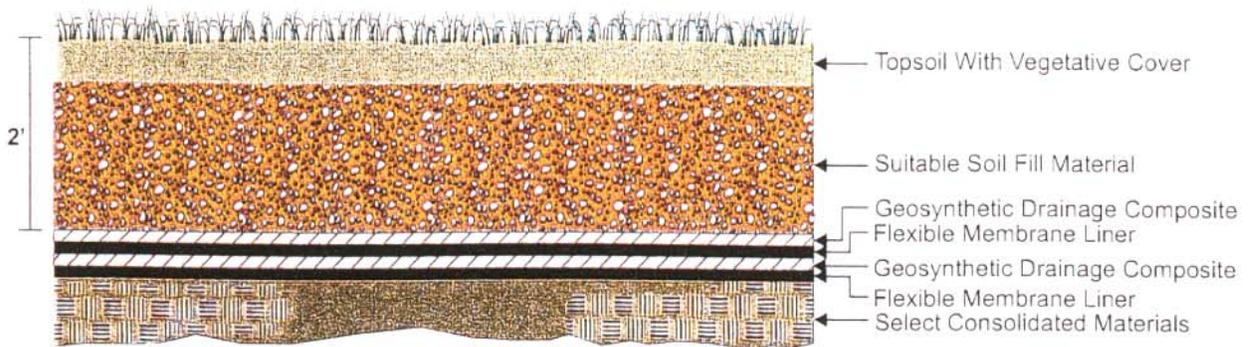
GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL WORK PLAN FOR FUTURE**  
**ON-PLANT CONSOLIDATION AREAS**

**BASE LINER SYSTEM**  
**FOR BUILDING 71**  
**CONSOLIDATION AREA**

**BBL**

BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*

**FIGURE**  
**2**



**FINAL COVER SYSTEM**

**NOT-TO-SCALE**

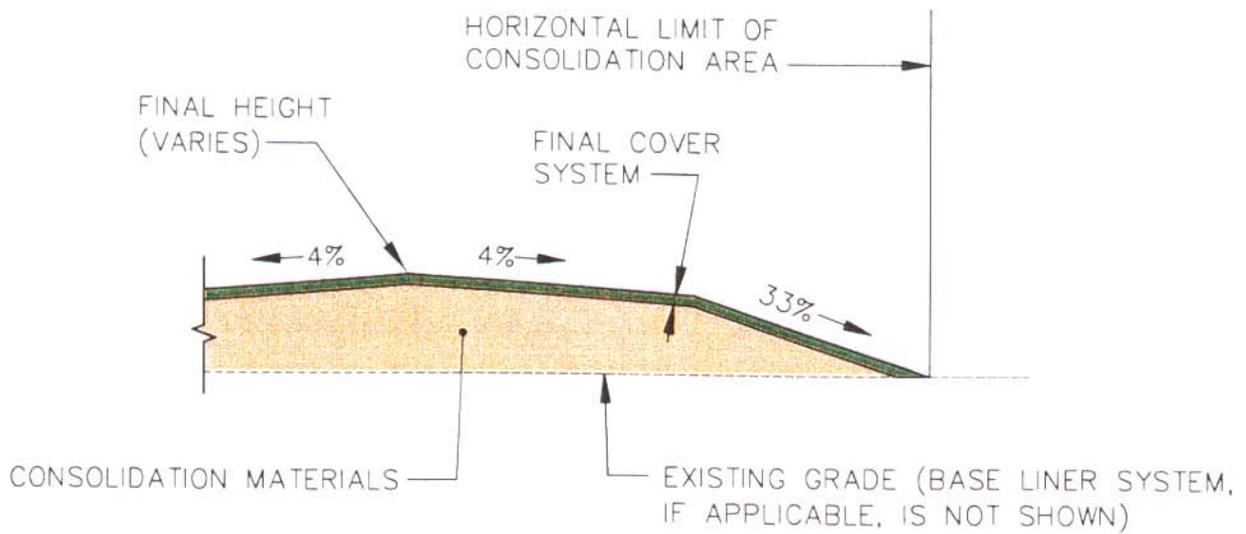
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GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
**CONCEPTUAL WORK PLAN FOR FUTURE**  
**ON-PLANT CONSOLIDATION AREAS**

**FINAL COVER SYSTEM**

**BBL** BLASLAND, BOUCK & LEE, INC.  
 engineers & scientists

**FIGURE**  
**3**



**NOT-TO-SCALE**

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GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
 CONCEPTUAL WORK PLAN FOR FUTURE  
 ON-PLANT CONSOLIDATION AREA

**CONSOLIDATION AREA  
 CROSS-SECTION**

L: OW=\*, OFF=REF  
 P: STD-PCP/AP  
 3/29/99 SYR-54 GMS  
 20140006/20140N01.DWG

**BBL**

BLASLAND, BOUCK & LEE, INC.  
 engineers & scientists

FIGURE  
**4**

BUILDING 71 CONSOLIDATION AREA

HILL 78 CONSOLIDATION AREA

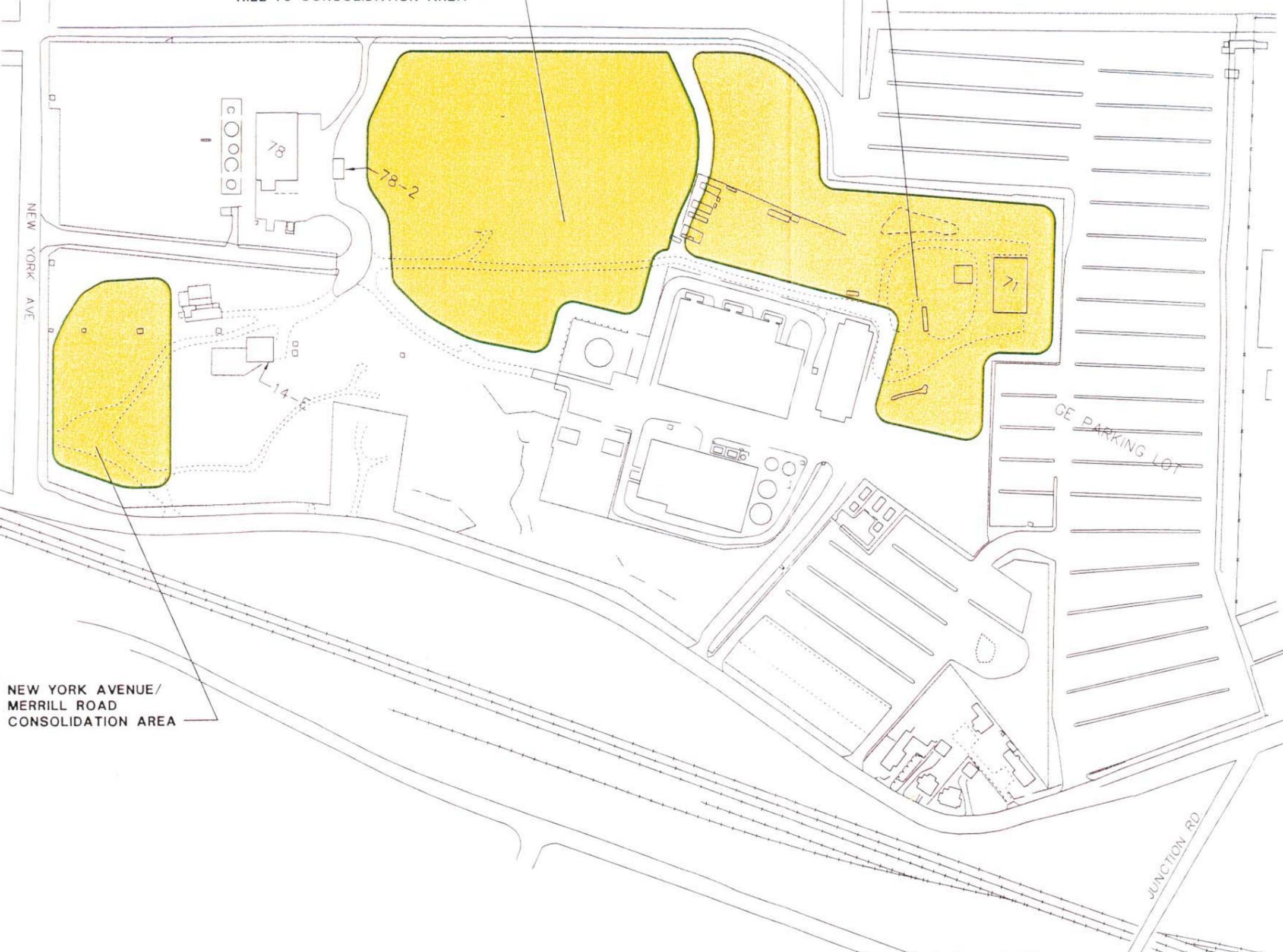
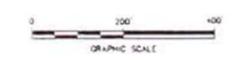


LEGEND

-  NON-TSCA/NON-RCRA AREA
-  TSCA/RCRA AND NON-TSCA/NON-RCRA AREA
-  APPROXIMATE AREA OF PROPOSED CONSOLIDATION AREAS
-  FENCE

NOTES

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY, AND BLASLAND, BOUCK & LEE, INC. (BBL) CONSTRUCTION PLANS, AND ON OBSERVATIONS DURING A SITE VISIT BY BBL PERSONNEL ON DECEMBER 3, 1997.
2. SITE BOUNDARIES ARE APPROXIMATE
3. NOT ALL PHYSICAL FEATURES SHOWN



NEW YORK AVENUE/  
MERRILL ROAD  
CONSOLIDATION AREA

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GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE  
ON-PLANT CONSOLIDATION AREAS  
**PREFERRED ON-PLANT  
CONSOLIDATION AREAS**

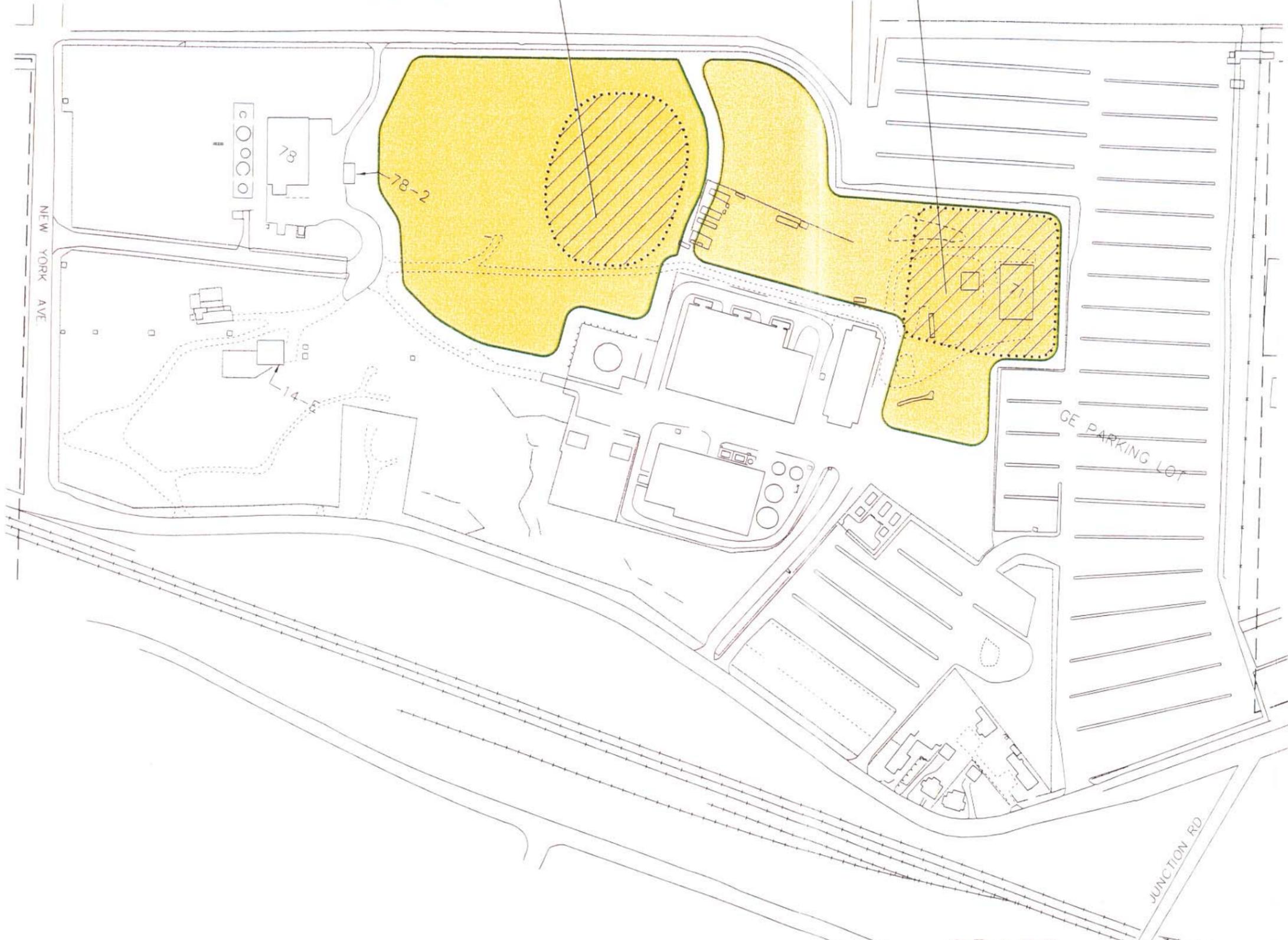
**BBL** BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

FIGURE 5

K: 20140X01  
L: DN+\*, DFF+\*, REF+\*, RIVER-1,  
SHADE, USEPA, FLOOD, CLEAR  
P: STD-PCP/DL, G0J029  
J/29/99 SYR-54-GMS  
20140003/20140815.DWG

BUILDING 71 CONSOLIDATION AREA

HILL 78 CONSOLIDATION AREA



LEGEND:

- NON-TSCA/NON-RCRA AREA
- TSCA/RCRA AND NON-TSCA/NON-RCRA AREA
- APPROXIMATE AREA OF PROPOSED CONSOLIDATION AREAS
- APPROXIMATE AREA OF POTENTIAL 1999 CONSOLIDATION ACTIVITIES
- FENCE

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY; AND BLASLAND, BOUCK & LEE, INC (BBL) CONSTRUCTION PLANS AND ON OBSERVATIONS DURING A SITE VISIT BY BBL PERSONNEL ON DECEMBER 3, 1997.
2. SITE BOUNDARIES ARE APPROXIMATE
3. NOT ALL PHYSICAL FEATURES SHOWN



GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE  
ON-PLANT CONSOLIDATION AREAS

**PROPOSED ON-PLANT  
CONSOLIDATION AREAS**

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engineers & scientists

FIGURE  
**6**

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X: 20140K01  
L: DN=\*, OFF=\*, REF=\*, RIVER=1,  
FLOODPLAIN, CLEAR  
P: STD=PCP/DL00302B  
3/29/99 5\*Y-54-GWS NES GWS  
20140001/20140B1.3.DWG



Approximate Limits of Hill 78 Consolidation Area



NOTE:

1. Photograph taken by R.L. Presutti, January, 1999.

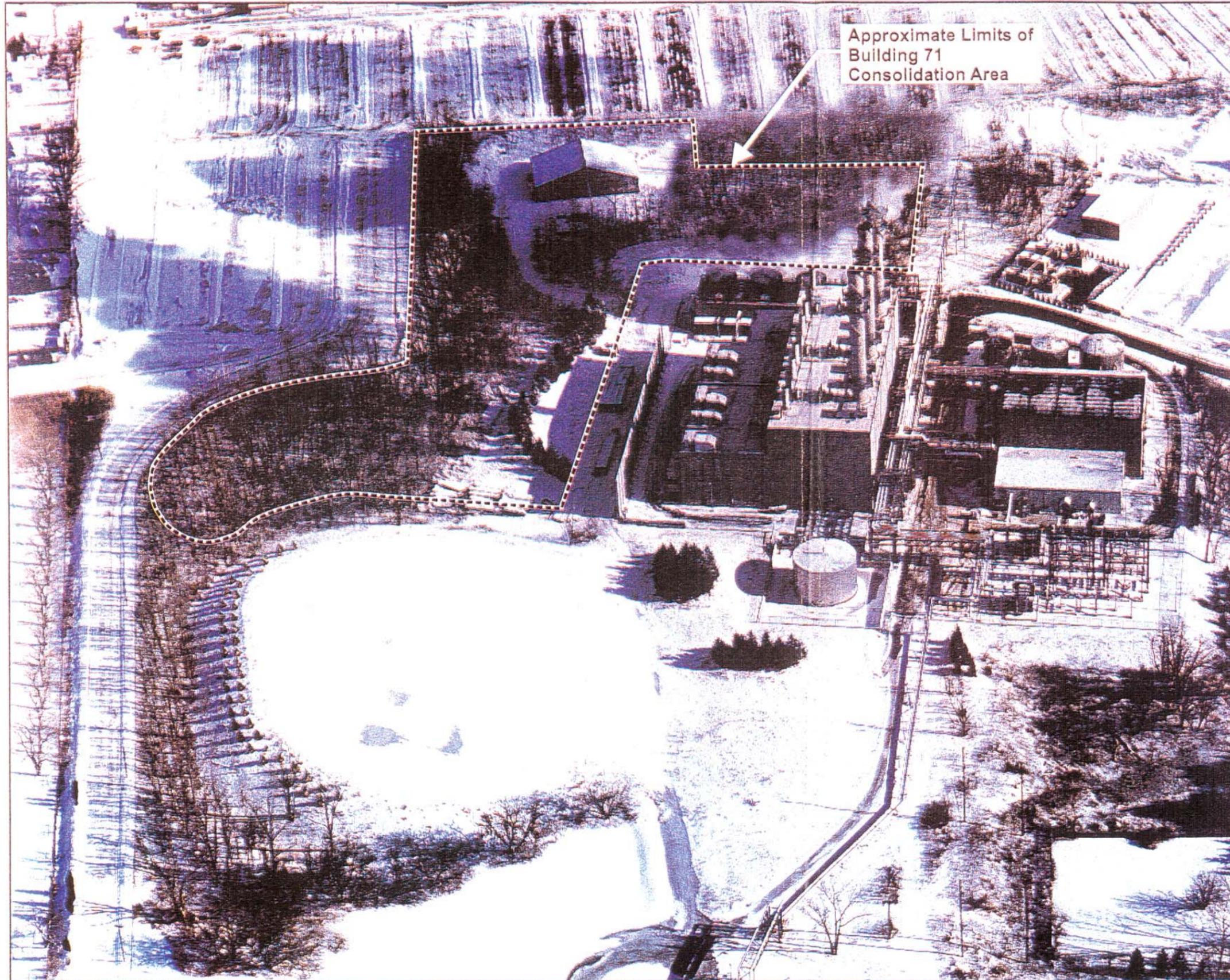
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GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE  
ON-PLANT CONSOLIDATION AREAS

APPROXIMATE LIMITS OF  
HILL 78 CONSOLIDATION AREA

**BBL** BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

FIGURE  
7



Approximate Limits of  
Building 71  
Consolidation Area



NOTES

1. Area immediately south of Building 71 has been digitally enhanced to remove steam from original photo.
2. Photograph taken by R.L. Presutti, January, 1999.

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GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE  
ON-PLANT CONSOLIDATION AREAS

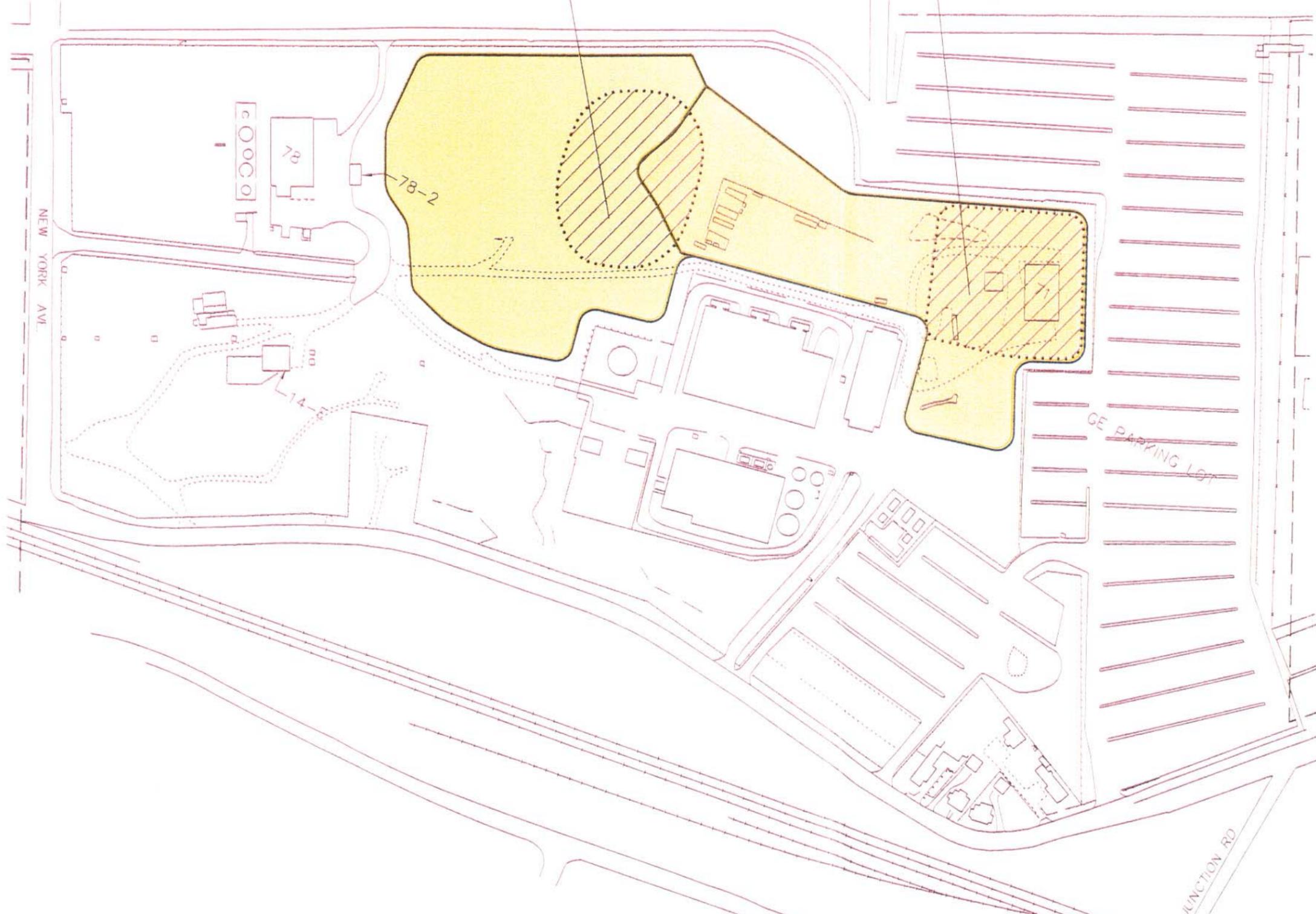
APPROXIMATE LIMITS OF  
BUILDING 71 CONSOLIDATION AREA

**BBL** BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

FIGURE  
8

BUILDING 71 CONSOLIDATION AREA

HILL 78 CONSOLIDATION AREA



LEGEND

- NON-TSCA/NON-RCRA AREA
- TSCA/RCRA AND NON-TSCA/NON-RCRA AREA
- APPROXIMATE AREA OF PROPOSED CONSOLIDATION AREAS
- APPROXIMATE AREA OF POTENTIAL 1999 CONSOLIDATION ACTIVITIES
- FENCE

NOTES

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY AND BLASLAND, BOUCK & LEE, INC. (BBL) CONSTRUCTION PLANS, AND ON OBSERVATIONS DURING A SITE VISIT BY BBL PERSONNEL ON DECEMBER 3, 1997.
2. SITE BOUNDARIES ARE APPROXIMATE
3. NOT ALL PHYSICAL FEATURES SHOWN.



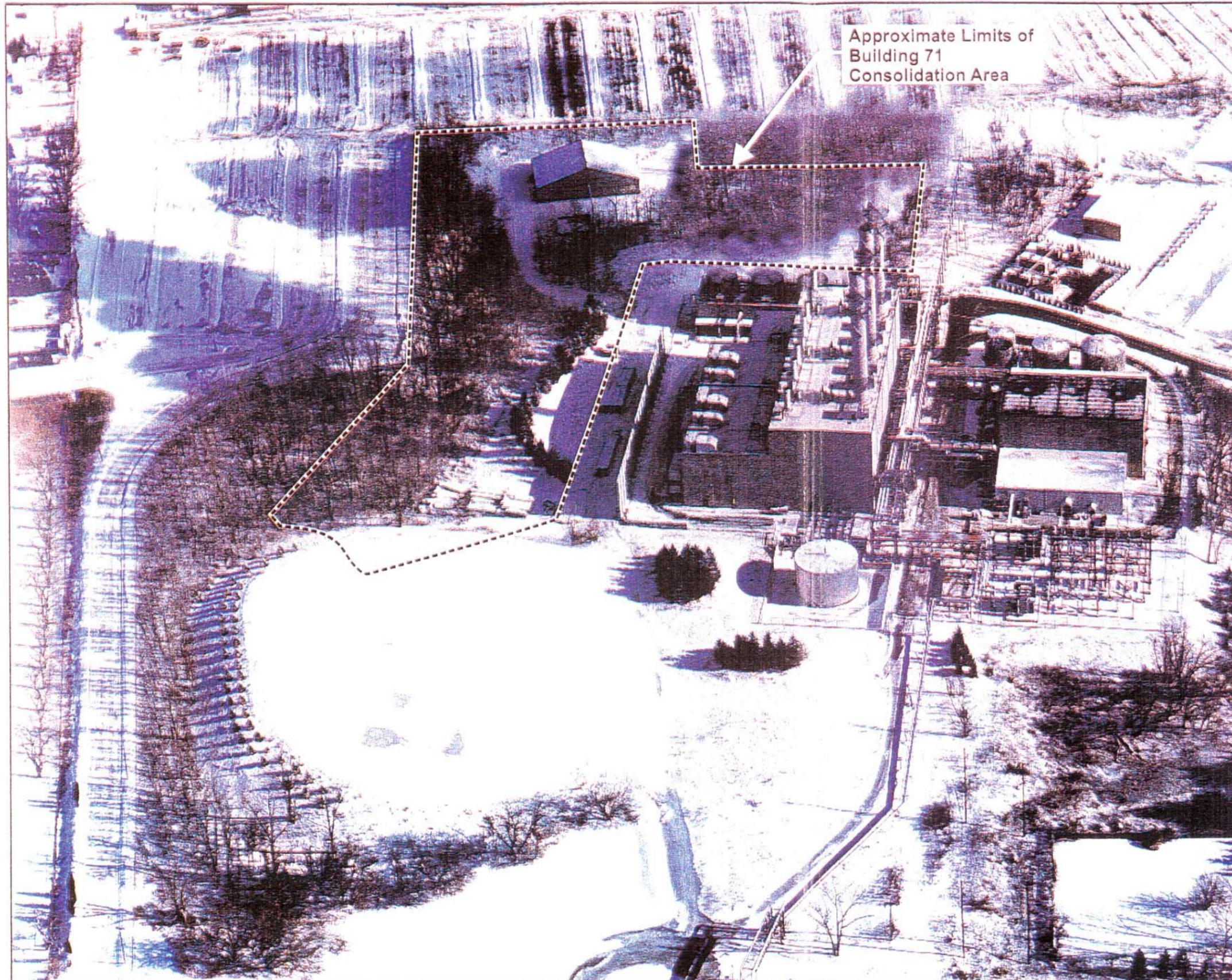
**DRAFT**  
 CONFIDENTIAL - FOR  
 MEDIATION PURPOSES

GENERAL ELECTRIC COMPANY  
 PITTSFIELD, MASSACHUSETTS  
 CONCEPTUAL WORK PLAN FOR FUTURE  
 ON-PLANT CONSOLIDATION AREAS  
**PROPOSED ON-PLANT  
 CONSOLIDATION AREAS WITH  
 BUILDING 71 ALTERNATIVE**

**BBL** BLASLAND, BOUCK & LEE, INC.  
*engineers & scientists*

FIGURE  
**9**

E: 2014001  
 U: DN+1 OFF+DEF+ RIVER+1  
 P: STD-PCR, DL, 003028  
 3/29/99 578-54-GWS  
 20140003/20140818.DWG



NOTES

1. Area immediately south of Building 71 has been digitally enhanced to remove steam from original photo.
2. Photograph taken by R.L. Presutti, January, 1999.

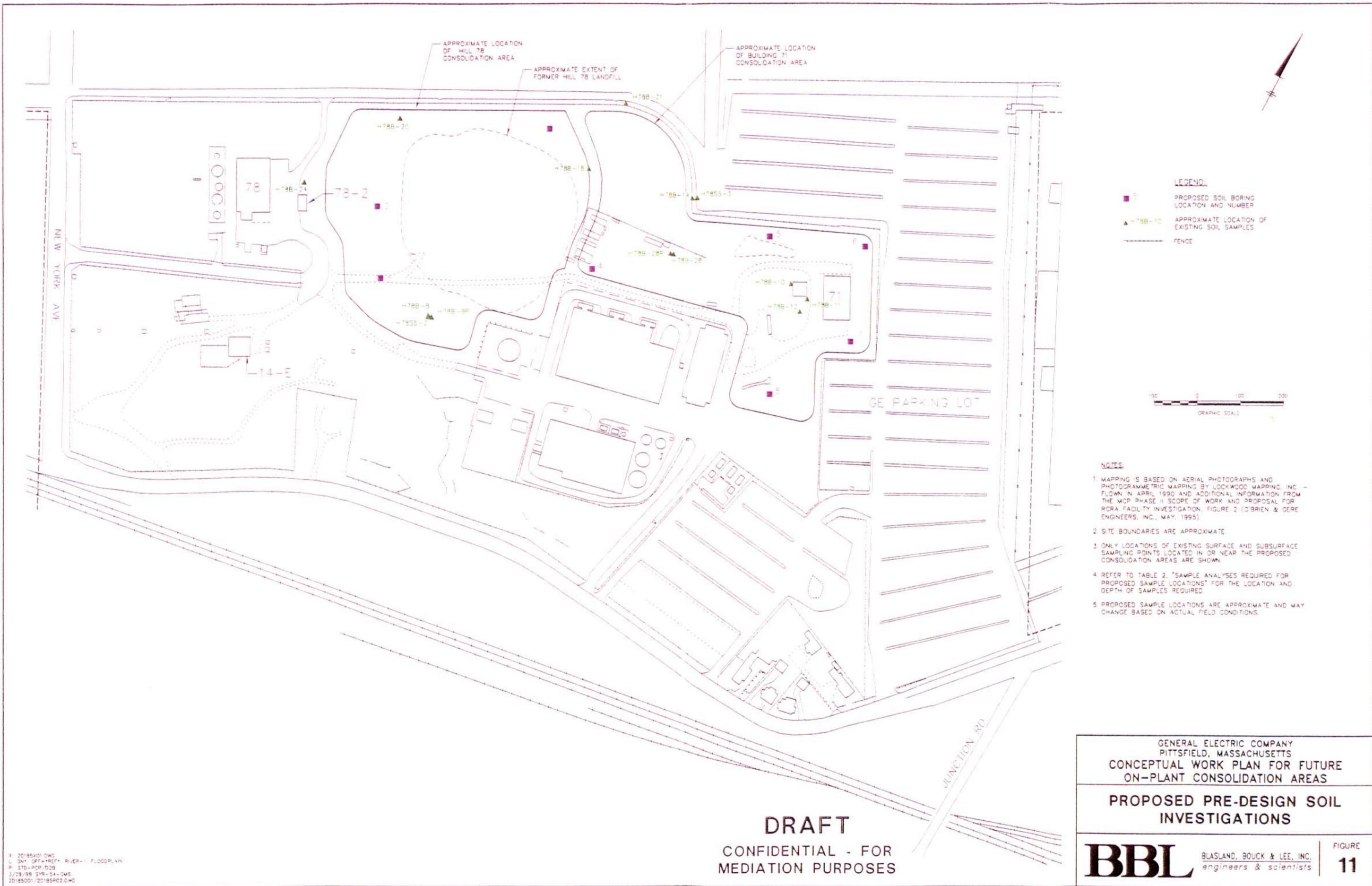
**DRAFT**  
**CONFIDENTIAL - FOR**  
**MEDIATION PURPOSES**

GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE  
ON-PLANT CONSOLIDATION AREAS

**APPROXIMATE LIMITS OF  
ALTERNATE BUILDING 71  
CONSOLIDATION AREA**

**BBL** BLASLAND, BOUCK & LEE, INC.  
engineers & scientists

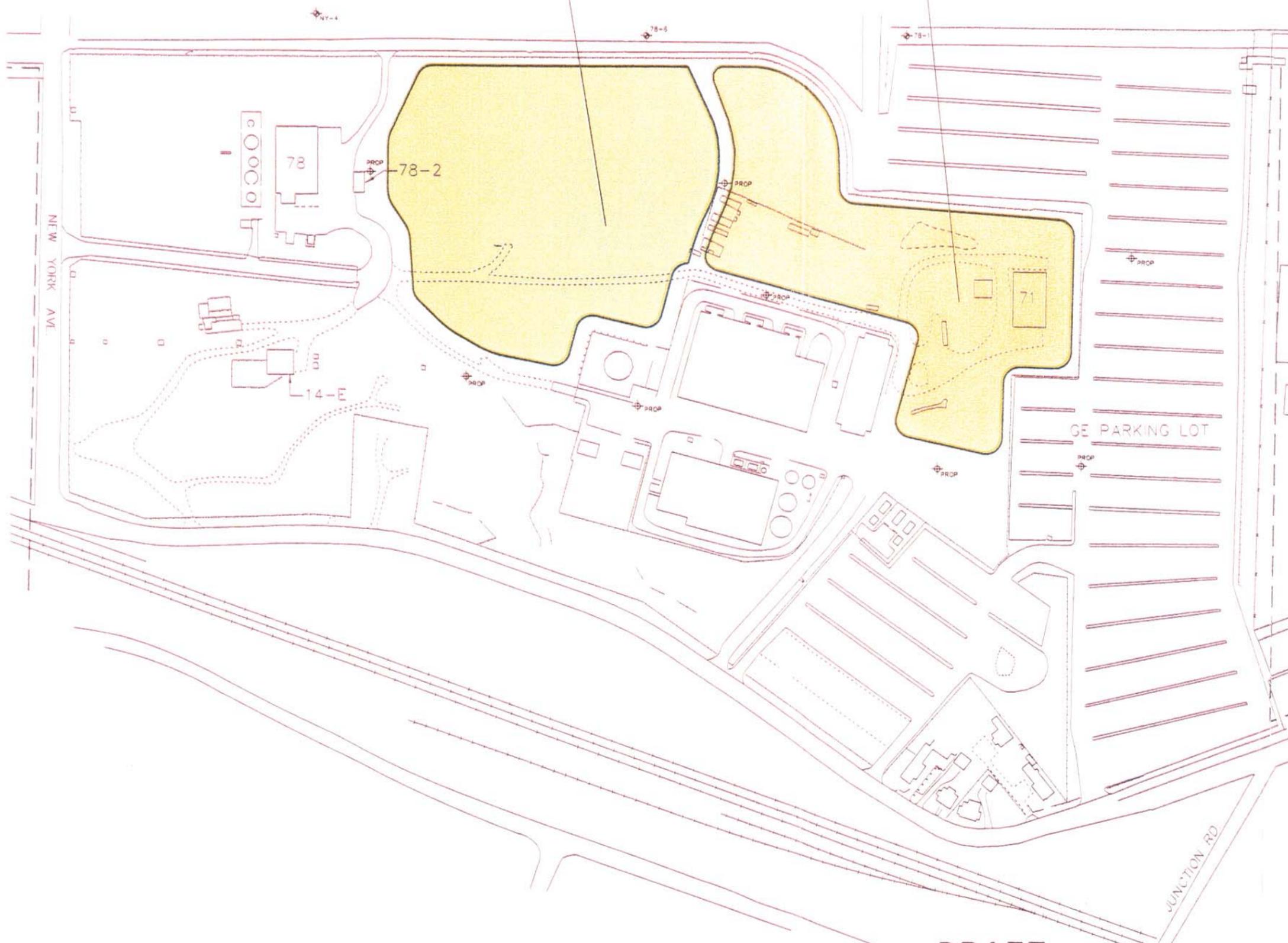
FIGURE  
**10**



E: 2018501.DWG  
L: 0N1 - OFF - REF - RIVER - 1 FLOODPLAIN  
P: ST0 - PCP - D2B  
J: 2/29/99 3:48:54 - DMS  
20185001/20185002.DWG

HILL 78 CONSOLIDATION AREA

BUILDING 71 CONSOLIDATION AREA



LEGEND:

- NON-TSCA/NON-RCRA AREA
- TSCA/RCRA AND NON-TSCA/NON-RCRA AREA
- APPROXIMATE AREA OF PROPOSED CONSOLIDATION AREAS
- FENCE
- 78-5
 EXISTING WELL PROPOSED AS PART OF CONSOLIDATION AREA MONITORING PROGRAM
- PROP
 PROPOSED WELL TO BE ADDED TO CONSOLIDATION AREA MONITORING PROGRAM

NOTES:

1. MAPPING IS BASED ON AERIAL PHOTOGRAPHS AND PHOTOGRAMMETRIC MAPPING BY LOCKWOOD MAPPING, INC. - FLOWN IN APRIL 1990; DATA PROVIDED BY GENERAL ELECTRIC COMPANY; AND BLASLAND, BOUCK & LEE, INC. (BBL) CONSTRUCTION PLANS, AND ON OBSERVATIONS DURING A SITE VISIT BY BBL PERSONNEL ON DECEMBER 3, 1997.
2. SITE BOUNDARIES ARE APPROXIMATE.
3. NOT ALL PHYSICAL FEATURES SHOWN.



GENERAL ELECTRIC COMPANY  
PITTSFIELD, MASSACHUSETTS  
CONCEPTUAL WORK PLAN FOR FUTURE  
ON-PLANT CONSOLIDATION AREAS

**PROPOSED GROUNDWATER  
MONITORING PROGRAM**

**DRAFT**  
CONFIDENTIAL - FOR  
MEDIATION PURPOSES

X: 20185X01  
L: ON\* OFF\* REF\* RIVER-1  
FLOODPLAIN, CLEAR  
P: STD-PROP/DL 2003028  
1/29/99 STR-54-GUS  
20185001/20140802.DWG