

Notice of Intent  
Closure of Northern Mound  
and Lot 26 Ash Area  
Haverhill Landfill  
MassDEP File No. 033-1540

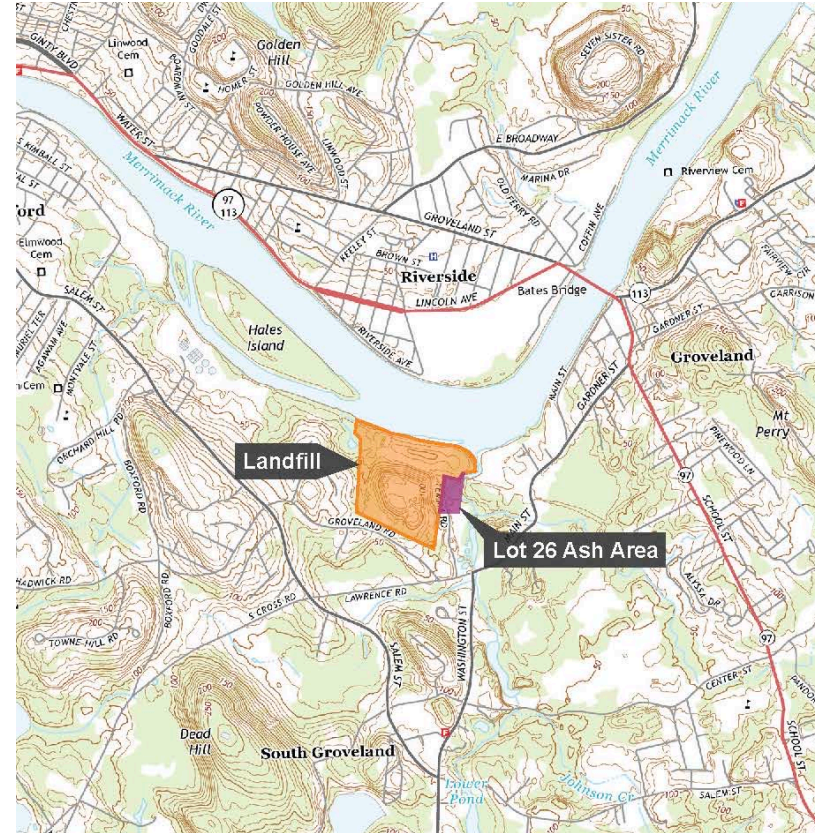
Presentation to Haverhill Conservation Commission

Proponents: City of Haverhill and Holcim-NER, Inc.

November 17, 2022

# Project Purpose

- Construct a final cap over the Northern Mound portion of the former Haverhill Landfill and landfilled ash on the Lot 26 Ash Area.
- Final cap is mandated by MassDEP under Solid Waste Management Regulations (310 CMR 19.000).
- Haverhill Landfill is on National Priorities List (NPL) under the Superfund program administered by EPA.



# Background and History



- Haverhill Landfill operated for disposal of City's waste from 1930's to 1983.
- Landfill accepted wastewater residuals until 1996.
- Hazardous waste removal action completed on Northern Mound in mid-2000's.
- Southern Mound capped in 2014. Currently solar PV installation.
- No specific history on operations of Lot 26 Ash Area.



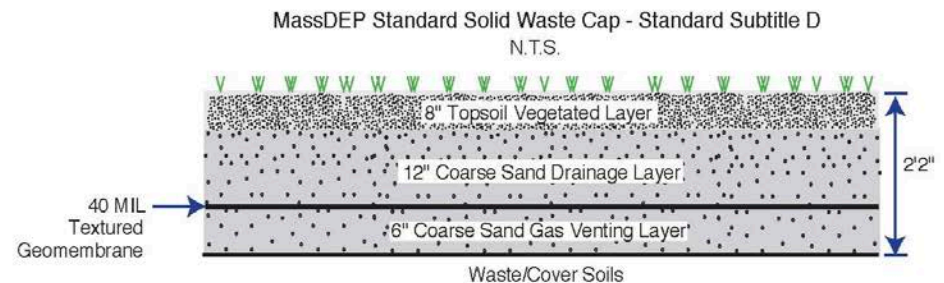
# Current Site Conditions

- Northern Mound covers about 17 acres of landfilled waste.
- Lot 26 Ash Area covers about 2 acres of landfilled ash.
- Project area includes mapped habitat for Bald Eagle and Shortnose Sturgeon. Wood Turtle habitat mapped across Johnson's Creek in Groveland.
- On Northern Mound, landfilled waste extends into the Merrimack River and Johnson's Creek. Slope well established with mature trees.
- Stormwater basin for portion of Southern and Northern Mounds on ash on Lot 26 Ash Area.

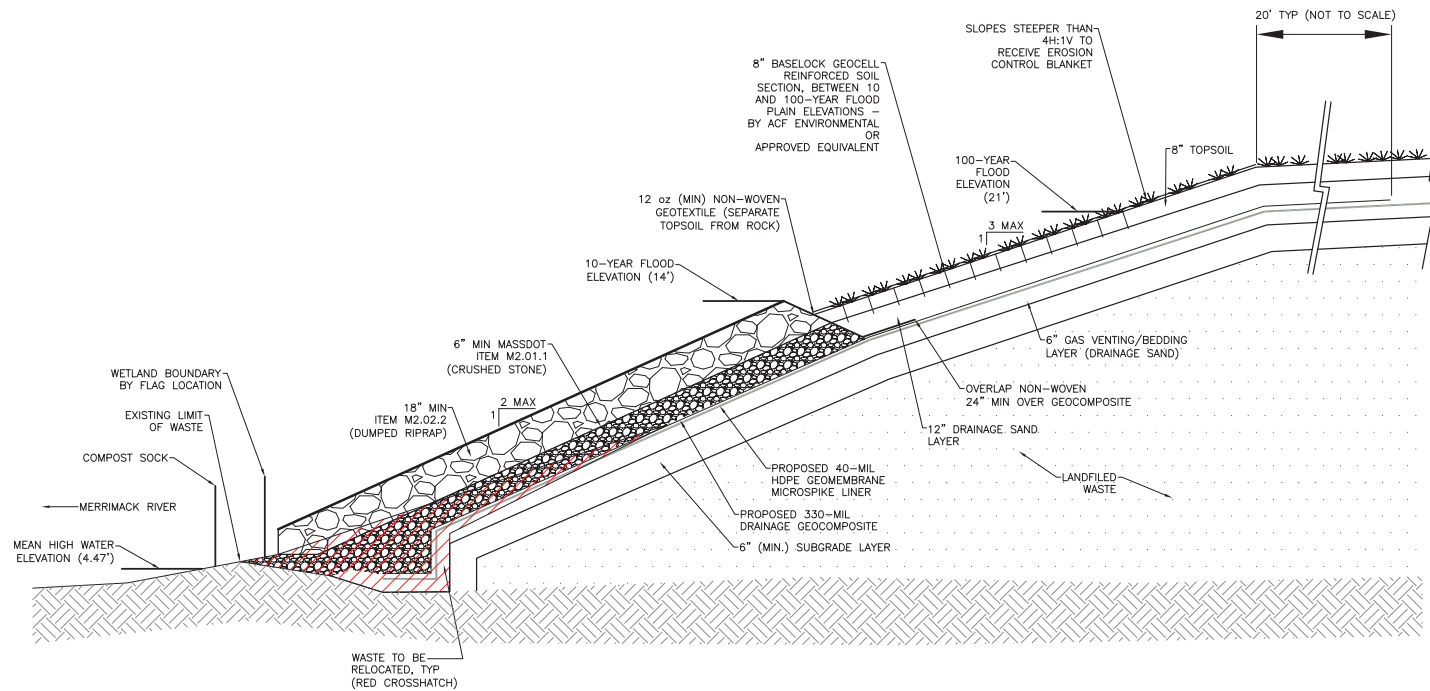


# Summary of Proposed Project

- Construct a cap meeting MassDEP standards over Northern Mound and Lot 26 Ash Area.
- Landfill capping Limited Project under WPA.
- Cap River-facing slope of Northern Mound with reinforced slope.
- Develop stormwater system complying with MassDEP Regulations including replacement stormwater basin on Lot 26 Ash Area
- Incorporate gravel road to top of bank for maintenance and potential future public access
- Implement resource area and habitat mitigation

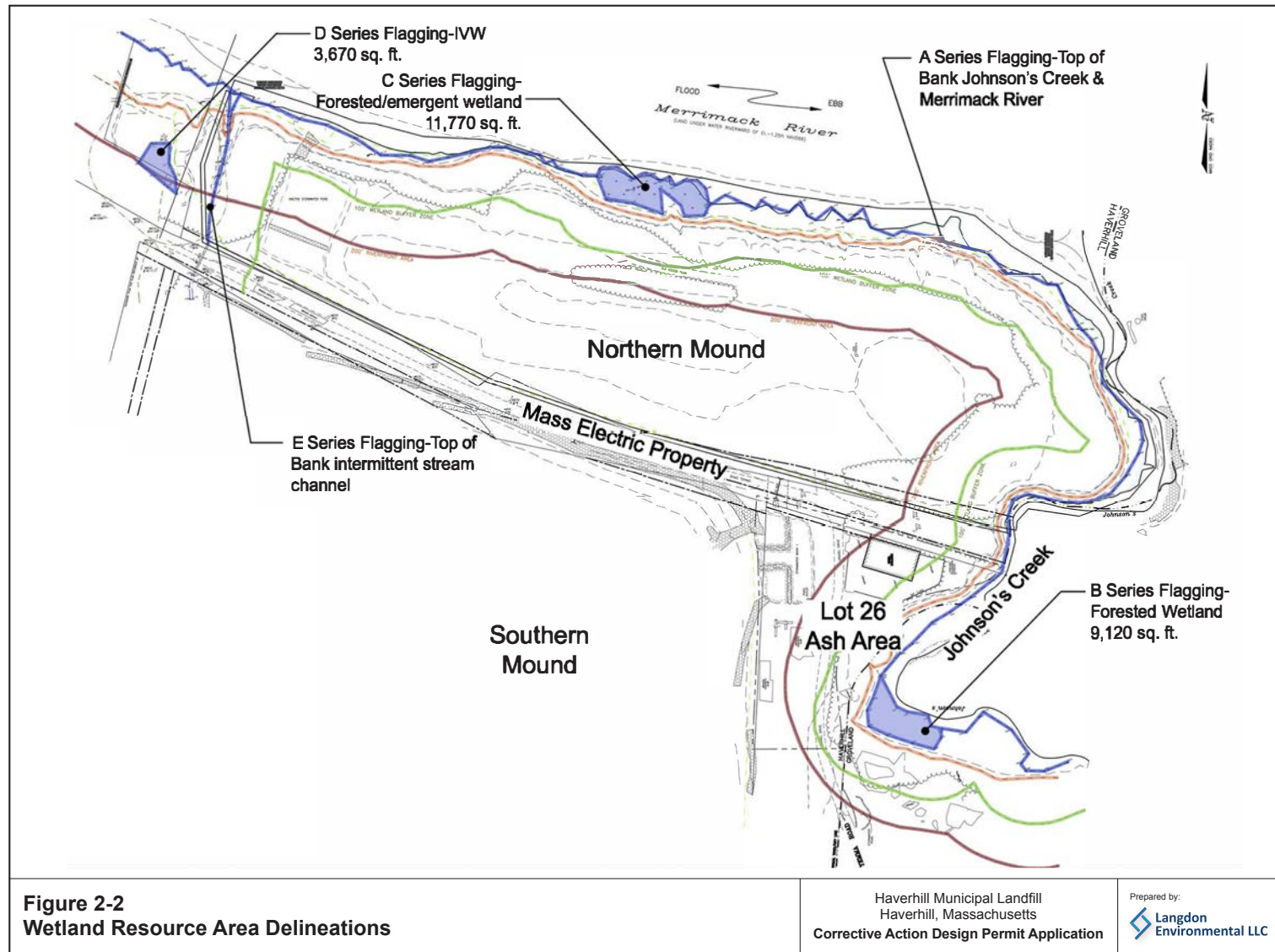


# Project Summary, continued



Typical Cross-Section: Landfill Cap at River and Creek

# Project Summary, continued





# Proposed Wetland Impacts and Mitigation

- Final Cap will be installed in Riverfront Area (9.62 acres) associated with River and Johnson's Creek.
  - Planting of treed buffer on plateau with natural trees and shrubs.
- Temporary impacts to 1,185 ft<sup>2</sup> of BVW (Flag Series B & C). Restored in-place. No net loss.
- Temporary impacts to 950 ft<sup>2</sup> IVW area (Flag Series D). Restored in-place. No net loss.
- Temporary impacts to 305 ft of intermittent stream. Above landfilled waste. Will be capped and restored in-place.
- Compensatory flood storage volume increased after regrading.





# Project Habitat Mitigation

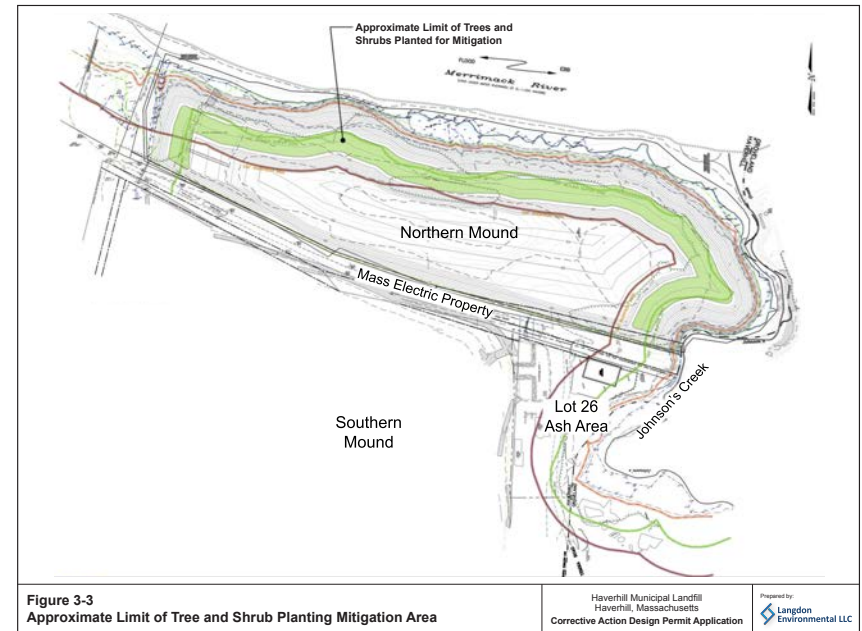


View of Lot 26 Ash Area including Quonset Hut and Existing Stormwater Basin

- Proposed habitat mitigation coordinated with NHESP during MEPA Environmental Impact Report process.
- Draft CMP submitted to NHESP
- Mitigation Program
- All construction from upland areas – no proposed work anticipated below MHW.
- Leave existing treed areas below MHW in-place.
- Pre-construction inspections for existing Bald Eagles nests
- Single mast pole with cross-bars for Bald Eagle perching

# Proposed Habitat Mitigation, continued

- Tree and shrub planting area along top of bank of Northern Mound (55- to 60-foot width)
  - Entire length of capped area (2,400 feet, total of 2.8 acres)
  - Planted with native species appropriate for above landfill cap.
- Rip rap stone at River installed in meandering face with variability.
- Wood Turtle habitat (10,000 ft<sup>2</sup>) to be installed at current Quonset Hut.
- Permanent barrier to restrict turtles migrating over existing access road.
- Implement inspection measures to avoid a “Take” of any Turtles during construction.



# Project Schedule and Permits

- Other Permits & Approvals
  - *Corrective Action Design (CAD)*
  - *Conservation & Management Permit*
  - Water Quality Certification/PGP ACOE Permit
  - *Chapter 91 License*
- Schedule
  - All permits submitted – Oct/Nov 2022
  - Approvals – Spring 2023
  - Start Construction – June 2023
  - Complete Construction – Fall 2024
  - Schedule driven by MassDEP SRF Program financing.



View of River and Northern Mound from  
Top of Southern Mound

# Questions and Answers

