

# SPRING VALLEY FORMERLY USED DEFENSE SITE

Partners Meeting Presentation  
December 2020



US Army Corps  
of Engineers®



# AGENDA REVIEW



## Parsons Update

- 4825 Glenbrook Road

## Weston Updates

- Site-Wide Remedial Action
- Public Safety Building

## USACE Updates

- Groundwater Study
- New TAPP Advisor
- 4835 Glenbrook Road

## Future Partners Agenda Development

# SPRING VALLEY GLENBROOK ROAD SITES

PARTNER'S UPDATE  
December 2020



*"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."*



US Army Corps  
of Engineers®



U.S. ARMY

# 4825 Glenbrook Road - Recent Activities

- The previous source sampled in late October found metals concentration to be higher than acceptable
- On November 11<sup>th</sup> Parsons sampled a new source
- This source was approved by the USACE and the regulators (USEPA and DDOE) on November 30<sup>th</sup>



US Army Corps  
of Engineers®



## 4825 Glenbrook Road - Recent Activities (Cont.)

- November and December was spent bringing the new soil from the Mclean site to either the Federal Property for staging or 4825 Glenbrook Rd site for placement



US Army Corps  
of Engineers®



# 4825 Glenbrook Road - Recent Activities (Cont.)

- Shipped off a load of munitions debris scrap to the smelter on November 18th



US Army Corps  
of Engineers®



# 4825 Glenbrook Road - Recent Activities (Cont.)

- Built a concrete pad and re-established the exterior air conditioning units servicing 4835 Glenbrook (completed on November 19<sup>th</sup>)



US Army Corps  
of Engineers®



# 4825 Glenbrook Road - Summary of Clean Backfill for Restoration

Restoration				
	Expected Volume Needed (bcy*)	Approx. Volume Placed (bcy)	Approx. Volume on Hand (bcy)	Total # of Truck Loads to Date
	4,348	1,479	0	217
% Complete:	--	34%	--	--

\*bcy – bulk cubic yards



US Army Corps  
of Engineers®





## Near -Term Schedule

- Cut intact munitions items so that they can be certified as Material Documented As Safe (MDAS)
- Dispose of remaining waste derived from the removal
- Throughout December continue bringing entire site up to grade weather allowing
  - ✓ The cooler weather does not allow for the soil to dry as quickly which affects us getting the proper compaction



US Army Corps  
of Engineers®



## Mid-Term Schedule

- Bring site to grade for AU water and sewer installation
- Re-install AU water line
- Re-install AU sanitary sewer line
- Restore fence along 4801 and 4825 Glenbrook Road properties
- Restore site to final grade in 6-inch lifts with compaction in accordance with the Work Plan
- Submit Draft Final Site-Specific Final Report to regulators and other outside stakeholders



US Army Corps  
of Engineers®



# Tentative Long-Term Schedule

Winter-Spring 2020/2021	Final restoration of 4801 and 4825 Glenbrook
Summer 2021	Submit Final Site-Specific Removal Report
Summer 2021	Closeout Project



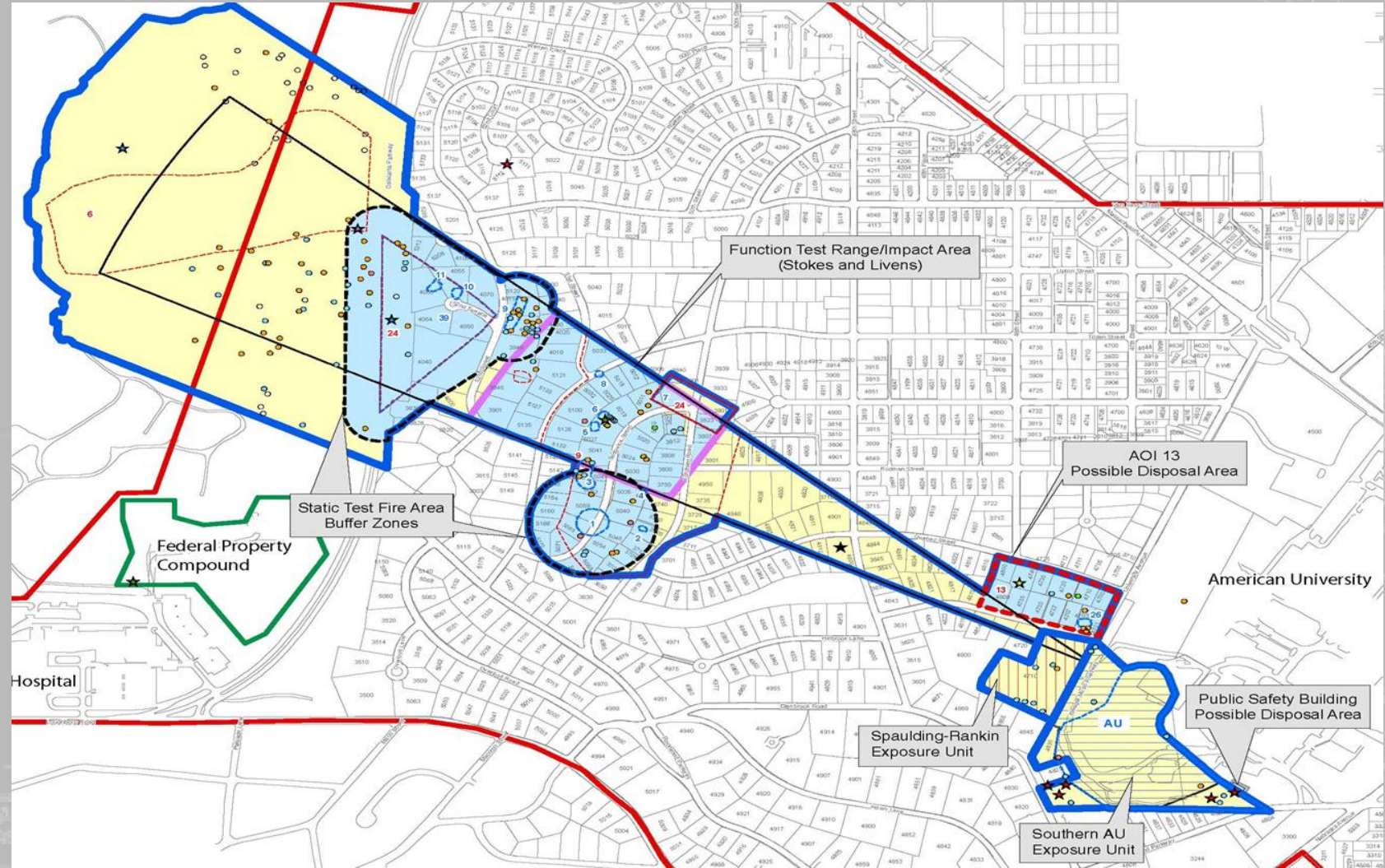
US Army Corps  
of Engineers®



# SVFUDS SITE-WIDE REMEDIATION STATUS DECEMBER 2020

Weston Solutions, Inc.

December 11, 2020



US Army Corps  
of Engineers®



# SPRING VALLEY STATUS UPDATE – COVID-19

- **Public Safety Building Site** – Field operations at the PSB Site restarted on July 10, 2020 after remobilization and they have not been impacted, so far, by the COVID-19 pandemic.
- **92 Residential Properties** – Field operations at the 92 Residential Properties have been continuous and they have not been impacted, so far, by the COVID-19 pandemic. CCDC has been able to provide the operations required to support the AGC anomaly dig teams.
- **Christmas Holiday Update** – CCDC Edgewood Lab operations will be suspended between December 15<sup>th</sup> and January 5<sup>th</sup> due to the holiday and COVID-19 staff impacts.



# RESIDENTIAL PROPERTIES – FIELDWORK\*



- **Property Availability** – Six property owners approved landscape plans. Seven properties remain.
- **Vegetation removal/Blind Seeding** – Vegetation removal and blind seeding completed at 5 properties. Two additional properties are scheduled to have this task completed in December 2020. Seven properties will remain after December.



\*info provided includes progress since last Partners presentation dated October 22, 2020



# RESIDENTIAL PROPERTIES – FIELDWORK\* (CONTINUED)



## Geophysical surveys:

- A group of 7 properties and 3 fed/city lots were completed on 11/11/20.
- Geophysical surveys at 7 new properties began on 12/1/20 and are expected to be complete in mid-January.



\*info provided includes progress since last Partners presentation dated October 22, 2020



# RESIDENTIAL PROPERTIES – FIELDWORK\* (CONTINUED)



**Intrusive Investigations:** Began on 12/1/20 and are expected to be complete prior to 12/23/20.

- Quebec Property: One MPV target and all of the analog mag & dig areas completed after Intrusive operations at this property were halted on 09/16/20 upon recovery of an intact 3” Stokes Mortar.
- One Hardscape Dig on 52nd Street (permit approved)



\*info provided includes progress since last Partners presentation dated October 22, 2020





# RESIDENTIAL PROPERTIES – FIELDWORK\* (CONTINUED)



## December 2020 Intrusive Investigation Results (Preliminary):

- No MEC/MPPEH items recovered.
- Seven MD items recovered as of 12/7/2020.
- Headspace results received have all been non-detect for agent.



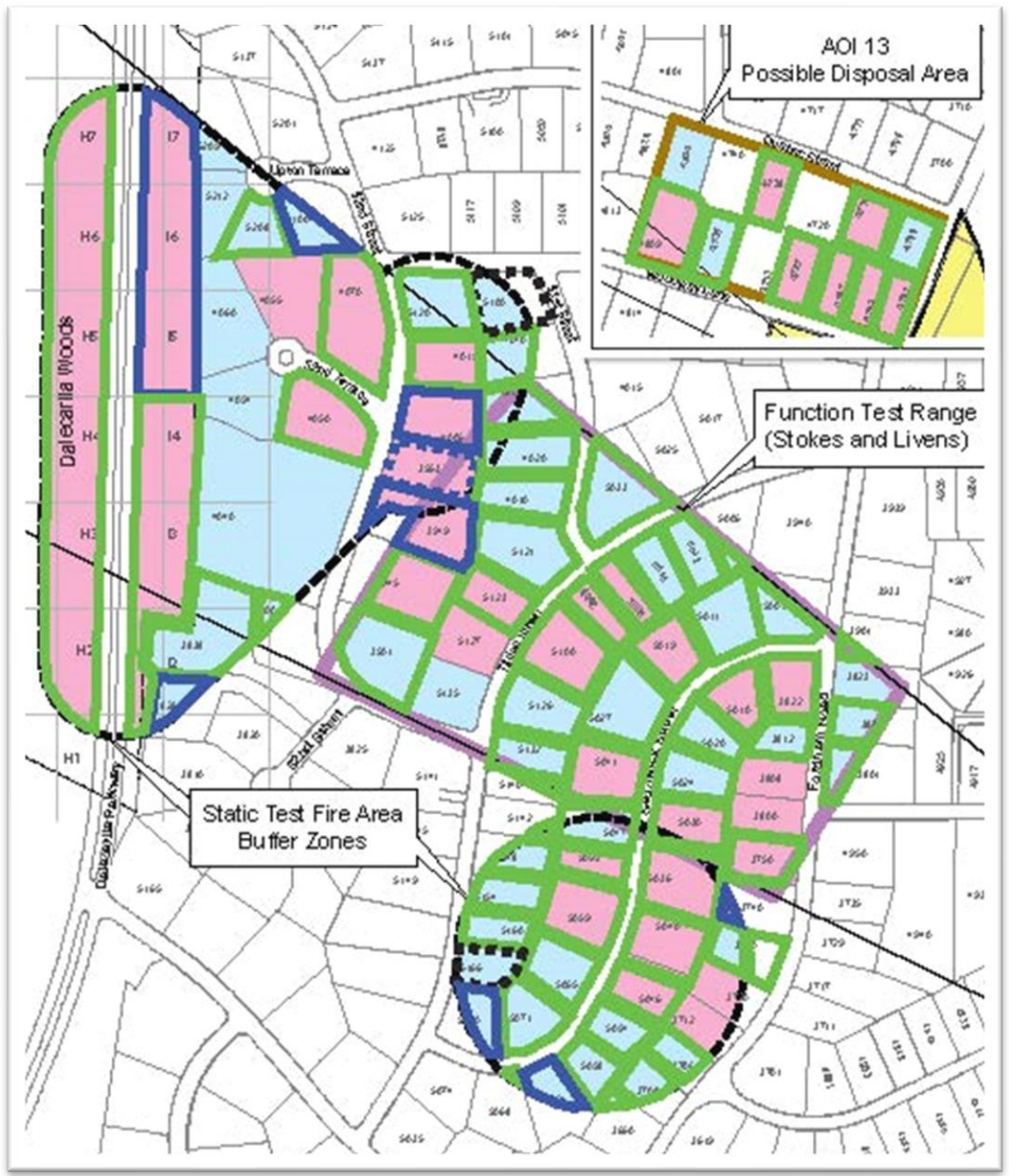
\*info provided includes progress since last Partners presentation dated October 22, 2020



# RESIDENTIAL PROPERTIES - INTRUSIVE STATUS



- 68 residential properties and 10 federal/city lots completed to date
- Intrusive investigations at 7 properties and 3 city lots in Dec 2020
- Intrusive investigations to be completed at 3953 52<sup>nd</sup> (permit approved) in Dec 2020
- Two properties require DDOT permit approval to complete



### Intrusive Investigations:

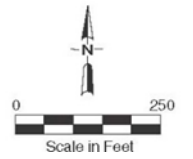
Complete

December 2020

To be completed Dec 2020

Permit approval pending

Remediation Planned previous DGM completed  
 Remediation Planned as listed in PWS



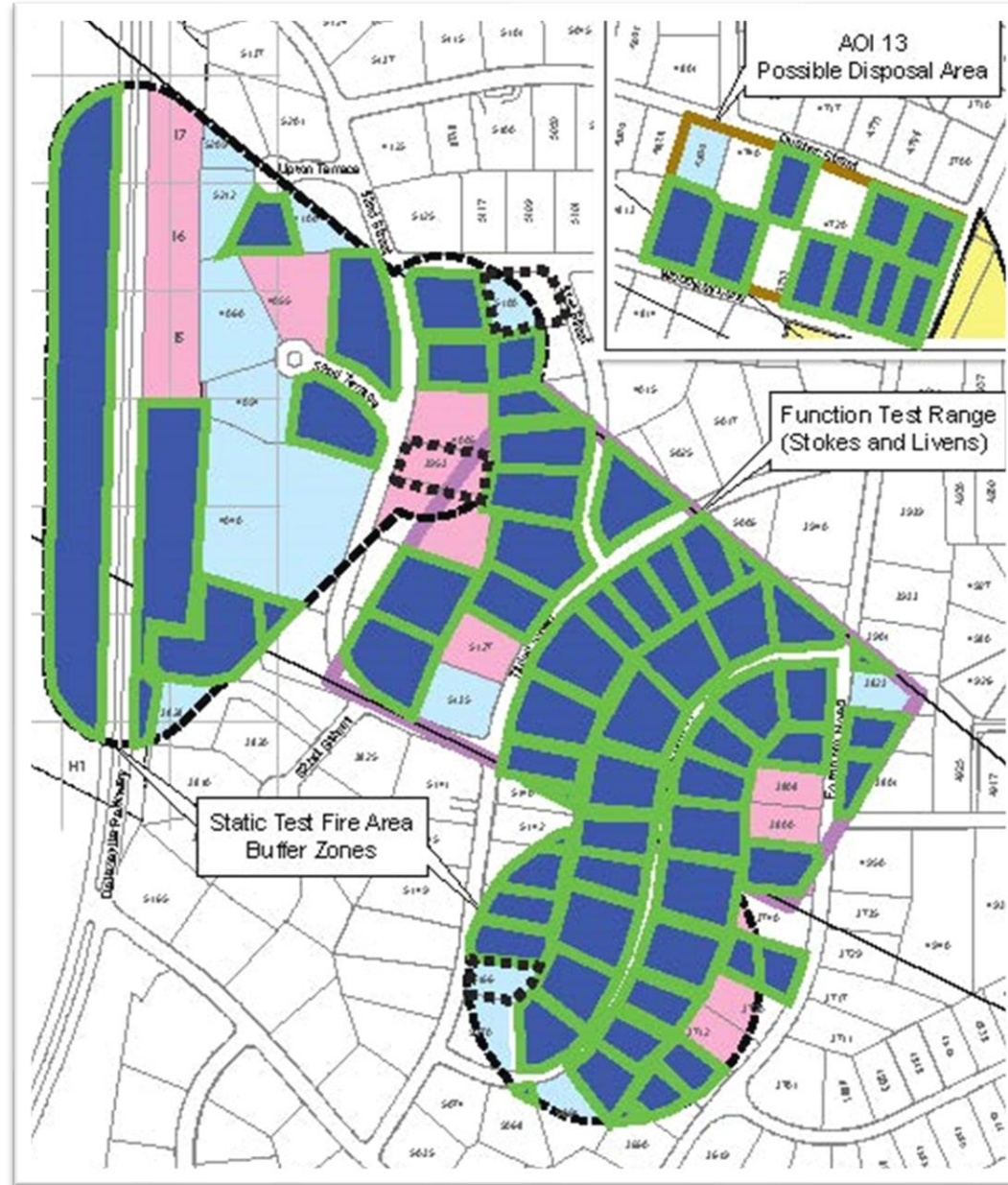


# RESIDENTIAL PROPERTIES - INTRUSIVE STATUS



## Intrusive Statistics:

- 68 residential properties completed to date (74%)
- 2404 targets investigated to date
- MD recovered = 130 (5.41% of total digs)
- MEC recovered (including Civil War cannonball) = 3 (0.12% of total digs)
- WW1-era MEC recovered = 2 (0.08% of total digs)

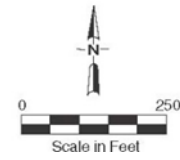


## Intrusive Investigations:

Property/Lot Completed

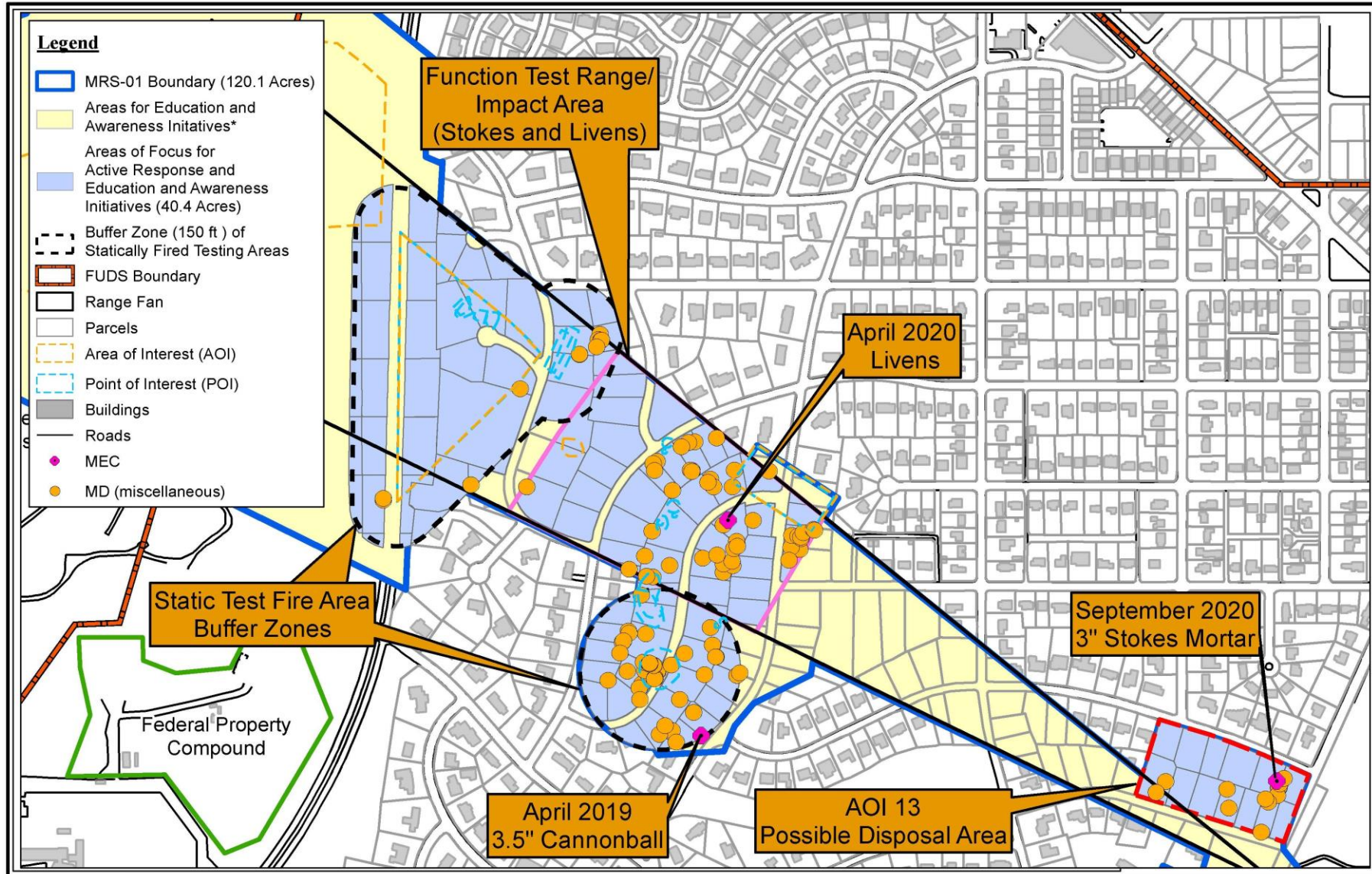
Partially Completed

- 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** – Five Draft Final PSDS were delivered to USACE/EPA/DOEE as of 12/7/20. Three additional Draft Final PSDSs will be delivered to USACE/EPA/DOEE to support the December intrusive investigations.
- **RA Property Summary (RAPS) Memos** – Eleven Draft Final RAPS were submitted to USACE/EPA/DOEE for review.
- **Root Cause Analyses (RCAs)/Field Variance Forms (FVFs)** – No new FVFs or RCAs were generated during this reporting period.



# RESIDENTIAL PROPERTIES – SCHEDULE

- **Geophysical Surveys** – Geophysical surveys at 7 residential properties expected to be completed in January. Schedule for next round of geophysical surveys will be coordinated once properties become available.
- **Intrusive Investigations** – December 2020 intrusive investigations expected to be complete prior to 12/23/20. February intrusive investigations will be conducted at:
  - The 7 properties included in the December/January geophysical surveys
  - 2 others pending DDOT permit approval



# PUBLIC SAFETY BUILDING UPDATE

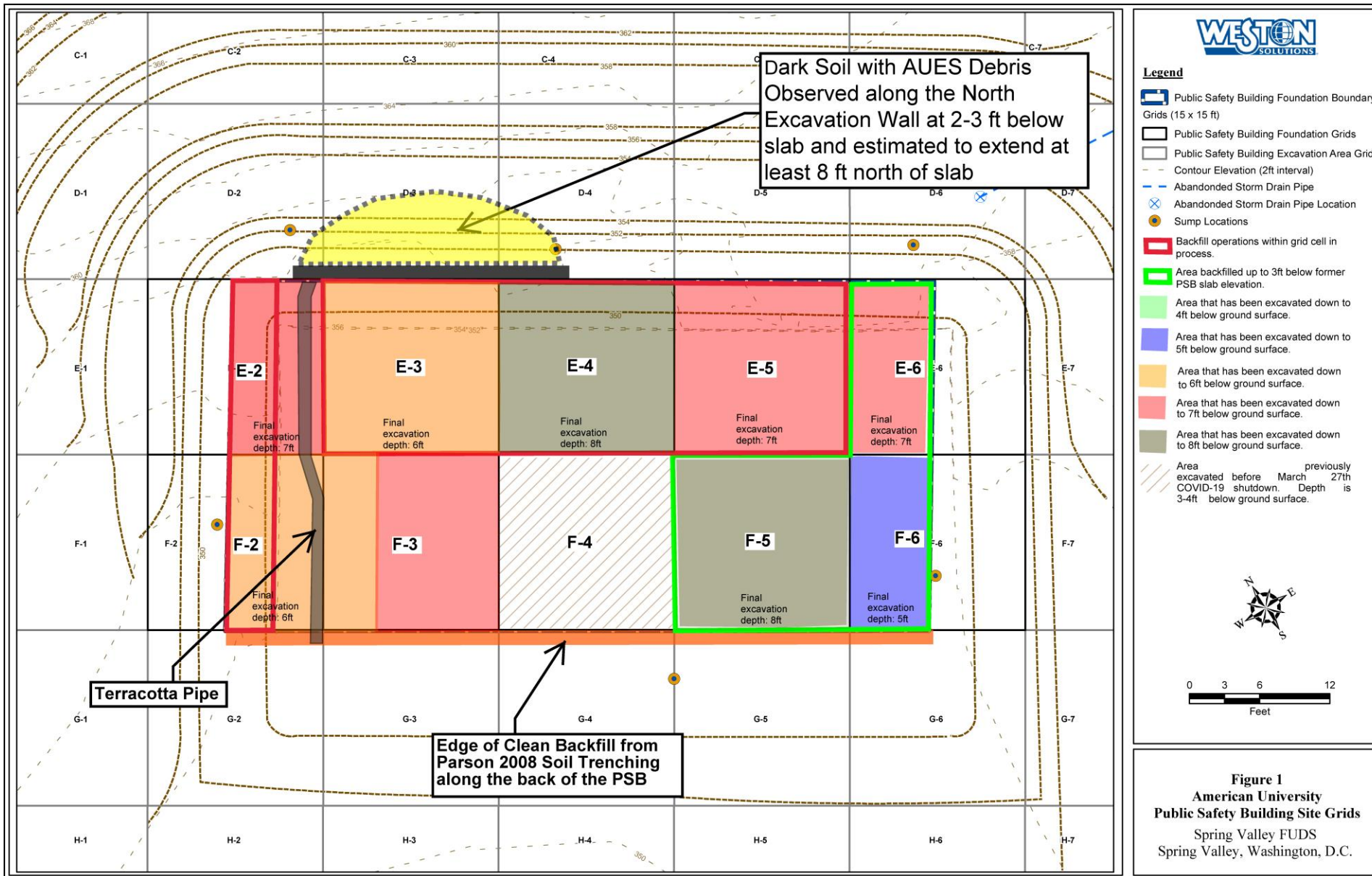


- Completed excavation, backfilling & compaction testing in all but two grids at the PSB: F3 and F4.
- Currently excavating and screening soil in grid F3 from 6-8 feet.
- Preparing to bypass/ excavate under terracotta pipe in grid F2/F3.





# PSB GRID EXCAVATION AND BACKFILL DEPTHS







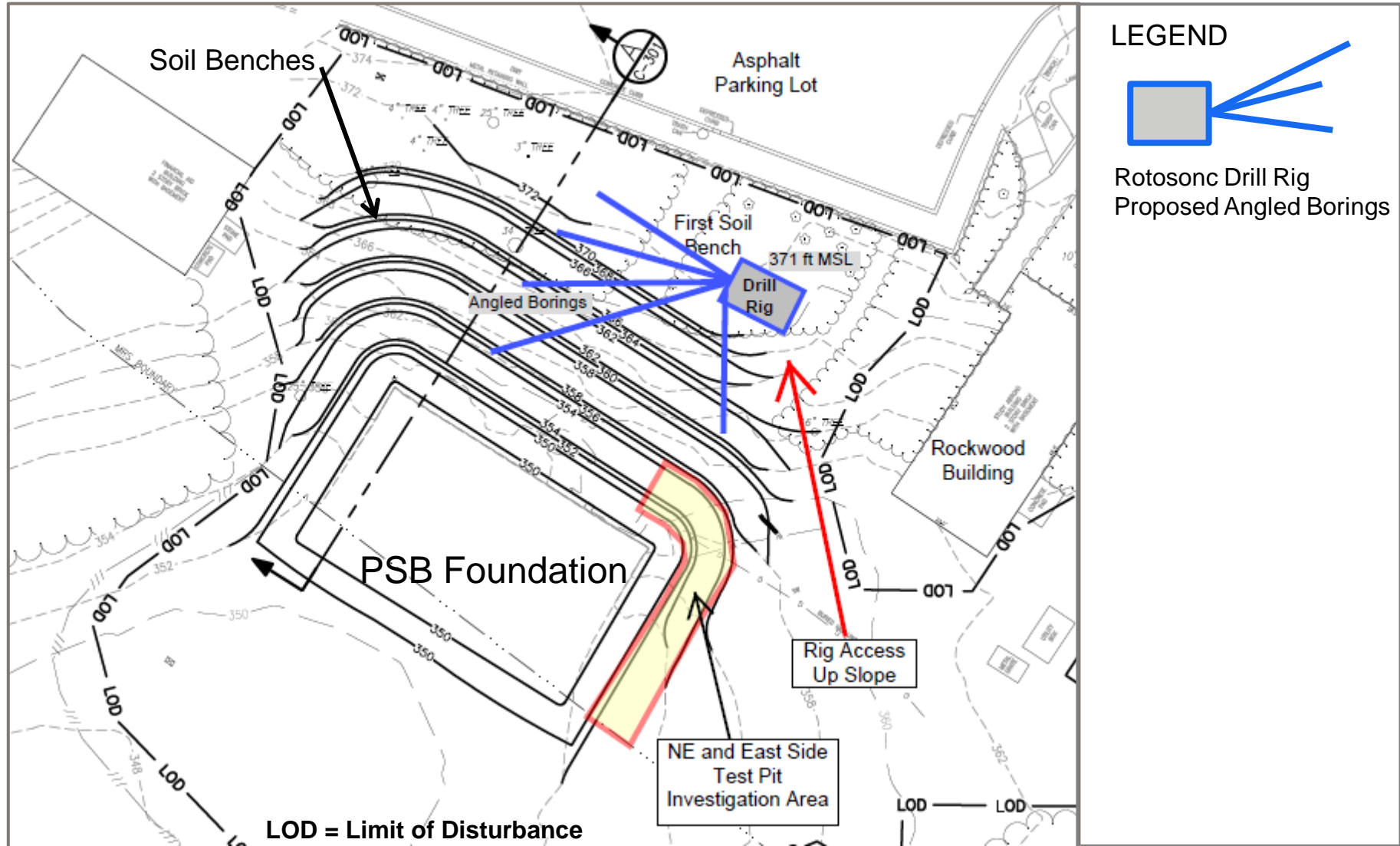
# PUBLIC SAFETY BUILDING STATUS



- 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).
- USACE is currently reviewing a proposal to conduct a Rotosonic drilling and Test Pit investigation to determine the extent of AUES debris north and east of the PSB foundation slab. If awarded this work would be conducted in early 2021. The scope of work would include:
  - Conduct up to six Rotosonic angled borings with continuous coring to help determine the extent of AUES debris under the slope.
  - Perform test pit excavations and soil screening east and northeast of the former PSB foundation.



# ROTONSONIC & TEST PIT INVESTIGATION MAP





# PUBLIC SAFETY BUILDING – ONGOING TASKS

- E&S control inspections after major rain events.
- Excess water in the excavation will be pumped off into the Frac tank, as needed to keep the excavation from filling up with water.
- Remove terracotta pipe in Grid F3, then install bypass pipe.
- Continue soil excavations in each grid down to target depths based on the test pit AUES sorting results – actual/proposed end depths:
  - Grid E6/F6 - 7/5 ft below slab
  - Grid E5 - 7 ft below slab
  - Grid F5 - 8 ft below slab
  - Grid E4 - 8 ft below slab
  - Grid F4 - 8 ft below slab
  - Grid E3 - 6 ft below slab
  - Grid F3 - 8 ft below slab
  - Grid E2/F2 - 7/6 ft below slab



# PSB GRID EXCAVATION AND BACKFILL DEPTHS

SUB-SLAB		PSB Sub-Slab Excavation Depth Interval (feet)								Total Soil Vol. Expected (CY)
	Soil Vol. (CY) per Foot	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	
E2 (half grid)	4.17	Completed & Backfilled to 3 feet								29.2
F2 (half grid)	4.17	Completed & Backfilled to 3 feet								25.0
E3	8.33	Completed & Backfilled to 3 feet								50.0
F3	8.33	Excavation Completed					In Progress			66.7
E4	8.33	Completed & Backfilled to 3 feet								66.7
F4	8.33	Excavation Completed			Pending Excavation					66.7
E5	8.33	Completed & Backfilled to 3 feet								58.3
F5	8.33	Completed & Backfilled to 3 feet								66.7
E6 (half grid)	4.17	Completed & Backfilled to 3 feet								29.2
F6 (half grid)	4.17	Completed & Backfilled to 3 feet								20.8
<b>CY = cubic yards</b>									<b>479.3</b>	



**PSB Operations** – Crushed rock backfill from Aggtrans Savage Quarry, Jessup, MD being placed in excavation.



**Compaction** – Using Vibratory drum trench compactor.



**Density Testing** – Using Troxler nuclear density gauge to test compaction.



# PSB SCHEDULE



- Continue excavation to target depth and backfilling in Grids F2 & F3, backfill to terracotta pipe invert depth, reroute pipe into backfilled Grid F2.
- Continue sub-slab grid soil excavation, screening & backfilling in Grids F3 and F4. The latest schedule has PSB excavation work extending to the Christmas holiday or if delayed – early January 2021.
- USACE is currently reviewing a proposal to conduct a Rotosonic drilling and Test Pit investigation to determine the extent of AUES debris north and east of the PSB foundation slab. If awarded this work would be conducted in January and February 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 most likely entail a demobilization and delay of several months.



# PSB SCHEDULE (CONTINUED)



- After re-mobilizing, soil excavation, screening and backfilling will begin under the slope north of the PSB foundation and along the eastern edge of the foundation.
- Restoration work would start after completing the north/east slope investigation and slope soil excavation and backfilling – rebuilding the PSB slope, finishing the backfilling above the former PSB slab and removing the access road.



# SOUTHERN AU EXPOSURE UNIT UPDATE



- Completed the shallow (1-foot) excavation at SAU-RA2 on September 17, 2020 using an air-knife, hand tools and soil vacuum.
- Completed the deeper (10-foot) excavation at SAU-RA1 on 21 Sep. 2020 using a mini excavator.
- Filled the excavations with approved backfill and applied topsoil, cool season grass mix and erosion-control blanket to complete the site restoration on 23 Sep. 2020.
- Submitted the Draft Southern AU EU Soil Remediation Property Report to USACE for review on 6 November 2020.
- **Schedule:** Looking to respond to USACE comments and submit Draft Final Southern AU EU Soil Remediation Property Report to the Partners for review prior to the Christmas holiday.





# SOUTHERN AU EXPOSURE UNIT RESULTS

- A total volume of 10.2 cubic yards (cy) of cobalt-contaminated soil was removed from Southern AU EU behind the Hamilton Building at the SAU-RA1 and SAU-RA2 remedial areas.
- A post-excavation risk evaluation was conducted using the Risk Assessment and pre-excavation soil investigation data sets, and it was determined that the Southern AU EU has a Hazard Index (HI) of 1.5 for cobalt in soil based on data with designated remediation points removed and replaced with the 11 mg/kg and 22.6 mg/kg cobalt “background/backfill” concentrations. The post-remediation risk evaluation determined that the Southern AU EU soil has an HI of 0.2 for vanadium.
- These HI values are both less than the HI remediation goal of 2 for cobalt and 1 for vanadium.



# GROUNDWATER STUDY



- The groundwater sampling event took place on June 23-26 and was conducted by the Army Corps and the U.S. Geological Survey (USGS).

## *Next Steps:*

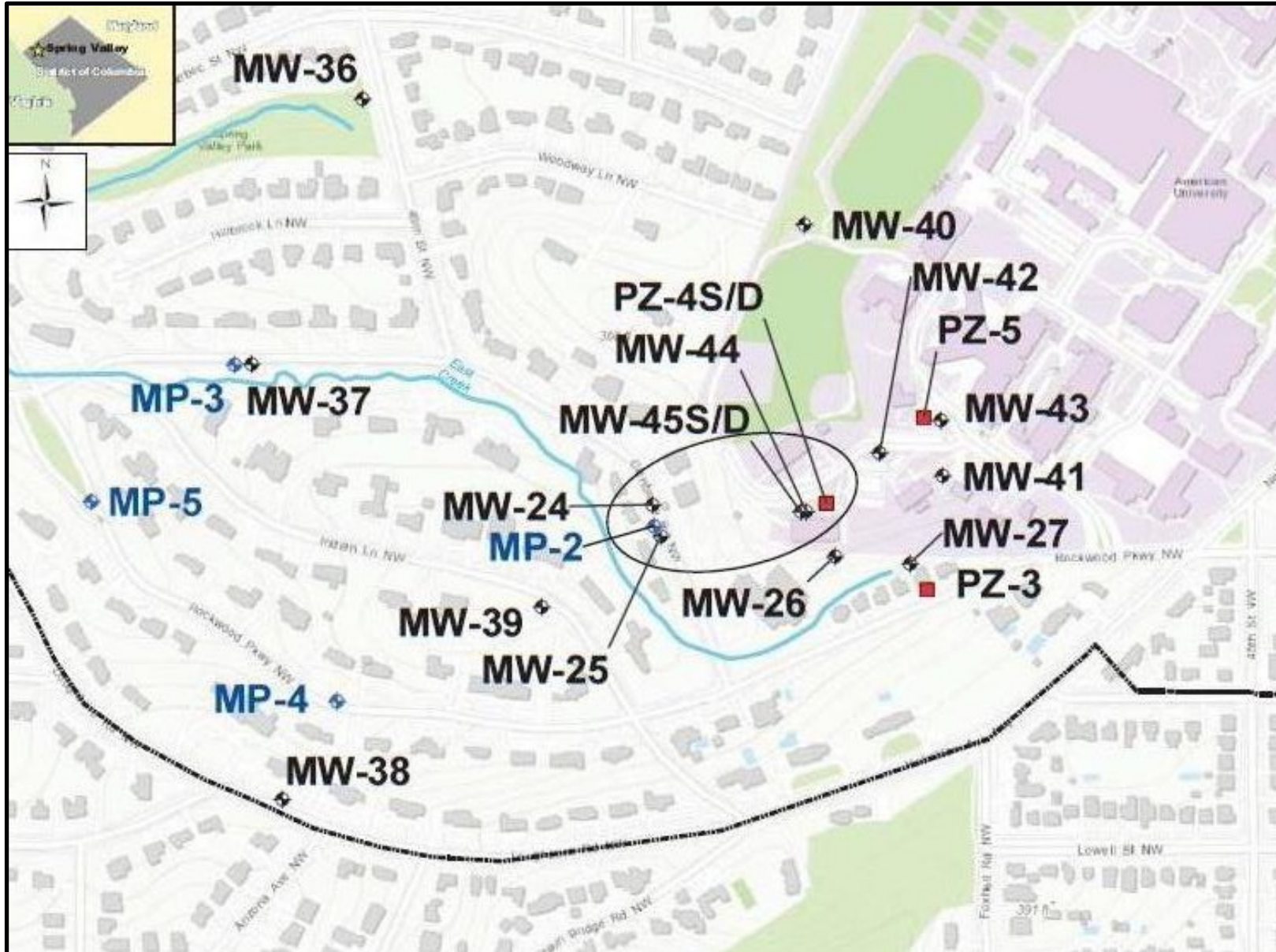
- The current sampling results are very similar to the results from last September. The Army Corps and Partners are currently discussing the path forward for the final groundwater approach for Arsenic.
- The Partners agreed to wait for the November update to the perchlorate Regional Screening Level (RSL) or any changes to the drinking water advisory level before conducting additional perchlorate sampling.



*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.



# TECHNICAL ASSISTANCE FOR PUBLIC PARTICIPATION (TAPP) ADVISOR UPDATE



- The RAB recently welcomed the new TAPP advisor Devamita Chattopadhyay, Ph.D. The two-year contract for the TAPP advisor was approved by and awarded through Dayton Group Inc. (DGI) late September.
- USACE and ERT conducted a virtual orientation and socially distanced site tour in December with the new TAPP advisor.
- In addition to attending RAB meetings, the team will also share final RAPS and Partner presentations with the TAPP advisor going forward.



# 4835 GLENBROOK ROAD – Soil Gas Sampling



- Crews completed the trenching for utilities along the shared property line and installed the replacement utilities for the water and sewer lines.
- The results of the third round of non-quantitative passive soil gas monitoring at borehole locations in the basement of 4835 Glenbrook Rd show no contamination. The Army Corps and Partners are working to determine the final path forward for the Glenbrook project area.



# SPRING VALLEY PARTNERS



## Reminders:

- Due to continued concerns surrounding the COVID-19 pandemic, the next Partners meeting for **February** 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?*

