

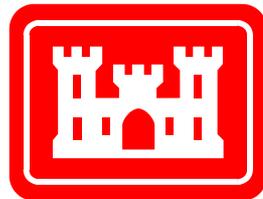


Fort George G. Meade



Restoration Advisory Board Meeting November 19, 2015

Multiple Award Environmental Services (MAES)
Contract No. W912DR-12-D-0014
Delivery Order 0003



ARMY STRONG.



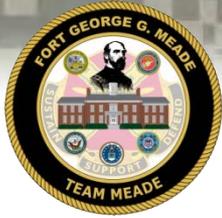
Contract No. W912DR-12-D-0014, Delivery Order 0003



Multi-Site Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Phases Supplemental Site Investigation (SSI), Remedial Investigation/Feasibility Study (RI/FS), Remedy in Place/Response Complete (RIP/RC), Remedial Action Operation (RAO) and Long Term Monitoring (LTM) for multiple sites at Fort George G. Meade

Fort Meade CERCLA





Team Members and Subcontractors



- USACE
- PIKA/ARCADIS
- Drillers
- Laboratories
- Surveyors
- Investigation Derived Waste Handlers
- Utility Locator



Tasks

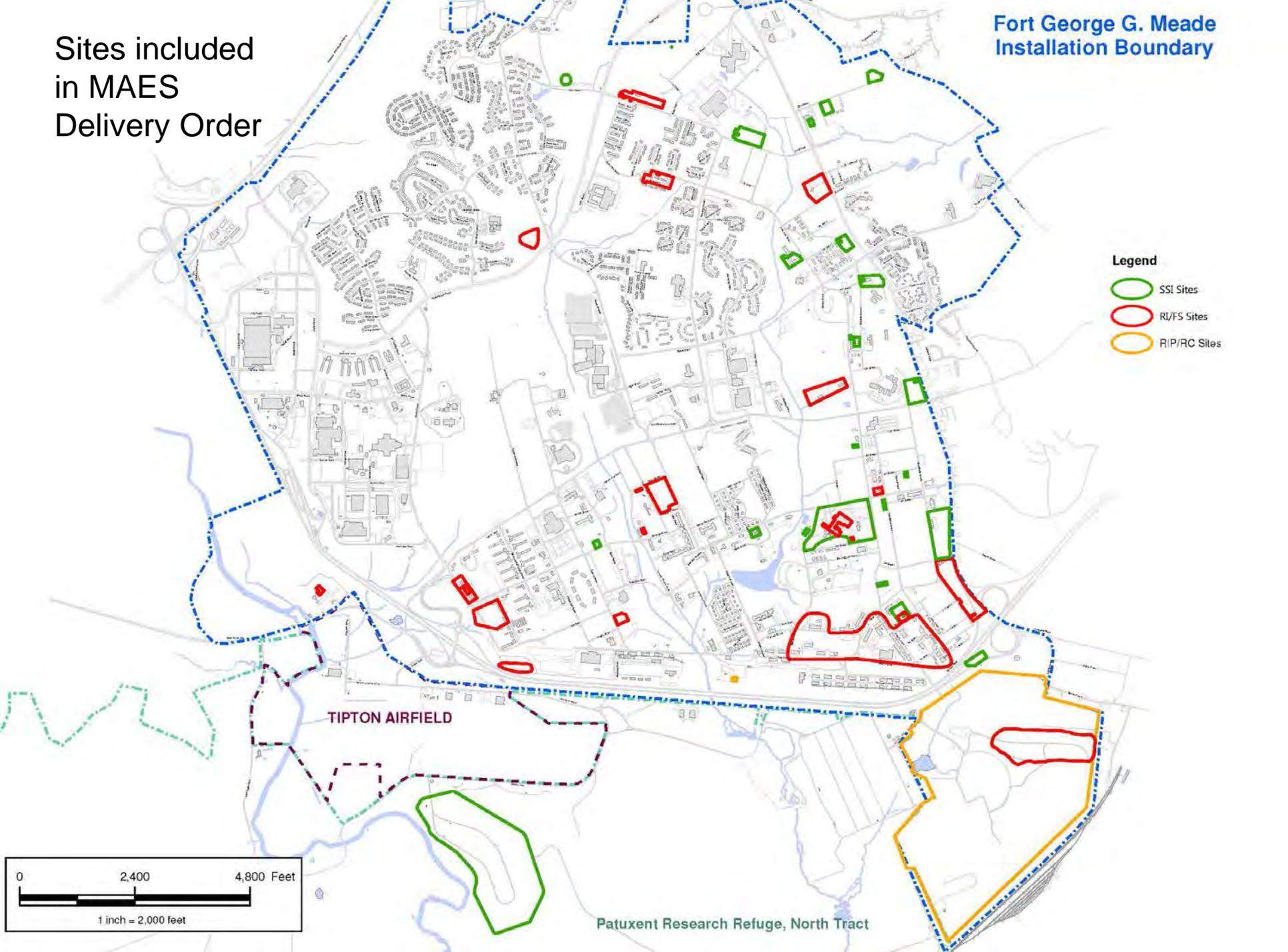


- Achieve RIP/RC of the Closed Sanitary Landfill (CSL) including semi-annual groundwater monitoring and reporting.
- Cover Cell 3 of the CSL with 2-feet of soil.
- Achieve RIP/RC for soil at Architect of the Capitol (AOC).
- Achieve Final SSI at 23 sites
- Achieve Final RI/FS at 20 sites

Sites included in MAES Delivery Order

Fort George G. Meade
Installation Boundary

- Legend**
- SSJ Sites
 - R/FS Sites
 - R/P/RC Sites

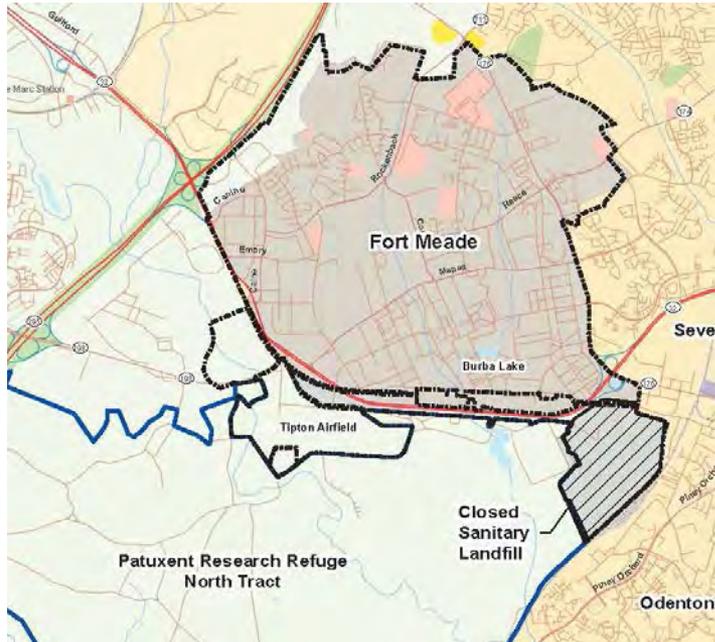


TIPTON AIRFIELD

Patuxent Research Refuge, North Tract



Closed Sanitary Landfill





Closed Sanitary Landfill



IMCOM
SOLDIERS • FAMILIES • CIVILIANS

History

- 1958 to 1976 trench fill method of waste disposal
- January 1996 officially closed
- Cells 1 and 2 capped and landfill-gas collection system installed
- Cell 3 lacks topographic expression
- Post-closure semi-annual groundwater monitoring is ongoing
- RI/FS completed
- Draft PP submitted





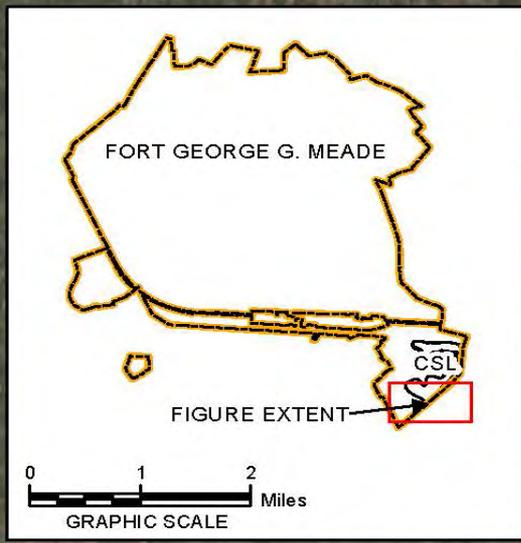
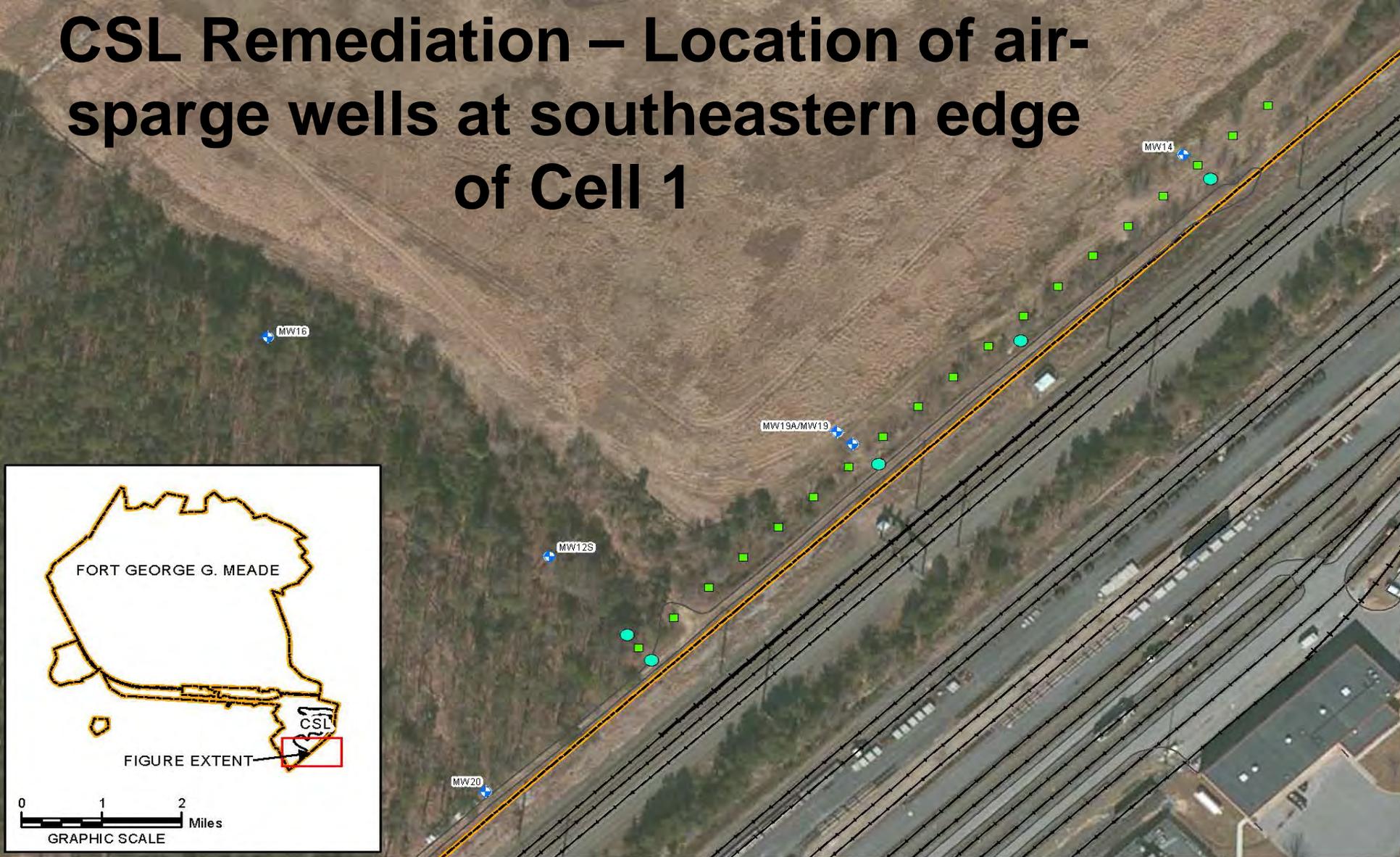
Closed Sanitary Landfill



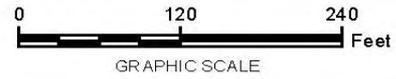
Planned Work

- Semi-Annual Groundwater Monitoring and Report
- Ecological Risk Assessment for entire CSL
- Finalize Proposed Plan
- Prepare Record of Decision
- Pilot Test for Air Sparge system
- Remedial Design and Air Sparge System Installation
- Remedial Action Completion Report

CSL Remediation – Location of air-spurge wells at southeastern edge of Cell 1



- LEGEND:**
- PROPOSED AIR SPURGE WELL
 - PROPOSED PERFORMANCE MONITORING WELL
 - ◆ MONITORING WELL
 - ROAD
 - +— RAILROAD
 - ▭ INSTALLATION BOUNDARY



NOTES:
 SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

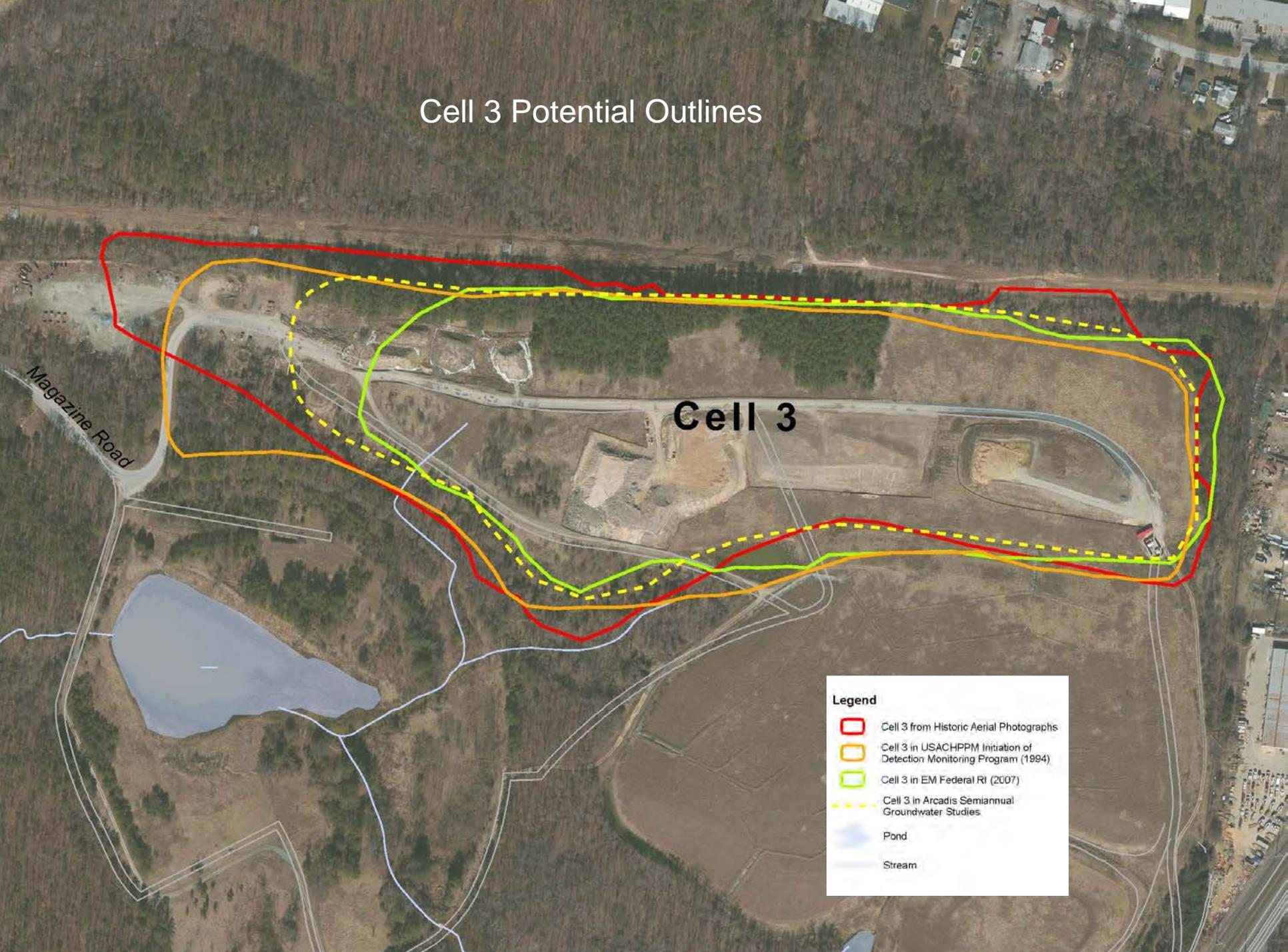


Cell 3 History



- Six trenches excavated in Cell 3 as part of 2007 RI of CSL. Waste uncovered in 5 of the trenches.
- 2008 Methane study of CSL that included Cell 3.
- 2013 domestic and medical wastes (circa 1960s) uncovered while re-grading a 2-acre parcel located west of the supposed western boundary of Cell 3.
- Soil from construction activity on base are stockpiled on Cell 3.

Cell 3 Potential Outlines



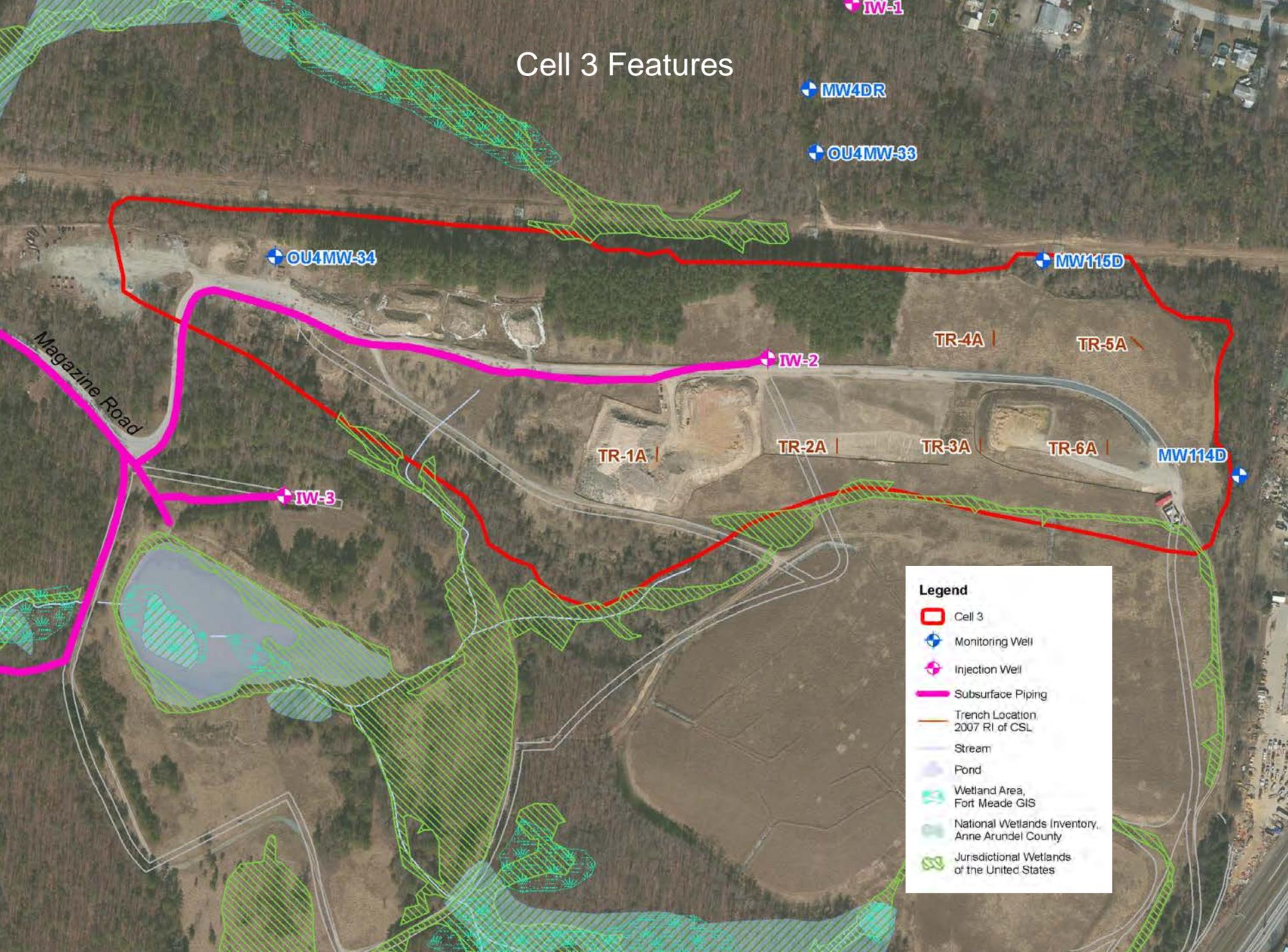
Cell 3

Magazine Road

Legend

-  Cell 3 from Historic Aerial Photographs
-  Cell 3 in USACHPPM Initiation of Detection Monitoring Program (1994)
-  Cell 3 in EM Federal RI (2007)
-  Cell 3 in Arcadis Semiannual Groundwater Studies
-  Pond
-  Stream

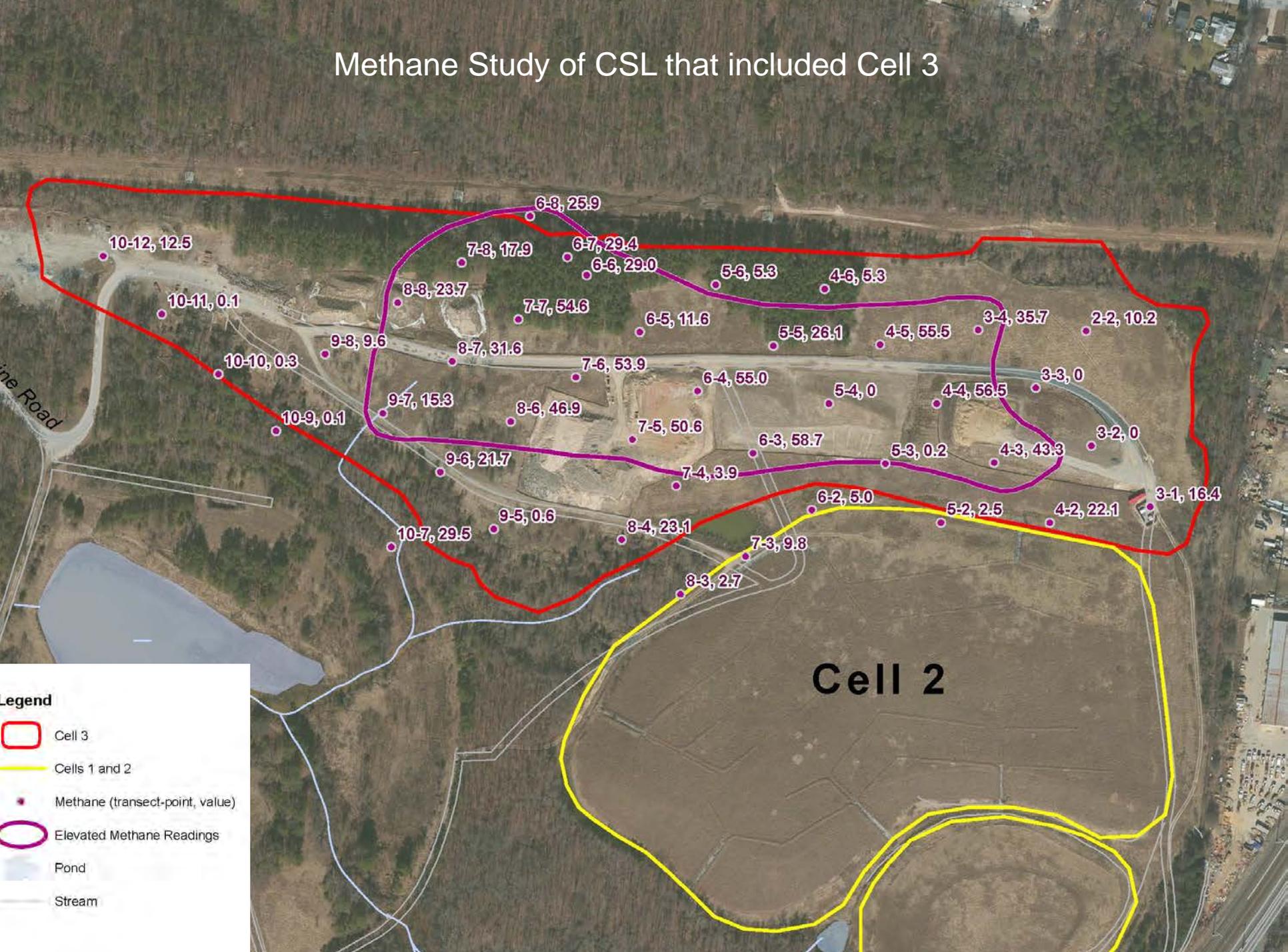
Cell 3 Features

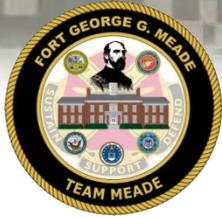


Legend

- Cell 3
- Monitoring Well
- Injection Well
- Subsurface Piping
- Trench Location, 2007 RI of CSL
- Stream
- Pond
- Wetland Area, Fort Meade GIS
- National Wetlands Inventory, Anne Arundel County
- Jurisdictional Wetlands of the United States

Methane Study of CSL that included Cell 3





Cell 3 Planned Activities



IMCOM
SOLDIERS • FAMILIES • CIVILIANS

- Two-Foot Soil Cover
 - Geophysical survey and test pits to confirm boundary
 - Design cover and apply for permits
 - Utilize stockpiled soil as much as possible
 - Maintain existing roadway through center of Cell 3
- Remedial Investigation/Feasibility Study
 - Test pits and soil borings for soil samples
 - Well installation for groundwater samples



ARMY STRONG.™



AOC History



IMCOM
SOLDIERS • FAMILIES • CIVILIANS

- RI/FS/PP/ROD of AOC completed.
- A 60 by 68 foot lead study area identified.
- PP and ROD recommended excavation and removal of soil with elevated lead concentrations.
- Elevated lead concentrations located at 14 foot depth.





AOC Remediation



IMCOM
SOLDIERS • FAMILIES • CIVILIANS

- Remediate high concentrations of lead at 14 feet depth.
- Lead concentrations up to 6,800 mg/kg.

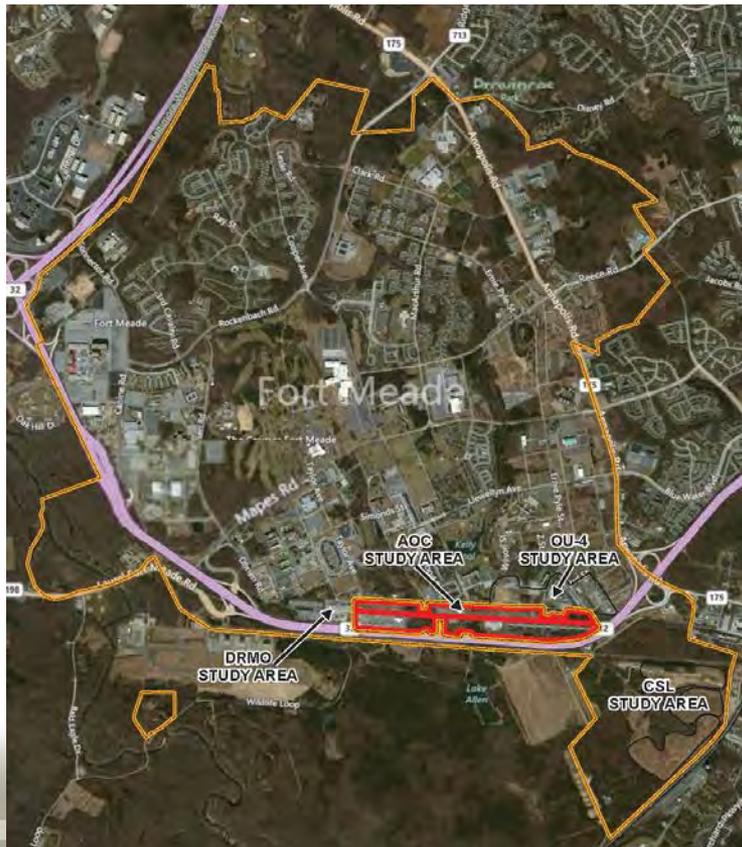


Figure 1: AOC Lead Hot Spots



SSI and RI/FS Sites



History

- PA/SI of entire Base
- Final PA/SI Reports submitted July through October 2015.
- SSI recommended for sites that require minimal information to determine resolution.
- RI/FS recommended for sites that require further delineation and assessment.



Sites Requiring an SSI

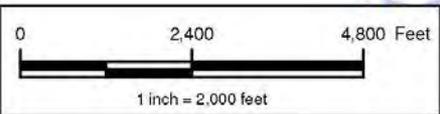
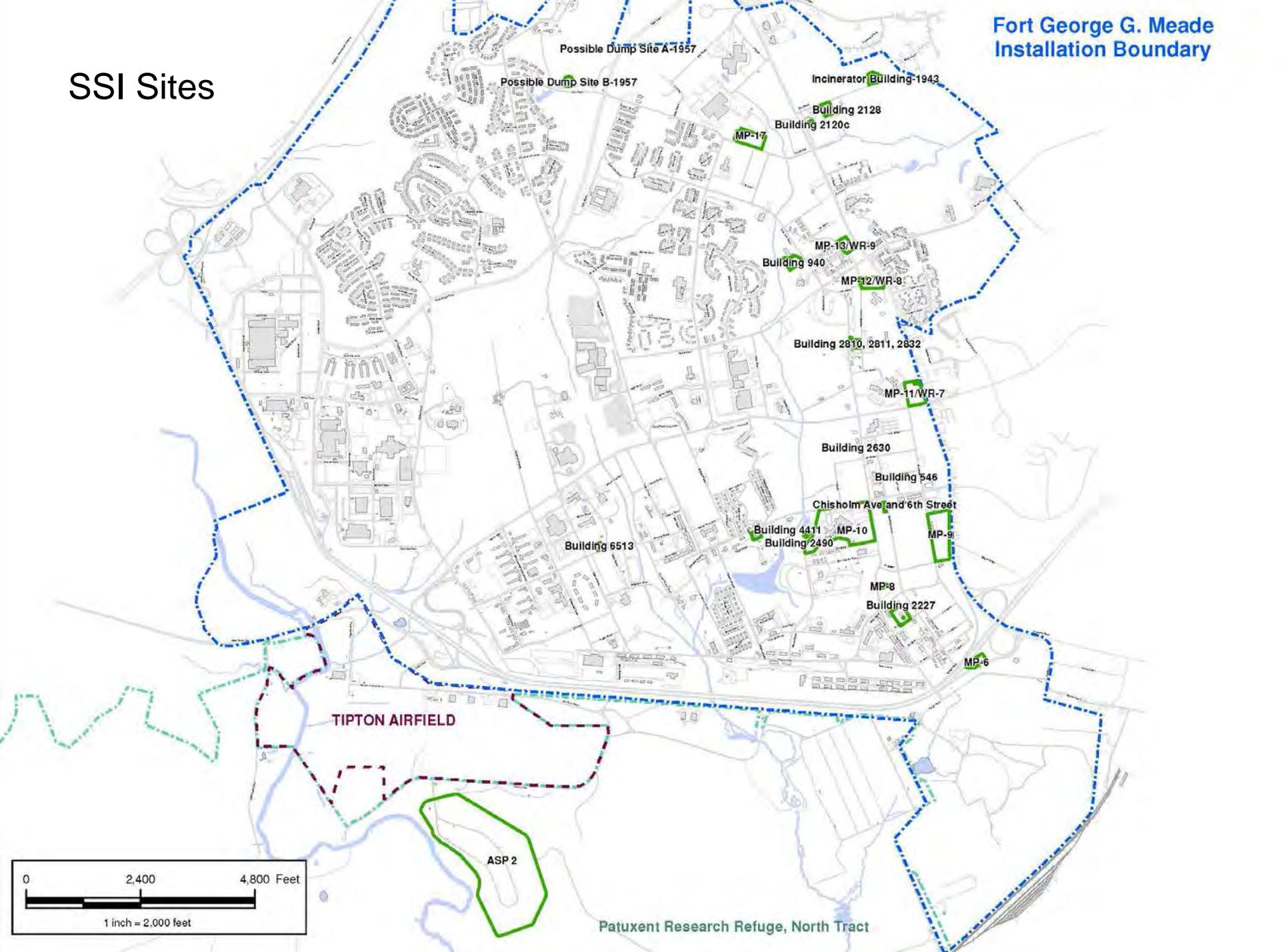


IMCOM
SOLDIERS • FAMILIES • CIVILIANS

- Ammunition Supply Point (ASP) 2
FGGM 18 (Operable Unit [OU]-13)
- Building 546 (Solid Waste
Management Unit [SWMU] 11)
- Building 940 (SWMUs 12, 13,
&146)
- Building 2120c (SWMUs 25-28)
- Building 2128 (SWMU 35,36)
- Building 2227 (SWMU 43, 44, 147
& Building 2224
- Building 2490 (SWMU 74)
- Building 2630 (SWMUs 77, 78, &
79)
- Building 2810, 2811, 2832 (non-
SWMUs 6, 7, 8)
- Building 4411 (SWMU 99)
- Building 6513 (SWMU 150)
- Chisholm Ave and 6th Street
- Incinerator Building-1943
- Motor Pool (MP)-6
- MP-8
- MP-9
- MP-10
- MP-11/Wash Rack (WR)-7
- MP-12/WR-8
- MP-13/WR-9
- MP-17
- Possible Dump Site A-1957
(FGGM-95)
- Possible Dump Site B-1957
(FGGM-95)



SSI Sites





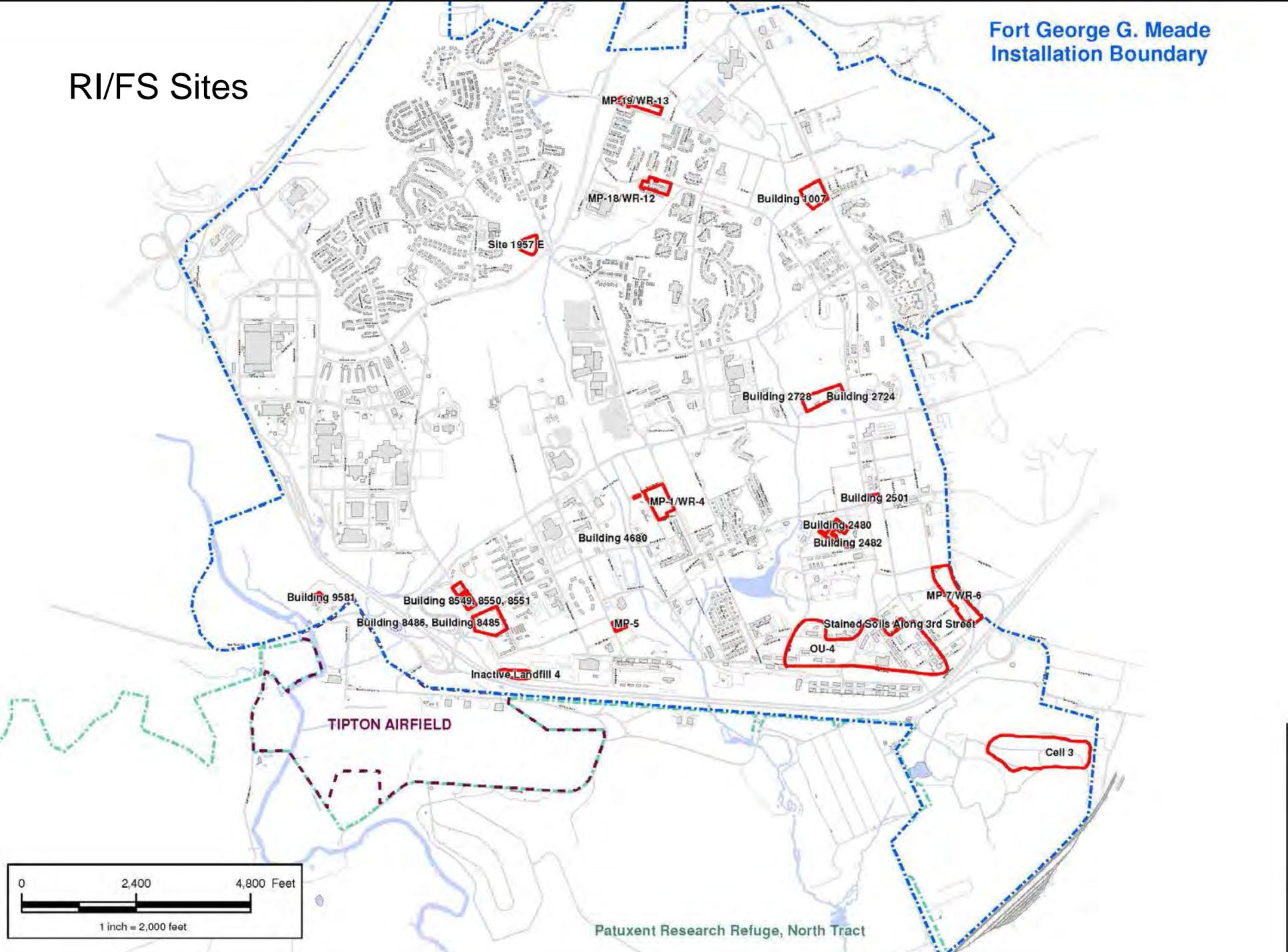
Sites Requiring an RI/FS



- Building 1007 (SWMU 14-18) MP-15/WR10
- Building 2480 (FGGM-37 (OU-21))
- Building 2482 (SWMU 72)
- Building 2501 (SWMUs 75, 76)
- Building 2724 (SWMUs 80, 86)
- Building 2728 (SWMU 87-92, 148)
- Building 4680 (SWMU 103)
- Building 8485 (SWMUs 115, 116, 116A)
- Building 8486 (SWMUs 117, 118)
- Building 8549, 8550, 8551, WR & Oil Water Separator (OWS) (SWMUs 121-128 & 149)
- Building 9581 (SWMU 138) Waste Water Treatment Facility (WWTF)
- Inactive Landfill 4 (FGGM-95)
- MP-1/WR-4
- MP-5
- MP-7,WR-6
- MP-18/WR-12
- Site 1957 E (Burning Waste Site) (FGGM-95)
- Stained Soils Along 3rd Street
- OU-4 (FGGM-33, -45, -47, -49, -51, -86, -88, -89, -90, -91, -92)
- CSL Cell 3 (FGGM-97)

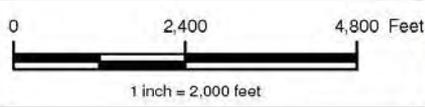


RI/FS Sites



TIPTON AIRFIELD

Patuxent Research Refuge, North Tract





SSI and PA/SI Sites



IMCOM
SOLDIERS • FAMILIES • CIVILIANS

Planned Activities

- Collect additional soil, groundwater, surface water, and/or sediment samples.
- Install and sample additional monitoring wells.
- Prepare human health and ecological risk assessments, as appropriate for RI sites.
- Prepare reports.





Near Term Schedule



- **First Quarter Fiscal Year 2016**
 - Project Management Plan
 - Unified Federal Policy Quality Assurance Project Plan (UFP-QAPP) - includes AOC, SSI, RI/FS, and CSL semi-annual sampling
 - Project APP
 - Cell 3 Preliminary Field Activities Memorandum
 - CSL PP
- **Second Quarter Fiscal Year 2016**
 - Cell 3 geophysical survey, exploratory trenches, and stockpile and surface surveys field work begins
 - CSL Semi-Annual sampling field work
- **Third Quarter Fiscal Year 2016**
 - SSI field work
 - RI/FS field work
 - AOC soil removal field work
 - Cell 3 cover field work begins





Questions?





Acronyms and Abbreviations



- AECOM – AECOM Technical Services, Inc.
- AOC – Architect of the Capitol
- ASP – Ammunition Supply Point
- CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
- CSL – Closed Sanitary Landfill
- FGGM – Fort George G. Meade
- FS – Feasibility Study
- LTM – Long Term Monitoring
- MAES – Multiple Award Environmental Services
- MP – Motor Pool
- OU – Operable Unit



Acronyms and Abbreviations



- OWS – Oil Water Separator
- RAB – Restoration Advisory Board
- RAO – Remedial Action Operation
- RC – Response Complete
- RI – Remedial Investigation
- RIP – Remedy in Place
- ROD – Record of Decision
- SSI – Supplemental Site Investigation
- SWMU – Solid Waste Management Unit
- UFP-QAPP – Unified Federal Policy - Quality Assurance Project Plan
- WR – Wash Rack
- WWTF – Waste Water Treatment Facility



Points of Contact



**U.S. Army Garrison Fort George G. Meade
Directorate of Public Works-Environmental Division**

Mailing address:

4216 Roberts Ave, Suite 5115, Fort Meade, Maryland 20755-7068

Physical Address (FedEx):

Building 2460, 85th Medical Battalion Avenue, Fort Meade MD 20755

Points of Contact:

Mr. Michael “Mick” Butler, Environmental Div. Chief

301.677.9188

michael.p.butler50.civ@mail.mil

Mr. George Knight, Installation Restoration Program, Manager

301.677.7999

george.b.knight7.civ@mail.mil

