

Carnotite Reduction Company Site Remediation

Virtual Community Meeting

February 25, 2021

4th Ward Alderman Sophia King

City of Chicago Department of Assets, Information and Services

www.Chicago.org/carnotite



Meeting Agenda

Introduction to Speakers

- Alderman Sophia King
- Kimberly Worthington, AIS
- Abby Mazza, AIS

Site Background and Environmental Monitoring

Remediation Project

- Overview
- Construction Activities
- Project Timeline

Responses to Questions and Comments Received





Carnotite Site Background



- Radium processing facility operated from approximately 1916 to 1921 near what is now 434 E. 26th Street.
- Became part of the land occupied by the former Michael Reese Hospital.
- Elevated radioactivity identified in 1979 by a state regulatory agency with a determination of no immediate health hazard.
- Determined again to be safe in 2013 by Illinois Department of Public Health for vacant site conditions.



Former Carnotite Reduction Company Site

Activities Completed to Date

2009:

- City acquires Michael Reese Hospital site
- IEMA confirms radiological contamination is present
- City begins radiation monitoring program similar to Streeterville

2009-2013:

- IEMA, EPA and City conduct site investigations

2010:

- Public meeting held during demolition of Michael Reese buildings where radiological information was presented

2015:

- IEMA issues license to City to begin formal decommissioning process
- City begins quarterly environmental monitoring

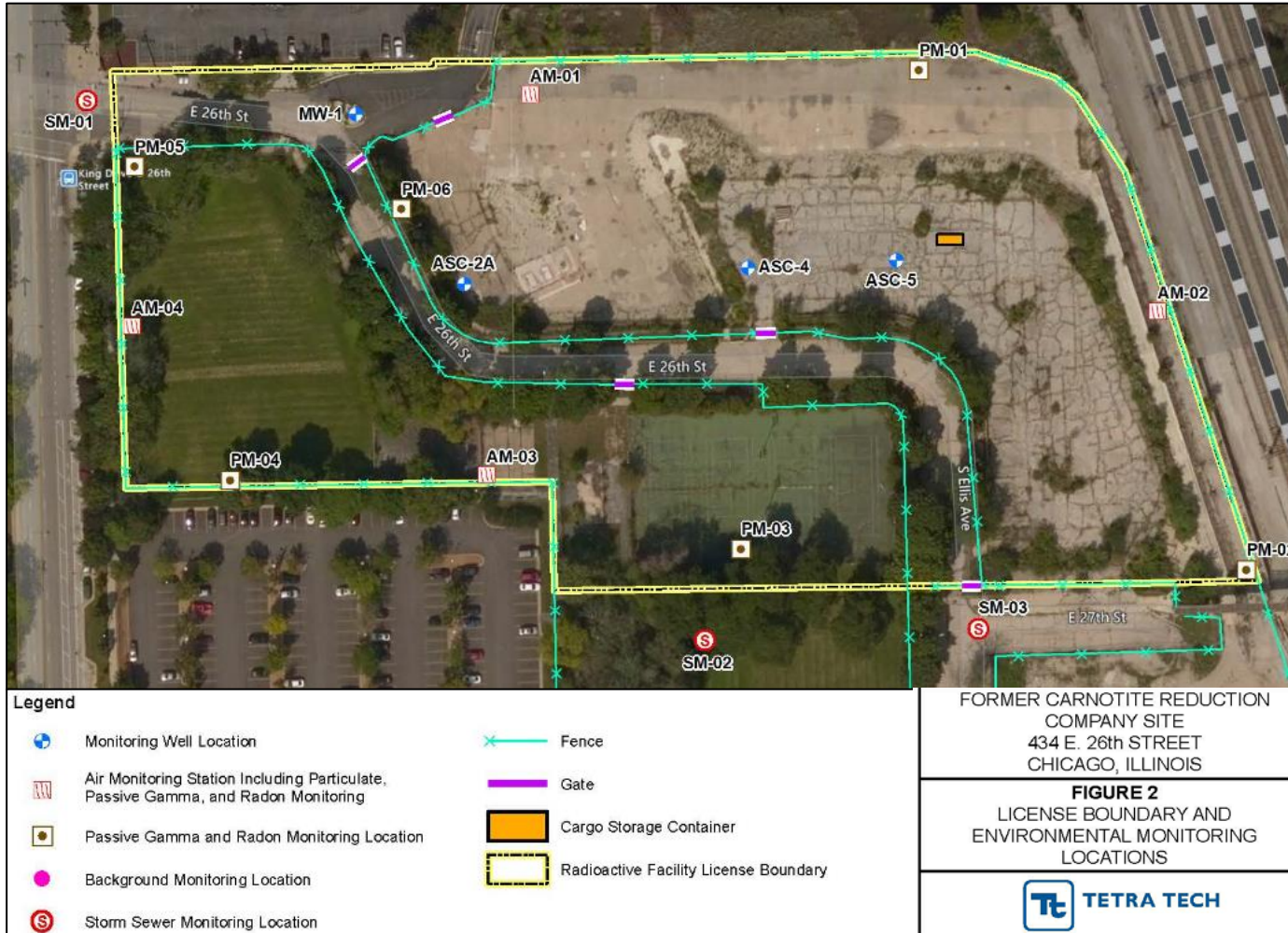
2020:

- Project fact sheet mailed to community area in preparation for 2021 construction start
- Issue remediation bid

2021:

- Community meeting

Environmental Monitoring



Air particulate, groundwater, sewer sediment and sewer water

- Sampled quarterly starting in October 2015 for up to two years
- Results are below concentrations of concern

Passive gamma radiation and radon

- Evaluates the cumulative exposure to the public
- Started in October 2015 and will continue until remediation begins.
- Results are below maximum dose limits set by IEMA

Remediation Project Overview

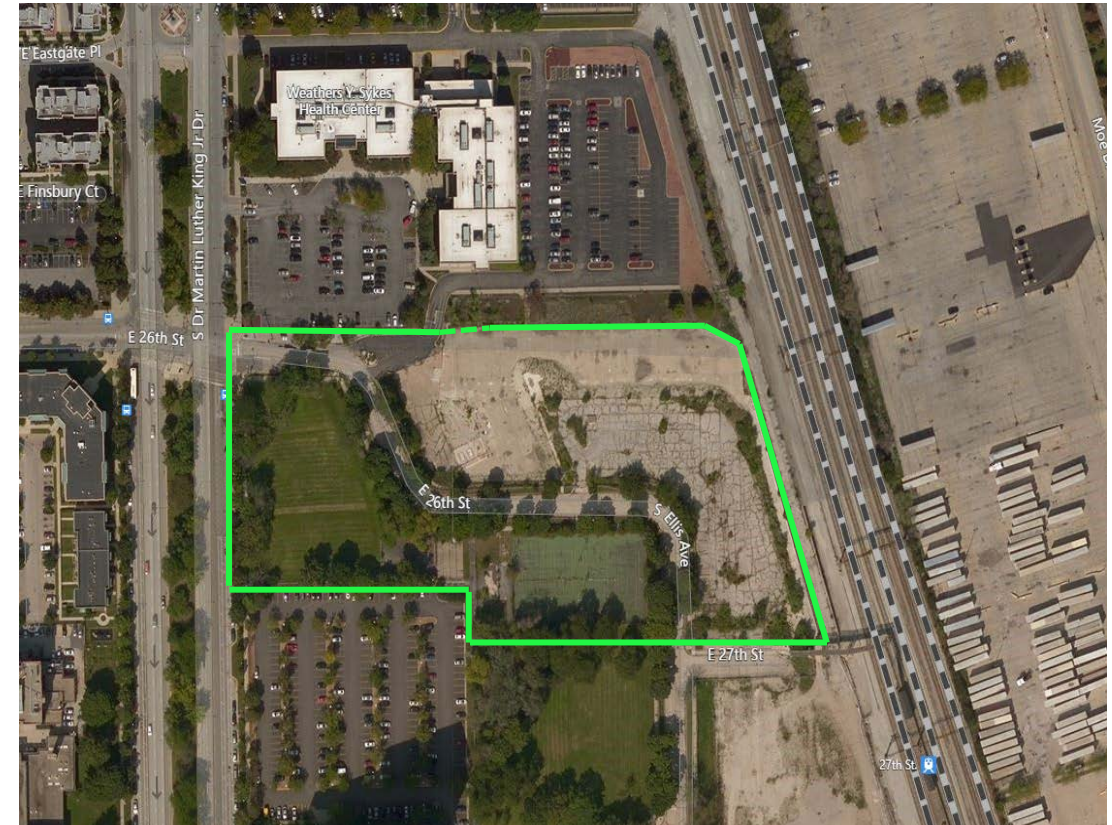
Project Goals: Protect human health and the environment, fulfill regulatory requirements, and eliminate a primary barrier to redevelopment of the site.

Scope of Work: Excavate radiologically contaminated soil from the site for off-site disposal and backfill with clean fill.

Cost Estimate: \$31,000,000 (GO bond and TIF; includes construction, oversight and contingency)

Minority and Local Resident Participation Goals:

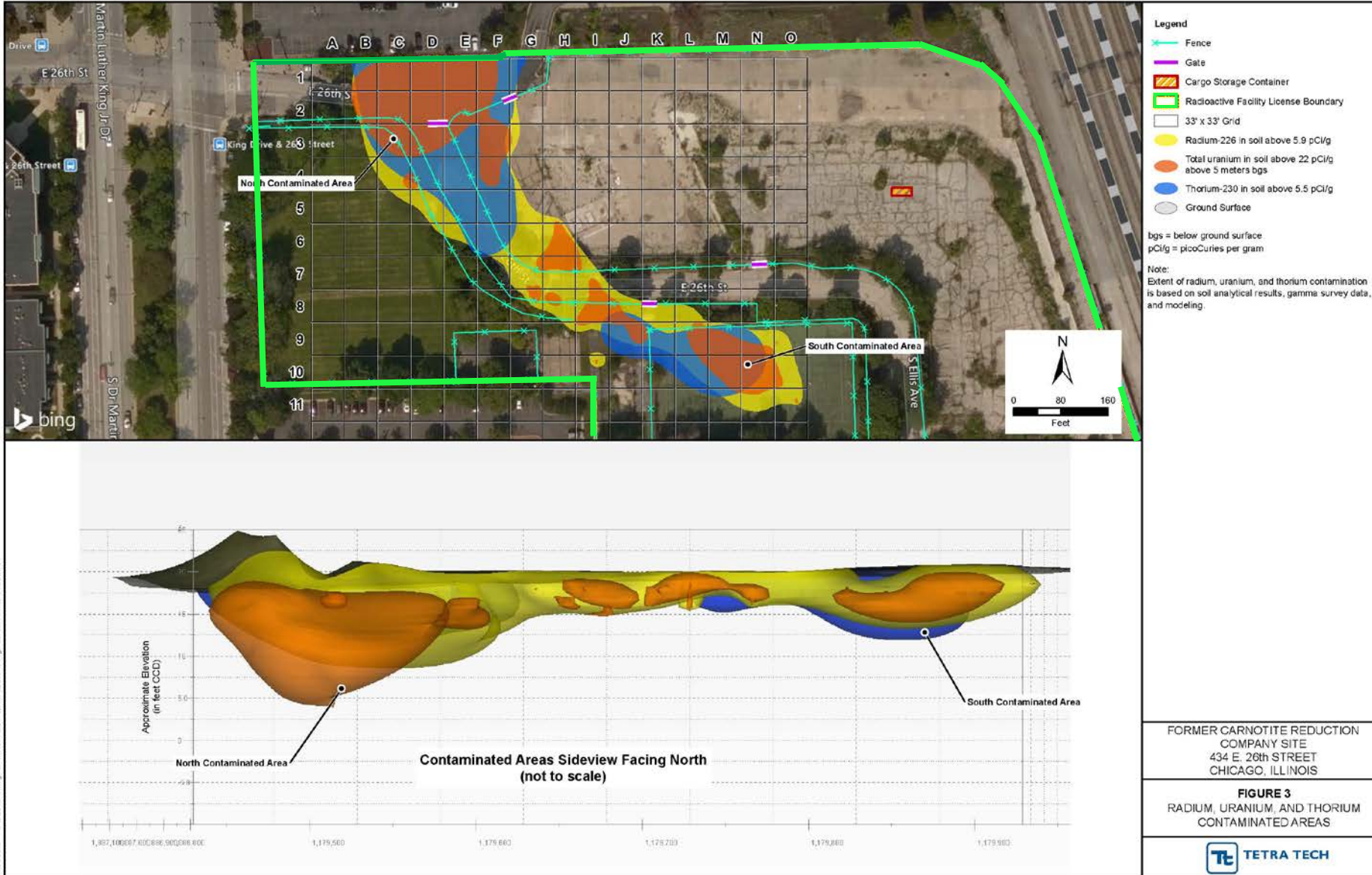
Contract	Goals
Construction	MBE – 14.5% WBE – 3.4% Local Resident - 10%
Professional Services	MBE - 16% WBE - 4.5%



 **Former Carnotite Reduction Company Site**

*Construction goals are lower due to account for significant proportion of costs associated with the treatment, transportation and disposal of radiological which have limited or no MBE/WBE opportunities.

Extent of Contamination



Contamination Depth
~6 ft (south area) to 14 ft (north area) deep

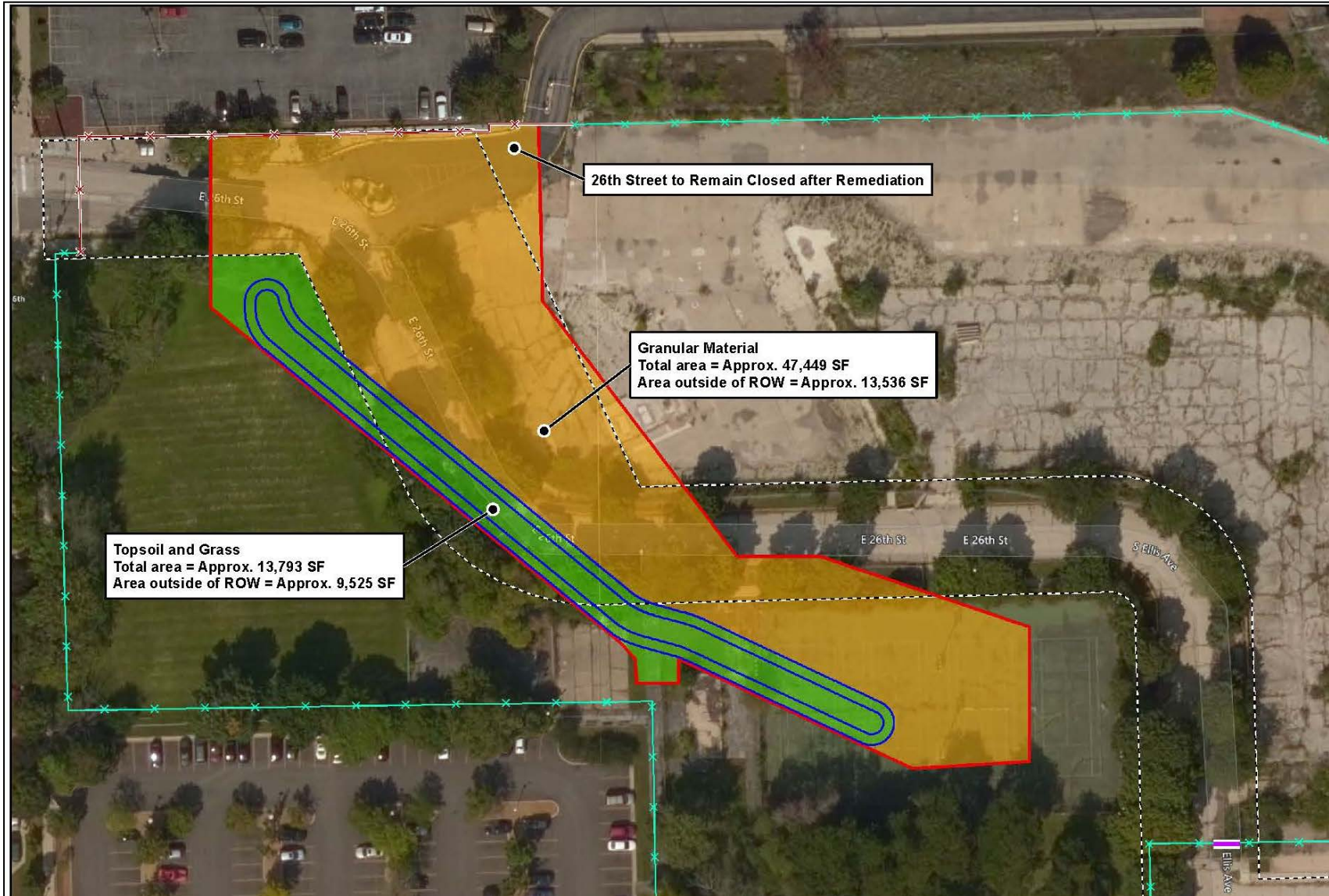
Total Excavation
~17,400 cubic yards

Clean-up Criteria*

- Radium-226 - 5.9 pCi/g
- Total uranium – 22 pCi/g to 5 meters and 52 pCi/g below 5 meters
- Thorium-230 – 5.5 pCi/g

*Factors in the presence of background concentrations of these naturally occurring elements

Site Restoration



- Majority of excavation area will be backfilled with stone to existing grade
- A stormwater bioswale will be constructed for stormwater management
- 26th Street will remain closed after remediation is complete until redevelopment

DRAFT

Remediation Oversight

Regulatory

- Prior to beginning remediation, IEMA must review and approve construction plans and procedures.
- IEMA will have inspectors onsite throughout the project to ensure approved construction plans and procedures are being followed.
- IEMA will issue notices of violations and fines and can stop work if deemed necessary.
- Chicago Department of Public Health will also be involved and conduct site inspections for compliance.

Contractual

- The City's remediation oversight consultant and Radiation Safety Officer (RSO) will be onsite during all excavation and loading activities to monitor for compliance with IEMA-approved plans and procedures.
- The City, oversight consultant, and RSO have the authority to stop work at any time if deemed necessary.

Air Monitoring During Remediation

- Conducted at the edge of the excavation and along the perimeter of the site.
- Performed by both oversight consultant and remediation contractor.
- Perimeter Monitoring
 - Action Levels are based on National Air Quality Standards.
 - Results will be made available regularly on the City's website in an easy-to-understand format.
- If Action Levels are reached, work will stop to determine the source or cause of the exceedance and implement additional dust suppression measures accordingly



Air monitoring station at Carnotite



Example excavation air monitoring equipment*

*Example photos from Ottawa, IL Radiation Site

Dust Protection

- Dust control measures will be reviewed and approved by IEMA and the City prior to starting work.
- Controls can include:
 - Water misting
 - Crusting
 - Shade cloth on perimeter fencing
 - Tarping/covering of stockpiles and trucks
 - Reducing speeds
 - Wheel washer
- Dust-generating activities (concrete/asphalt removal, soil excavation, blending and loading) will cease during periods of adverse weather.



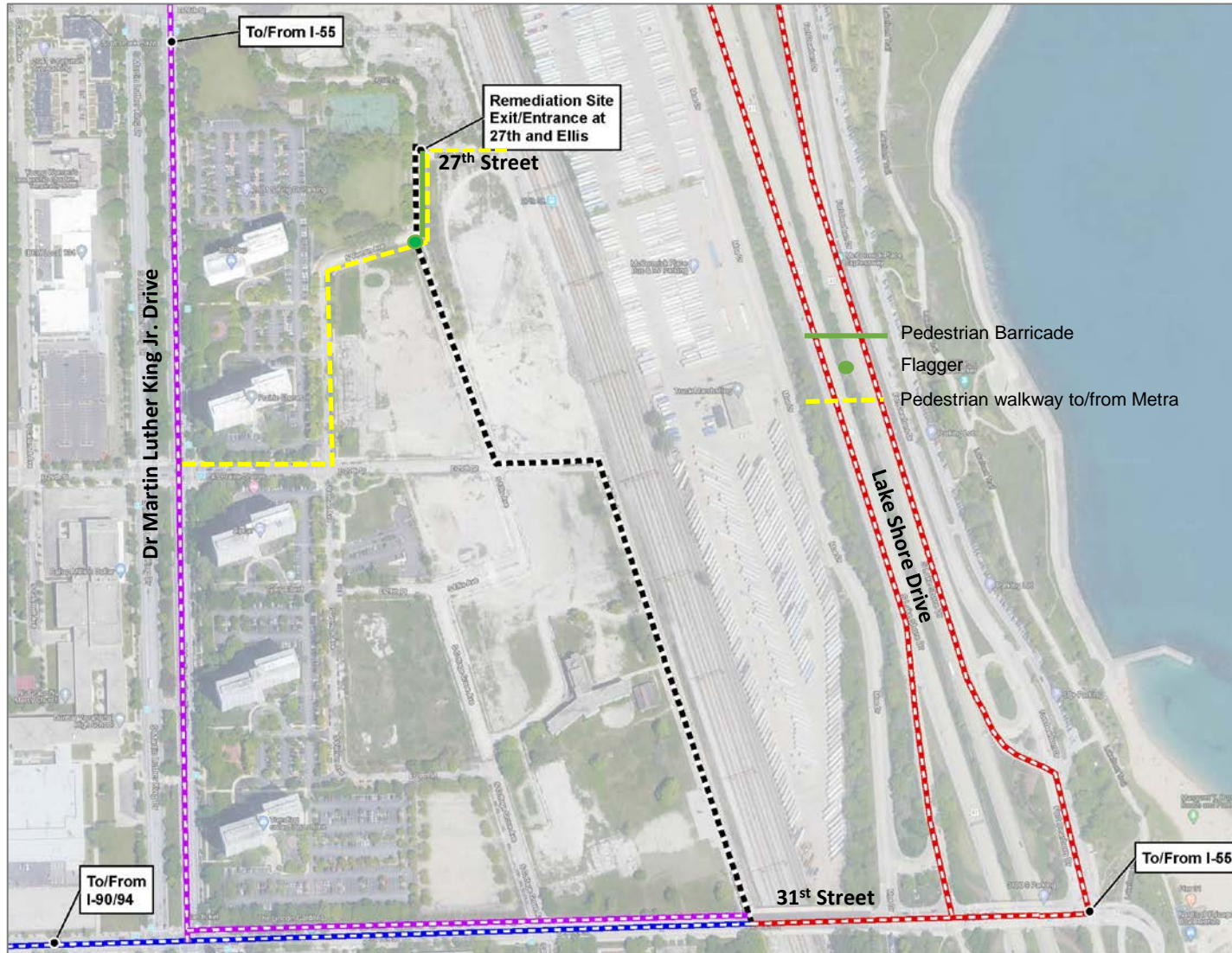
Tarped stockpile example*



Tarped truck example*

*Example photos from Ottawa, IL Radiation Site

Temporary Truck Traffic



- Trucks will be decontaminated and tarped prior to leaving the site.
- **Expected Primary Route:** enter/exit at 27th Street, through the former Michael Reese Hospital site to 31st Street and to I-55 via Lake Shore Drive frontage roads/ramps.
- Flaggers and safety barriers will be provided for pedestrians accessing the 27th Street Metra Station.
- Although not expected, if the 31st Street bridge construction is not able to accommodate trucks, alternate routes will be used.

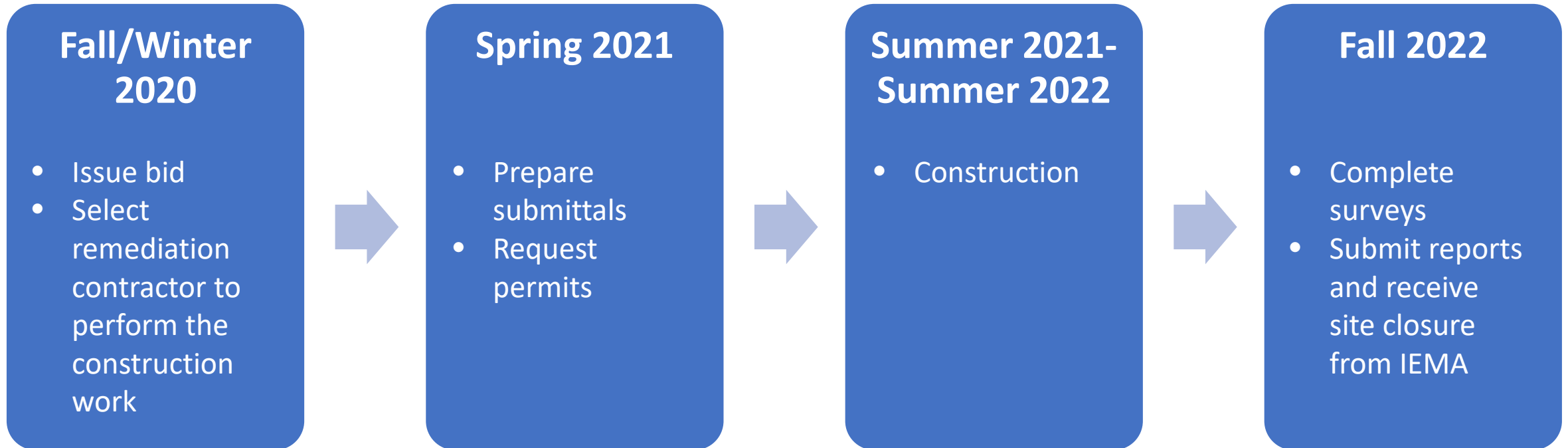
Metra Station Changes

- North access via 26th Street to be closed during and after remediation
- South entrance via Vernon Avenue will remain open during and after remediation
- Wayfinding signs to be installed prior to 26th Street closure

Sign Location Photo Elevations and Messages



Project Timeline



Responses to Comments & Questions Received

THANK YOU FOR ATTENDING

Please check our website for continued updates on the project.

www.chicago.org/carnotite

Please email any comments to

Alderman King's Office: ward04@cityofchicago.org

and

Department of Assets, Information and Services: 2FM_EHS_Notifications@cityofchicago.org

