

SPRING VALLEY FORMERLY USED DEFENSE SITE

Partners Meeting Presentation
April 2021



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AGENDA REVIEW



Parsons Update

- 4825 Glenbrook Road

Weston Updates

- Site-Wide Remedial Action
- Public Safety Building

USACE Updates

- Groundwater Study
- 4835 Glenbrook Road

Future Partners Agenda Development

SPRING VALLEY GLENBROOK ROAD SITES

PARTNER'S UPDATE
April 2021



"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."



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4825 Glenbrook Road - Recent Activities

- Continued to perform compaction and E&S control maintenance activities in March, April, and May
- Also continued with waste shipments
- As of April 21st all removal action derived waste from 4825 Glenbrook Rd has been shipped off for disposal



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4825 Glenbrook Road - Recent Activities (Cont.)

- On April 7th began sewer line restoration work
- Permanent sewer line tied in and completed on April 21st



4825 Glenbrook Road - Summary of Clean Backfill for Restoration

Restoration				
	Expected Volume Needed (bcy*)	Approx. Volume Delivered to Site (bcy)	Approx. Volume on Hand at Federal Prop. (bcy)	Total # of Truck Loads to Date
	3,264	2,112	1,152	465
% Complete:	--	64.7%	--	--

*bcy – bulk cubic yards



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Near -Term Schedule

- Install permanent water lateral servicing American University onto 4825 Glenbrook
- Remove temporary utilities from 4801 Glenbrook Right-Of-Way
- Restore fence along 4801 Glenbrook Road properties
- Restore site to final grade in 6-inch lifts with compaction in accordance with the Work Plan
- The above is expected to be completed in June
- Submittal of Draft Final Site-Specific Final Report to regulators and other outside stakeholders is expected in mid May pending final waste manifest.
 - Delays in shipping the final waste shipments has pushed the Draft-Final publishing date as USACE wants all waste manifests included in the Draft-Final report.

Tentative Long-Term Schedule

Spring/Summer 2021	Final restoration of 4801 and 4825 Glenbrook
Summer 2021	Submit Final Site-Specific Removal Report
Summer 2021	Closeout Project



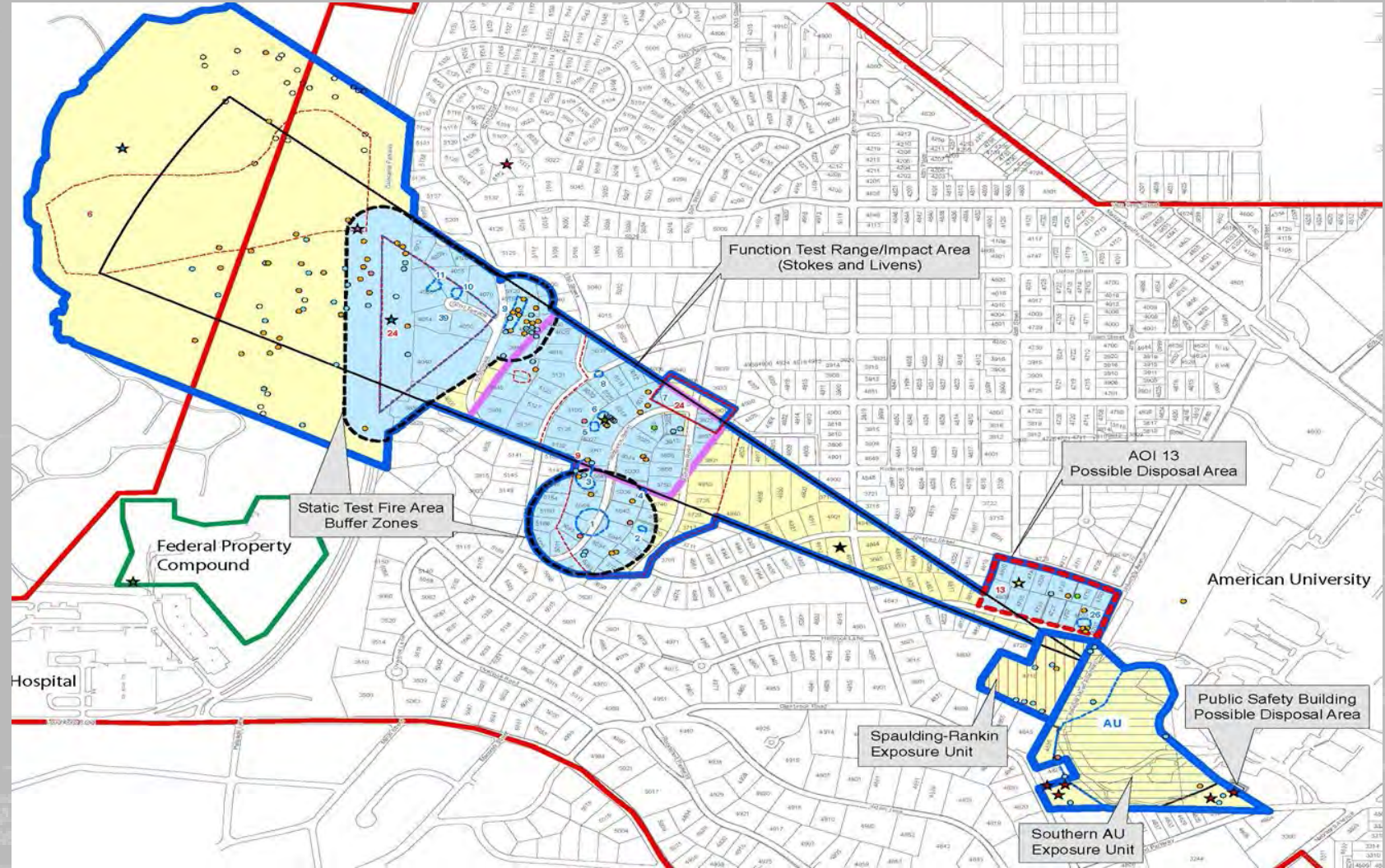
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SVFUDS SITE-WIDE REMEDIATION STATUS APRIL 2021

Weston Solutions, Inc.

April 28, 2021



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RESIDENTIAL PROPERTIES*



- **Property Availability** – One new property approved their Landscape Plan and became available for geophysical survey. Six property owners yet to approve Landscape Plans.
- **Site Preparation** – Site preparation activities resumed at the beginning of April. HD videos and Civil Surveys completed at two properties. One property remains to start preparation activities.



*info provided includes progress since last Partners presentation dated February 19, 2021

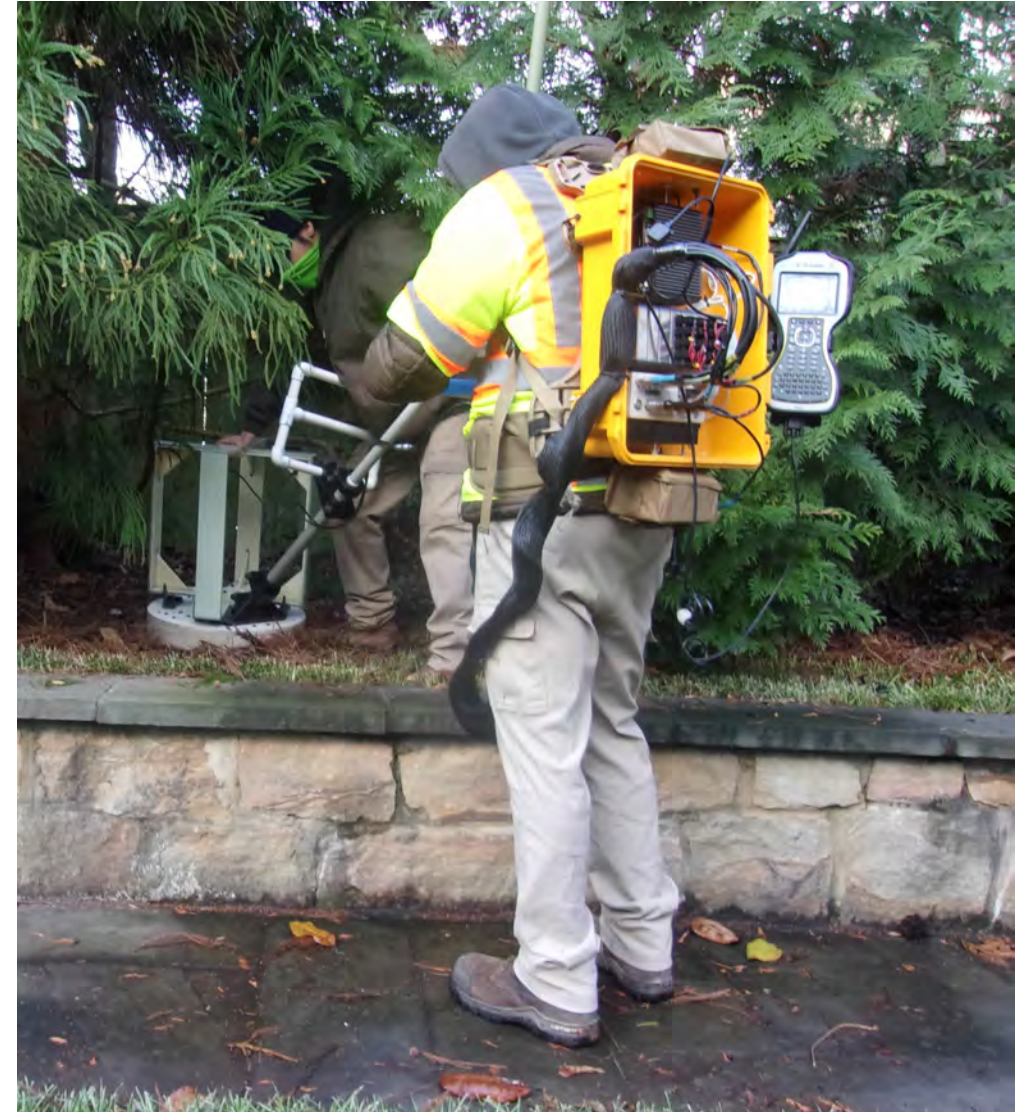


RESIDENTIAL PROPERTIES (CONTINUED)



Geophysical surveys:

- No geophysical surveys have been conducted since the February 19 Partners update. Next round of geophysical surveys pending completion of site preparation activities and/or property owner approvals of Landscape Plans.
- To date, geophysical surveys have been completed at 13 Fed/city lots and 85 residential properties
- Geophysical surveys remaining to be conducted include 7 residential properties





INTRUSIVE INVESTIGATIONS UPDATE



Intrusive Investigations:

- February intrusive phase (began on 2/8/21) was complete on 2/22/21. This group included Grid I6-Extension.
- Hardscape digs are scheduled for 4/28/21 at three properties.





INTRUSIVE INVESTIGATIONS UPDATE



February 2021 Intrusive Investigation Results:

- No MEC/MPPEH items recovered.
- Three MD items recovered.
- Headspace results all non-detect for agent.

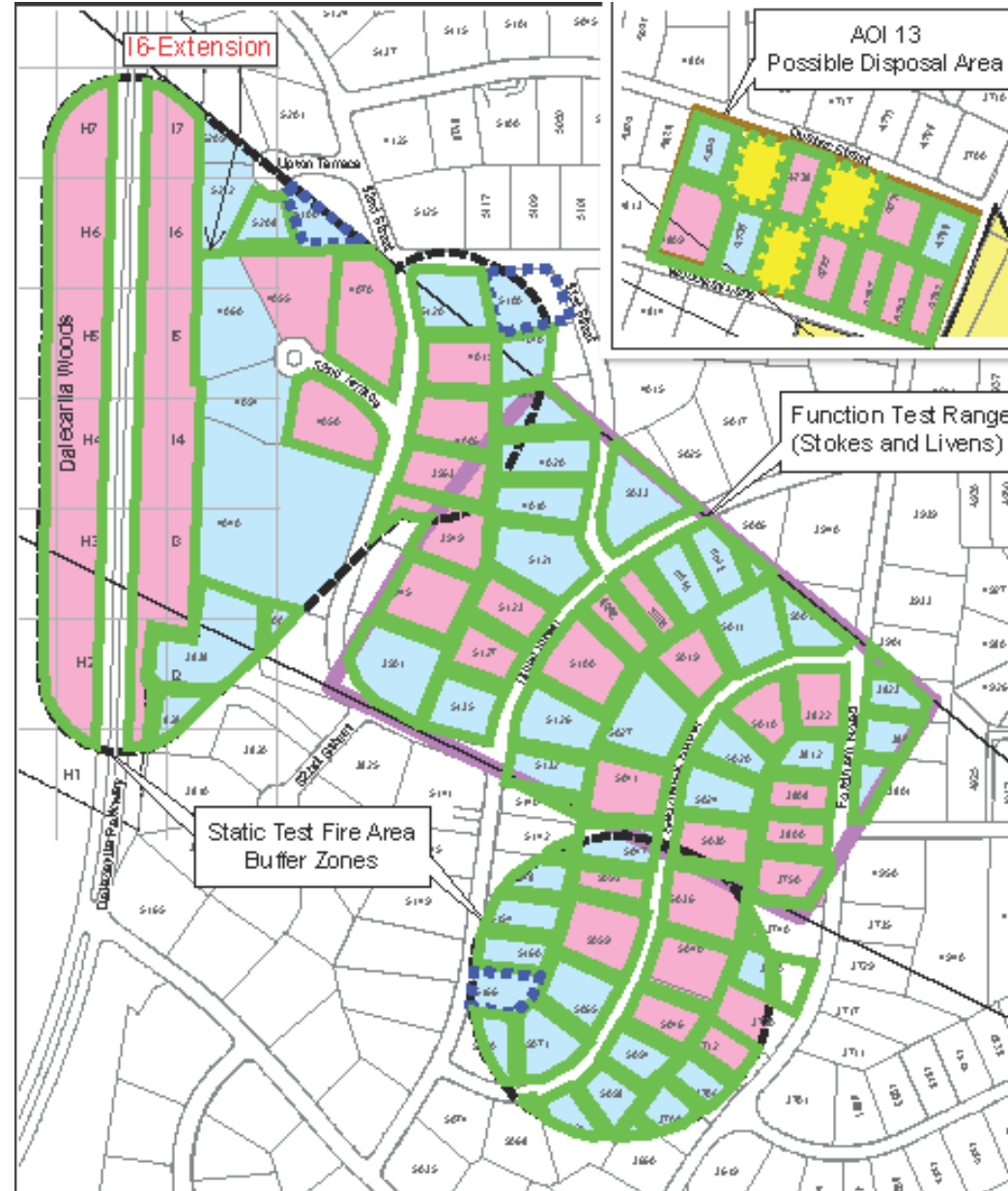




RESIDENTIAL PROPERTIES – INTRUSIVE STATUS



- 82 residential properties and 13 federal/city lots completed to date
- Three properties have a hardscape dig requiring concrete work to complete the intrusive investigations. Necessary permits have been obtained and the work is scheduled to start on 4/28/21.





Intrusive Investigations:

Complete

April Hardscape Dig

Completed during 2016 Pilot Study

 Remediation Planned previous DGM completed
 Remediation Planned as listed in PWS





RESIDENTIAL PROPERTIES – INTRUSIVE DATA



Intrusive Statistics:

- 82 residential properties completed to date (89%)
- 2791 targets investigated
- MD recovered = 133 (4.7% of total digs)
- MEC recovered (including Civil War cannonball) = 3 (0.11% of total digs)
- WW1-era MEC recovered = 2 (0.07% of total digs)



Intrusive Investigations:

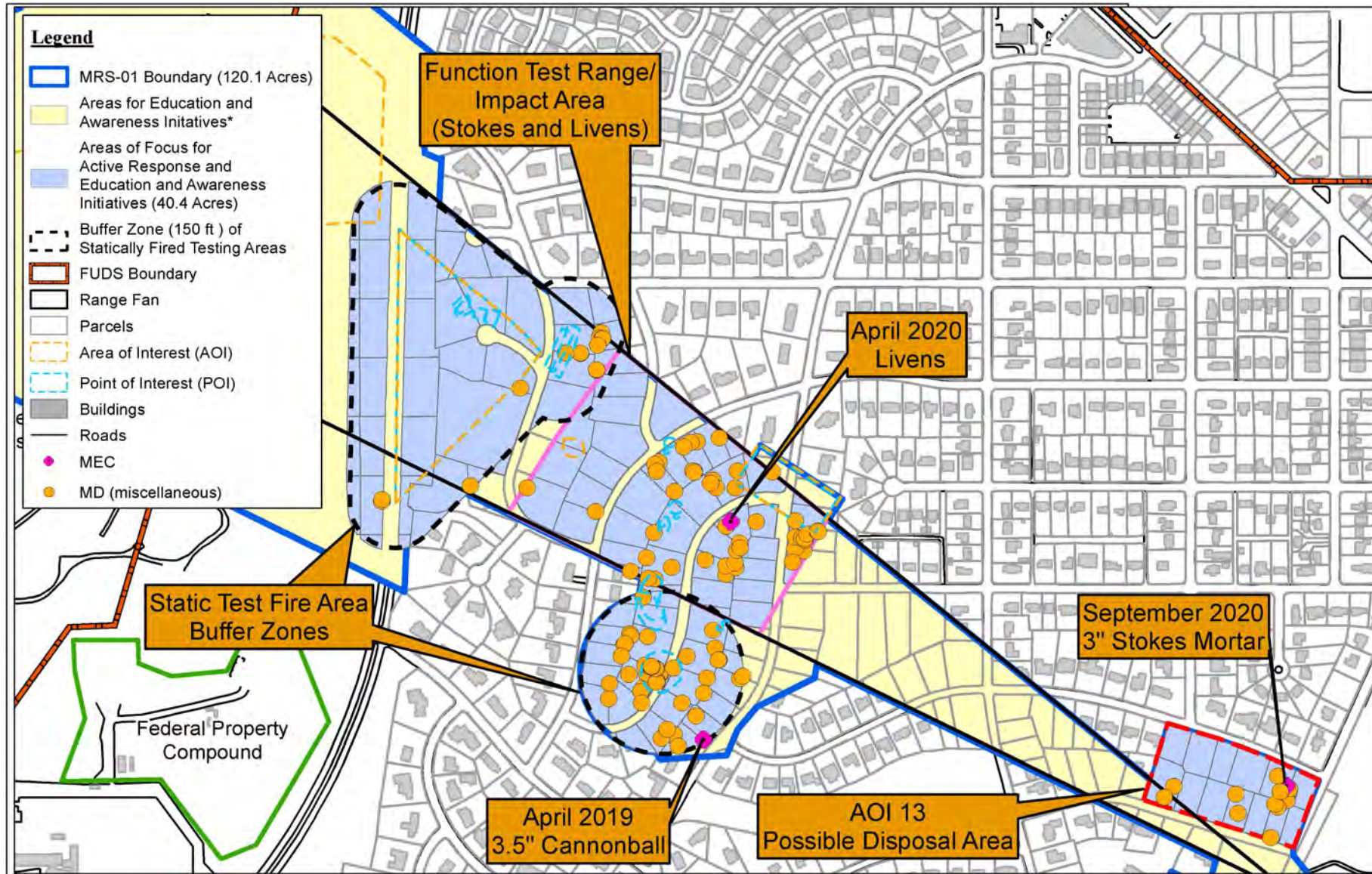
- Property/Lot Completed
- Partially Completed
- Completed during 2016 Pilot Study

- Remediation Planned previous DGM completed
- Remediation Planned as listed in PWS





RESIDENTIAL PROPERTIES – RA MEC/MD FINDS





RESIDENTIAL PROPERTIES – DELIVERABLES*



- **Property Specific Data Summary (PSDS) Reports** – One Draft Final PSDS was delivered to USACE/EPA/DOEE since last Partners presentation (as of 4/23/21).
- **Root Cause Analyses (RCAs)/Field Variance Forms (FVFs)** – No new RCAs or FVFs have been issued since the last Partners presentation.

*info provided includes progress since last Partners presentation on February 19, 2021



RESIDENTIAL PROPERTIES – SCHEDULE



- **Intrusive Investigations** – Hardscape digs at three properties are scheduled for 4/28/21.
- **Site preparation activities** – Arborist appraisals are scheduled at two properties on 5/4 and 5/11. Landscape removal evaluations will be scheduled following the appraisals.
- **Geophysical Surveys** – Schedule for geophysical surveys at 7 remaining properties pending completion of site preparation activities and/or property owner approvals of Landscape Plans.



PUBLIC SAFETY BUILDING UPDATE



- Completed excavation under the former PSB slab on 21 January 2021.
- Completed terracotta pipe replacement.
- Backfill, compaction & testing to ground surface ended on 23 March 2021.
- Completed Rotosonic drilling & test pit AUES debris slope investigation on 12 April 2021.





PUBLIC SAFETY BUILDING UPDATE (PAGE 2)



- Demobilized from the PSB site on April 16th.
- Team left the security fence, truck entrance and work area orange fencing at the site during the shutdown.
- Completed first post shutdown Erosion & Sediment Control inspection on April 23rd.



Backfilled Excavation & Soil Benches - Photo from April 23, 2021



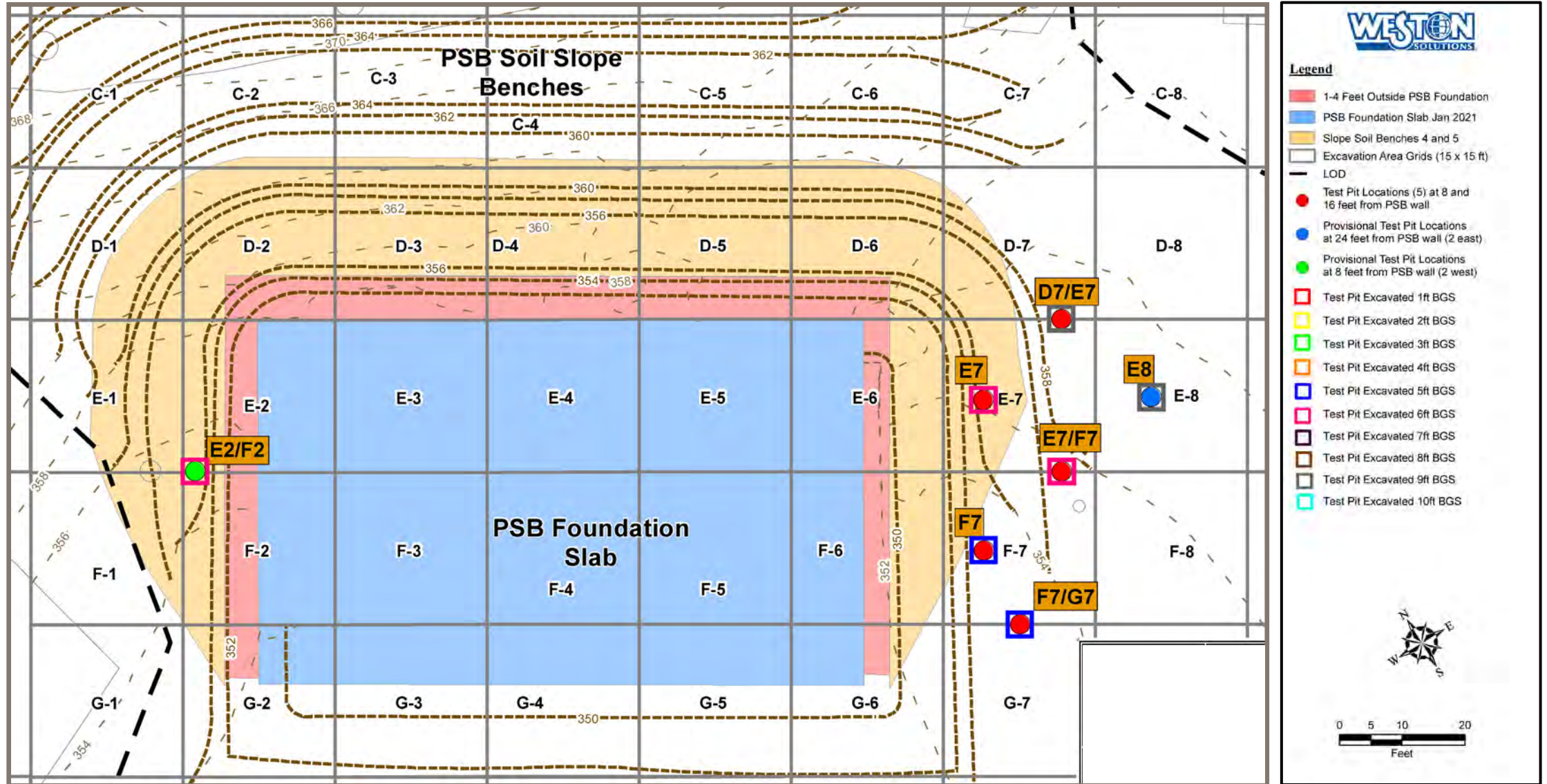
PUBLIC SAFETY BUILDING STATUS



- All Excavation floor Confirmation Soil Sample results for Grids have meet the cleanup criteria for CWA, metals, SVOCs, Cyanide, Explosives (Grid F3 only) and VOCs (none detected).
- Preparing to transport the last four roll-off containers of non-haz remediation derived waste to the King & Queen Landfill in Virginia.
- Conducted Rotosonic drilling and Test Pit investigation to determine extent of AUES debris north, east & west of the PSB foundation slab:
 - Completed seven (7) test pit excavations and soil screening east, west and northeast of the former PSB foundation.
 - Completed six (6) angled Rotosonic borings north of the former PSB foundation and 4-inch diameter soil core screening for AUES debris.



TEST PIT INVESTIGATION MAP





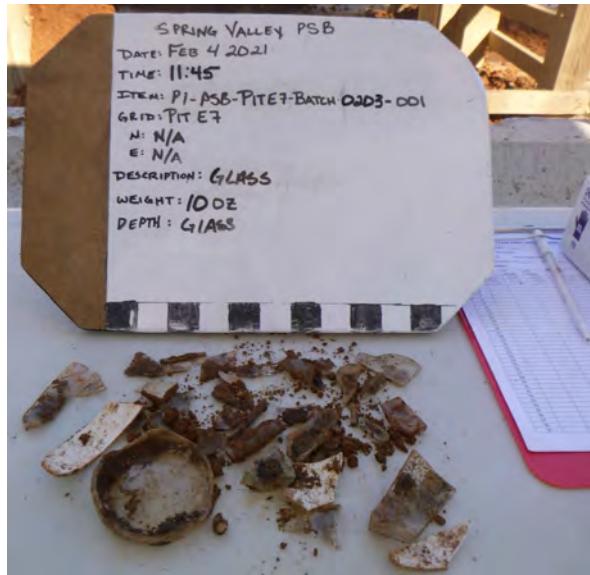
PSB - TEST PIT RESULTS TABLE



Test Pit	Initial Elevation (ft)	Final Depth (ft)	Final Elevation (ft)	Depth/Elev. Last AUES Glass (ft)	Observations
E7	353.0	6 ft	347.0	5 ft/ 348 ft	Lab glass observed from 0-5 ft
F7	352.7	5 ft	347.7	4 ft/ 348.7 ft	Lab glass observed from 0-4 ft
F7/G7	354.0	5 ft	349.0	4 ft/ 350 ft	Small amounts of glass from 0-4 ft
D7/E7	358.1	9 ft	349.1	8 ft/ 350 ft	Lab glass observed from 0-5 & 7-8 ft
E7/F7	354.9	6 ft	348.9	5 ft/ 350 ft	Small amounts of glass from 0-1 & 4-5 ft
E8	357.3	9 ft	348.3	5 ft/ 352 ft	Small amounts of glass from 1-3 & 4-5 ft
E2/F2	355.0	6 ft	349.0	3 ft/ 352 ft	Significant AUES glass from 0-3 ft



PSB – TEST PIT PHOTOS



Test Pit E8 Excavated to 9 ft

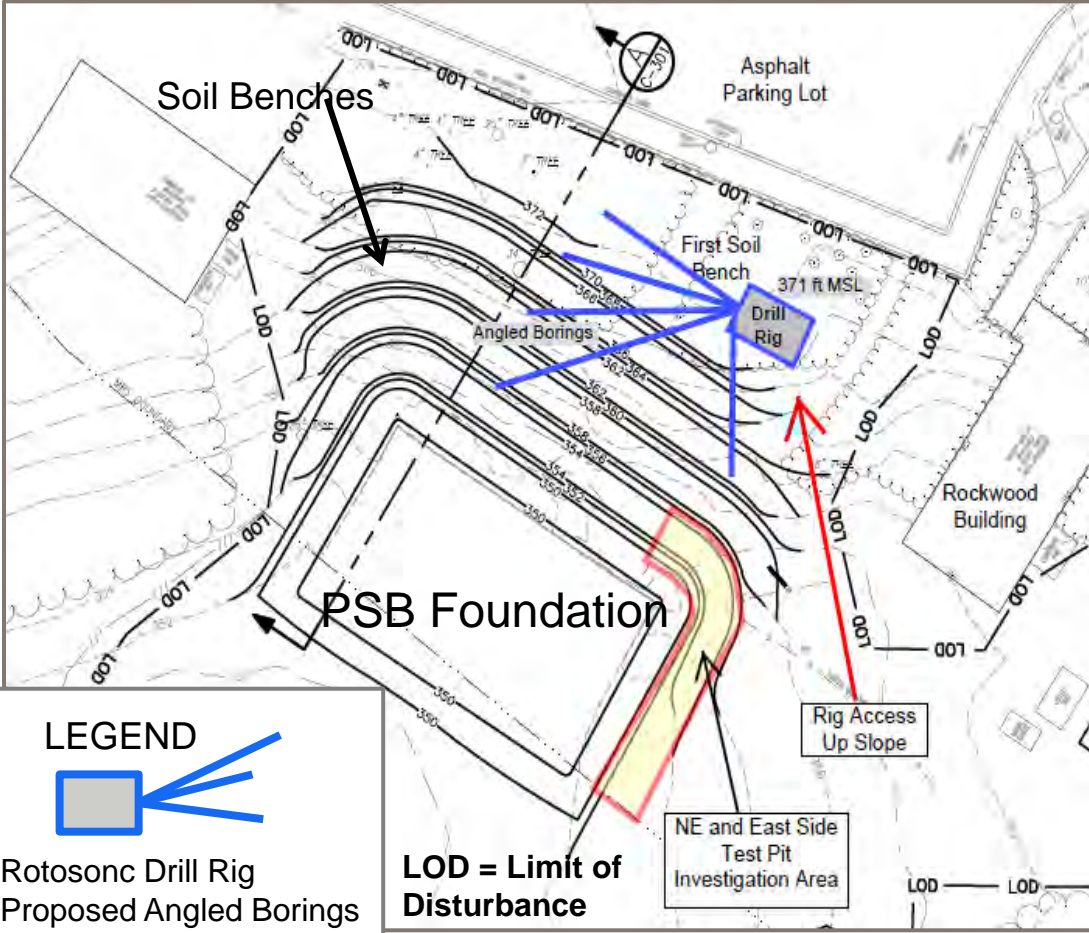




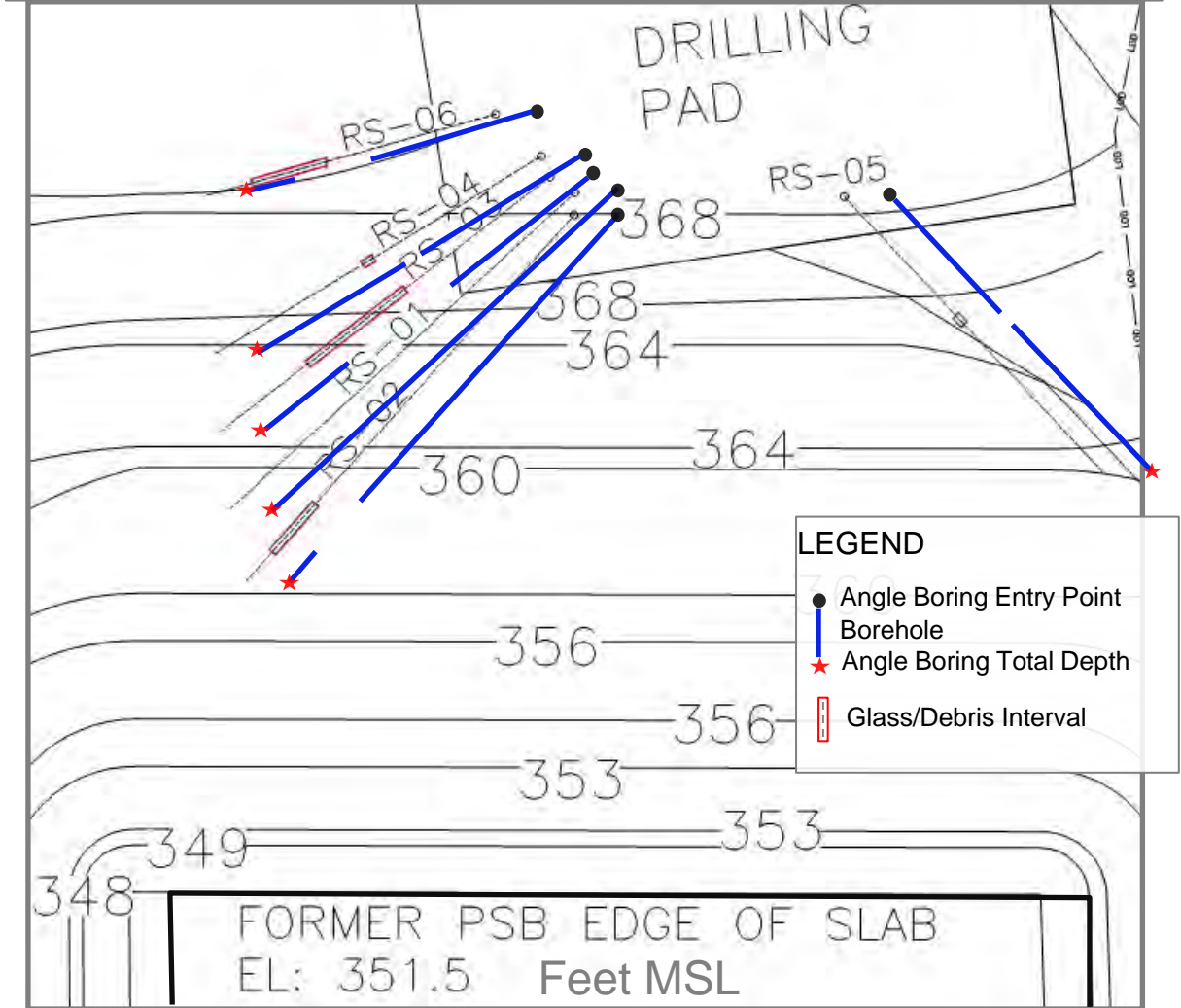
ROTONSONIC BORING INVESTIGATION MAP



Rotosonic Drilling – Proposed Locations



Rotosonic Drill Rig Completed Angled Borings





ROTOSONIC DRILLING PHOTOS



Rotosonic borehole RS-03 on drilling platform at the top of the PSB slope north of the foundation.



Rotosonic Rig advancing 4-inch diameter soil core barrel & 6-inch casing to collect continuous soil cores for AUES screening.



ROTONSONIC DRILLING AUES DEBRIS OBSERVED



Rotosonic Drilling Location	Angle of Drilling (°)	AUES Debris Potential Item Observations						
		Depth Interval along Boring (ft)		Elevations (ft)		Distance from Edge of Slab (ft)		Description
		Start	End	Start	End	Start	End	
RS-01	39.1	NO AUES DEBRIS POTENTIAL ITEMS IDENTIFIED						
RS-02	34.8	30	35	352.9	350.0	24	21.5	PI - Porcelain (1 Piece)
RS-03	39.2	15	25	360.5	354.2	33.3	36.9	PI - Glass (8 Pieces)
RS-04	43	17	18	358.4	357.7	38.9	39.2	PI - Glass (20+ Pieces; 7.2 oz)
RS-05	42.5	14	15	360.5	359.9	28.8	28.1	PI - Glass (1 Piece)
RS-06	46	16	23	358.5	353.5	45.2	45.7	PI - Glass (1 Piece)

PI - Potential Item



ROTOSONIC SOIL CORES AND DEBRIS PHOTOS



Rotosonic borehole RS-03 soil core on table after UXO Techs checked and sorted any debris and Geologist described the soil properties.



Rotosonic borehole RS-04 glass debris encountered at 17-18 feet with sample collected for CCDC headspace screening.



PSB SLOPE INVESTIGATION SUMMARY



Test Pit Results

- Based on the observations from the North wall test pit (August 2020) and the recent test pits East and West of the PSB: AUES debris was located in a continuous layer to the:
 - North – 8 feet north of PSB foundation – 2 feet below slab elevation
 - West – 8 feet west of PSB foundation – shallow/above slab elevation
 - East – 16 feet east of PSB foundation – down to slab elevation
 - Northeast Corner – AUES debris observed 16 feet east of the PSB foundation slab northeast corner



Rotosonic Drilling Results

- No continuous AUES debris layer was observed north of the PSB foundation starting at 17 feet from the slab:
 - North – AUES debris continuous layer ends between 8 and 17 feet north of the PSB slab.
 - North – Isolated pocket of AUES debris encountered approximately 39 feet from the PSB foundation slab
 - Northeast Corner – No AUES debris layer encountered in RS-05 within 12 feet of the PSB foundation slab.



PUBLIC SAFETY BUILDING - PHOTOS



PSB Demobilized – Photo overlooking the site from the Rotosonic Drilling platform north of the PSB foundation excavation.



Waste Disposal – Last four excavated soil roll-offs waiting for disposal transport to King & Queen Landfill.



PSB SCHEDULE



- Prepare a PSB Slope Investigation Report – May 2021.
- Based on the investigation results USACE will determine the scope of work to excavate the extent of AUES debris identified during the investigation.
- Once funding has been obtained and the work awarded, additional plans will be required before re-starting the soil remediation work – this will entail a demobilization and delay of many months before the work is awarded and the required planning documents are prepared and approved.
- Slope Soil Removal not expected to begin until late 2021.
- Restoration work would start after completing the north/east slope investigation and slope soil excavation and backfilling and include rebuilding the PSB slope and removing the access road.
- Landscape restoration work will be coordinated with American University – based on the approved landscape restoration plan.



SOUTHERN AU EXPOSURE UNIT UPDATE



- **SV Partner Comments:** All Spring Valley Partner comments or approvals were received for the Draft Final Report.
- **Final Report:** Hard copies of the Final Southern American University Exposure Unit Soil Remediation Property Report were mailed out to the Partners on April 16, 2021.



LUCIP - INSTITUTIONAL NOTICE



- **The Spring Valley FUDS Land Use Control Implementation Plan (LUCIP - Weston, 2018)** specifies the implementation of the 3Rs, Explosive Safety Education Program for the residents and institutions involved with the Spring Valley FUDS site including the following 7 institutions: USEPA, DOEE, Washington Aqueduct, American University, National Park Service, Sibley Memorial Hospital and Wesley Theological Seminary.
- **Institutional Notice Distribution** - USACE plans to distribute an Institutional Notice, Site 3Rs Brochure, Site Map and a 4-minute Munitions Safety Video to the 7 listed institutions in the coming weeks. The Munitions Safety Video can be viewed on the US Army Corps of Engineers, Baltimore District Website for Spring Valley.
- **The Residential Notice**, 3Rs Brochure and Site Map were distributed initially in June 2019.



INSTITUTIONAL NOTICE – FOLLOW THE 3Rs



Follow the 3Rs



Spring Valley Formerly Used Defense Site

Legend

- Spring Valley Formerly Used Defense Site Boundary
- Roads
- Parcels
- Non-Residential Lots

Recognize

Recognize when you may have encountered a munition.

Recognizing if you may have encountered a munition is the most important step in reducing risk. Munitions may be encountered during residential construction projects. Munitions may be easy or hard to identify.

To avoid injury or, in severe cases, death:

- **Never** move, touch or disturb a munition or suspect munition.
- **Beware** that munitions do not become safer with age, in fact they may become more dangerous.
- **Don't** be tempted to take or keep a munition as a souvenir.
- **Notify** contractors working in your yard that munitions may be encountered and share the 3Rs information.

Munitions come in many sizes, shapes and colors. Some may look like bullets or bombs while others look like pipes, small cans or even a car muffler. Whether whole or in parts, new or old, shiny or rusty, munitions can still explode. The easiest way to avoid risk is to follow the **3Rs**.

Retreat

Do not touch, move or disturb it, but carefully leave the area.

In the unlikely event that you encounter what you believe is a munition, **do not touch, move or disturb it.** Instead, immediately and carefully leave the area by retracing your steps—going out the way you entered. Once safely away from the munition, mark the location or path (e.g., with a piece of clothing) so munitions response personnel can find the munition.



Report

Notify the local police - Call 911.

Protect yourself, your family, friends, community, and workers/contractors by immediately reporting munitions or suspected munitions to the police.

Help us by providing as much information as possible about what you saw and where you saw it. This will help the police and military or civilian explosive ordnance disposal personnel find, evaluate and address the situation.

If you believe you may have encountered a munition, call the police and report:

- The **area** where you encountered it.
- Its **general description**. Remember, do not approach, touch, move or disturb it.
- When possible, provide:
 - Its estimated size
 - Its shape
 - Any visible markings, including coloring

SPRING VALLEY FORMERLY USED DEFENSE SITE

USACE Update
April 2021



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GROUNDWATER STUDY



The groundwater sampling event for perchlorate at wells PZ-4D and MW-44 was conducted by the USACE and the U.S. Geological Survey (USGS) on March 1st.

- The preliminary data for this sampling event has been received—the USGS is currently validating the data. The summary of the preliminary sampling results are below, as seen on page 25 of the attached lab report. A spreadsheet of historic data for these wells has also been attached.

FA83795-1 - this was a field blank, non detect

FA83795-2 - MW-44 - 16.2 ug/L

FA83795-3 - Duplicate of MW-44 – 15.7 ug/L

FA83795-4 - PZ-4D - 27.3 ug/L

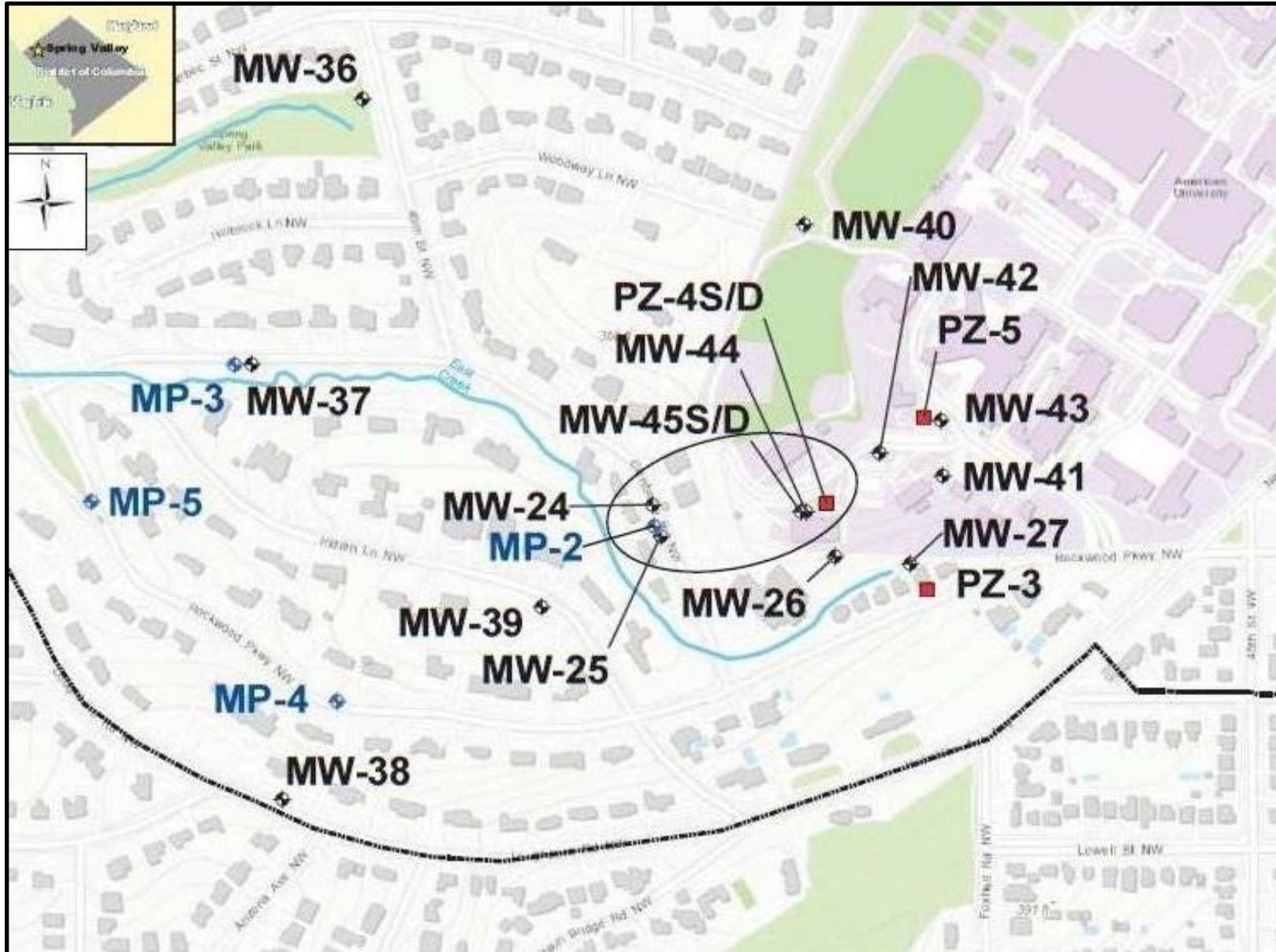
FA83795-5 - Duplicate of PZ-4D – 27.5 ug/L



Groundwater sampling well



GROUNDWATER STUDY: EXPOSURE UNIT 2



Key

 Area encompassing the EU2 Monitoring Wells

 Spring Valley FUDS Boundary

 Piezometer

 Monitoring Well

 Multiport Well

S/D = Monitoring well or piezometer with screened intervals in the same borehole.



4835 GLENBROOK ROAD



- The Army Corps has allowed the 4835 lease to expire at the end of January 2021 and has returned the house to the control of the property owner (American University). USACE will finalize an agreement with the owner to reimburse them for damages incurred during the USACE lease of the property.



SPRING VALLEY PARTNERS



Reminders:

- Due to continued concerns surrounding the COVID-19 pandemic, the next Partners meeting for **June** will likely be an electronic update in lieu of an in-person meeting once again.
- Our team is continually monitoring the situation closely and is open to discuss plans for future in-person or conference call meetings.

Upcoming Agenda Items:

- *Suggestions?*

