Final

Record of Decision
for Soil, Sediment, and Surface Water
at RVAAP-40 Load Line 7

Former Ravenna Army Ammunition Plant
Portage and Trumbull Counties, Ohio

Contract No. W912QR-15-C-0046

Prepared for:

U.S. Army Corps of Engineers
Louisville District

Prepared by:

Leidos
8866 Commons Boulevard, Suite 201
Twinsburg, Ohio 44087

February 22, 2019

Final

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None.

14. ABSTRACT

This Record of Decision for Load Line 7 presents the physical characteristics, geology, and hydrogeology of Load Line 7. This decision document summarizes nature and extent of contamination in soil, sediment, and surface water; contaminant fate and transport; and human health and ecological risk assessments. These evaluations indicate there are no chemicals of concern (COCs) that pose unacceptable risk. This information was presented to the public, and all public input was considered during the selection of the final remedy for soil, surface water, and sediment at Load Line 7 in this ROD. This decision document selects No Further Action (NFA) with respect to soil, sediment, and surface water to attain Unrestricted (Residential) Land Use to the public.

15. SUBJECT TERMS

proposed plan, no further action, land use, chemicals of concern

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Ohio Environmental Protection Agency

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Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

March 28, 2019

Mr. David Connolly
Army National Guard Directorate
Environmental Programs Division
ARNG-ILE-CR
111 South George Mason Drive
Arlington, VA 22204

Re: US Army Ravenna Ammunition Plt RVAAP
Remediation Response
Project records
Remedial Response
Portage County
267000859118

Subject: Final Record of Decision (ROD) for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7

Dear Mr. Connolly:

Ohio Environmental Protection Agency (Ohio EPA), Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR) has received and reviewed the "Final Record of Decision for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7" dated February 22, 2019. This document was received by Ohio EPA NEDO on February 22, 2019. It was prepared by Leidos.

Ohio EPA has no comments on the Final Record of Decision (ROD) for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7. Based on the information contained in the Final ROD document, other investigation documents and reports, and Ohio EPA's oversight participation during the investigation, Ohio EPA concurs with the Final ROD document for Load Line 7 recommending No Further Action.

If you have any questions concerning this letter, please contact Megan Oravec at 330-963-1168.

Sincerely,

James Sferra, Chief
Division of Environmental Response and Revitalization

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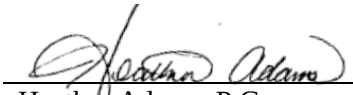
CONTRACTOR STATEMENT OF INDEPENDENT TECHNICAL REVIEW

Leidos has completed the Record of Decision for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7 at the Former Ravenna Army Ammunition Plant, Portage and Trumbull Counties, Ohio. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of data quality objectives; technical assumptions; methods, procedures, and materials to be used; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing U.S. Army Corps of Engineers policy. In addition, an independent verification was performed to ensure all applicable changes were made per regulatory and Army comments.

Jed Thomas, P.E., PMP
Study/Design Team Leader

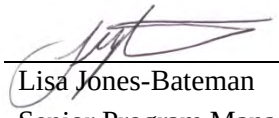
February 22, 2019
Date



Heather Adams, P.G.
Independent Technical Review Team Leader

February 22, 2019
Date

Significant concerns and the explanation of the resolution are documented within the project file. As noted above, all concerns resulting from independent technical review of the project have been considered.



Lisa Jones-Bateman
Senior Program Manager

February 22, 2019
Date

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Portage and Trumbull Counties, Ohio

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ARNG = Army National Guard.
I&E = Installations and Environment.
NEDO = Northeast District Office.
OHARNG = Ohio Army National Guard.
Ohio EPA = Ohio Environmental Protection Agency.
REIMS = Ravenna Environmental Information Management System.
SWDO = Southwest District Office.
USACE = U.S. Army Corps of Engineers.

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ACRONYMS AND ABBREVIATIONS

amsl	Above Mean Sea Level
AOC	Area of Concern
Army	U.S. Department of the Army
ARNG	Army National Guard
AT123D	Analytical Transient 1-, 2-, and 3-Dimensional Model
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CJAG	Camp James A. Garfield
CMCOPC	Contaminant Migration Chemical of Potential Concern
COC	Chemical of Concern
COPC	Chemical of Potential Concern
COPEC	Chemical of Potential Ecological Concern
DFFO	Director's Final Findings and Orders
ERA	Ecological Risk Assessment
FPA	Former Production Area
FS	Feasibility Study
FWCUG	Facility-wide Cleanup Goal
FWGWMP	Facility-wide Groundwater Monitoring Program
HHRA	Human Health Risk Assessment
IRP	Installation Restoration Program
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPA	Non-production Area
OHARNG	Ohio Army National Guard
Ohio EPA	Ohio Environmental Protection Agency
PAH	Polycyclic Aromatic Hydrocarbon
PBA08 RI	2008 Performance-based Acquisition Remedial Investigation
PCB	Polychlorinated Biphenyl
RDX	Hexahydro-1,3,5-trinitro-1,3,5-triazine
RI	Remedial Investigation
ROD	Record of Decision
RSL	Regional Screening Level
RVAAP	Ravenna Army Ammunition Plant
SEMS	Superfund Environmental Management System
SRC	Site-related Contaminant
TR	Target Risk
USEPA	U.S. Environmental Protection Agency
USP&FO	U.S. Property and Fiscal Officer
VOC	Volatile Organic Compound

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PART I: THE DECLARATION

A SITE NAME AND LOCATION

This Record of Decision (ROD) addresses soil, sediment, and surface water contaminants at Load Line 7. Load Line 7 is designated as area of concern (AOC) RVAAP-40 within the former Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio (Figures 1 and 2).

The former RVAAP, now known as Camp James A. Garfield (CJAG), located in northeastern Ohio within Portage and Trumbull counties, is approximately 3 miles east/northeast of the city of Ravenna and 1 mile north/northwest of the city of Newton Falls. The facility is approximately 11 miles long and 3.5 miles wide. The facility is bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad to the south; Garrett, McCormick, and Berry Roads to the west; the Norfolk Southern Railroad to the north; and State Route 534 to the east. In addition, the facility is surrounded by the communities of Windham, Garrettsville, Charlestown, and Wayland. The facility is federal property, which has had multiple accountability transfers amongst multiple Army agencies, making the property ownership and transfer history complex. The most recent administrative accountability transfer occurred in September 2013 when the remaining acreage (not previously transferred) was transferred to the U.S. Property and Fiscal Officer for Ohio (USP&FO) and subsequently licensed to the Ohio Army National Guard (OHARNG) for use as a military training site (Camp James A. Garfield).

Load Line 7 is located in the south-central portion of CJAG. The Superfund Environmental Management System (SEMS) Identifier for RVAAP is OH5210020736.

B STATEMENT OF BASIS AND PURPOSE

The Army National Guard (ARNG) is the lead agency and has chosen the selected remedy for Load Line 7 in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on information contained in the Administrative Record file for the AOC.

The Ohio Environmental Protection Agency (Ohio EPA), the supporting state regulatory agency, concurred with the *Remedial Investigation/Feasibility Study Report for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7* (USACE 2016; herein referred to as the Load Line 7 Remedial Investigation/Feasibility Study [RI/FS] Report) and *Proposed Plan for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7* (USACE 2018; herein referred to as the Load Line 7 Proposed Plan).

The Director's Final Findings and Orders (DFFO) was issued to the U.S. Department of the Army (Army) on June 10, 2004 (Ohio EPA 2004). The objective of the DFFO was for the Army and Ohio EPA to "contribute to the protection of public health, safety, and welfare and the environment from the disposal, discharge, or release of contaminants at or from the site, through implementation of a

CERCLA-based environmental remediation program. This program will include the development by respondent of an RI/FS for each AOC or appropriate group of AOCs at the site, and upon completion and publication of a Proposed Plan and ROD or other appropriate document for each AOC or appropriate group of AOCs, the design, construction, operation, and maintenance of the selected remedy as set forth in the ROD or other appropriate document for each AOC or appropriate group of AOCs."

The Load Line 7 RI/FS Report evaluated contaminated soil, sediment, and surface water at Load Line 7 and identified benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene as surface soil chemicals of concern (COCs) to be carried forward for potential remediation at sample locations LL7ss-097M and LL7ss-098M for Unrestricted (Residential) Land Use. The Load Line 7 RI/FS Report recommended Alternative 4: Ex Situ Thermal Treatment-Attain Unrestricted (Residential) Land Use to address contamination at the AOC.

The Load Line 7 RI/FS Report was issued in July 2016 and approved by Ohio EPA in August 2016. Since that time, the U.S. Environmental Protection Agency (USEPA) updated the cancer slope factors for carcinogenic polycyclic aromatic hydrocarbons (PAHs) using more recent toxicity studies. These updated factors, which resulted in higher regional screening levels (RSLs) for previously identified PAH COCs, are utilized in the June 2017 USEPA RSLs. Based on the updated risk management analysis presented in the Load Line 7 Proposed Plan (USACE 2018), including revised screening against the 2017 USEPA Resident Soil RSLs, no COCs were identified as requiring remediation under CERCLA to be protective of the Resident Receptor (Adult and Child).

The Load Line 7 Proposed Plan provided rationale that no further action is required for soil, sediment, and surface water at Load Line 7. This was considered a significant change in accordance with the *Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (USEPA 1999), as it impacts the scope, performance, and cost from what was recommended in the Load Line 7 RI/FS Report. Accordingly, the Army documented the significant change in the Proposed Plan to ensure the state regulatory agency (Ohio EPA) and the public were afforded the opportunity to review and comment on the no further action preferred remedy prior to selection of the remedy in this ROD.

The decision that no further action is required for soil, sediment, and surface water satisfies the requirements of the DFFO, as the Army and Ohio EPA completed the CERCLA RI/FS phase of investigation at Load Line 7. ARNG is publishing this ROD to select no further action for this site. Part II, Section G explains how the human health and ecological risks were assessed and how this no further action conclusion was made.

C DESCRIPTION OF THE SELECTED REMEDY

No further action is necessary for soil, sediment, and surface water at Load Line 7 for Unrestricted (Residential) Land Use. Consequently, no further action is necessary for the future use of the site (military training). Groundwater at Load Line 7 will be addressed under future CERCLA decisions.

Land use controls will not be implemented as part of this decision, as no CERCLA-related COCs were identified in soil, sediment, or surface water for the Resident Receptor.

D STATUTORY DETERMINATIONS

The recommendation of no further action for soil, sediment, and surface water is protective of human health and the environment and meets the statutory requirements for cleanup standards established in Section 121 of CERCLA. Because the CERCLA-related contamination present in soil, sediment, and surface water at Load Line 7 does not pose a potential risk to human health or the environment, five-year reviews will not be required. No other remedial action is necessary to ensure protection of human health and the environment for these media.

E AUTHORIZING SIGNATURE AND APPROVAL

William M. Myer
COL, GS
I&E, Army National Guard

7 June 2019
Date

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PART II: DECISION SUMMARY

A SITE NAME, LOCATION, AND DESCRIPTION

When the RVAAP Installation Restoration Program (IRP) began in 1989, RVAAP (SEMS Identification Number OH5210020736) was identified as a 21,419-acre installation. In 2002 and 2003, OHARNG surveyed the property and the total acreage of the property was found to be 21,683 acres. The RVAAP IRP encompasses investigation and cleanup of past activities over the entire 21,683-acre former RVAAP.

As of September 2013, administrative accountability for the entire acreage of the facility has been transferred to the USP&FO for Ohio and subsequently licensed to OHARNG for use as a military training site. ARNG is the lead agency for any remediation, decisions, and applicable cleanup at Load Line 7. These activities are being funded and conducted under the IRP. Ohio EPA is the supporting state regulatory agency.

CJAG is located in northeastern Ohio within Portage and Trumbull counties, approximately 4.8 km (3 miles) east-northeast of the city of Ravenna and approximately 1.6 km (1 mile) northwest of the city of Newton Falls. References in this document to RVAAP relate to previous activities at the facility as related to former munitions production activities or to activities being conducted under the restoration/cleanup program.

CJAG is a parcel of property approximately 17.7 km (11 miles) long and 5.6 km (3.5 miles) wide, bounded by State Route 5 and the CSX System Railroad on the south; Garrett, McCormick, and Berry roads on the west; the Norfolk Southern Railroad on the north; and State Route 534 on the east (see Figures 1 and 2). CJAG is surrounded by several communities: Windham 11.2 km (7 miles) to the north, Garrettsville 9.6 km (6 miles) to the north, Newton Falls 1.6 km (1 mile) to the southeast, Charlestown 3.6 km (6 miles) to the southwest, and Wayland 4.8 km (3 miles) to the south.

The distinct surface features of Load Line 7 are shown in Figure 3. All buildings, including slabs and foundations, were removed in 2006. Remaining features at Load Line 7 include a one-lane asphalt access road that enters the AOC from the south and runs along the east and north sides of the locations of the former production buildings. The Load Line 7 AOC fence is still in place, but it is not currently maintained. Small constructed drainage ditches border the access road. The AOC is currently overgrown with grass, trees, and scrub vegetation.

The AOC boundary encompasses the former production area (FPA) and non-production area (NPA) soil exposure units. The FPA consists of approximately 12.3 acres and is located west of the eastern asphalt access road in the central portion of the AOC. The FPA encompasses the locations of the former production and storage buildings. The NPA is 24.4 acres and includes the areas between the eastern access road and perimeter fence and the western production buildings and perimeter fence. The NPA also contains the location of the former Vacuum Pump House (1B-4-VP-1); two associated collectors (LL7-VC-1 and LL7-VC-2); and the former Building 1B-22, which was used for solvent storage. These exposure units are presented in Figure 4.

B SITE HISTORY AND ENFORCEMENT ACTIVITIES

RVAAP was constructed in 1940 and 1941 for depot storage and ammunition assembly/loading and placed on standby status in 1950. The primary purpose of the former RVAAP was to load medium and major caliber artillery ammunition (i.e., bombs, mines, fuze and boosters, primers, and percussion elements) and store finished components. Load Lines 5 through 11 produced fuzes, boosters, primers, detonators, and percussion elements.

In June 2004, the DFFO was issued to the Army (Ohio EPA 2004). The objective of the DFFO was for the Army and Ohio EPA to "contribute to the protection of public health, safety, and welfare and the environment from the disposal, discharge, or release of contaminants at or from the site, through implementation of a CERCLA-based environmental remediation program. This program will include the development by respondent of an RI/FS for each AOC or appropriate group of AOCs at the site, and upon completion and publication of a Proposed Plan and ROD or other appropriate document for each AOC or appropriate group of AOCs, the design, construction, operation and maintenance of the selected remedy as set forth in the ROD or other appropriate document for each AOC or appropriate group of AOCs."

Load Line 7, formerly known as Booster Line #1, is a 37-acre, fenced AOC located on the western side of Fuze and Booster Spur Road, south of Load Line 11 and northeast of Water Works #4 in the south-central portion of CJAG (Figure 2). Historical operations at Load Line 7 are summarized below:

- 1941–1945 – Load Line 7 operated at full capacity to produce booster charges for artillery projectiles. Booster charges are explosive devices designed to receive the relatively weak detonating wave from a fuze and to amplify that wave so it will have sufficient strength to ensure the high explosive completely functions in the shell body. The explosive in the booster is usually tetryl. No bulk handling of explosives occurred at Load Line 7, as all primary explosive products were delivered to Load Line 7 as sealed, finished sub-assemblies. At the end of World War II, Load Line 7 was deactivated, and the process equipment was removed.
- 1968 – The site was modified to produce M-406 High Explosive and M-407A1 practice 40mm projectiles.
- 1969–1970 – The site was reactivated to produce and assemble 16,000,000 40mm projectiles. No bulk handling of the primary explosives associated with the 40mm production occurred, as the products were received as finished sub-assemblies.
- 1970 – The site was deactivated, and process equipment was removed.
- 1989–1993 – The Load Line 7 Treatment Plant (designated as AOC RVAAP-30) was operable. This pink water treatment plant discharged under a National Pollutant Discharge Elimination System permit to the George Road Sewage Treatment Plant (RVAAP-22).

No historical information exists to indicate Load Line 7 was used for any other processes other than what is presented above. No fuel storage tanks were present at the AOC during operations. In addition, no fuel materials were used operationally at Load Line 7, and no burning was conducted.
No CERCLA enforcement actions related to Load Line 7 have been conducted.

C COMMUNITY PARTICIPATION

Using the RVAAP community relations program, the Army and Ohio EPA have interacted with the public through public notices, public meetings, reading materials, direct mailings, an internet website, and receiving and responding to public comments.

Specific items in the community relations program include the following:

- **Restoration Advisory Board –** The Army established a Restoration Advisory Board in 1996 to promote community involvement in U.S. Department of Defense environmental cleanup activities and allow the public to review and discuss the progress with decision makers. Board meetings are generally held two to three times per year and are open to the public.
- **Community Relations Plan –** The *Community Relations Plan* (Vista 2017) is maintained to establish processes to keep the public informed of activities at RVAAP. The plan is available in the Administrative Record at CJAG.
- **Internet Website –** The Army established an internet website in 2004 for RVAAP. It is accessible to the public at www.rvaap.org.

In accordance with CERCLA Section 117(a) and NCP Section 300.430(f)(2), the Army released the Load Line 7 Proposed Plan (USACE 2018) to the public on June 6, 2018. The Proposed Plan and other project-related documents were made available to the public in the Administrative Record maintained at CJAG and in the Information Repositories at Reed Memorial Library in Ravenna, Ohio, and Newton Falls Public Library in Newton Falls, Ohio. A notice of availability for the Load Line 7 Proposed Plan was sent to radio stations, television stations, and newspapers (e.g., *Warren Tribune-Chronicle* and *Ravenna Record Courier*), as specified in the Community Relations Plan. The notice of availability initiated the 30-day public comment period beginning June 6, 2018 and ending July 6, 2018.

The Army held a public meeting on June 21, 2018 at the Shearer Community Center, 9355 Newton Falls Road, Ravenna, Ohio 44266 to present the Load Line 7 Proposed Plan. At this meeting, representatives of the Army provided information and were available to answer any questions. A transcript of the public meeting is available to the public and has been included in the Administrative Record. Responses to any comments received at this meeting and during the public notification period are included in the Responsiveness Summary, which is Part III of this ROD.

The Army considered public input from the public meeting on the Load Line 7 Proposed Plan when selecting the remedy.

D SCOPE AND ROLE OF RESPONSE ACTIONS

The overall program goal of the IRP at the former RVAAP is to clean up previously contaminated lands to reduce contamination to concentrations that are not anticipated to cause risks to human health or the environment. Load Line 7 is one of many IRP sites at the former RVAAP.

This ROD addresses soil, sediment, and surface water at Load Line 7. The CERCLA-related contamination at Load Line 7 is already at concentrations low enough to allow for Unrestricted (Residential) Land Use, and the program goal of the IRP at the former RVAAP has been met for Load Line 7. Therefore, these media are already protective for Unrestricted (Residential) Land Use, and the program goal of the IRP at RVAAP has been met for Load Line 7.

Potential impacts to groundwater from soil (e.g., contaminant leaching) were evaluated in the Load Line 7 RI/FS Report, as protectiveness to groundwater was included in the fate and transport analysis. However, groundwater will be evaluated as an individual AOC for the entire facility (designated as RVAAP-66) under the Facility-wide Groundwater Monitoring Program (FWGWMP).

E SITE CHARACTERISTICS

This section presents site characteristics, nature and extent of contamination, and the conceptual site model for Load Line 7. These characteristics and findings are based on investigations conducted from 1978–2011 and are further summarized in the Load Line 7 RI/FS Report (USACE 2016).

E.1 Physical Characteristics

This section describes the topography/physiology, geology, hydrogeology, and ecological characteristics of CJAG and Load Line 7 that were key factors in identifying the potential contaminant transport pathways, receptor populations, and exposure scenarios to evaluate human health and ecological risks.

E.1.1 Topography/Physiography

The topography of CJAG is gently undulating with an overall decrease in ground elevation from a topographic high of approximately 1,220 ft above mean sea level (amsl) in the far western portion of the facility to low areas at approximately 930 ft amsl in the far eastern portion. Topographic relief at the AOC is moderate, with a topographic high on the western boundary of the AOC that slopes downward to the topographic low in the northeastern boundary of the AOC. Ground elevations within Load Line 7 range from approximately 1,110–1,146 ft amsl (Figure 3). Surface water follows topographic relief and drains into ditches that exit the AOC. A fence exists as the perimeter boundary of the AOC, although it is not currently maintained.

All buildings and structures within Load Line 7 have been demolished and building slabs and footers have been removed. The work areas were re-graded, cavities were filled with approved fill dirt as needed, and the area was vegetated in 2007 (LES 2007). Remaining features at Load Line 7 include a one-lane asphalt access road that enters the AOC from the south and runs along the eastern and northern sides of the locations of the former production buildings (Figure 3).

No permanent surface water features are present at the AOC. Surface water intermittently occurs as overland storm water runoff associated with heavy rainfall events and generally drains into small

ditches bordering roads. As shown in Figure 3, surface water drainage generally follows the topography of Load Line 7 and drains east toward Fuze and Booster Spur Road.

E.1.2 Geology

As shown in Figure 5, Load Line 7 is located within Hiram Till glacial deposits. Although the unconsolidated deposit's characteristics may vary due to site disturbances (e.g., building construction, demolition, and re-grading), the primary soil type found at Load Line 7 is the Mahoning silt loam, which covers more than 95% of the AOC. The Mahoning silt loam is a gently sloping, poorly drained soil formed in silty clay loam or clay loam glacial till, generally where bedrock is greater than 6 ft below ground surface (bgs). Mahoning silt loam has low permeability with rapid runoff and seasonal wetness (USDA 2010).

Mitiwanga silt (2–6% slopes) covers approximately 5% of the AOC on the far central-western portion of the AOC. Mitiwanga silt is characterized as gently sloping, somewhat poorly drained soil formed in silty clay loam glacial till over residuum weather from sandstone, generally where bedrock is less than 4 ft bgs. Mitiwanga silt has moderate permeability with low runoff (USDA 2010).

As shown in Figure 6, the bedrock formation underlying the unconsolidated deposits at Load Line 7, as inferred from existing geologic data, is the Pennsylvanian-age Pottsville Formation, Homewood Sandstone and Mercer Members. Bedrock was encountered at Load Line 7 from 1.6–16.9 ft bgs during monitoring well installation activities as part of the Characterization of 14 AOCs (MKM 2007). During the 2008 Performance-based Acquisition Remedial Investigation (PBA08 RI), top of bedrock was encountered in six soil borings drilled at Load Line 7 at depths ranging from 3.5–13 ft bgs (USACE 2016).

E.1.3 Hydrogeology

Six monitoring wells are present at Load Line 7 that were installed in 2004 during the Characterization of 14 AOCs (MKM 2007). All monitoring wells at Load Line 7 are screened in the bedrock. Initial depths to groundwater encountered during groundwater monitoring well installation varied from 11–19 ft bgs. Groundwater depths in monitoring wells at the AOC ranged from 10.50–22.48 ft bgs with the highest elevation being at the bedrock well LL7mw-005. Potentiometric data indicate the groundwater table occurs within bedrock throughout the AOC.

E.1.4 Ecology

The ecological risk assessment (ERA) in the Load Line 7 RI/FS Report concluded that no important and significant ecological resources exist at the AOC. A field survey conducted by Leidos field biologists at Load Line 7 in 2008 and 2010 identified four main habitat types, as presented in Figure 7: dry, early-successional, herbaceous field habitat surrounded by dry, mid-successional, cold-deciduous shrubland to the west, north, and east and further surrounded by red maple (*Acer rubrum*) successional forest to the west and north. The seasonally flooded pin-oak/swamp white oak (*Quercus palustris/Quercus bicolor*) forest alliance within the eastern boundary of Load Line 7 is limited in

extent. Although only a small portion (0.2 acres) of the pin-oak/swamp white oak forest alliance is within the habitat boundary, the forest alliance extends several hundred feet west of the AOC. The shrubland habitat within Load Line 7 is in the early stages of replacing herbaceous habitat.

The northern long-eared bat (*Myotis septentrionalis*; endangered species) exists at CJAG. No other federally listed species and no critical habitat occur on CJAG. Load Line 7 has not had a site-specific survey for federally or state-listed species. However, surveys have been conducted throughout the facility and have not identified state-listed, federally listed, threatened, or endangered species at the AOC (OHARNG 2014).

The habitats at Load Line 7 were assessed to be healthy and functioning. Functional habitat was determined by noting the absence of large bare spots and dead vegetation or other obvious visual signs of an unhealthy ecosystem (USACE 2016).

E.2 Site Investigations

In 1978, the U.S. Army Toxic and Hazardous Materials Agency conducted an Installation Assessment of RVAAP to review the potential for contaminant releases at multiple former operations areas, as documented in *Installation Assessment of Ravenna Army Ammunition Plant* (USATHAMA 1978). Since 1978, Load Line 7 has been included in various historical assessments and investigations conducted at the former RVAAP. The following environmental investigations have been completed for Load Line 7:

- Installation Assessment of Ravenna Army Ammunition Plant (USATHAMA 1978),
- Resource Conservation and Recovery Act Facility Assessment (Jacobs 1989,;
- Preliminary Assessment for the Characterization of Areas of Contamination (USACE 1996),
- Relative Risk Site Evaluation for Newly Added Sites (USACHPPM 1998),
- 2004 Characterization of 14 AOCs (MKM 2007),
- 2007 Investigation of the Under Slab Surface Soils (USACE 2009), and
- 2010/2011 PBA08 RI (USACE 2016).

The results of the PBA08 RI sampling were combined with applicable results of previous sampling events to evaluate the nature and extent of contamination, examine contaminant fate and transport, conduct risk assessments, and evaluate potential remedial alternatives, as summarized in the Load Line 7 RI/FS Report (USACE 2016).

E.3 Nature and Extent of Contamination

Data from the 2004 Characterization of 14 AOCs, 2007 Investigation of Under Slab Surface Soils, and 2010/2011 PBA08 RIs effectively characterized the nature and extent of contamination at the AOC. Figure 8 presents the RI sample locations. Based on previous information and the summary below, it can be concluded that no further sampling is needed to evaluate Load Line 7.

The predominant site-related contaminants (SRCs) in surface and subsurface soil at Load Line 7 were PAHs observed during the 2011 PBA08 RI at sample locations LL7ss-005M, LL7ss-013M, LL7ss-043M, LLss-073M, and LL7ss-074M which had an exceedance of at least one Resident Receptor facility-wide cleanup goal (FWCUG) in surface soil. Using the information collected from this 2011 sampling event, the human health risk assessment (HHRA) further evaluated benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene in surface soil (0–1 ft bgs), as discussed in Section G.1.

Explosives were a main potential contaminant from previous use of the site. With the exception of hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX), all explosives concentrations in soil were below their screening level. RDX was considered a chemical of potential concern (COPC). The exposure point concentration for RDX was lower than the Resident Receptor (Adult and Child) FWCUG; therefore, RDX was not considered a COC.

The former 1B-22 Solvent Storage Building was identified as having potential volatile organic compound (VOC) contamination. No VOCs were detected in surface soil in the sample associated with former Building 1B-22 (LL7ss-055D).

Historical records indicate that 11 transformers serviced all buildings at the AOC and were located in and around Heater House Buildings 1B-23 and 1B-24. Large grid incremental sampling methodology sample LL7ss-078M was collected adjacent to Heater House 1B-24, and sample LL7ss-073M was collected adjacent to former Building 1B-23. Polychlorinated biphenyls (PCBs) were not detected in samples LL7ss-073M and LL7ss-078M. PCB-1254 was detected at 0.07 mg/kg, which was below the screening level (0.12 mg/kg), in surface soil sample LL7ss-005M associated with Building 1B-5.

E.4 Conceptual Site Model

Conceptual site model elements are discussed in this section, including primary and secondary contaminant sources and release mechanisms, contaminant migration pathways and discharge or exit points, and potential human receptors and ecological resources.

E.4.1 Primary and Secondary Contaminant Sources and Release Mechanisms

No primary contaminant sources (e.g., operational facilities) are currently located at Load Line 7. All buildings were demolished in 2006. Remnant contamination in soil and sediment is considered a secondary source of contamination.

The potential mechanisms for contaminant releases from secondary sources at Load Line 7 include:

- Eroding soil with sorbed contaminants and mobilization in turbulent surface water flow under storm conditions,
- Dissolving soluble contaminants and transport in surface water,

- Re-suspending contaminated sediment during periods of high flow with downstream transport within the surface water system, and
- Contaminant leaching to groundwater.

E.4.2 Contaminant Migration Pathways and Exit Points

The potential for soil contaminants to impact groundwater was evaluated in the fate and transport evaluation presented in the Load Line 7 RI/FS Report (USACE 2016). Contaminants in surface soil may migrate to surface water via drainage ditches in the dissolved phase following a storm event or as particulates in storm water runoff.

Maximum SRC concentrations identified in surface and subsurface soil were evaluated using a series of generic screening steps to identify initial contaminant migration chemicals of potential concern (CMCOPCs). These soil CMCOPCs were further evaluated using the Seasonal Soil Compartment model to predict leaching concentrations and identify final CMCOPCs based on RVAAP facility-wide background criteria and the lowest risk-based screening criteria among USEPA maximum contaminant levels, USEPA tap water RSLs, or RVAAP groundwater FWCUGs for the Resident Receptor Adult. Final CMCOPCs were evaluated using the Analytical Transient 1-, 2-, and 3-Dimensional (AT123D) model to predict groundwater mixing concentrations beneath source areas and concentrations at the nearest downgradient groundwater receptor to the AOC (e.g., stream). The AT123D modeling results were evaluated with respect to AOC groundwater monitoring data, as well as model limitations and assumptions, to identify chemicals to be retained as contaminant migration COCs.

Conclusions of the soil screening, leachate modeling, and groundwater modeling are as follows:

- Silver; 2,4-trinitrotoluene; 3-nitrotoluene; and naphthalene were predicted to exceed the screening criteria in groundwater beneath the source area.
- 2,6-Dinitrotoluene; nitroglycerin; and RDX were predicted to exceed the screening criteria in groundwater beneath the source area and at the downgradient receptor location (i.e., tributary to Sand Creek east of Load Line 7).

Evaluation of modeling results with respect to current AOC groundwater data and model limitations indicated that identified CMCOPCs are not currently impacting groundwater beneath the source areas and that modeling assumptions are conservative.

All SRCs identified in surface soil and subsurface soil were evaluated through the stepwise fate and transport evaluation. All SRCs were eliminated as posing future impacts to groundwater, and no further action is necessary for surface soil, subsurface soil, and sediment to protect groundwater (USACE 2016). Groundwater will be further evaluated under the FWGWMP.

E.4.3 Potential Human Receptors and Ecological Resources

In February 2014, the Army and Ohio EPA amended the risk assessment process to address changes in the RVAAP restoration program.

The *Final Technical Memorandum: Land Uses and Revised Risk Assessment Process for the RVAAP Installation Restoration Program* (ARNG 2014) identified the following three Categorical Land Uses and Representative Receptors to be considered during the RI phase of the CERCLA process.

1. Unrestricted (Residential) Land Use – Resident Receptor (Adult and Child) (formerly called Resident Farmer).
2. Military Training Land Use – National Guard Trainee.
3. Commercial/Industrial Land Use – Industrial Receptor (USEPA Composite Worker).

An evaluation using Resident Receptor (Adult and Child) FWCUGs was used to provide an Unrestricted (Residential) Land Use evaluation. If a site meets the standards for Unrestricted (Residential) Land Use, it can be used for all categories of Land Use at CJAG. No COCs were identified as requiring remediation to be protective for the Resident Receptor or Unrestricted (Residential) Land Use. The receptor is assumed to be exposed to surface soil from 0–1 ft bgs and subsurface soil from 1–13 ft bgs.

Load Line 7 does not have any important and significant ecological resources such as wetlands, terrestrial areas used for breeding by large or dense populations of animals, habitats used by threatened and endangered species, state land designated for wildlife or game management, or locally important ecological places. Groundwater is not considered an exposure medium for ecological receptors on the AOC given its depth and occurrence within bedrock, and there are no discharge points (e.g., springs, seeps) that would represent potential exposure points.

F CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

Load Line 7 is currently managed by ARNG/OHARNG. The AOC is not currently being utilized for training purposes. The future use of Load Line 7 is military training. The Resident Receptor was evaluated in the HHRA to assess an Unrestricted (Residential) Land Use scenario. This ROD discusses future Land Use as it pertains to soil, sediment, and surface water and how it impacts human health, the environment, and groundwater.

G SUMMARY OF SITE RISKS

The HHRA and ERA estimated risks to human receptors and ecological resources; identified exposure pathways and COCs and chemicals of potential ecological concern (COPECs), if any; and provided a basis for remedial decisions. This section of the ROD summarizes the results of the HHRA and ERA, which are presented in detail in the Load Line 7 RI/FS Report (USACE 2016) and Load Line 7 Proposed Plan (USACE 2018). As indicated in Section G.1, the Load Line 7 Proposed Plan (USACE 2018) contains an updated risk management analysis pertaining to COCs recommended for

remediation in the Load Line 7 RI/FS Report (USACE 2016). Both documents are located in the Administrative Record and Information Repositories.

G.1 Human Health Risk Assessment

An HHRA was performed to identify COCs and provide a risk management evaluation to determine if remediation is required under CERCLA based on potential risks to human receptors. Media of concern evaluated in the Load Line 7 HHRA are surface soil (0–1 ft bgs) and subsurface soil (1–13 ft bgs). Surface water is not a permanent feature at Load Line 7; therefore, sediment and surface water are not media of concern at this AOC.

The HHRA in the Load Line 7 RI/FS Report identified four PAH COCs in surface soil (0–1 ft bgs): benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene based on exceedances of Resident Receptor FWCUG at a target risk (TR) of 1E-05, hazard quotient of 1. As shown in Figure 9, locations LL7ss-005M, LL7ss-013M, LL7ss-043M, LLss-073M, and LL7ss-074M had an exceedance of at least one Resident Receptor FWCUG in surface soil.

The area associated with sample locations LL7ss-013M and LL7ss-074M was re-evaluated as part of the April 2011 sampling event using a subset of six incremental sampling methodology samples ranging in size from 0.02–0.11 acres to further refine the area of contamination. The six sample locations were LL7ss-096M to LL7ss-101M and are presented in Figure 10. The results of this new sampling event were discussed in the Load Line 7 RI/FS Report. However, since the finalization of the Load Line 7 RI/FS Report, USEPA updated the cancer slope factors for the carcinogenic PAHs using more recent toxicity studies. These updated values are utilized in the June 2017 USEPA RSLs. The Resident Receptor FWCUG and the USEPA Resident Soil RSLs, updated in June 2017, at a TR of 1E-05 for the PAH COCs are presented in Table 1.

The six locations sampled in April 2011 (LL7ss-096M to LL7ss-101M) and the COC concentrations are presented in Table 1 and Figure 10.

The following discusses the April 2011 sample results and compares concentrations to the 2017 USEPA Resident Soil RSLs:

- The concentration of benzo(a)pyrene at sample location LL7ss-096M (1.3 mg/kg) slightly exceeded the 2017 USEPA Resident Soil RSL of 1.1 mg/kg. This exceedance is attributed to the adjacent asphalt driveway.
- The concentration of benzo(a)pyrene at sample location LL7ss-097M (1.4 mg/kg) slightly exceeded the 2017 USEPA Resident Soil RSL of 1.1 mg/kg. This 0.06-acre sample is surrounded by sample locations LL7ss-098, LL7ss-099, and LL7ss-100 (which represent a combined 0.26 acres). Concentrations in these three samples range from 0.059–0.47 mg/kg.
- The concentrations of all other PAH COCs collected from the delineation samples were below the 2017 USEPA Resident Soil RSLs.

Evaluation of PAH concentrations at Load Line 7 indicates concentrations that are consistent with common anthropogenic sources, such as asphalt parking lots and roads and vehicle traffic.

Table 1. USEPA RSLs (June 2017) for PAH COCs

Chemical of Concern	Concentrations (mg/kg)							
	Screening Levels (TR of 1E-05)		April 2011 Sample Results					
	Resident Receptor FWCUG	USEPA Resident Soil RSL (June 2017)	LL7ss-096M	LL7ss-097M	LL7ss-098M	LL7ss-099M	LL7ss-100M	LL7ss-101M
Benz(a)anthracene	2.21	11	1.6	1.8	0.58	0.14	0.072	0.33
Benzo(a)pyrene	0.221	1.1	1.3	1.4	0.47	0.12	0.059	0.28
Benzo(b)fluoranthene	2.21	11	1.5	1.6	0.6	0.14	0.083	0.34
Dibenz(a,h)anthracene	0.221	1.1	0.17	0.23	0.071	0.018	0.0076	0.032

COC = Chemical of concern.
FWCUG = Facility-wide cleanup goal.
mg/kg = Milligrams per kilogram.
PAH = Polycyclic aromatic hydrocarbon.
RSL = Regional Screening Level.
TR = Target Risk.
USEPA = U.S. Environmental Protection Agency.

Based on the updated risk management analysis presented in the Load Line 7 Proposed Plan (USACE 2018), including revised screening against the current USEPA Resident RSLs, no COCs are required to be carried forth in a remedial action to be protective of the Resident Receptor (Adult and Child). Because the risk management analysis determined there were no unacceptable risks to the Resident Receptor (Adult and Child), it can be concluded that there is no unacceptable risk to the National Guard Trainee and Industrial Receptor and an FS and remedial action are not required at Load Line 7.

G.2 Ecological Risk Assessment

The ecological habitat in Load Line 7 is approximately 37 acres and consists of grasses, forest, and shrubs. The vegetation provides a habitat for birds, mammals, insects, and other organisms. Although no streams, ponds, or wetlands are located on the AOC, small drainage ditches exist bordering the roads and within the FPA. During most of the year, no water exists in the drainage ditches; in turn, no signs of an aquatic habitat have been observed.

Ecological resources at Load Line 7 were compared to the list of important ecological places and resources. Based on the 39 criteria defining important places as identified by the Army and Ohio EPA, no important/significant ecological resources were identified at the AOC. The vegetation types present at Load Line 7 are also found elsewhere near the AOC, at CJAG, and in the ecoregion.

The northern long-eared bat (*Myotis septentrionalis*; federally threatened) exists at CJAG. No other federally listed species or critical habitats are found on CJAG. Load Line 7 has not had a site-specific survey for federal- or state-listed species. However, surveys have been conducted throughout the facility and have not identified state-listed, federally listed, threatened, or endangered species at the AOC (OHARNG 2014).

The ERA was conducted in accordance with the *Guidance for Conducting Ecological Risk Assessments* (Ohio EPA 2008) and evaluated chemical contamination to determine if it posed a risk to the environment. The ERA incorporated available data to identify integrated COPECs. Four integrated soil COPECs were identified in the Level I ERA.

Load Line 7 does not have any important and significant ecological resources such as wetlands, terrestrial areas used for breeding by large or dense populations of animals, habitats used by threatened and endangered species, state land designated for wildlife or game management, or locally important ecological places. Consequently, the ERA for Load Line 7 concludes with a Level I Scoping Level Risk Assessment, with a recommendation of no further action from the ecological risk perspective.

H DOCUMENTATION OF NO SIGNIFICANT CHANGE

The Load Line 7 Proposed Plan (USACE 2018) was released for public comment on June 6, 2018. Feedback received from the public during the public comment period and public meeting are presented in Part III of this ROD. The Proposed Plan recommended no further action for soil, sediment, and surface water at Load Line 7. No significant changes were necessary or appropriate following the conclusion of the public comment period.

PART III: RESPONSIVENESS SUMMARY FOR PUBLIC COMMENTS ON THE ARMY PROPOSED PLAN FOR RVAAP-40 LOAD LINE 7

A OVERVIEW

On June 6, 2018, the Army released the Load Line 7 Proposed Plan (USACE 2018) for public comment. A 30-day public comment period was held from June 6, 2018 to July 6, 2018. The Army hosted a public meeting on June 21, 2018 to present the Proposed Plan and take questions and comments from the public for the record. This public comment period and public meeting also included Proposed Plans for Load Line 9, Load Line 12, Wet Storage Area, and Upper and Lower Cobbs Ponds.

For soil, surface water, and sediment at Load Line 7, the Army recommended no further action. During the public meeting, Ohio EPA concurred with the recommendation of no further action. Comments provided during the public comment period and public meeting are summarized in the following section.

The community voiced no objections to the no further action recommendation. All public input was considered during the selection of the final remedy for soil, surface water, and sediment at Load Line 7 in this ROD.

B STAKEHOLDER ISSUES AND LEAD AGENCY RESPONSES

The following subsections summarize the oral and written comments provided during the public comment period and public meeting. ARNG's responses provided below are considered final upon approval of the Final ROD.

B.1 Oral Comments from Public Meeting

Comment 1: What impacts or what will occur when you excavate the contaminated soil? Is there any testing that is done to monitor airborne contaminants?

Response: The recommended alternative for Load Line 7 is "no further action," as soil, sediment, and surface water were determined to not require a remedial action. Consequently, there will be no excavation activities at this site. Generally, excavation of contaminated soil includes using engineering controls to mitigate risk from airborne contaminants to workers and the community. These controls include performing constant visual inspections to verify that excessive dust is not created in excavation or transport, wetting of the contaminated soil if dust is created, and ensuring the contaminated soil is covered when in the haul trucks prior to exiting the site.

If contaminated media are at concentrations that airborne particulates could pose unacceptable risk to workers or the community via an airborne pathway, the Remedial Design will specify that air monitoring equipment will be on site and continually monitored.

B.2 Written Comments

Comment 1: What happens to Sand Creek after the exit from the arsenal area into Windham?
Response: Sand Creek flows through the center of the former RVAAP (CJAG), generally in a northeast direction to its confluence with South Fork Eagle Creek. This confluence is just inside the CJAG perimeter fence. After the confluence, South Fork Eagle Creek exits CJAG between Windham Road and Snow Road and continues in a northerly direction for approximately 3 miles to its confluence with Eagle Creek.

C TECHNICAL AND LEGAL ISSUES

There were no technical or legal issues raised during the public comment period.

PART IV: REFERENCES

ARNG (Army National Guard) 2014. *Final Technical Memorandum: Land Uses and Revised Risk Assessment Process for the Ravenna Army Ammunition Plant (RVAAP) Installation Restoration Program, Portage /Trumbull Counties, Ohio*. Memorandum between ARNG-ILE Cleanup and the Ohio Environmental Protection Agency. February 2014.

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USATHAMA (U.S. Army Toxic and Hazardous Materials Agency) 1978. *Installation Assessment of Ravenna Army Ammunition Plant,* Records Evaluation Report No. 132. 1978.

USDA (U.S. Department of Agriculture) 2010. Soil Map of Portage County, Version 4. Website: www.websoilsurvey.nrcs.usda.gov. January 2010.

USEPA (U.S. Environmental Protection Agency) 1999. *Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*. July 1999.

Vista (Vista Sciences Corporation) 2017. *Community Relations Plan 2017 for the Ravenna Army Ammunition Plant Restoration Program.* March 2017.

FIGURES

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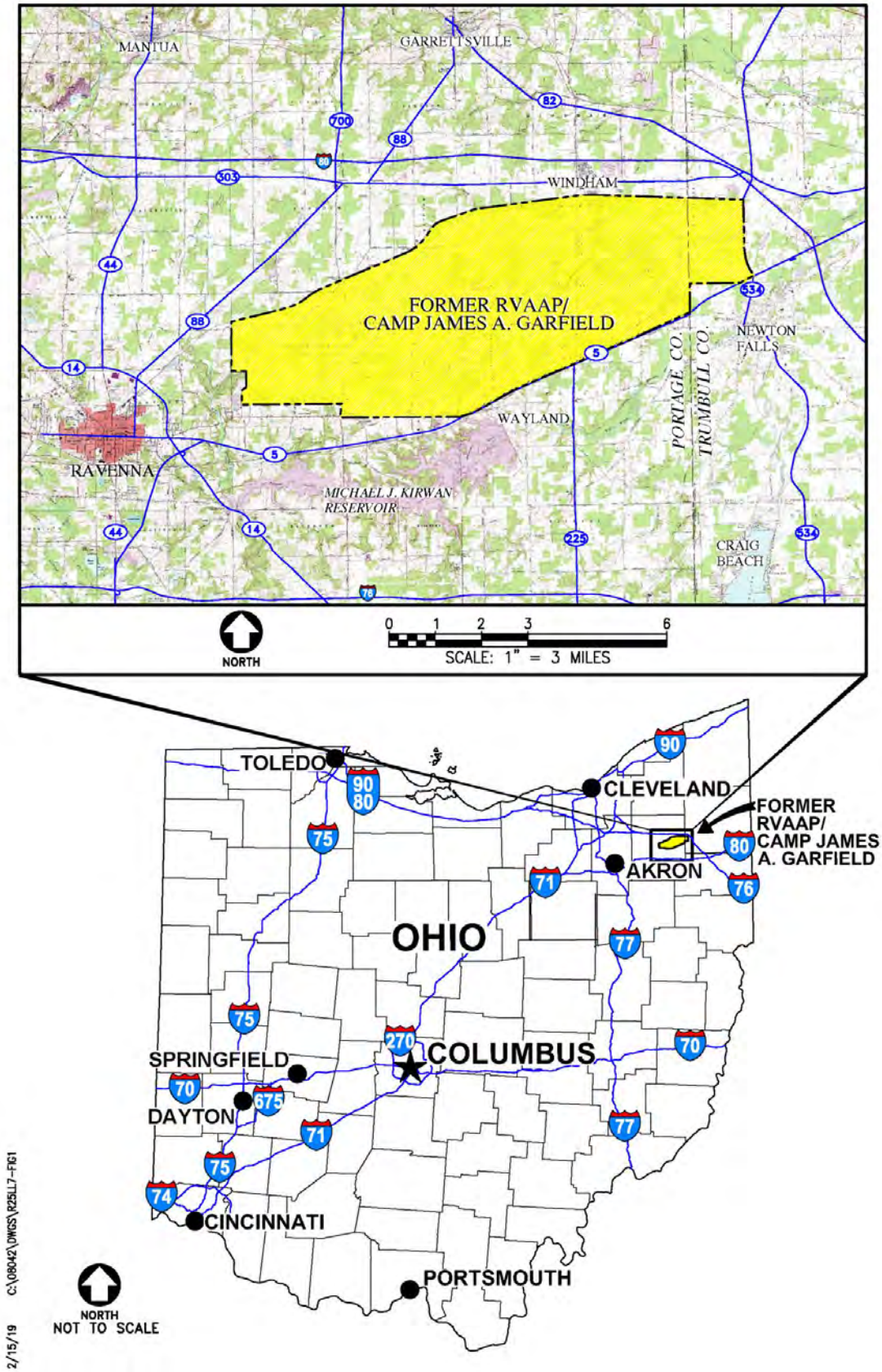

Figure 1. General Location and Orientation of Camp James A. Garfield

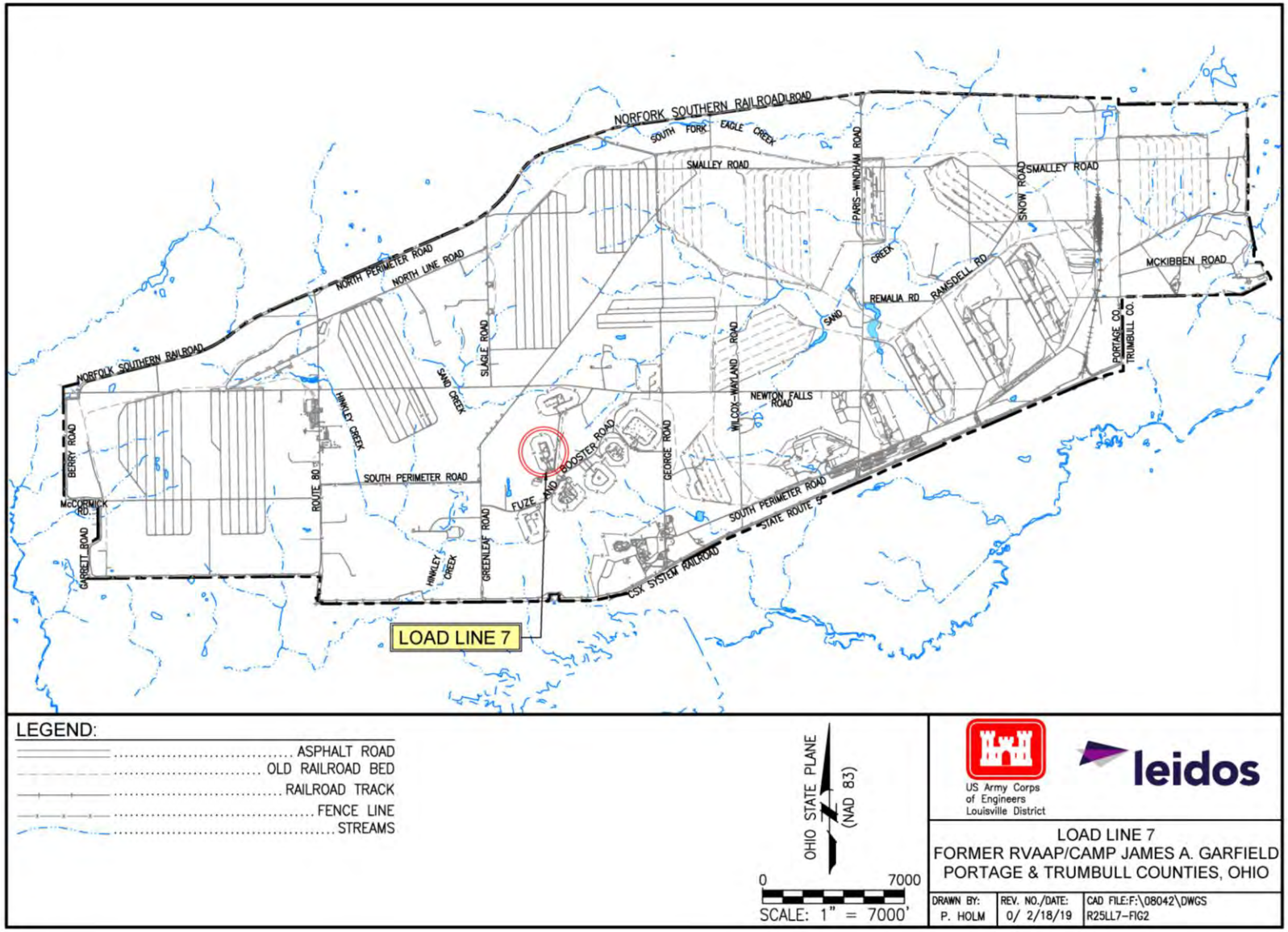

Figure 2. Camp James A. Garfield Installation Map

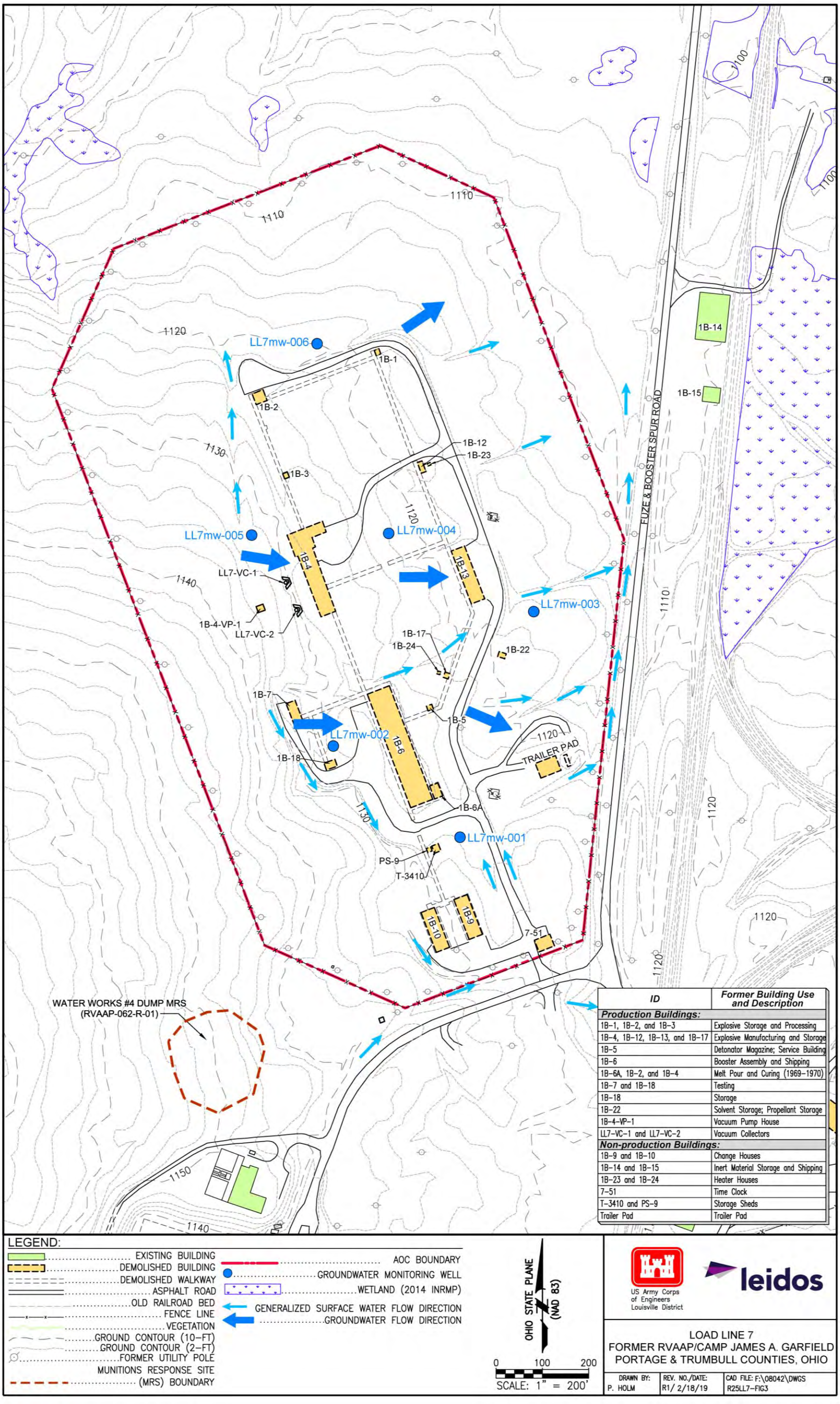

Figure 3. Load Line 7 Site Features

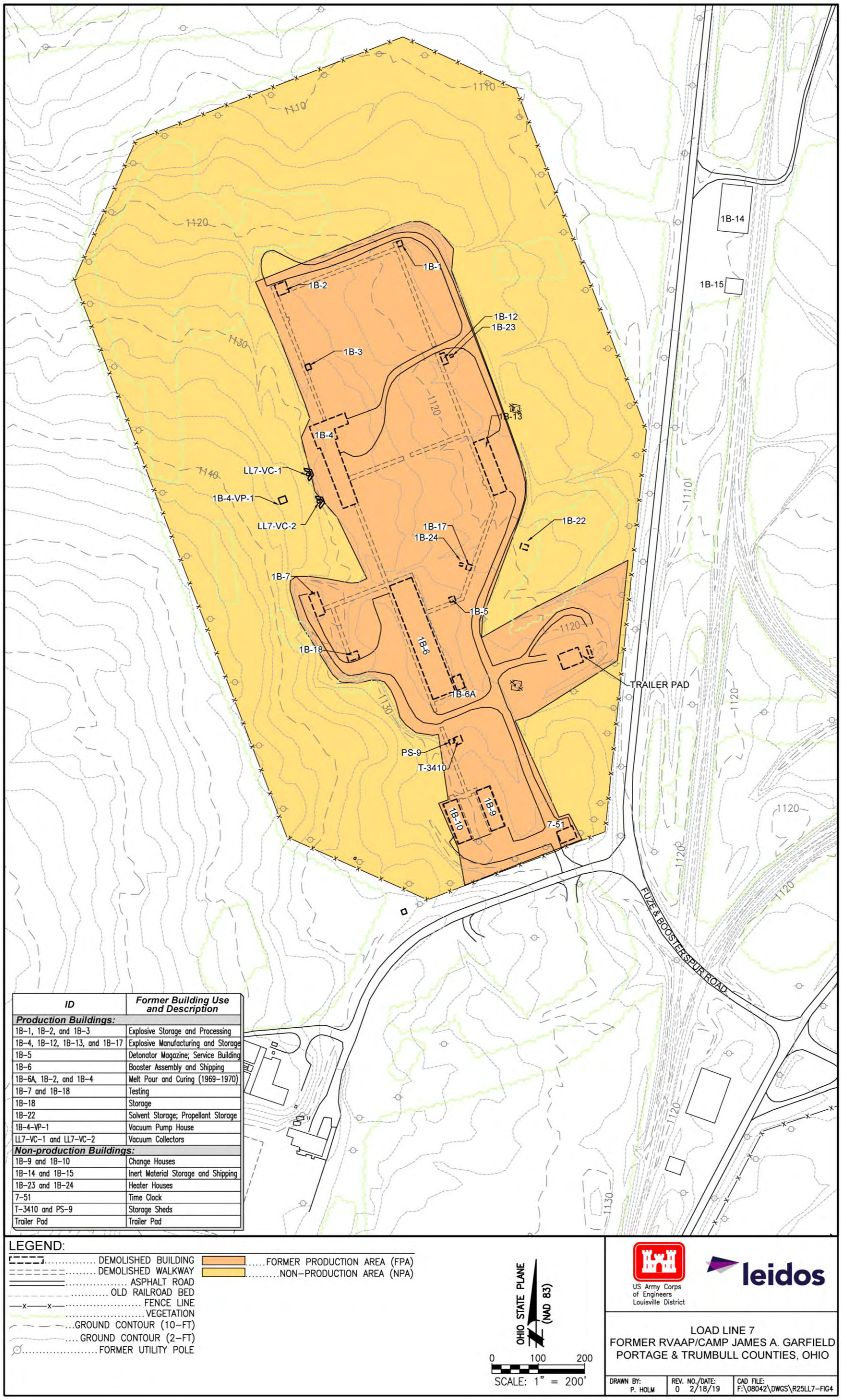

Figure 4. Load Line 7 Exposure Units

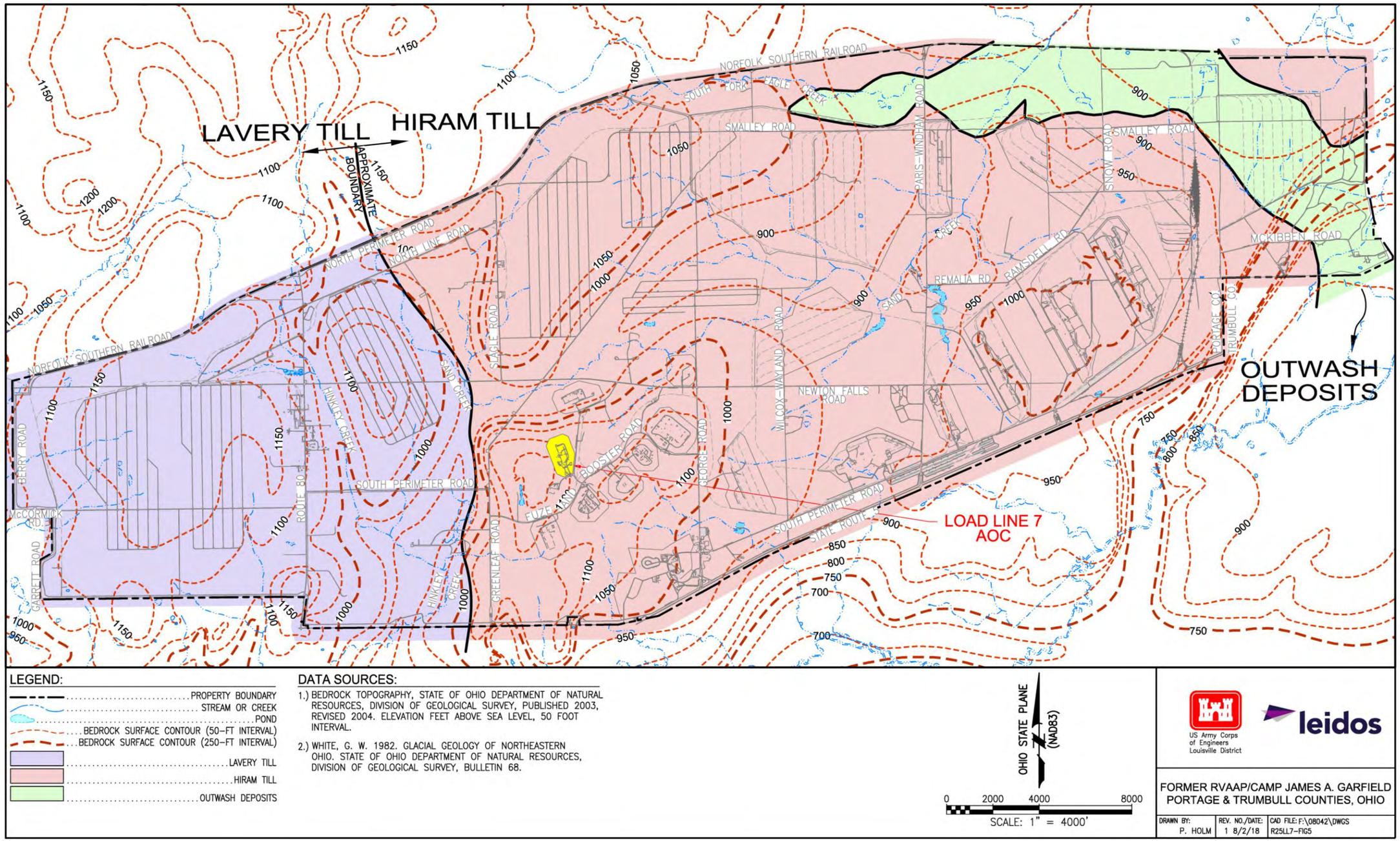

Figure 5. Geologic Map of Unconsolidated Deposits on Camp James A. Garfield

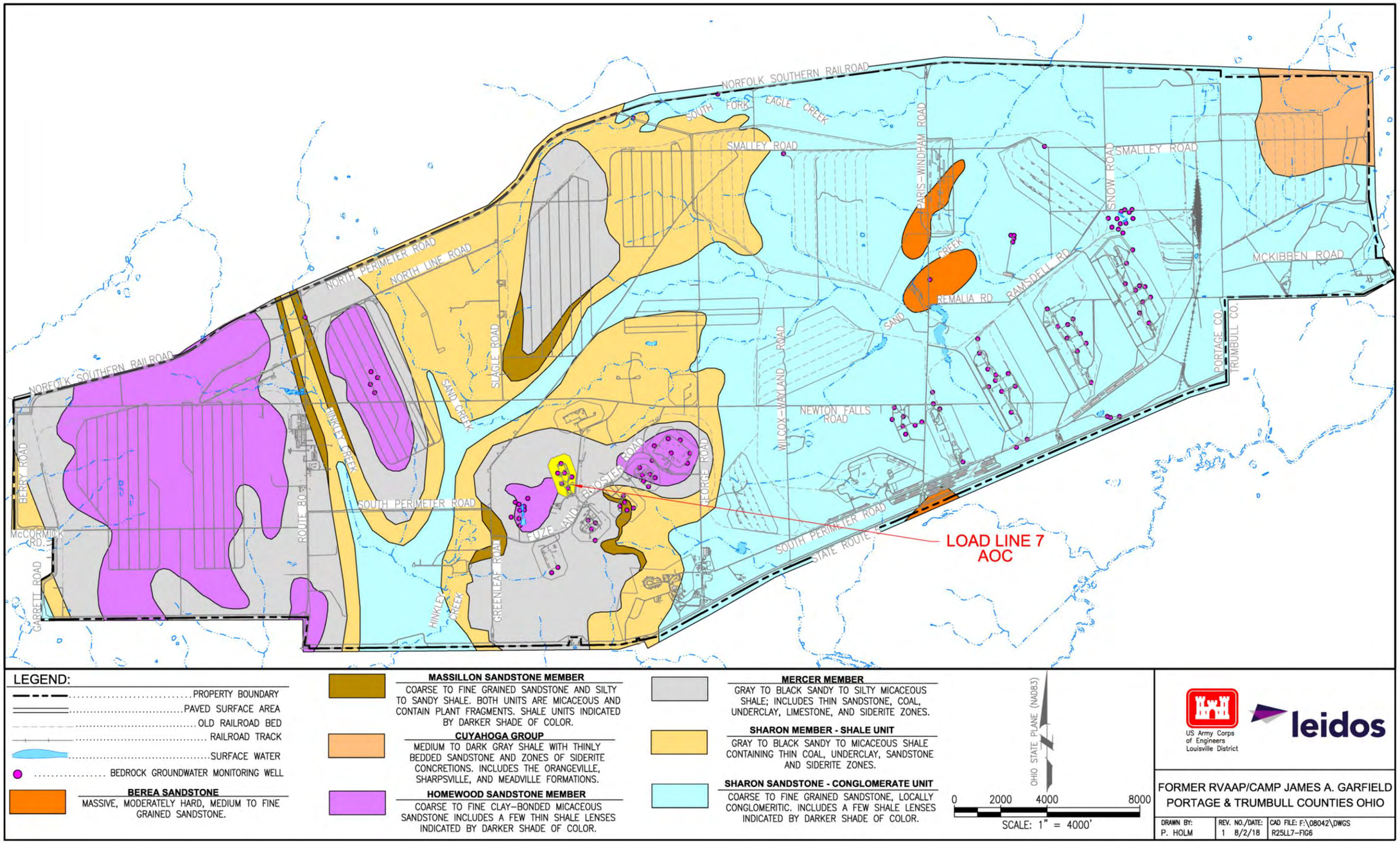

Figure 6. Geologic Bedrock Map and Stratigraphic Description of Units on Camp James A. Garfield

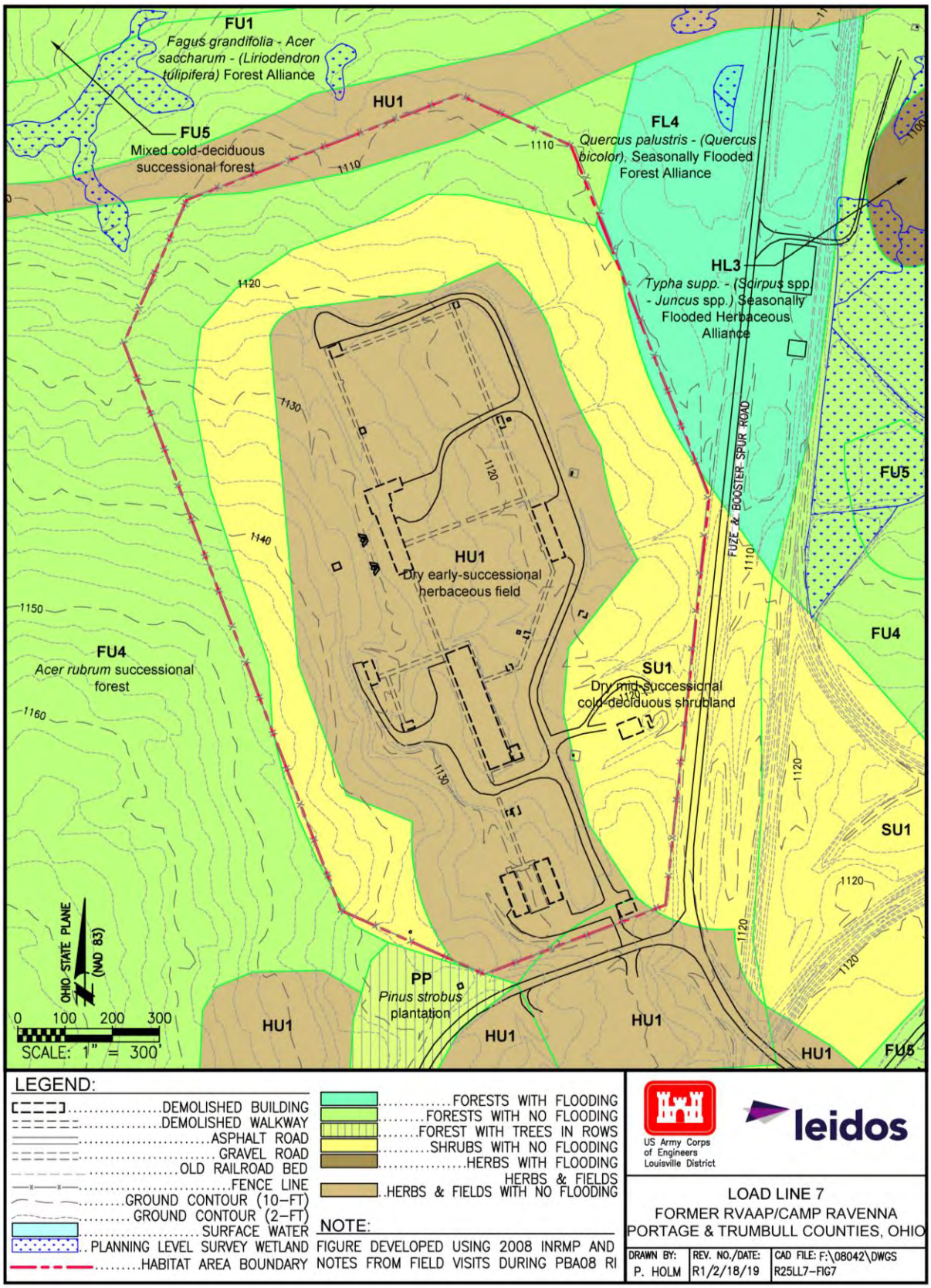

Figure 7. Natural Resources Inside and Near Habitat Area at Load Line 7

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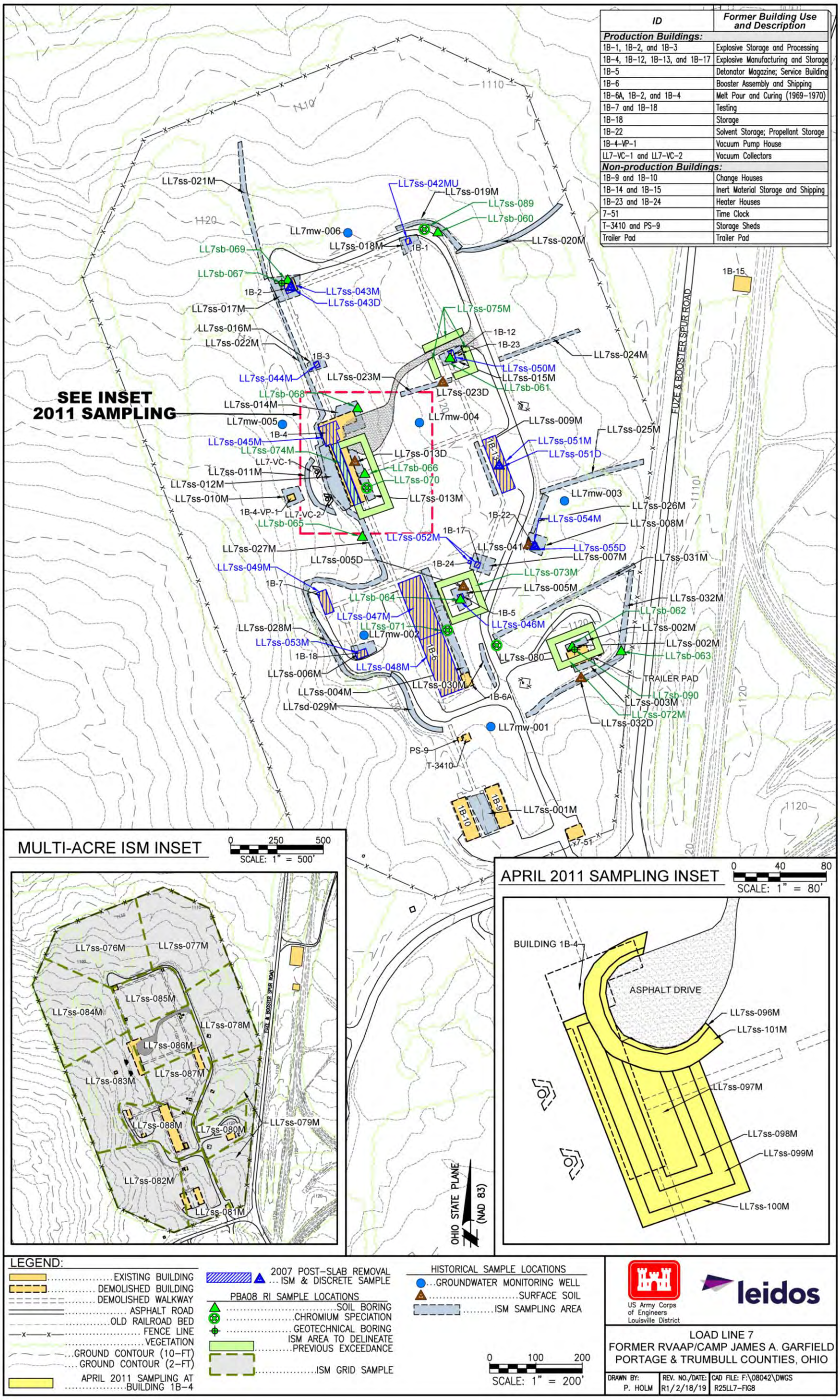

Figure 8. Load Line 7 Sample Locations

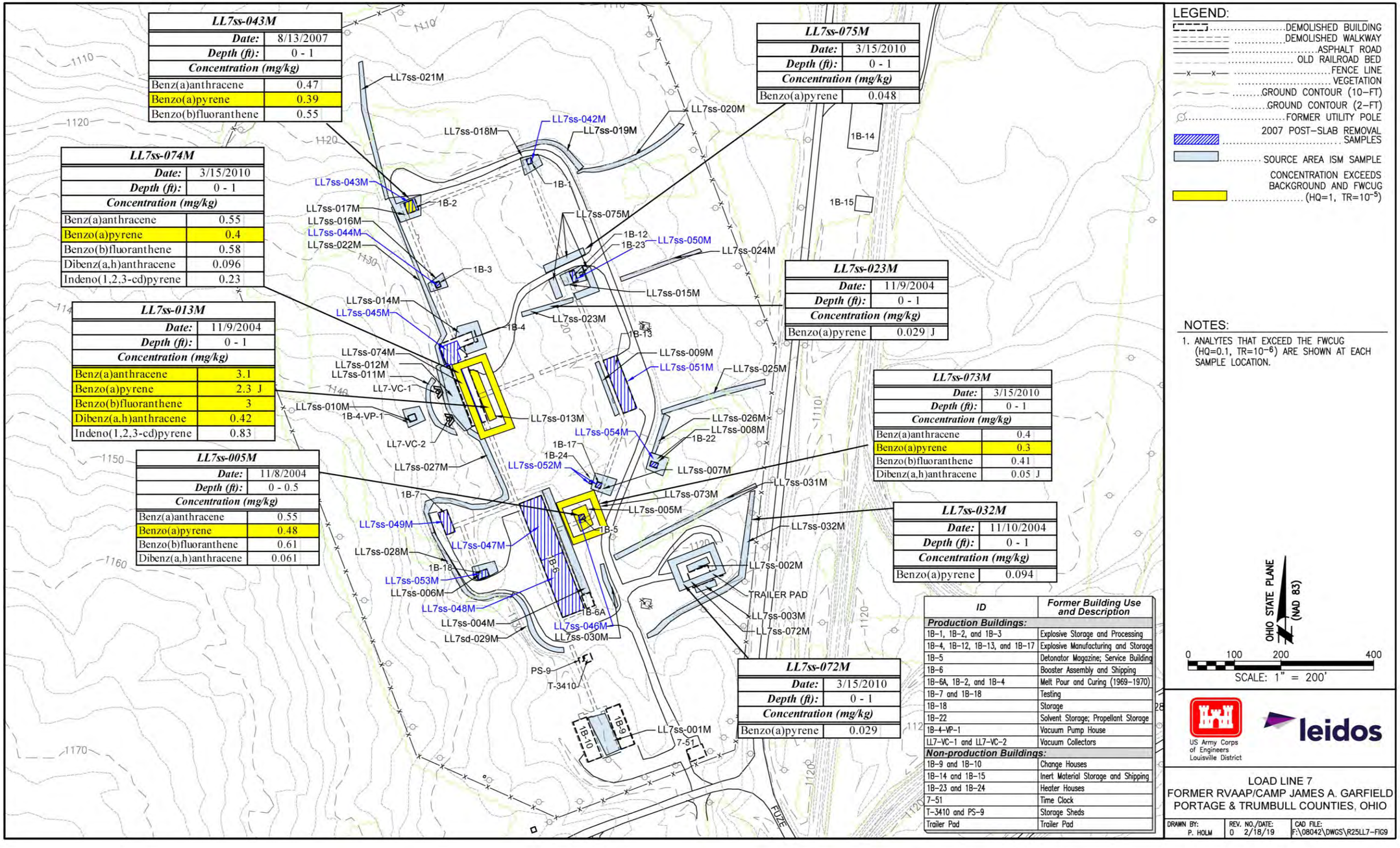

Figure 9. PAH Exceedances of FWCUG in Surface Soil (Source Area ISM Samples)

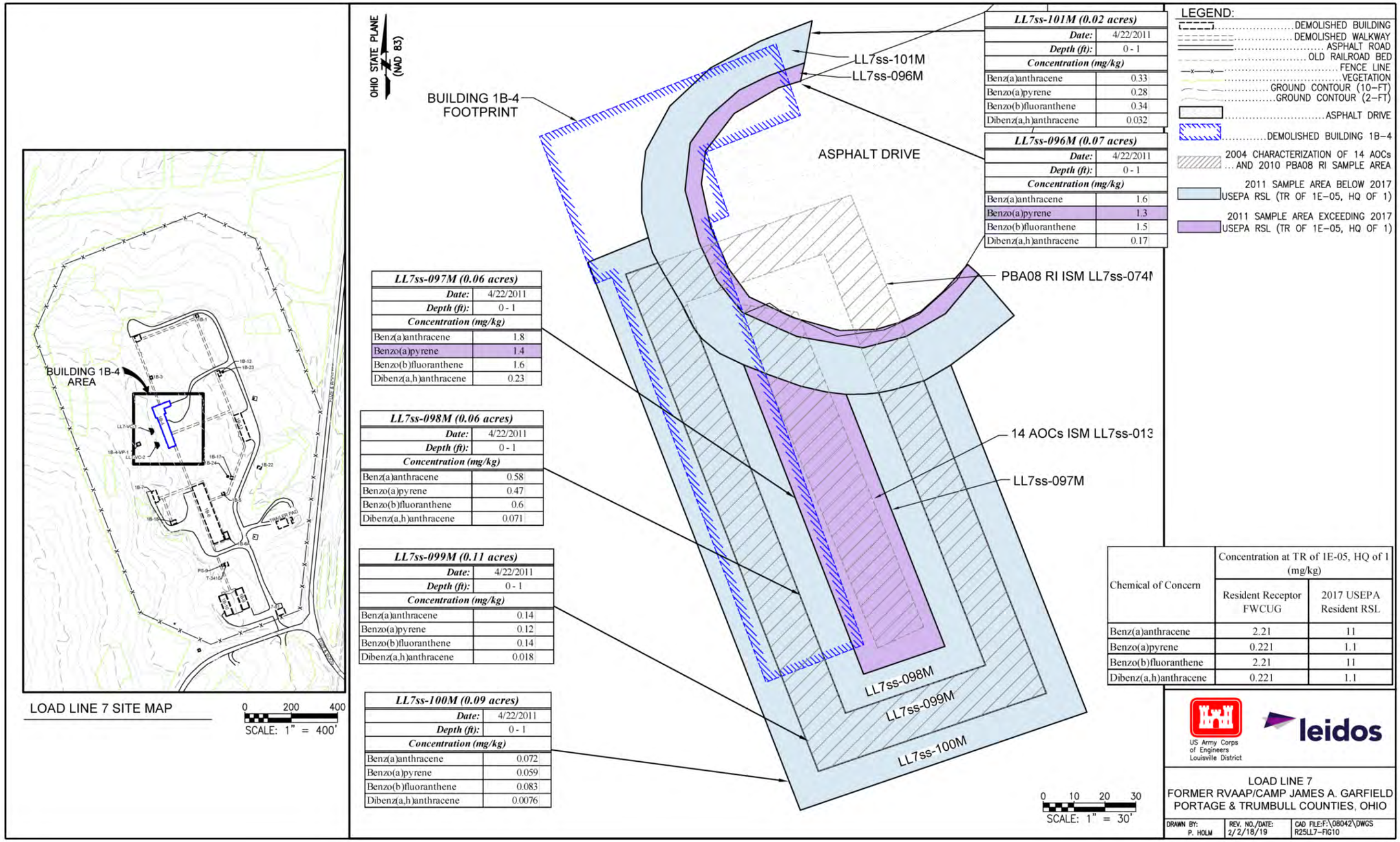

Figure 10. Concentrations of PAHs Near LL7ss-013M and LL7ss-074M from April 2011 Sampling Event

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APPENDIX A

Affidavits

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Affidavit of Publication, Tribune Chronicle, June 6, 2018

NOTICE OF DOCUMENT AVAILABILITY
Proposed Plans for Load Line 7, Load Line 9, Load Line 12, Wet Storage Area and Upper and Lower Cobbs Ponds at the Former Ravenna Army Ammunition Plant (RVAAP)

The Proposed Plans for Load Line 7, Load Line 12, and Upper and Lower Cobbs Ponds each present a recommendation of No Further Action and provide the rationale for this recommendation. The Proposed Plans for Load Line 9 and Wet Storage Area present the preferred alternative, Ex-situ Thermal Treatment. These Proposed Plans are now available for public review for 30 days from June 6, 2018 to July 6, 2018.

The Proposed Plans are available at:

Newton Falls Public Library	Reed Memorial Library
204 South Canal Street	167 East Main Street
Newton Falls, Ohio 44444	Ravenna, Ohio 44266

The Proposed Plans are also available at www.rvaap.org

Please join us for an OPEN HOUSE and PUBLIC MEETING.

The Army will host an informational open house and a public meeting to explain the recommendations in the Proposed Plans. Oral and written comments will be accepted at the meeting. Written comments may be mailed to the Camp Ravenna Environmental Office, 1438 State Route 534 SW, Newton Falls, OH 44444. Comments will be accepted during the public comment period from June 6, 2018 to July 6, 2018.

The public meeting is scheduled for:	at:
Thursday, June 21, 2018	Shearer Community Center
6:00 pm Open House	(Paris Township Hall)
6:30 pm Public Meeting	9355 Newton Falls Road
	Ravenna, OH 44266

For more information or if you need special accommodations to attend, please contact Katie Tait at 614-336-6136.
#157-1T-June 6, 2018 #3674

PROOF OF PUBLICATION

STATE OF OHIO
TRUMBULL COUNTY SS. PAMELA EAZOR

BEING DULY SWORN, UPON OATH STATES THAT SHE IS AN AUTHORIZED REPRESENTATIVE OF THE TRIBUNE CHRONICLE, (A DIVISION OF EASTERN OHIO NEWSPAPERS INC) A DAILY NEWSPAPER PRINTED IN THE CITY OF WARREN, COUNTY OF TRUMBULL, STATE OF OHIO AND OF GENERAL CIRCULATION IN THE CITY OF WARREN, TRUMBULL COUNTY, OHIO AND IS INDEPENDENT IN POLITICS.

THAT THE ATTACHED ADVERTISEMENT WAS PUBLISHED IN THE TRIBUNE CHRONICLE EVERY WEDNESDAY FOR (1) ONE CONSECUTIVE WEEKS AND THAT THE FIRST INSERTION WAS ON WEDNESDAY THE 6th DAY OF JUNE 2018.

Pamela Eazor

SWORN TO BEFORE ME AND SUBSCRIBED IN MY PRESENCE ON THIS 6th DAY OF JUNE 2018

Constance A. Pacek
NOTARY PUBLIC

NOTARY PUBLIC STATE OF OHIO

CONSTANCE A. PACEK
Notary Public, State of Ohio
My Commission Expires
March 7, 2021

ADVERTISING COST $ 283.32

Affidavit of Publication, Record Courier, June 6, 2018

~~3119393~~
3119393

Proof of Publication
Record Publishing Company
1050 W. Main Street,
Kent, OH 44240
Phone (330) 541-9400
Fax (330) 673-6363

I, [illegible] being first duly sworn depose and say that I am Advertising Clerk of
Record Publishing Company

30 Record-Courier a newspaper printed and published in the city of Kent, and of General circulation in the County of Portage, State of Ohio, and personal knowledge of the facts herein stated and that the notice hereto annexed was Published in said newspapers for 1 insertions on the same day of the week from and after the 6th day of June, 2018 and that the fees charged are legal.

Name of Account: Leidos
Ad Number: 12454540
No. of Lines: 28

Day(s) Published: 06/06.
Printers Fee: $115.20

Sworn to and subscribed before this 6th day of June, 2018.

Elizabeth McDaniel
Notary Public
Commission Expires June 19, 2021

Notice of Document Availability

Proposed Plans for Load Line 7, Load Line 9, Load Line 12, Wet Storage Area and Upper and Lower Cobbs Ponds at the Former Ravenna Army Ammunition Plant (RVAAP)

The Proposed Plans for Load Line 7, Load Line 12, and Upper and Lower Cobbs Ponds each present a recommendation of No Further Action and provide the rationale for this recommendation. The Proposed Plans for Load Line 9 and Wet Storage Area present the preferred alternative, Ex-situ Thermal Treatment. These Proposed Plans are now available for public review for 30 days from June 6, 2018 to July 6, 2018.

The Proposed Plans are available at:

Newton Falls Public Library
204 South Canal Street
Newton Falls, Ohio 44444

Reed Memorial Library
167 East Main Street
Ravenna, Ohio 44266

The Proposed Plans are also available at: www.rvaap.org

Please join us for an OPEN HOUSE and PUBLIC MEETING.

The Army will host an informational open house and a public meeting to explain the recommendations in the Proposed Plans. Oral and written comments will be accepted at the meeting. Written comments may be mailed to the Camp Ravenna Environmental Office; 1438 State Route 534 SW, Newton Falls, OH 44444. Comments will be accepted during the public comment period from June 6, 2018 to July 6, 2018.

The public meeting is scheduled for:	at:
Thursday June 21, 2018	**Shearer Community Center (Paris Township Hall)**
6:00 pm Open House	9355 Newton Falls Road
6:30 pm Public Meeting	Ravenna, OH 44266

For more information or if you need special accommodations to attend, please contact Katie Tait at 614-336-6136.

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APPENDIX B

Ohio EPA Correspondence

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Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

January 11, 2019

Mr. David Connolly
Army National Guard Directorate
Environmental Programs Division
ARNGD-ILE -CR
111 South George Mason Drive
Arlington, VA 22204

Re: US Army Ammunition PLT RVAAP
Remediation Response
Project Records
Remedial Response
Portage County
267000859118

Subject: Ravenna Army Ammunition Plant, Portage/Trumbull Counties. "Draft Record of Decision for Soil, Sediment, and Surface Water at RVAAP-40, Load Line 7," Dated November 29, 2018.

Dear Mr. Connolly:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the Draft Record of Decision for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7 for the Ravenna Army Ammunition Plant (RVAAP), Portage/Trumbull Counties. This document is dated and was received at Ohio EPA, Northeast District Office (NEDO) on November 29, 2018.

Ohio EPA has no comments on the Draft Record of Decision for Soil, Sediment, and Surface Water at RVAAP-40 Load Line 7. Please forward the final version of the ROD to Ohio EPA for review.

If you have any questions, please contact me at megan.oravec@epa.ohio.gov or at (330) 963-1168.

Sincerely,

Megan Oravec

Megan Oravec, Site Coordinator
Division of Environmental Response and Revitalization

RECEIVED
JAN 11 2019

MO/nvp

ec: Bob Princic, Ohio EPA, NEDO DERR
Mark Johnson, Ohio EPA, NEDO DERR
Tom Schneider, Ohio EPA, SWDO DERR
Vanessa Steigerwald-Dick, Ohio EPA, NEDO DERR
Bill Damschroder, Ohio EPA, Legal
Nat Peters, USACE
Katie Tait/Kevin Sedlak, OHARNG RTLS
Craig Coombs, USACE
Rebecca Shreffler, Chenega
David Connolly, ARNG
Jed Thomas, Leidos

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