



# Clean-Up of the Former Fireworks Site: Summary of Activities Relevant to the Town of Hanson

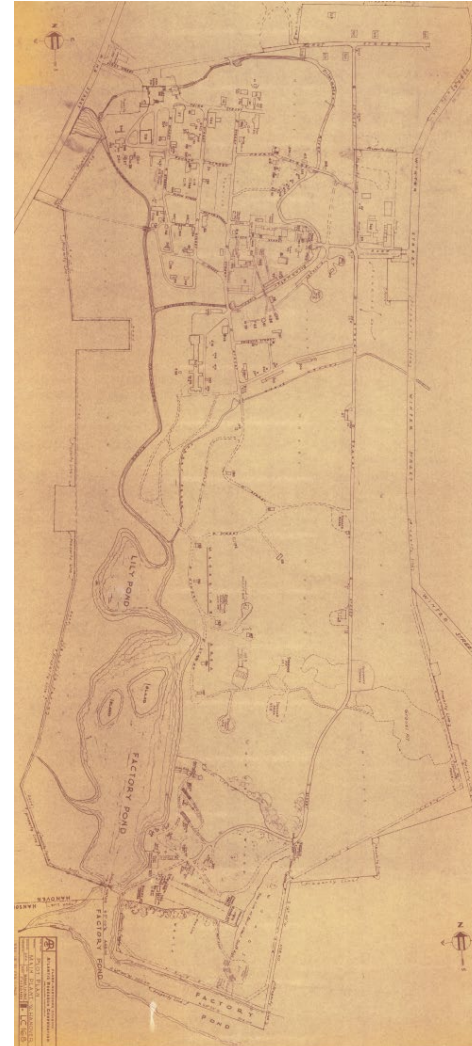
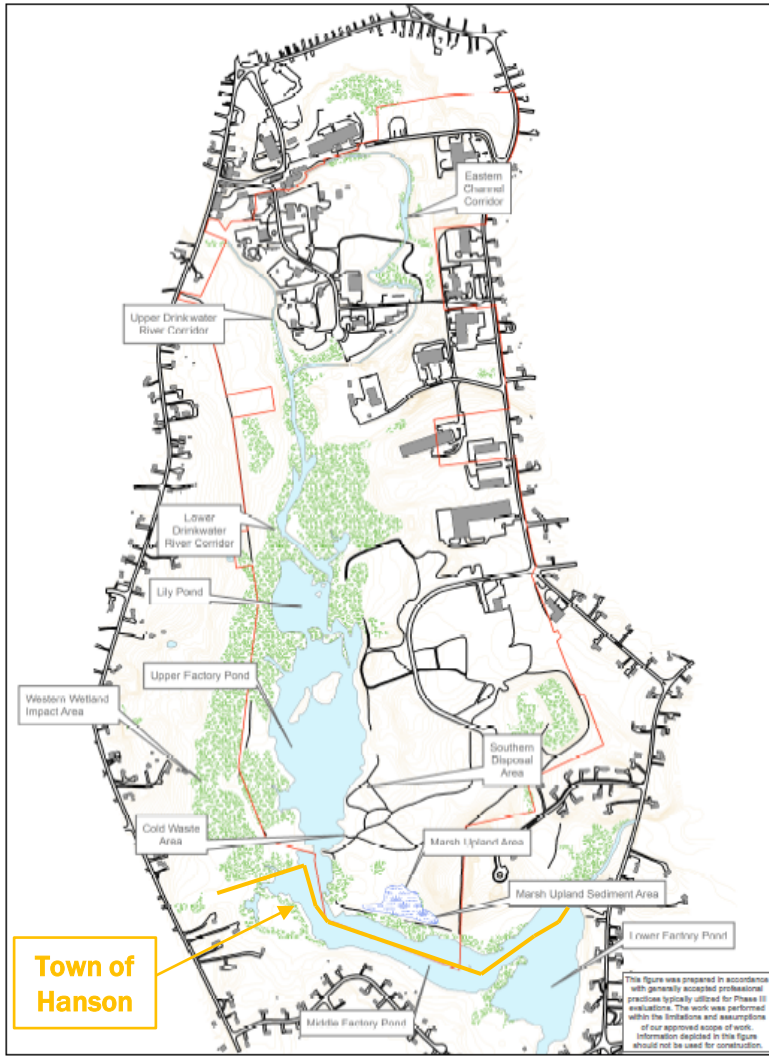
Hanson Board of Selectmen Meeting  
May 17, 2022

# AGENDA

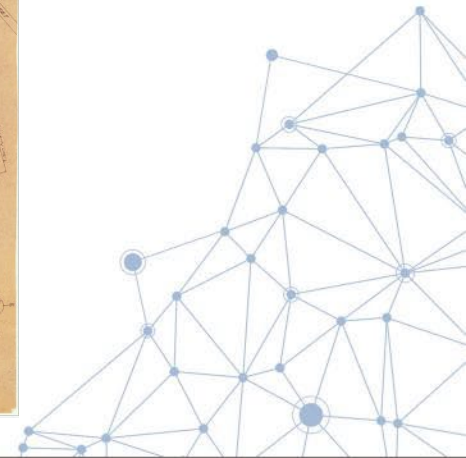
- Site Overview
- Chronology of Site Discovery, Characterization and Assessment
- The Ongoing Munitions Response in Hanover
- Overview of the Selected Remedy for the Ponds and Streams
- Key Hanson-Specific Features of the Selected Remedy [Design is Ongoing]
- Questions



# Site Location and Historical Facility Site Plan

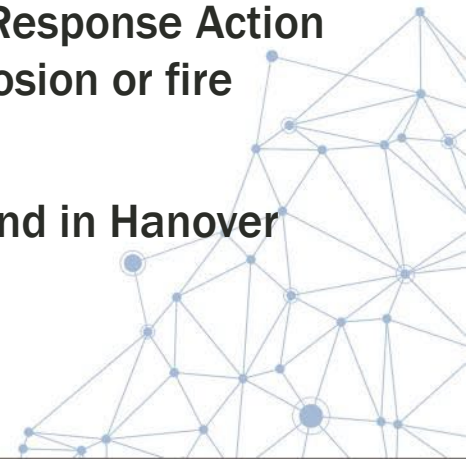


**Fireworks Facility  
 Site Plan  
 (February 1968)**



# Phased Characterization and Assessment of the Site

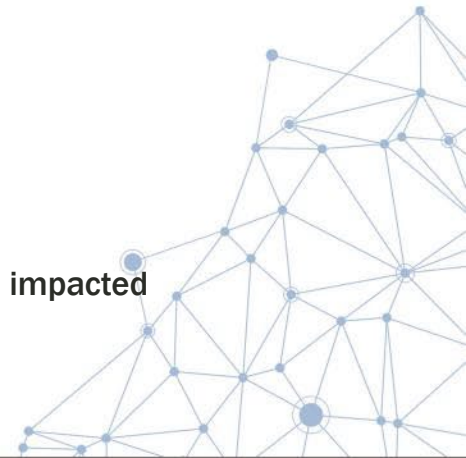
- Site is undergoing assessment and remediation under the Massachusetts Contingency Plan (MCP)
- The characterization and assessment of the Site was performed in a systematic phased manner over the period of 1997 - 2018
- The evaluation of the remedial alternatives was performed in 2019 - 2020
- The selected remedy was described in the Phase III Remedial Action Plan (RAP) and was approved by MassDEP in 2021
- The initial remediation activity has included an Immediate Response Action (IRA) for the removal of munitions posing an imminent explosion or fire hazard
- Most of the munitions and chemical contamination was found in Hanover



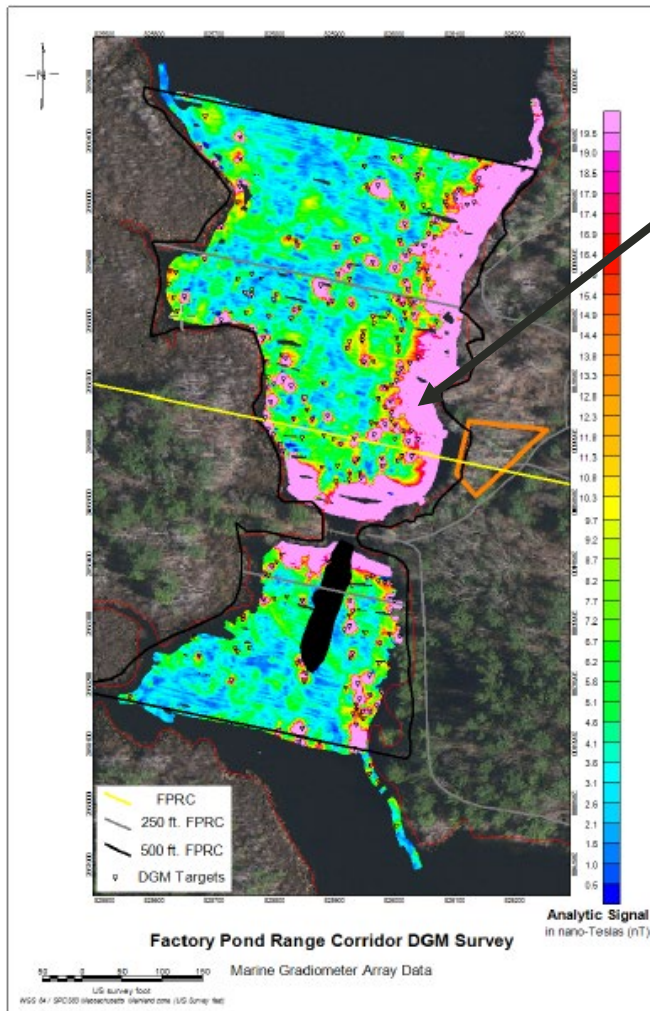


# The Ongoing Munitions Response

- When incendiary and explosive items were found in the southern portion of the Site in June 2017, a mandatory Immediate Response Action (IRA) was initiated
- When more undocumented disposal areas were uncovered, MassDEP required all subsequent munitions response work to be performed as part of an expanded IRA
- The IRA was extended into Factory Pond in June 2018 when munitions were found near the Greenway footbridge; Access to the pond was then restricted
- The munitions response work has been ongoing without interruption since 2017 despite the COVID pandemic. As of 4/29/2022:
  - 18,315 explosive munitions items have been destroyed
  - 163,350 inert munitions debris items have been recovered and processed
  - 10,789 tons of contaminated soil have been transported off-site for disposal
  - The IRA Munitions Response has been completed in approximately 75% of the impacted upland area and the work is ongoing in the remaining 25%



# Munitions Response Work in 2022 includes the High Metal Density Area (HMDA) of Factory Pond



Pink indicates a high concentration of metal buried in the sediment

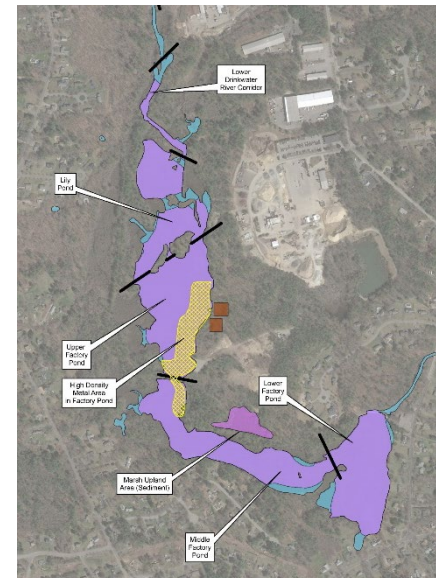
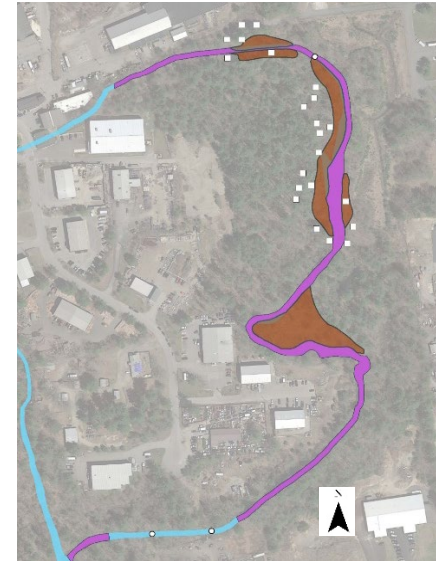
Sampling confirmed co-mingled metallic debris and munitions in the pink area sediment



Munitions Response work also is continuing in the upland areas in Hanover in 2022

# Summary of the “Final Remedy”

- The selected remedy was designed to remove mercury, lead and other chemical contamination in the Site’s sediment and soil to protect current and future Site users and local aquatic and terrestrial species
- Removal of ~36,500 cubic yards (CY) of contaminated sediment and 2,300 CY of contaminated soil with restoration of disturbed areas and habitats
- Estimated cost in the Phase III RAP was \$76.1 million, with a range of \$64.7 million to \$95.1 million (-15%/+25%) [2020\$]
- MassDEP estimated the cost will be \$85.3 million, with a range of \$72.5 million to \$106.5 million [2020\$]
- Field implementation over two years
- Remedial design in currently underway
- Next submission to MassDEP will be a Phase IV Remedy Implementation Plan (RIP)

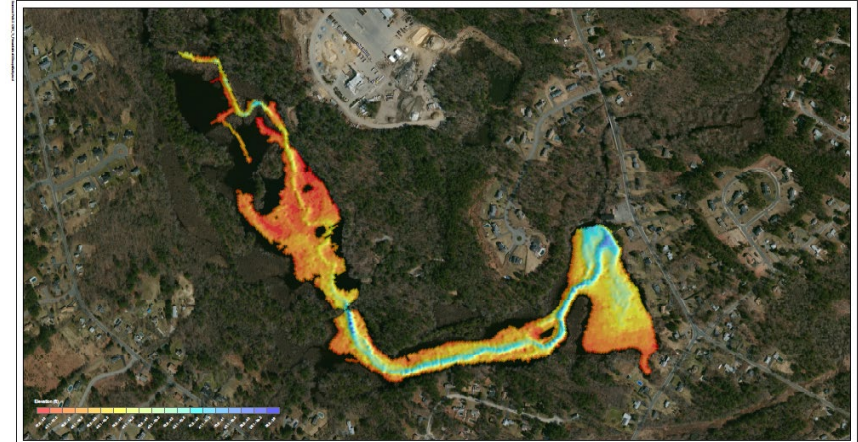




# Key Hanson-Specific Features of the Selected Remedy

## Pre-Year 1 Planning:

- Coordination relative to plans for lowering the water level in Lily and Factory Ponds using the controls at the refurbished Factory Pond Dam
- Consultation relative to wetlands protection and backfill / restoration requirements
- Consultation relative to the preparation of a full Environmental Impact Report (EIR) for MEPA
- Communications with residents and obtaining required access agreements





# Key Hanson-Specific Features of the Selected Remedy

## Implementation Year 1:

- Lower water levels in Middle and Lower Factory Pond (downstream of the Greenway footbridge)
- Greater amount of exposed mudflat on or adjacent to ~20 privately owned parcels and one Town of Hanson parcel for approximately 6 to 8 months
- Potential for experiencing periodic mudflat odors from exposed sediments
- Some increased truck traffic on Winter Street under current plan
- Off-site ambient air will be monitored to ensure no impacts to neighboring properties



# Key Hanson-Specific Features of the Selected Remedy

## Implementation Year 2:

- Restoring current water levels in Lily and Factory Pond
- “Wet” dredging of 6”-12” of sediment from areas in the pond within the Town boundary from a floating platform
- Processing of dredged sediment at the current on-site operations area and transporting the waste to an off-site disposal facility
- Sampling of the post-dredging sediment surface to ensure the established clean-up goals are met
- Backfilling/Restoration as required
- Some increase of controlled noise and truck traffic
- Off-site ambient air will be monitored to ensure no impacts to neighboring properties



# Questions?

