Washington Metropolitan
Area Transit Authority

November 13, 2024

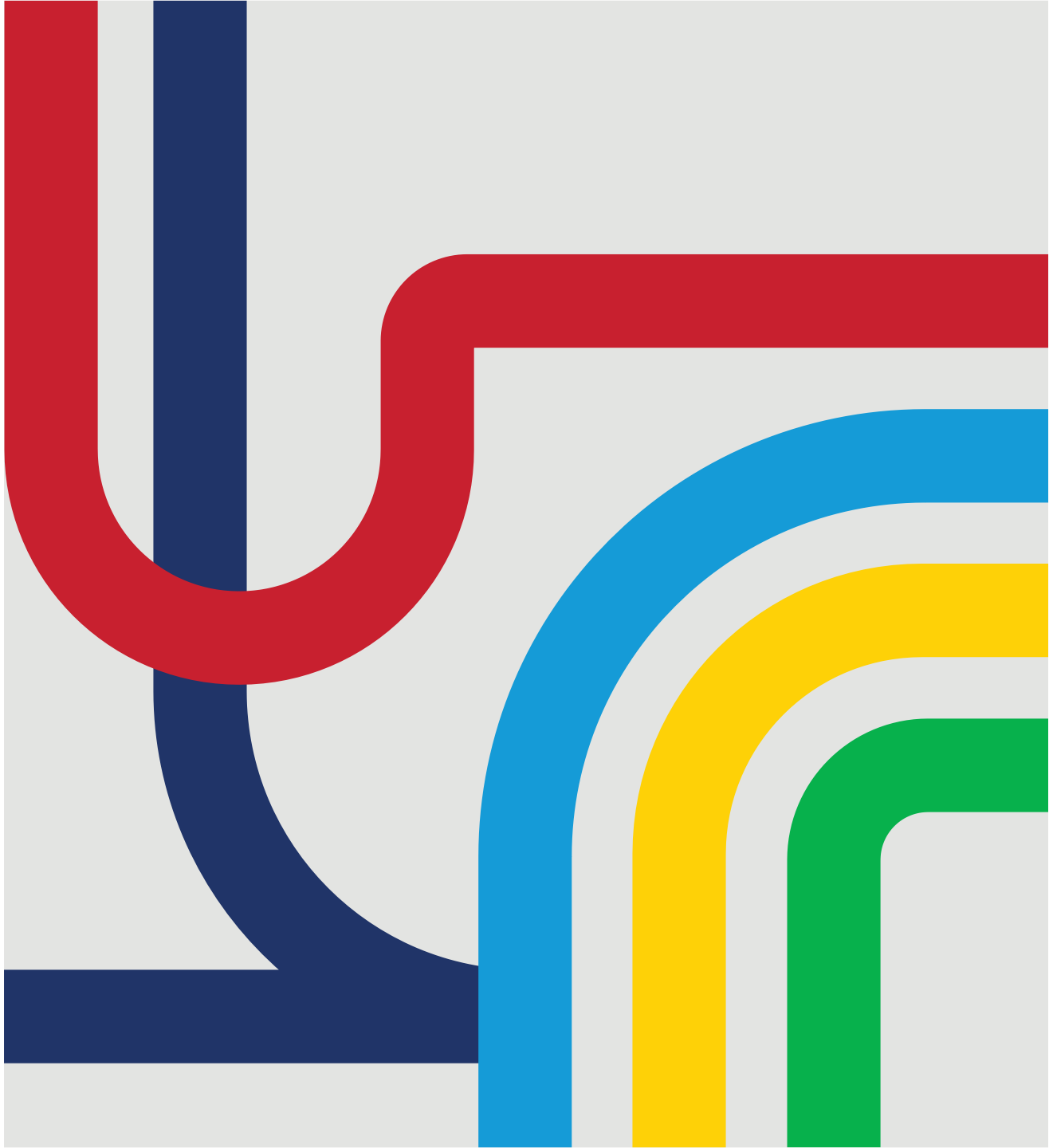
Northern Bus Garage

Reconstruction Project

Fall Community Meeting

This meeting is being recorded

RD OR SV BL YL GR metrobus Metro Access

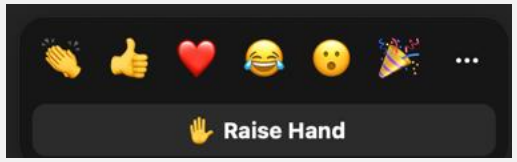


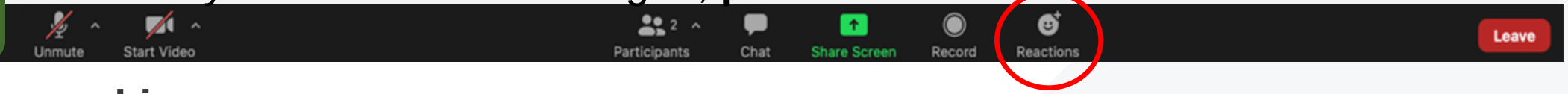
Meeting Etiquette: Virtual

Help keep this meeting productive and respectful.

Please adhere to the Q&A protocol:

- Request to speak by typing your name in the chat
- Type questions directly into the chat
- Use the raise hand feature in Zoom
  To raise your hand while dialing in, **press *9**





When speaking:

- Maintain a civil tone
- Be mindful of time

Agenda

- Introductions
- Interpretive Wayside Exhibit Draft Plan
- Environmental Overview
- Construction Overview
- Project Review and Updates
- What to Expect for 2024 & Beyond

Introductions

Project Team

Maya Nino
Senior Capital Program Manager, Capital Delivery

Tom Robinson
PMCM Project Manager

John Munson
Project Executive, Clark Civil
Clark Construction Group

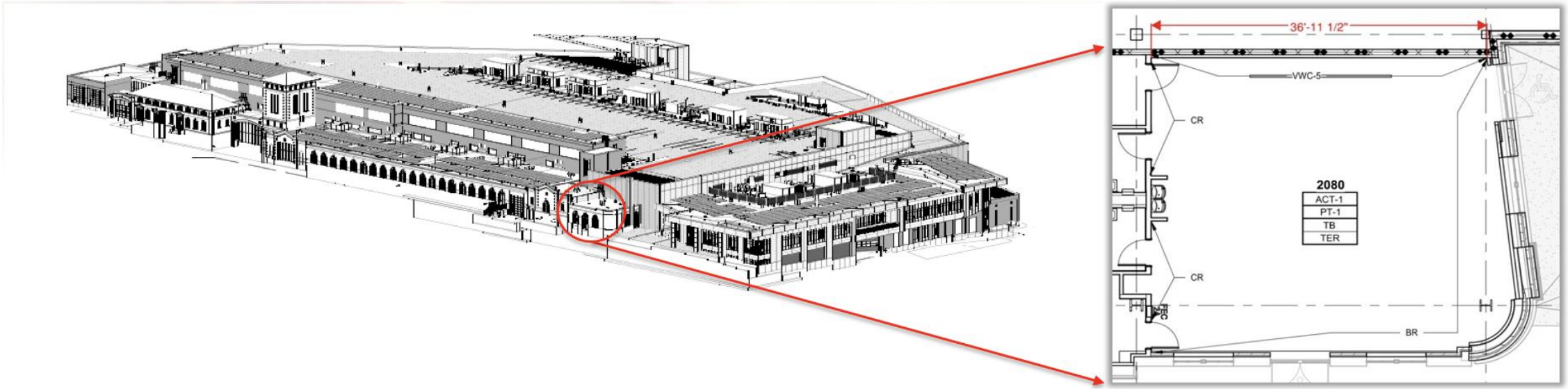
Jim Ashe
Environmental Coordinator

Jeff Winstel
Architectural Historian

Interpretive Wayside Exhibit Draft Plan

Purpose

- We Need Your Feedback: Community Engagement
  - Oral histories and community photos
  - Review and comment on draft plan, copy, and graphics
  - Community Room exhibit design concepts



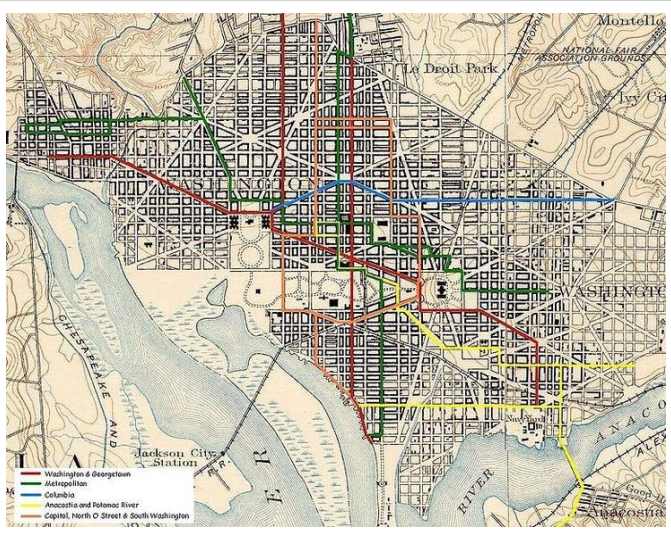
Background

- Historic building and historic preservation regulations
- Section 106 and Memorandum of Agreement (MOA)
  - *Signatory Parties*
    - WMATA, FTA, DC SHPO
  - *Consulting Parties:*
    - ANC 4C02, 16th Street Neighborhood Assoc.
    - Uptown Main Street, Northern Busbarn Neighbors
- WMATA agreed to Interpretive Signage Exhibits
  - *3 double-sided exterior exhibit panels*
  - *5 interior (community room) exhibit panels*

A visitor reads a sign at the Downtown Heritage Trail. The Cultural Tourism DC Heritage Trails connect cosmopolitan DC with local neighborhood culture and history.

Exhibit Requirements

- Historic and architectural significance
- DC Streetcar system history
- Social history, African American History



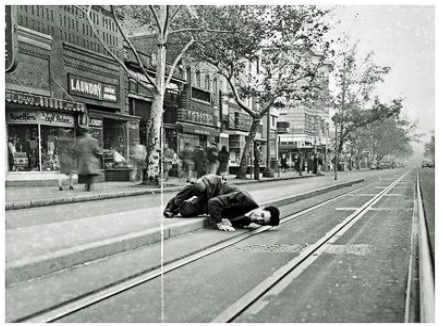
1888 Washington, D.C. Streetcar Map

Project Status

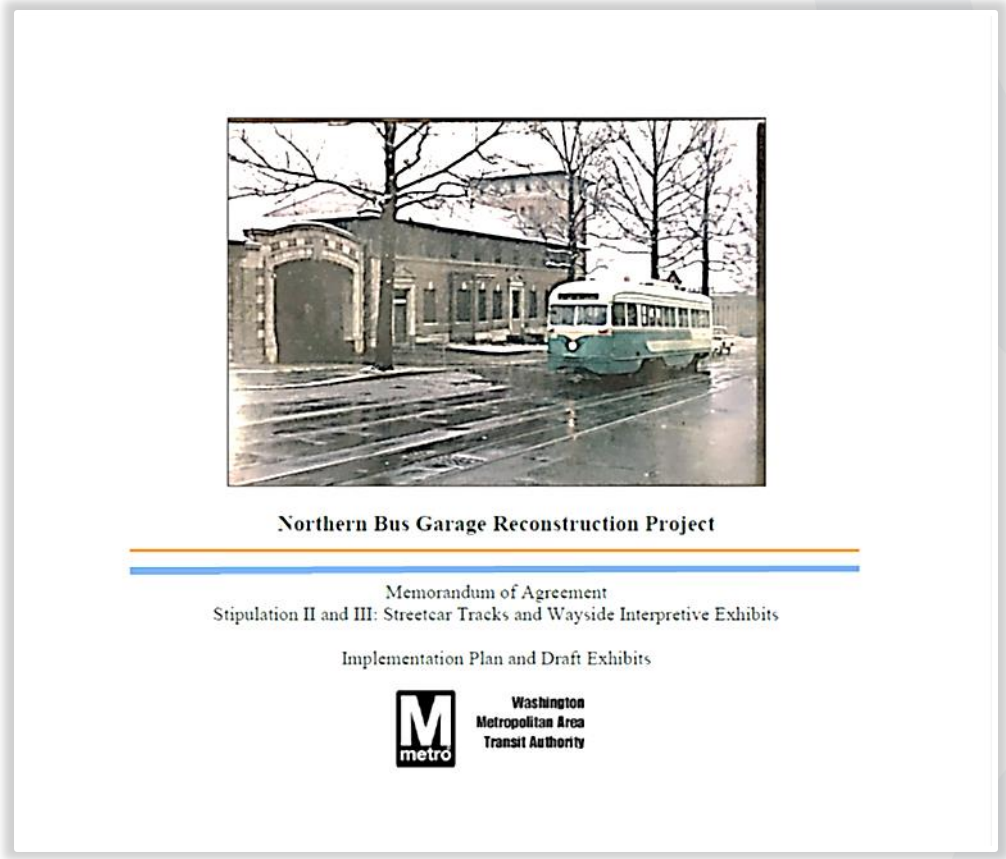
- Outreach and research
  - *GWU Archives*
  - *National Capital Trolley Museum*
  - *Mapping Segregation DC Project*
  - *DC History Center Archives*
  - *The People's Archive MLK jr. Memorial Library*
- Three oral histories conducted and transcribed
- Project Implementation Plan
- Community Room concept designs

Project Next Steps

- Metro invites you to share your thoughts about the plans for the exterior panels.
  - *Share community stories, news clippings, photographs, etc.*
  - *Email your thoughts/comments to MCAP_NBG_Reconstruction_Project@wmata.com (with subject line:. Comment period will close on Friday, December 13, 2024.*
- *Community Room Concept Designs Townhall-Q1 2025*
  - We'll be inviting community members to help choose the artwork format for the new Northern Bus Garage Community Room. We're excited to have your input in shaping this space. More details will be available soon.
  - Comment period for this initiative above will extend over a 4-week period. Date TBD.



Thank you!



Visit the project webpage to view the Wayside Interpretative Exhibit Plan and learn more.

Q&A Listening Session

Virtual

- Type comments directly into the chat
- Raise your hand if you'd like to ask a question

Update on Environmental Plan and Remediation

Environmental Remediation Approach

- Site History: What has happened at the site?
- Nature and Extent: What contaminants are present and where are they?
- Fate and Transport: Where are the contaminants going and what will happen to them in the environment?
- Risk: What is the level of cancer and non-cancer risk associated with these contaminants?
- Remediation: How are the contaminants managed?

Terms

- *Contaminant*—a material that is present on site above naturally-occurring levels
- *Aquifer*—a geologic formation that holds water.
- *LNAPL* [Light, non-aqueous phase liquid]—a liquid (such as diesel or gasoline) that is present in the environment and not dissolved in water. LNAPLS are lighter than water: LNAPLs float on groundwater.
- *DNAPL* [Dense, non-aqueous phase liquid]—a liquid (such as a dry cleaning fluid) that is present in the environment and not dissolved in water. DNAPLS are heavier than water: DNAPLs sink to the bottom of an aquifer.
- *Industrial RSL*--Contaminant screening level for risk, with a target risk of 1×10^{-6} for cancer hazards and Hazard Quotient of 1 for non-cancer hazards. Used for non-petroleum contamination.
- *RBCA Tier 1 Remediation Levels*—DOEE-prescribed remediation levels for petroleum contamination.

Site History and Sources

- Northern Bus Garage was opened in 1906 as a car barn for Street Cars.
- Over the years, it was also used as a bus garage.
- After discontinuance of street cars, the building continued as a bus garage until 2019, when operations ceased. Underground storage tanks held petroleum products.
- Reportedly, the southern portion of the property hosted a gas station, automotive garage, and potentially a dry cleaning facility.
- Contaminant source types include lead paint, asbestos, petroleum, chlorinated solvents, and polychlorinated biphenyls.

Remediation History

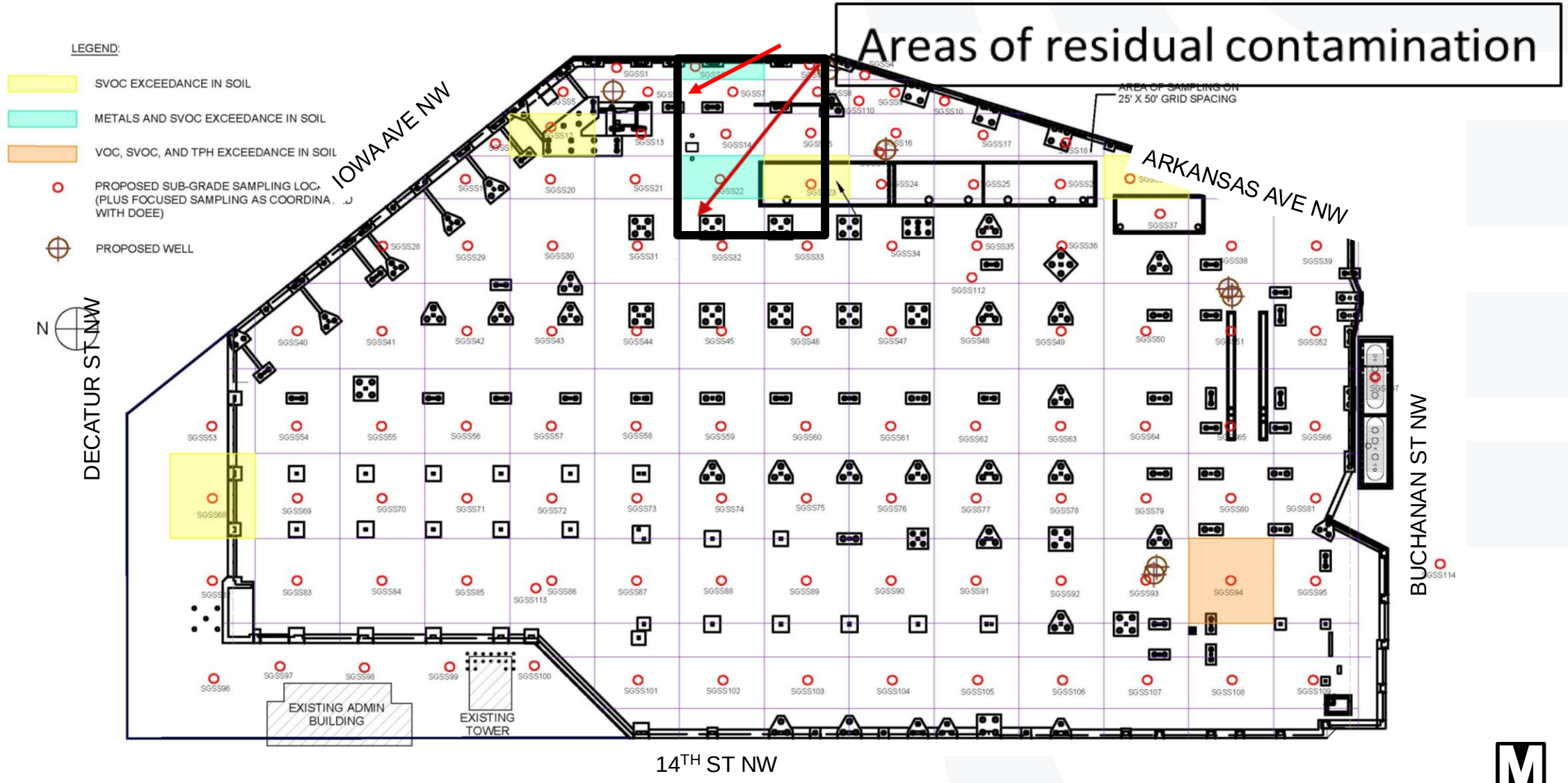
- 1984: Petroleum vapors identified during a geotechnical investigation. Soil removed and a pump-and-treat system was operated. Treatment system inactivated in 1990.
- 1992: In-well free product system installed.
- 1999: Air sparging system installed.
- 2003: Chlorinated solvents identified; source reported to be a historic dry-cleaning facility.
- 2020: Current effort initiated.
- 2023: Interim CAP approved (for area within the building footprint)
- 2024: Baseline Risk Assessment submitted

Remediation Strategy--Now

- For *inside* the building footprint, the Interim Corrective Action Plan says:
  - *Remove contaminated soil to Industrial RSLs and Tier 1 Levels. Dispose at authorized facility.*
  - *Remove all tanks and related debris, and other contaminated materials. Dispose at authorized facility.*
  - *Install a protective HDPE liner and a PVC air collection system to manage residual vapors if needed.*
  - *Add nutrients to enhance bioremediation breakdown of contaminants.*
  - *Treat groundwater removed during construction and remove free product if found.*
  - *Install 7 wells in the footprint for future pump and treat activities, if needed.*

- For *outside* the building footprint:
  - *Install additional wells to confirm understanding of nature and extent of contamination in groundwater. Remove free product if found.*
  - *Complete a risk assessment to establish remediation levels.*
  - *Complete a Final Corrective Action Plan to specify remediation activities.*
  - *If risk assessment indicates, install a pump-and-treat system for groundwater contamination.*

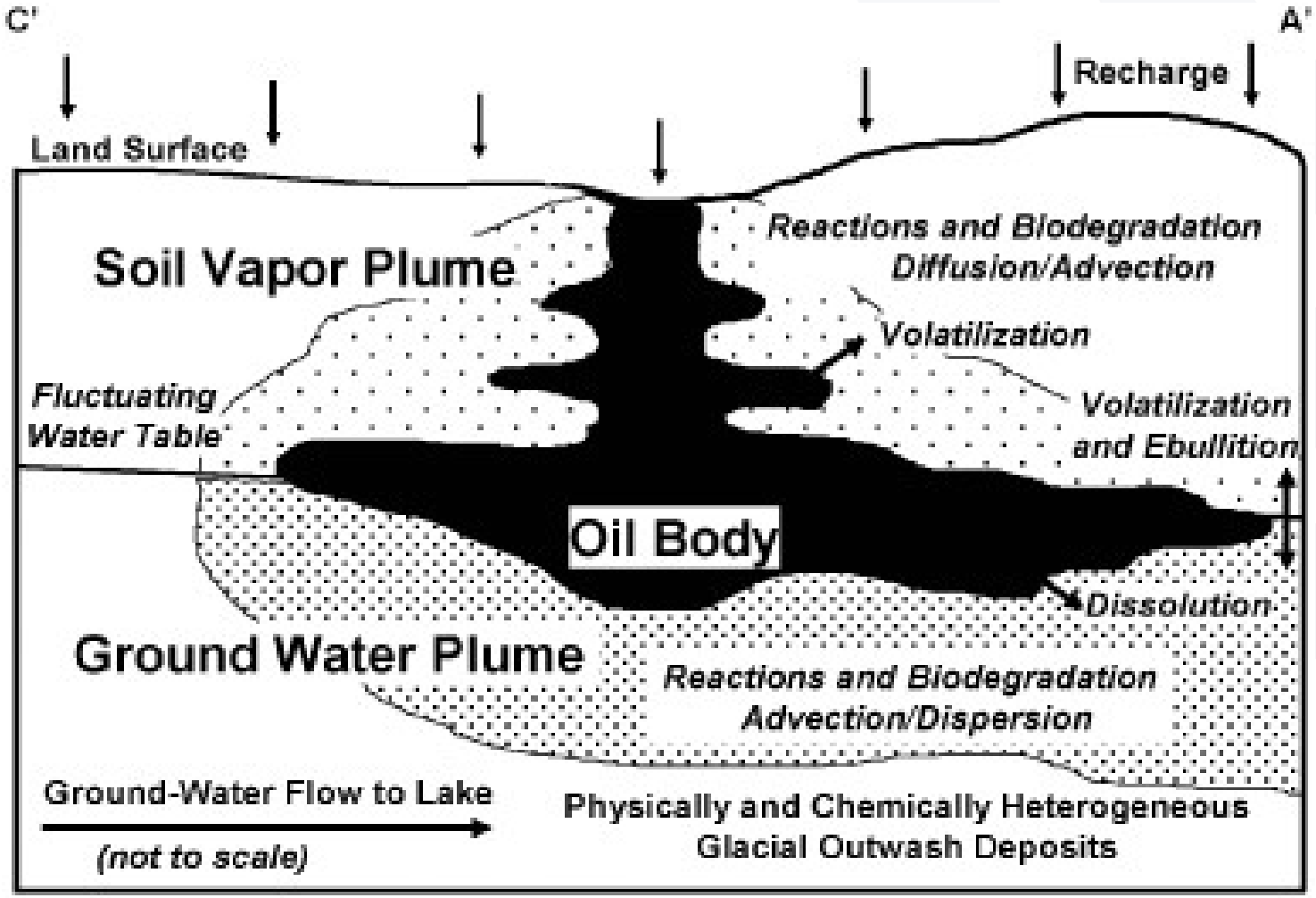
Soil Sampling Grid and Impacted Areas



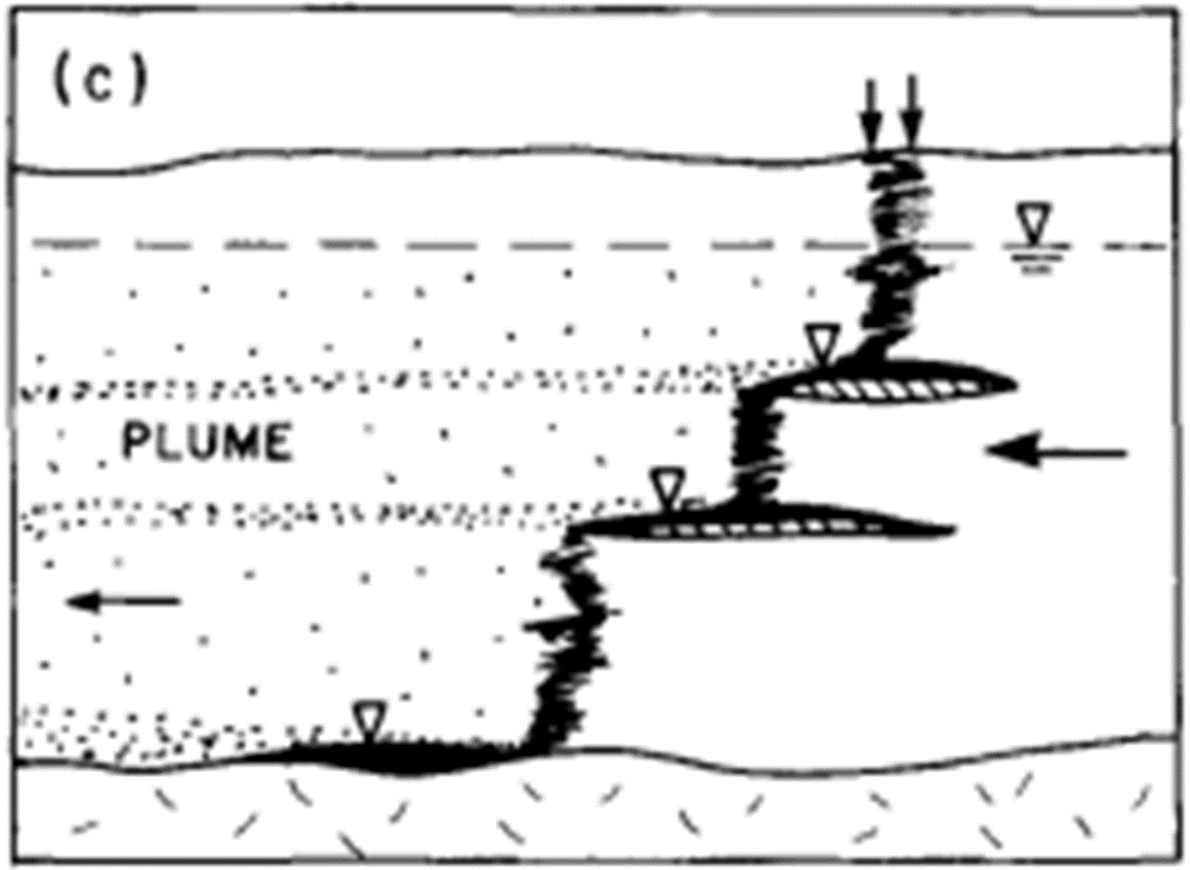
Fate and Transport

- Contaminated soil has been removed.
- Petroleum is lighter than water, and will float on water--LNAPLs. Engineers look ‘downhill’ of the site to assess where residual contamination will go.
- Chlorinated solvents are heavier than water and will sink to the aquitard--DNAPLs. Engineers look at the surface of the bedrock to assess flow direction, ‘down hill’.
- Both petroleum and chlorinated solvents will break down over time, but nutrients will enhance this degradation process.
- PCBs—one or two detections; will attach to soil particles. Removed during soil excavation.

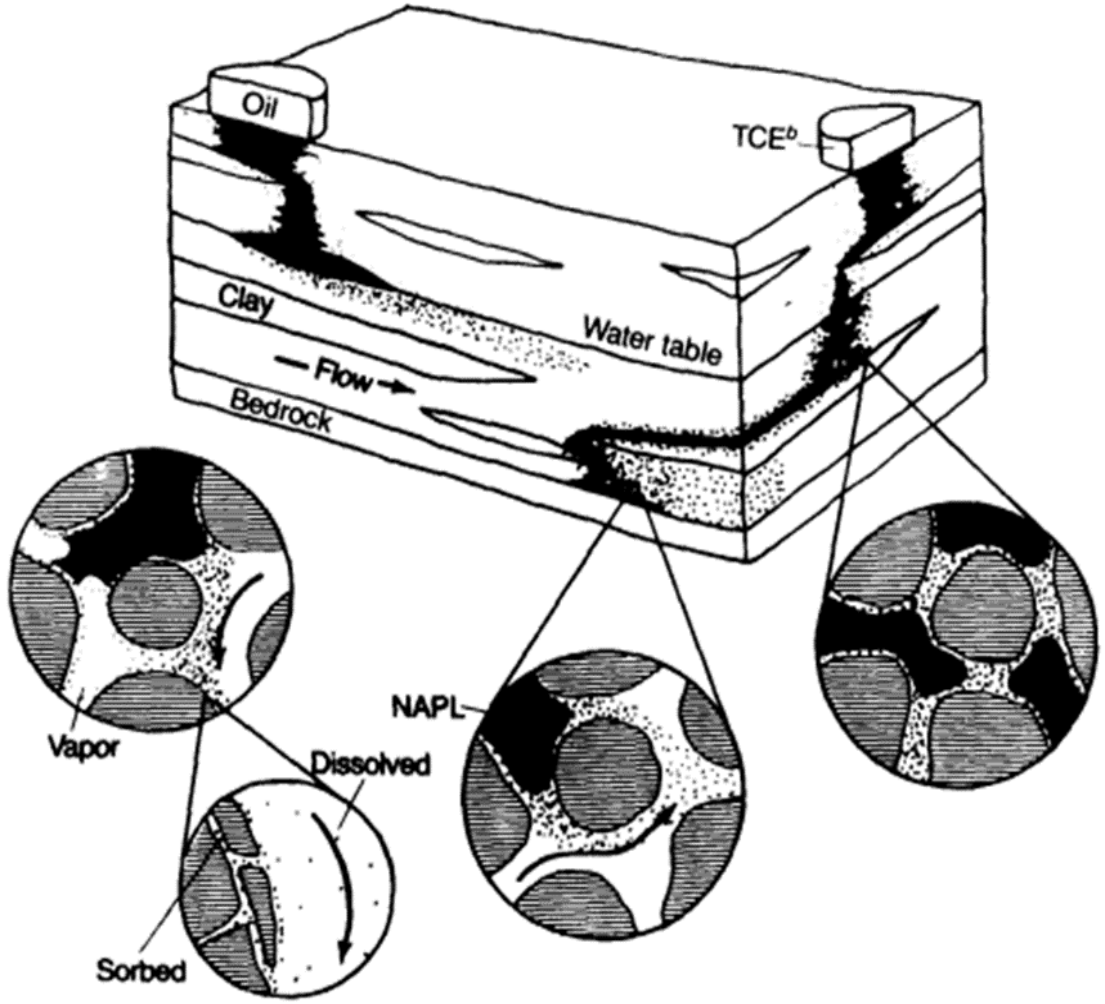
Petroleum in the Environment



Chlorinated Solvents in the Environment

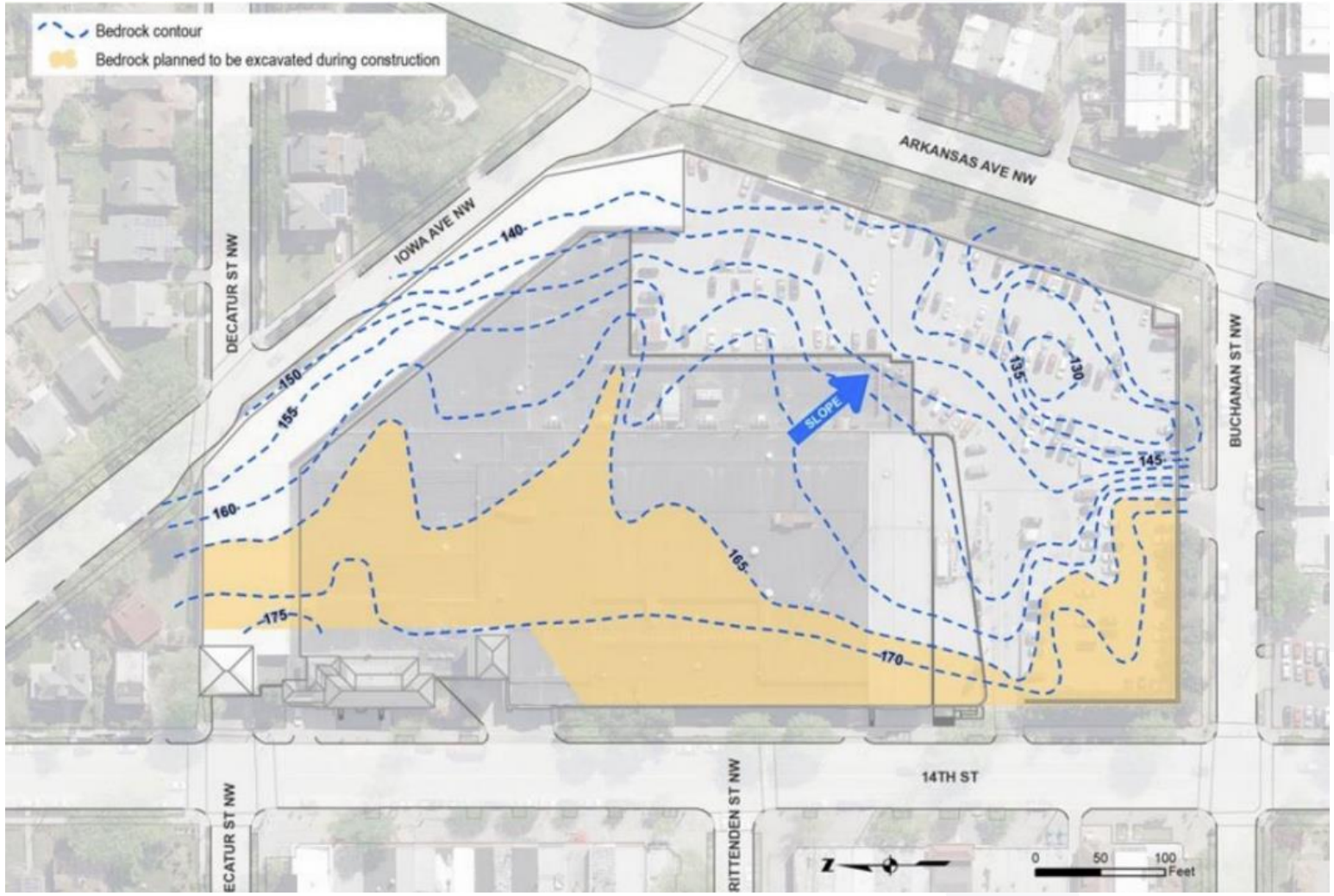


Petroleum and Chlorinated Solvents in the Environment



Groundwater Flow

Bedrock Contours



Regulatory Frameworks

- RCRA (for USTs and waste management)
- AHERA (for asbestos)
- DC Regulations (for air, dust, asbestos, lead, waste, USTs, and land remediation).
- DC Water for Permit conditions

Risk Assessment

- Baseline Risk Assessment (draft submitted October 2024)
  - *Risk at beginning of construction*
- Revised Risk Assessment
  - *Risk Calculation after Soil removal, installation of vapor systems, and groundwater sampling*

Then . . . Look at ranges > (1 x 10-4 to 1 x 10-6) and

Hazard Index > 1

Then . . . Set final remediation levels

Remediations Levels

- For petroleum: DOEE Tier 1 RBCA [Risk-based Corrective Action] levels
- For other materials (within building footprint): USEPA Industrial Risk Screening Levels
- Risk-based concentrations (for the entire project)
  - *Look at current uses, future uses, and temporary worker scenarios*
  - *Assess risk for Cancer. Typically, the range is for additional remediation is 1 x 10^{-4} to 1 x 10^{-6}.*
  - *Assess non cancer risk ("Hazard Index"). HIs greater than 1 suggest additional remediation.*

Remediation Strategy

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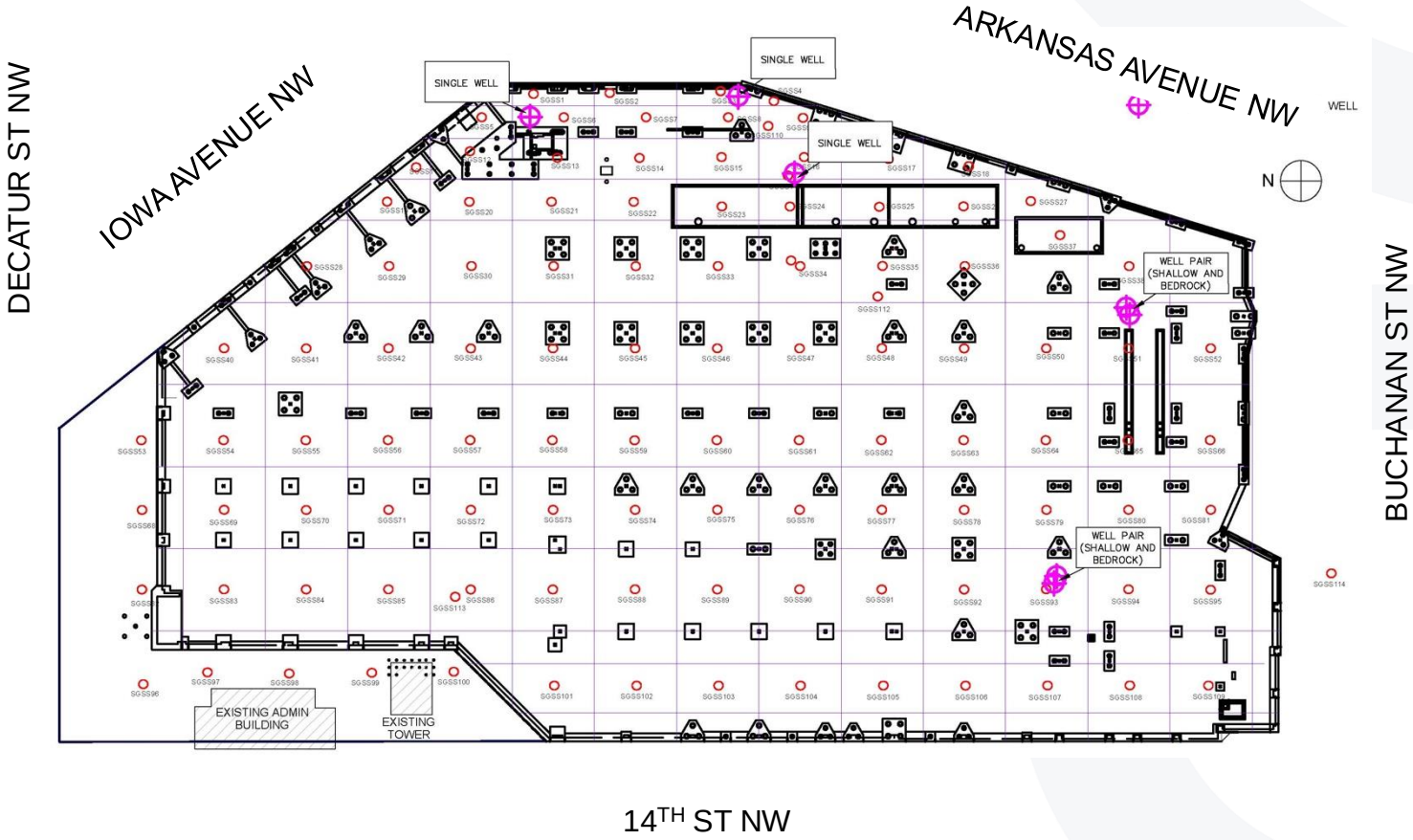
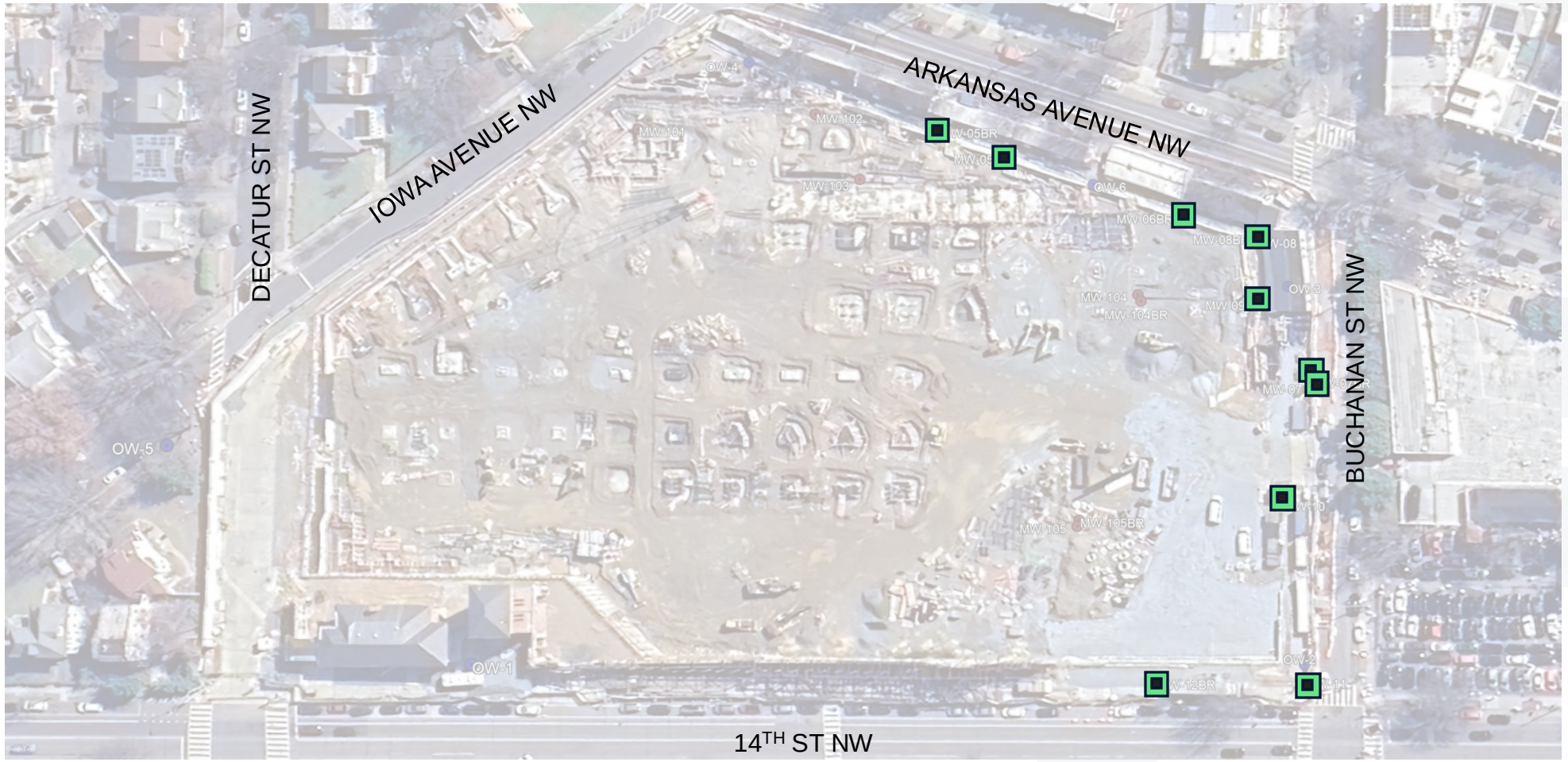
Soil Amendment Areas

Interior Groundwater Monitoring Wells

- 7 groundwater monitoring wells will be installed for continued monitoring in direction of groundwater flow
- Installed in areas with highest petroleum hydrocarbon and chlorinated VOC impacts



Perimeter Wells



Note: Green squares are planned well locations along Arkansas Avenue, Buchanan Street, and 14th Street.

Next Steps

- Complete all wells and sample; in progress.
- Develop a risk assessment; in progress. [Risk Assessment will be used to set final clean-up levels.]
- Develop Final Corrective Action Plan
- Implement corrective action measures and monitor.

Closing

- Coordinate with DOEE Underground Storage Tank Division and with DOEE Land Remediation Division

- Provide updates to the community.

- Provide immediate reports to DOEE in the event of unusual activities. (DOEE has a representative on site for well excavation.)

Monitoring Reports

- Monitoring reports for July 2024 and August 2024 have been posted to the project website.
- Overview (see online reports for specifics)
  - Noise level threshold exceedances have been identified during project work hours and during non-work hours in both July and August.
  - Five vibration threshold exceedances were documented in July 2024; three were associated with utility work and two were associated with site workers bumping instrument.
  - Particulate threshold exceedances (and noise exceedances) were noted on July 4th. (DM3 experienced a power outage on July 3rd to July 4th.)
  - Five vibration threshold exceedances were documented in August 2024; all were associated with utility work.
  - Five dust exceedance events were documented in August. Attributed to wind and truck traffic. Dust control measures were deployed.

Q&A Listening Session

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- Raise your hand if you'd like to ask a question

Project Overview & Construction Updates

Progress Since Last Meeting

Q3 Construction

Foundations & Underground

- Pile cap & foundation wall placement for Bus Storage level completed
- Slab-on-grade placement ongoing, ~60% complete
- Underground piping and conduit installation ongoing to support slab-on-grade placement

Progress Since Last Meeting

Q3 Construction

Superstructure

- Steel erection ongoing, ~30% complete
- Metal deck installation started for elevated decks, preparations ongoing to start concrete deck placement

Progress Since Last Meeting

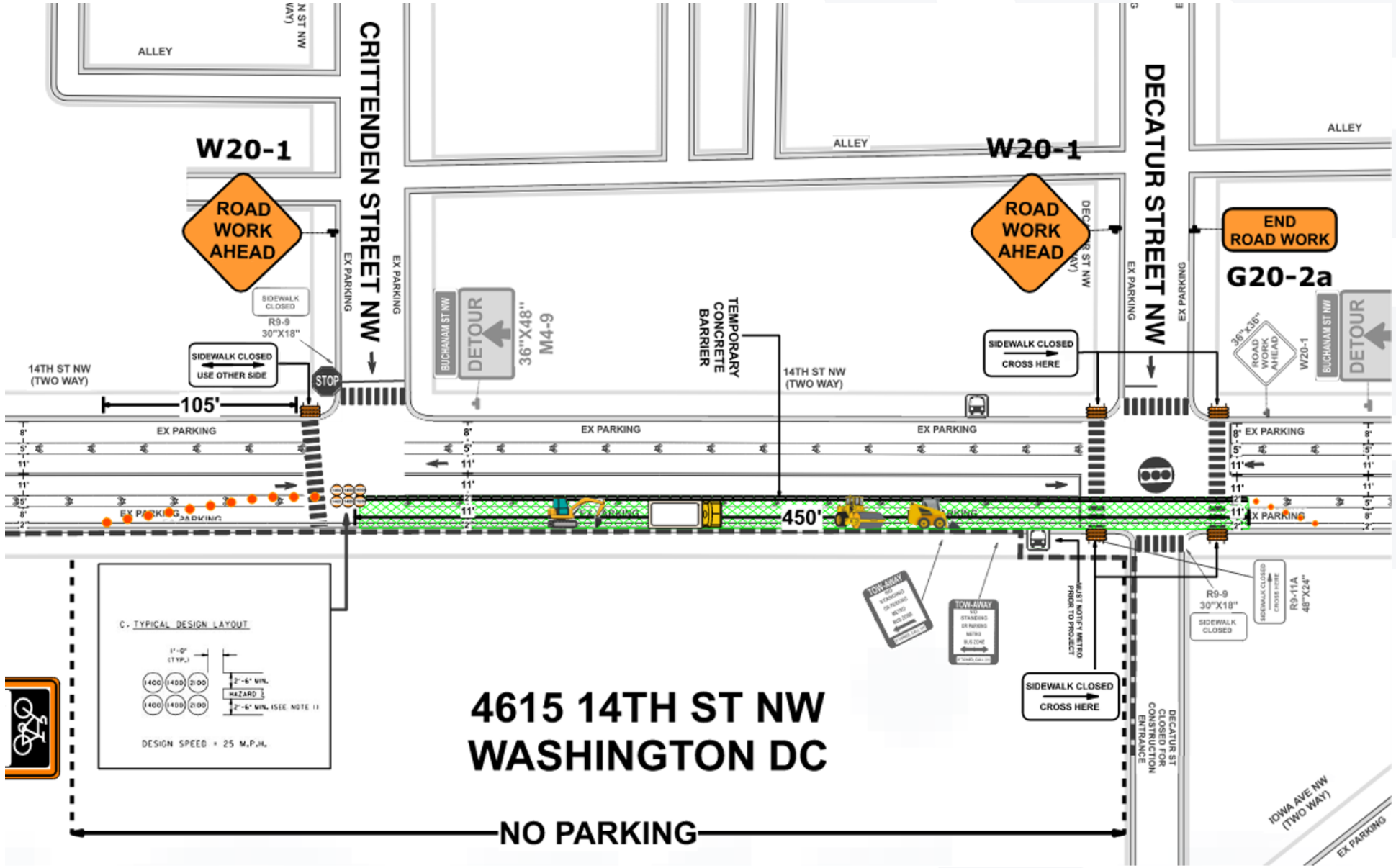
Q3 Construction

Wet Utilities

- Sewer line installation on 14th Street
  - New sewer main completed
  - Completion of lateral connections at Decatur Street intersection ongoing – coordination w/ DC Water to resolve existing utility conflicts
- Water main replacement on 14th Street
  - Start date: 10/31/2024
  - Duration: ~12 weeks* performed in two equal phases
  - Work hours: Mon – Fri 7:00 AM – 5:30 PM, weather dependent
  - 1st phase – install between Decatur & Crittenden Streets
  - 2nd phase – install between Crittenden & Buchanan Streets
  - Work zone will occupy the northbound parking and bike lane on 14th Street and will be separated by concrete barriers – see next slide

* - subject to adjustment if unforeseen conditions encountered

14th Street Water Line Installation – Phase 1 Work Zone



Progress Since Last Meeting

Q3 Construction

Wet Utilities (cont'd)

- Sewer relocation on Iowa Avenue
  - Start date: pending completion of sewer laterals on 14th Street
  - Duration: ~5 weeks*
  - Work hours: Mon – Fri 9:30 AM – 3:30 PM, weather dependent
  - Work zone will occupy west side of Iowa Avenue at Decatur Street intersection – flaggers will direct traffic between Delafield Place & Arkansas Avenue

* - subject to adjustment if unforeseen conditions encountered

Ongoing Site Maintenance

Erosion & Sediment Control

- Maintenance of controls in-place – silt fence, inlet protection
- Periodic inspections by DOEE

Delivery Logistics

- Verification of compliance with idling regulations

Construction Entrances

- Street sweeping at entrance/exit points

Pest Control

- Pest control subcontractor performing periodic inspections and rebaiting of stations

Outlook for Q4 2024

Construction

- Continue Bus Storage level slab-on-grade placement
- Continue underground plumbing and electric installation
- Complete water line installation on 14th Street
- Continue structural steel erection & deck installation
- Start framing for exterior walls
- Complete BEB design documents

Q&A Listening Session

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What to Expect for 2024 & Beyond

Current Schedule

Q1 2023	Q4 2023	Q3 2024	Q2 2025	Q3 2026	Q2 2027
Start mass demolition	Start permanent foundations	Start structural steel assembly	Start finishes	Start acceptance testing	Expected project completion

This schedule is subject to change due to the BEB scope addition

How to Follow-Up on the Project

Sign Up For Project & Newsletter Updates

MCAP_NBG_Reconstruction_Project@wmata.com

Project Website

wmata.com/NorthernBusGarage

Quarterly Community Meetings

Next meeting:
Winter 2024 (Virtual Only)

Follow us on: @MetroForward @wmata @MetroForward

Q&A Listening Session

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Thank you!

Washington Metropolitan
Area Transit Authority