EXPLANATION OF SIGNIFICANT DIFFERENCES

LAND USE CONTROLS TO RESTRICT USE OF GROUNDWATER

For

SHEPLEY'S HILL LANDFILL SUPERFUND SITE
FORMER FORT DEVENS, MA

Prepared for:
Department of the Army
Base Realignment and Closure Division
Fort Devens, Massachusetts

October 2012

Prepared by:

Sovereign Consulting Inc.
4 Open Square Way
Holyoke, MA 01040

Contents

FIGURES

1. INTRODUCTION

This document presents the second Explanation of Significant Differences (ESD) for the Shepley's Hill Landfill Operable Unit, inclusive of Areas of Contamination (AOC) 4, 5, and 18, at the former Fort Devens. The ESD represents a significant change in remediation approach subsequent to the issuance of the Shepley's Hill Landfill Operable Unit Record of Decision (ROD), dated September, 1995[1] and the first ESD dated April 2005.[2]

Site Name and Location	
Site Name:	Shepley's Hill Landfill Operable Unit. The Shepley's Hill Landfill includes three AOCs: AOC 4, the sanitary landfill incinerator, AOC 5, sanitary landfill No. 1, and AOC 18, the asbestos cell.
Location:	Fort Devens is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL) site located in the towns of Ayer and Shirley (Middlesex County) and Harvard and Lancaster (Worcester County), approximately 35 miles northwest of Boston, Massachusetts.
Lead and Support Agencies	
Lead Agency: Contacts:	Department of the Army Office of the Assistant Chief of Staff for Installation Management Base Realignment and Closure (BRAC) Division Robert Simeone, BRAC Environmental Coordinator, Fort Devens, MA, (978) 796-2205
Support Agencies: Contacts:	United States Environmental Protection Agency (USEPA) and Massachusetts Department of Environmental Protection (MassDEP) Ginny Lombardo, Remedial Project Manager, USEPA Region One, (617) 918-1754 David Chaffin, Remedial Project Manager, MassDEP Boston HQ Office (617)-348-4005

[1] US Army Environmental Center (USAEC), 1995. Record of Decision, Shepley's Hill Landfill Operable Unit, Fort Devens, Massachusetts. September. Signed by EPA New England (Region 1) and by Department of the Army BRAC Division on September 26th 1995 and September 28th 1995, respectively.

[2] US Army Base Realignment and Closure (BRAC) Atlanta Field Office (AFO), 2005. Explanation of Significant Differences, Groundwater Extraction, Trearment, and Discharge Contingency Remedy, Shepley's Hill Landfill, Fort Devens, Massachusetts. April. Signed by USEPA New England (Region 1) and by Department of the Army BRAC Division on November 2nd , 2005 and November 29th 2005, respectively.

Under Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and promulgated in 40 CFR Sections 300.435(c)(2)(i) and 300.825(a)(2), if the Army determines that the remedial action at the Shepley's Hill Landfill Operable Unit (SHL) differs significantly in scope, performance, or cost from the ROD for the site, the Army shall publish an ESD between the remedial action being undertaken and the remedial action set forth in the ROD and the reasons such changes are being made. This ESD includes a brief history of the site, a description of the remedy selected in the ROD, the contingency remedy specified in the ROD as implemented in the first ESD, and the remedy changes being implemented under this ESD. Specifically, the Lead and Support agencies have decided to enhance remedy Land Use Controls[3] (LUCs) by modifying the LUCs in the decision record for SHL via this ESD in order to further ensure protection of human health and the environment.

In accordance with the National Contingency Plan (NCP), Section 300.825(a)(2), the ESD will become part of the Administrative Record for the Shepley's Hill Landfill Operable Unit. The Administrative Record contains the ESD and other supporting documents considered by the Army and the regulatory agencies in developing the ROD for the Shepley's Hill Landfill Operable Unit. The Administrative Record may be viewed at the Ft. Devens BRAC Environmental Office (Building 666, 30 Quebec St., Devens, MA 01432) between the hours of 8:30 AM and 5:00 PM, Monday through Friday.

[3] Land Use Controls as defined by EPA policy memorandum (Land Use Control Policy**,** April 13, 1998, SUBJECT: Assuring Land Use Controls at Federal Facilities FROM: Jon D. Johnston, Chief, Federal Facilities Branch *www.epa.gov/region4/waste/fedfac/landusec.htm*):

> *any restriction or control, arising from the need to protect human health and the environment, that limits use of and/or exposure to any portion of that property, including water resources. This term encompasses 'institutional controls,' such as those involving real estate interests, governmental permitting, zoning, public advisories, deed notices, and other 'legal' restrictions. The term may also include restrictions on access, whether achieved by means of engineered barriers such as a fence or concrete pad, or by 'human' means, such as the presence of security guards. Additionally, the term may involve both affirmative measures to achieve the desired restriction (e.g., night lighting of an area) and prohibitive directives (e.g., no drilling of drinking water wells).*

2. SUMMARY OF SITE HISTORY AND SELECTED REMEDY

The following sections contain a brief history of the site, a description of the remedy selected in the ROD, and the contingency remedy specified in the ROD as implemented in the first ESD.

2.1 SITE HISTORY

2.1.1. General

The former Fort Devens is located 35 miles west of Boston in north-central Massachusetts within the towns of Ayer and Shirley in Middlesex County, and the towns of Harvard and Lancaster in Worcester County. Prior to realignment and closure in 1996, Fort Devens included 9,280 acres divided into North Post, Main Post, and South Post. Figure 1 depicts the location of the various areas of the former base. The North and Main Posts are separated from the South Post by Massachusetts Route 2. The Nashua River runs through the North, Main and South Posts and the area around the former Fort Devens is primarily rural/residential. Currently, the U.S. Army Garrison Fort Devens (formerly the Devens Reserve Forces Training Area) consists of 5,196 acres primarily on South Post.

Camp Devens was created as a temporary cantonment in 1917 for training soldiers from the New England area. In 1932, the camp was formerly dedicated as Fort Devens and trained active duty personnel for World War II, the Korean and Vietnam Wars. In July of 1991, the North and Main Posts of Fort Devens were slated for closure and the South Post for realignment, for tactical training of Army Reserves, under the Defense Base Realignment and Closure Act of 1990. The installation ceased to be Fort Devens on March 31, 1996 at which time the remaining Army mission was assimilated as the Devens Reserve Forces Training Area.

The U.S. Environmental Protection Agency (EPA) placed the former Fort Devens on its National Priorities List (NPL) on November 21, 1989. Since listing, investigation and cleanup activities have been occurring to protect human health and the environment and facilitate property redevelopment.

2.1.2. Shepley's Hill Landfill Operable Unit

SHL encompasses approximately 84 acres in the northeast corner of the former Main Post at Fort Devens (Figure 2). It is situated between the bedrock outcrop of Shepley's Hill on the west and Plow Shop Pond on the east. Nonacoicus Brook drains Plow Shop Pond and flows through a low-lying wooded area at the north end of the landfill. The southern end of the landfill borders an area formerly occupied by the Defense Reutilization and Marketing Office (DRMO) yard, motor repair shops, and a warehouse. Areas previously mapped as wetlands have been filled by

waste materials. The landfill waste material was placed over peat deposits and a sandy aquifer that overlie bedrock and/or till.

SHL includes three Areas of Contamination (AOCs): AOC 4, the sanitary landfill incinerator; AOC 5, sanitary landfill No. 1 or Shepley's Hill Landfill; and AOC 18, the asbestos cell. AOCs 4, 5, and 18 are all located within the capped area at SHL. The three AOCs are collectively referred to as Shepley's Hill Landfill Operable Unit. In an effort to mitigate the potential for off-site contaminant migration, Fort Devens initiated the Fort Devens Sanitary Landfill Closure Plan in 1984 in accordance with Massachusetts regulations (310CMR 19.00, April 21, 1971). The MassDEP (then the Department of Environmental Quality Engineering) approved the plan in 1985. Closure plan approval was consistent with 310 CMR 19.00. The capping was completed in four phases. In Phase I, 50 acres were capped in October 1986; in Phase II, 15 acres were capped in November 1987; and in Phase III, 9.2 acres were capped in March 1989. The Phase IV closure of the last 10 acres was accomplished in two steps: Phase IV-A was closed in 1991, and Phase IV-B was closed as of July 1, 1992, although the geomembrane cap was not installed over Phase IV-B until May 1993.

Because of the large area and shallow surface slope of the existing landfill, early phases of the landfill closure were completed with a 2 or 3 percent surface slope. Slopes were increased to 5 percent in Phase IV-B. Phases I through IV-A were capped with a 30-mil polyvinyl chloride (PVC) geomembrane overlain with a 12-inch drainage layer and 6-inch topsoil layer. At the request of MassDEP, the Phase IV-B cap design was modified to include a 40-mil PVC geomembrane, a 6-inch drainage layer, and a 12-inch topsoil layer. A landfill-gas collection system consisting of 3-inch diameter gas-collection pipes bedded in a minimum 6-inch thick gas-venting layer was installed beneath the PVC geomembrane in all closure phases. Gas vents were installed through the PVC geomembrane at 400-foot centers. A minimum 6-inch cushion/protection layer was maintained between the geomembrane and underlying waste. The Army submitted a draft closure plan to MassDEP on July 21, 1995 to document that SHL was closed in accordance with plans and applicable MassDEP requirements. The MassDEP issued a Capping Compliance Letter on February 8, 1996, concurring in the closure and establishing conditions for Monitoring and Maintenance of the Landfill Post Closure.

The Army performed a remedial investigation (RI) and a supplemental RI at SHL in accordance with CERCLA between 1991 and 1993. The RI and RI Addendum reports identified potential human exposure to arsenic in groundwater as the primary risk at SHL. A Feasibility Study was performed in 1995 to evaluate alternatives to reduce potential exposure risks, and in September 1995, the ROD was finalized.

2.2 SELECTED REMEDY (INCLUDING CONTINGENCY REMEDY)

2.2.1. Remedial Action Objectives

Remedial action objectives (RAOs) are project objectives identified to ensure the protection of public health or welfare and the environment. The following RAOs were stipulated in the 1995 ROD:

1) Protect potential residential receptors from exposure to contaminated groundwater migrating from the landfill having chemicals in excess of MCLs.

2) Prevent contaminated groundwater from contributing to the contamination of Plow Shop Pond sediments in excess of human health and ecological risk-based concentrations.

The ROD did not identify remedial objectives for surface soil, landfill gas, or leachate because the risk assessments did not identify potential risks from exposure to surface soil and ambient air. Leachate was not identified during the RI or supplemental RI activities.

The Plow Shop Pond Operable Unit (OU) was established under AOC 72 to evaluate additional actions that may be necessary to manage potential risks from exposure to Plow Shop Pond surface water and sediment. The Army and USEPA performed surface water and sediment characterization as well as sediment toxicity characterization in Plow Shop Pond and Grove Pond from 1992 through 2010. Results of these studies were reported in the RI Addendum Report (ABB-ES, 1993); the Draft Plow Shop Pond and Grove Pond Sediment Evaluation (ABB-ED, 1995c); the Final Expanded Site Investigation (ESI): Remedial Oversight of Activities at Fort Devens, Plow Shop Pond and Grove Pond (USEPA, 2006); Final SA 71 Sediment Risk Characterization (MACTEC, 2008); and the Draft Final Remedial Investigation for AOC 72, Plow Shop Pond (AMEC, 2011).

2.2.2. Summary of Existing Remedy

The ROD describes two alternatives, Alternative SHL-2 (Limited Action) and Alternative SHL-9 (Groundwater Pump and Discharge to the Ayer POTW), which became the primary and contingency elements of the selected remedy for the SHL remedial action. The ROD required the Army to perform groundwater monitoring and five-year reviews to evaluate the effectiveness of the selected remedial action (Alternative SHL-2), which relied on the previously installed landfill cap to attain groundwater cleanup goals by 2008 and to reduce potential exposure risks. The ROD and the Long Term Monitoring and Maintenance Plan established incremental reduction of risk rather than incremental reduction in concentration of individual contaminants as a measure of progress toward attainment of cleanup levels to focus on the cleanup of arsenic, which is the primary contributor to potential risk. The required incremental reduction in risk was

not achieved and the Army decided to implement the contingent element of the selected remedy as documented in the first ROD ESD.

Alternative SHL-2 contains components to maintain and potentially improve the effectiveness of the existing landfill cover system and to satisfy the Landfill Post-Closure Requirements of 310 CMR 19.142 to reduce potential future exposure to contaminated groundwater. Key components of this alternative include:

- landfill closure in accordance with applicable requirements of 310 CMR 19.000;
- survey of Shepley's Hill Landfill;
- evaluation/improvement of stormwater diversion and drainage;
- landfill cover maintenance;
- landfill gas collection system maintenance;
- long-term groundwater monitoring;
- long-term landfill gas monitoring;
- institutional controls;
- educational programs;
- 60 percent design of a groundwater extraction system;
- annual reporting to MassDEP and USEPA; and
- five-year site reviews

Alternative SHL-9, involving active extraction of groundwater, was selected as a contingency or supplement to SHL-2, should it not prove to be effective at controlling site risk.

The following selected remedy components related to this ESD and how they were implemented are described in greater detail below.

Existing SHL Remedy Institutional Controls (ICs):

From the SHL ROD;

> *Institutional controls are proposed in the form of zoning and deed restrictions for any property released by the Army at Shepley's Hill Landfill during Fort Devens base-closure activities. The Fort Devens Preliminary Reuse Plan, Main and North Posts has proposed that Army land bordering Plow Shop Pond be zoned for open space and rail-related uses. By pre-empting residential use, these controls would help limit human exposure. In addition, the Army would place deed restrictions on landfill area property to prohibit installation of drinking water wells. This, in combination with landfill capping and long-term groundwater monitoring, would protect potential human receptors from risks resulting from exposure to*

contaminated groundwater. There are no current human receptors for groundwater exposure. Institutional controls would be drafted, implemented, and enforced in cooperation with state and local governments.

These ROD remedy requirements were implemented by Army as follows:

Land Use Zoning:

Land use for the SHL and surrounding Army property is governed by the Devens Reuse Plan[4]which was approved by the towns of Ayer, Harvard and Shirley on December 7, 1994. The zoning or permitted land use for SHL and surrounding Army property per this plan is Open Space/Recreation which is further defined in the Devens Open Space and Recreation Plan[5] . As stated in the SHL ROD, this IC component restricts residential use of the SHL and surrounding Army property, and therefore limits human exposure. The Army's long-term monitoring and periodic inspections of the SHL and surrounding Army property ensure that this zoning layer is being enforced by MassDevelopment, the Land Redevelopment Authority (LRA).

Deed Restrictions:

The SHL property remains in Army ownership and is under a Lease in Furtherance of Conveyance (LIFOC) Agreement[6] with the LRA, pursuant to BRAC policy requirements. A Finding of Suitability to Transfer (FOST) has not been executed by the Army for this lease premise known as Parcel A.1 (SHL) (See Figure 3) since the SHL remedy has not been determined to be Operating Properly and Successfully (OPS). The SHL ROD requirement for the ICs to "*protect potential human receptors from risks resulting from exposure to contaminated groundwater*" is implemented and enforced by the Army through the LIFOC agreement. Specifically, Article 16.05 states "*No groundwater will be extracted for any purpose*." The Army long-term monitoring and periodic inspections of the SHL and surrounding Army property ensure that this use restriction is in compliance per the LIFOC agreement. Once the SHL remedy is determined to be OPS, the Army will execute a FOST and the property will be transferred by deed to the LRA. This deed will include similar provisions as the LIFOC agreement to ensure the SHL remedy remains protective of human health and environment.

<u>Alternative SHL-9, (active extraction of groundwater) or the Contingency Remedy:</u>

[4] *Devens Reuse Plan.* Prepared by VHB 1994.
[5] *Devens Open Space and Recreation Plan.* Prepared for Massachusetts Development by Cicil and Rizvi, Inc. 1996.
[6] Department of the Army Lease in Furtherance of Conveyance of Real Property and Facilities on the Fort Devens, Massachusetts, Military Reservation, dated May 9, 1996.

Post-ROD groundwater monitoring results indicated that the selected remedy, Alternative SHL-2, would not meet risk-based arsenic performance standards. Therefore, the Army issued an ESD, Groundwater Extraction, Treatment, and Discharge Contingency Remedy for SHL (CH2M Hill, 2005), and implemented the contingency remedy, Alternative SHL-9. The Army installed and started full time operation of a groundwater extraction and treatment system, generally referred to as the Arsenic Treatment Plant (ATP), in March 2006 to address groundwater contamination emanating from beneath the northern portion of the landfill. As anticipated in the ROD and ESD, the objective of the ATP was to provide for aquifer restoration in the area down gradient of the landfill, now generally referred to as the northern impacted area or NIA. In July 2007 the ATP flow rate was increased from 25 to 50 gpm. The ATP system treated and discharged approximately 22 million gallons of groundwater during 2011, bringing the cumulative treatment total to approximately 101 million gallons and 2,696 pounds of arsenic removed through 2011[7].

Since the time of the ROD, a *more comprehensive* understanding of the remedy Conceptual Site Model (CSM), groundwater chemistry in particular, has developed which indicates that a large amount of arsenic is being mobilized by natural as well as landfill-induced conditions. This CSM and the complex groundwater contamination problems have increased the uncertainty that the remedy will meet the aquifer restoration goals.

3. SIGNIFICANT DIFFERENCES AND THE BASIS FOR THOSE DIFFERENCES

This ESD documents a modification to the SHL ROD for a remedy component that significantly changes, but does not fundamentally alter, the selected remedy. The only significant differences in the remedy as detailed in the ROD are the incorporation of additional LUC language as an enforceable component of the ROD. A summary of the LUCs to be implemented at the Site are specified below.

3.1 LAND USE CONTROLS TO RESTRICT GROUNDWATER USE OFF-SITE

The current ROD does not specifically address LUCs for any non-Army property located north of the landfill (i.e., the groundwater impacted off-site or the "north impacted area" or NIA), because the extent of the impact was not defined at the time. Post-ROD investigations have established that the SHL has impacted groundwater within the NIA as documented in the *Supplemental Groundwater Investigation Report* (Harding ESE, 2000); the *Supplemental Groundwater & Landfill Cap Assessment for Long-Term Monitoring & Maintenance* (AMEC, 2009) and the *Supplemental Groundwater & Landfill Cap Assessment for Long-Term Monitoring & Maintenance Addendum Report (Sovereign 2011).*

[7] *Shepley's Hill Landfill and Treatment Plant Long Term Monitoring and O&M, 2011 Annual Report.*

The LUCs implemented pursuant to this ESD address the RAO to *protect potential residential receptors from exposure to contaminated groundwater migrating from the landfill having chemicals in excess of MCLs*, as stipulated in the ROD.

3.1.1. Land Use Control Performance Objectives

Groundwater in the NIA would pose an unacceptable risk to human health if used for drinking water and may cause unacceptable risk to human health if used for irrigation purposes. Therefore, administrative and/or legal land use controls known as "LUCs" are being incorporated as a component of the selected groundwater remedy for the Site.

The performance objectives of the LUCs shall be to:

- Restrict access to groundwater so the potential exposure pathway to the contaminants would remain incomplete.

- Prohibit the withdrawal and/or future use of water, except for monitoring, from the aquifer within the identified groundwater LUC boundary (Figure 3).

- Maintain the integrity of any current or future monitoring system.

To meet these objectives, the Army has established the Area of Land Use Controls where the use of groundwater will be restricted via this ESD (See Figure 3). This area is based on the defined limits of groundwater contamination as documented by the site investigations referenced in Section 3.1. The LUC boundary limits were then set approximately 400 feet from the horizontal limits of groundwater contamination in order to conservatively establish the restricted area.

The SHL and surrounding Army controlled property, also shown on Figure 3, are ***not*** addressed under these additional LUCs since this property is addressed in the initial ROD as described in Section 2.2.2. Also, it is noted that the Army property is within the Devens Regional Enterprise Zone (under jurisdiction of Devens) and the NIA is within the Town of Ayer jurisdiction.

This ESD documents decisions and provides notification relating to implementation of the LUCs restricting use of groundwater within the area defined herein – the area potentially impacted by SHL. Since natural sources of arsenic and natural conditions resulting in arsenic mobilization are prevalent throughout the region surrounding SHL, this ESD, nor the LUCs implemented, are not by any means intended to infer groundwater outside the restricted area is suitable for any use.

3.1.2 Land Use Controls

To meet the LUC performance objectives, the following institutional controls in the form of governmental permitting, zoning, public advisories, prohibitive directives (e.g., no drilling of drinking water wells) and other 'legal' restrictions will be utilized within the NIA.

- The Ayer Board of Health (BOH) Well Regulations (Adopted January 10, 2001) – Town of Ayer permitting requirements for the installation and use of new drinking water wells.

  This LUC layer ensures that the installation of private wells is in accordance with town regulations. Specifically, the requirement to identify any and all sources of potential contamination within 400 feet of the proposed well site as part of the permitting process.

- The Zoning By-Laws of the Town of Ayer (Adopted March 3, 1973 and Updated May 2001; Subdivision Control Regulations Updated 1987); Town of Ayer Building Department Permitting Requirements – Town of Ayer zoning, permitting and building requirements to which the use of all new or existing buildings, other structures or land must comply.

  This LUC layer ensures that any new building or structure and any land use comply with town regulations, by-laws and requirements. Specifically, any new homes located in areas serviced by public utilities are required to obtain connection permits from the town's Department of Public Works.

- The Massachusetts Drinking Water Regulation 310 CMR 22.00 – the state regulatory permitting and approval process for any new drinking water supply wells in Massachusetts that propose to service more than 25 customers or exceed a withdrawal rate of 100,000 gallons per day.

  This LUC layer ensures that the siting of a new or expanding source of public water supply will follow a rigorous screening, evaluation and approval process. For example, the screening process requires the identification of potential environmental threats within one-half mile of the proposed site.

In addition, the Army will implement the following affirmative measures to further ensure that the LUC performance objectives are being met.

- Public education and outreach via ongoing periodic distribution of educational materials and groundwater use surveys to be distributed to all property owners and residents with the stated goal of confirming that no groundwater wells are in use within the entire Area of LUCs.

The Army will contact land owners and residents in the Area of LUCs to explain the groundwater contamination distribution in the aquifer and the health impacts that may result from drinking contaminated groundwater, using contaminated groundwater for irrigation or otherwise contacting contaminated groundwater and that installation of wells that draw groundwater from the contaminated aquifer is prohibited. Private property owners have an independent obligation to comply with the applicable statutes, regulations, and zoning requirements.

- Request that the Ayer BOH consider implementing additional controls or restrictions on access to groundwater for the purpose of potable use or irrigation within the Area of Land Use Controls as defined by Figure 3 (including any future revisions).

- Meet with the Ayer BOH on an annual basis, or more frequently if needed, to discuss the implementation of LUCs and provide an updated Area of Land Use Control map(s) that document the current and projected location of groundwater contamination within the Town of Ayer. While Figure 3 shows the current area of the NIA where the LUCs apply, the Ayer BOH or the Army may modify the areas based on new information, and all LUCs will apply to such areas based on revisions to Figure 3.

All LUCs will be maintained until either (1) the concentrations of COCs in the groundwater are at such levels as to allow unrestricted use and exposure, or (2) the Army, with the prior concurrence of the EPA and MassDEP, modifies or terminates the LUC in question.

The Army will monitor and report on the implementation, maintenance, and enforcement of land use controls, and coordinate with federal, state, and local governments and owners and occupants of properties subject to land use controls. Although the Army may later transfer these procedural responsibilities to another party by contract or through other means, the Army shall retain ultimate responsibility for remedy integrity. The Army will provide notice of the groundwater contamination and any land use restrictions referenced in the ESD. The Army will send these notices to the federal, state and local governments involved at this site and the owners and occupants of the properties subject to those use restrictions and land use controls. The Army shall provide the initial notice within 3 months of ESD signature. The frequency of subsequent notifications will be described in the LUCIP for the ESD. The Army remains responsible for ensuring that the remedy remains protective of human health and the environment. The Army will fulfill its responsibility and obligations under CERCLA and the NCP as it implements, maintains, and reviews the selected remedy.

A Land Use Control Implementation Plan (LUCIP) will be prepared to describe the actions for all LUCs described in this ESD, including implementation, maintenance and periodic inspections. The Army shall prepare a draft LUCIP within 3 months of ESD signature.

4. SUPPORT AGENCY COMMENTS

The USEPA and the MassDEP have worked with the U.S. Army in developing the SHL remedy changes described in this ESD document. All comments received on the draft ESD have been addressed by the Army and incorporated into this document.

5. AFFIRMATION OF THE STATUTORY DETERMINATIONS

The proposed change to the selected remedy described in the ROD continues to satisfy all of the statutory requirements of CERCLA and the NCP. Considering the new information that has been developed and the proposed change to the selected remedy, the Army believes that the remedy remains protective of human health and the environment, complies with federal and state requirements that are applicable or relevant and appropriate to this remedial action, and is cost effective

6. PUBLIC PARTICIPATION ACTIVITIES

The Army meets regularly with stakeholders through BRAC clean-up team (BCT) meetings and quarterly Restoration Advisory Board (RAB) meetings to discuss clean up status at the former Fort Devens and, more specifically, monitoring and other data relating to the Shepley's Hill Landfill Operable Unit. These meetings have involved discussions of monitoring data relating to groundwater investigations and compliance monitoring, annual reports, and five year reviews evaluating performance of the selected alternative. At the RAB meeting on November 15, 2012, the ESD remedy component (LUCs to restrict access to groundwater) were presented and discussed.

In accordance with 40 CFR Section 300.435(c)(2)(i) of the National Contingency Plan, this ESD and other supporting documents are available in the Administrative Record maintained by the Army. The Administrative Record may be viewed at the Ft. Devens BRAC Environmental Office (Building 666, 30 Quebec St., Devens, MA 01434) between the hours of 8:30 AM and 5:00 PM, Monday through Friday, by calling (978) 796-2205.

Public notice relating to the availability of the ESD for review was made in the Nashoba Publishing papers, Lowell Sun, and Fitchburg Sentinel on [November XX, 2012]. A voluntary 30 day public comment period beginning [November XX, 2012 and ending [December XX, 2012] was held by the Army to solicit public comment on this Explanation of Significant Differences.

482

AUTHORIZING SIGNATURES

The forgoing Explanation of Significant Differences has been prepared to document changes in the selected and contingency remedies from the Record of Decision as required by Section 117(a) of CERCLA. The forgoing represents the selection of a remedial action by the U.S. Department of the Army and U. S. Environmental Protection Agency, with the concurrence of the Massachusetts Department of Environmental Protection.

Concur and recommend for immediate implementation.

U.S. DEPARTMENT OF THE ARMY

_____ _____

Robert J. Simeone Date
BRAC Environmental Coordinator
Department of the Army
Base Realignment and Closure Division

U.S. ENVIRONMENTAL PROTECTION AGENCY

_____ _____

James T. Owens III
Chief, Office of Site Remediation and Restoration
U.S. EPA Region I Date

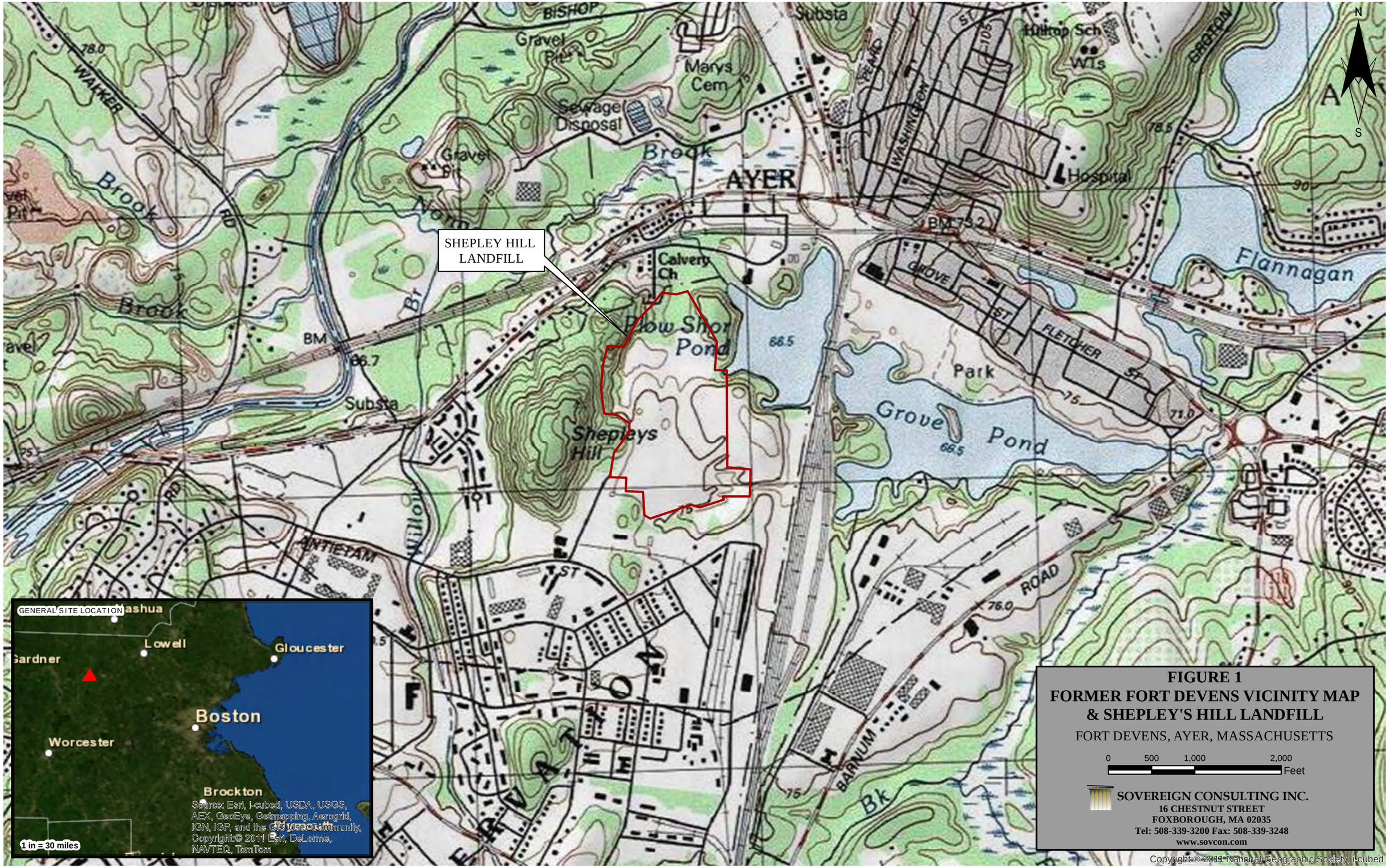


FIGURE 1
FORMER FORT DEVENS VICINITY MAP & SHEPLEY'S HILL LANDFILL
FORT DEVENS, AYER, MASSACHUSETTS

0 500 1,000 2,000 Feet

SOVEREIGN CONSULTING INC.
16 CHESTNUT STREET
FOXBOROUGH, MA 02035
Tel: 508-339-3200 Fax: 508-339-3248
www.sovcon.com

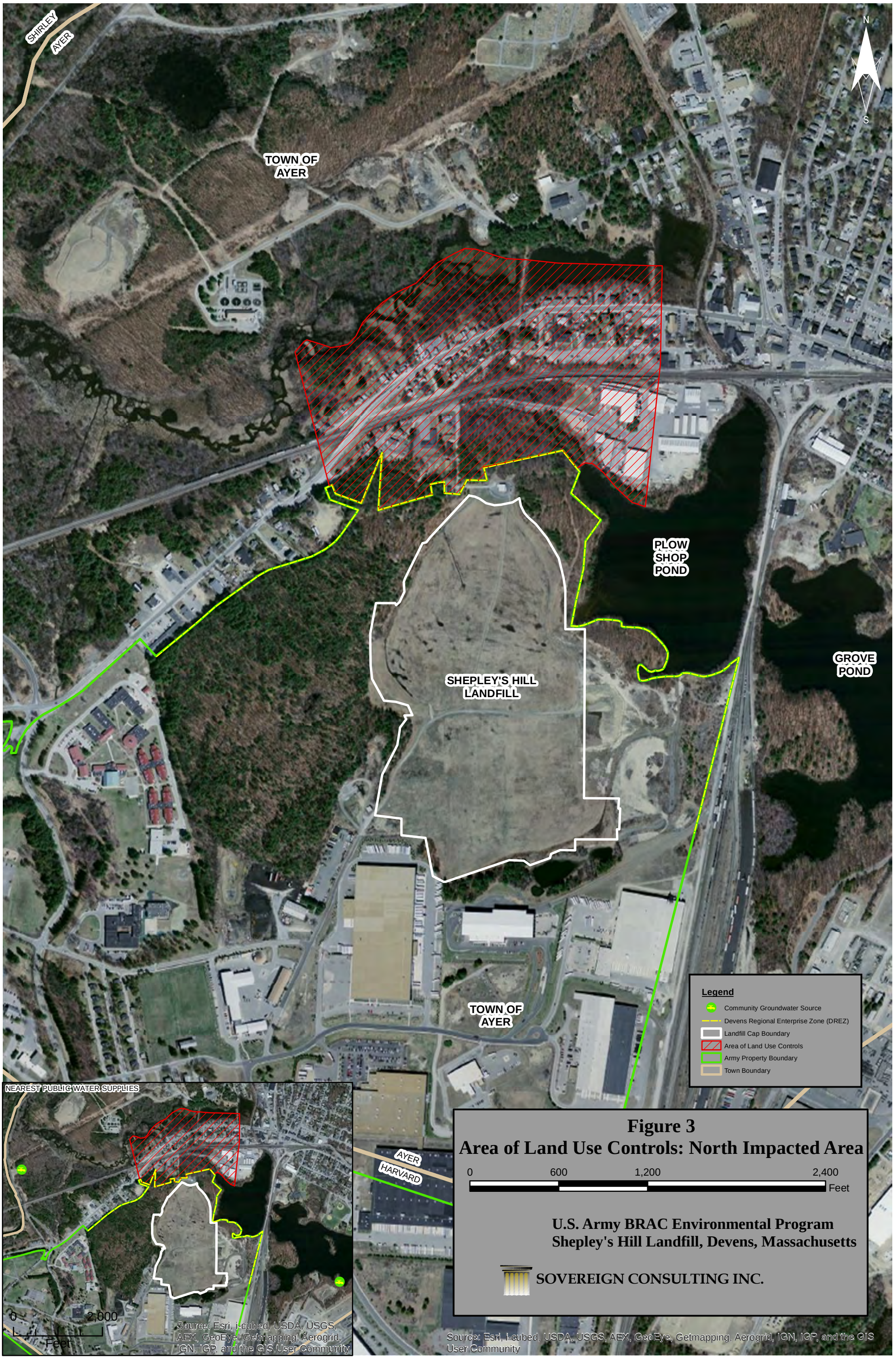
Dec 2010 ROV Updated Aug 6, 2012 ROV

FIGURE 2
SHEPLEY'S HILL LANDFILL
SITE LOCATION MAP

SHEPLEY'S LANDFILL
FORT DEVENS, AYER, MASSACHUSETTS

SOVEREIGN CONSULTING INC.
16 Chestnut Street, Foxborough, MA 02035
Tel: 508-339-3200 www.sovcon.com

07/27/2012 ROV



Source: 2000 TIGER Towns. US Census and Office of Geographic Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs.
2001 Devens Regional Enterprise Zone: Devens Zoning District Key Map. Accessed August 1, 2010. www.devensec.com.
2010 Public Water Supplies. Office of Geographic Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs.
2010 Legacy Level 0 and Level 2 Assessor's Parcels. Office of Geographic Information (MassGIS), Commonwealth of Massachusetts Executive Office of Environmental Affairs.

06/01/2012 ROV Updated 08/03/2012 ROV