

# 2022-2023 RiverRenew Stakeholder Advisory Group

Meeting No. 6

January 18, 2023

## Recap from November Meeting

- Provided a summary of noise variances with the City of Alexandria
- Provided an overview of pile driving activities and mitigation techniques at the Pendleton Street Site
- Tunnel Project Update
- Community Outreach Update

## Tonight's Presentation

- SAG Feedback
- 2023-2024 SAG
- Tunnel Project Update
- Community Outreach Update
- Major Takeaways

# SAG Feedback



Review and **monitor construction/program progress**



**Communicate progress** to the community by leveraging existing networks



Identify concerns and **receive input** from the public



**Provide recommendations** regarding mitigation of construction impacts

# In January 2023, City Council extended the term of the RiverRenew SAG through February 2024.

## 2023-2024 SAG Representation and Members:



**Morgan Babcock**  
Eisenhower Partnership  
Nominee



**Mace Carpenter**  
Tobacco Quay, Waterfront  
Residences, or Rivergate



**Liz Birnbaum**  
Carlyle or Duke St.  
Corridor



**Mark McNutt**  
Interest in RiverRenew



**Dan Bradfield (SAG Chair)**  
South Old Town



**Michelle Millben**  
Interest or expertise in  
diversity, race, and social  
equality



**Steven App**  
Engineering,  
Environmental, Financial,  
or related Background



**Erik Olson**  
NOTICe Nominee



**Yvonne Callahan**  
OTCA Nominee

**Charge:**

- Review and monitor construction and program progress
- Communicate progress to the community by leveraging existing networks
- Identify concerns and receive input from the public
- Provide recommendations regarding mitigation of construction impacts

**Other Information:**

- Term: Feb 2023 – Feb 2024
- Final term

# Tunnel Project Update

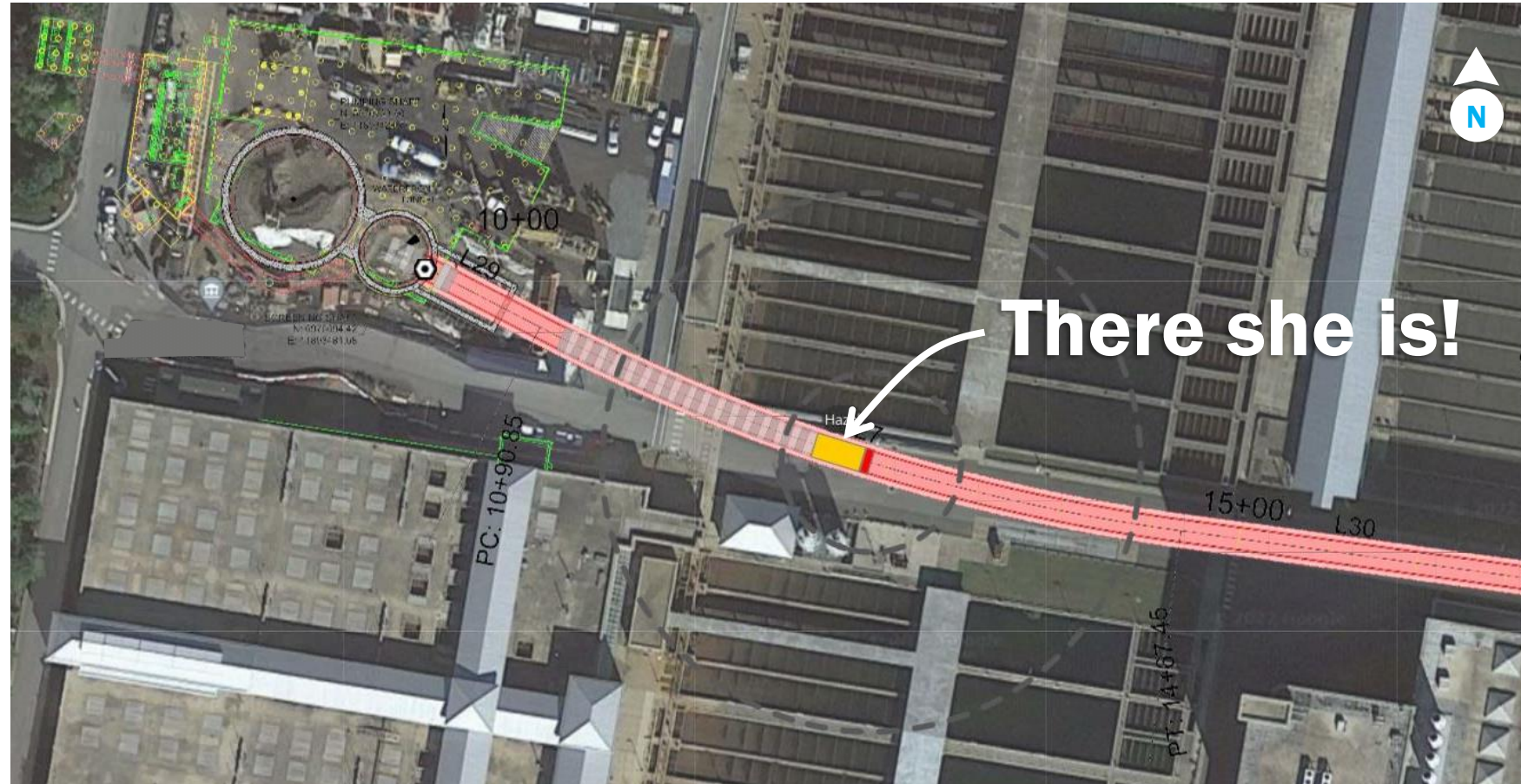
Tunnel segments loaded onto MSV

# Summary of RiverRenew Tunnel Project noise variances permitted by the City of Alexandria.

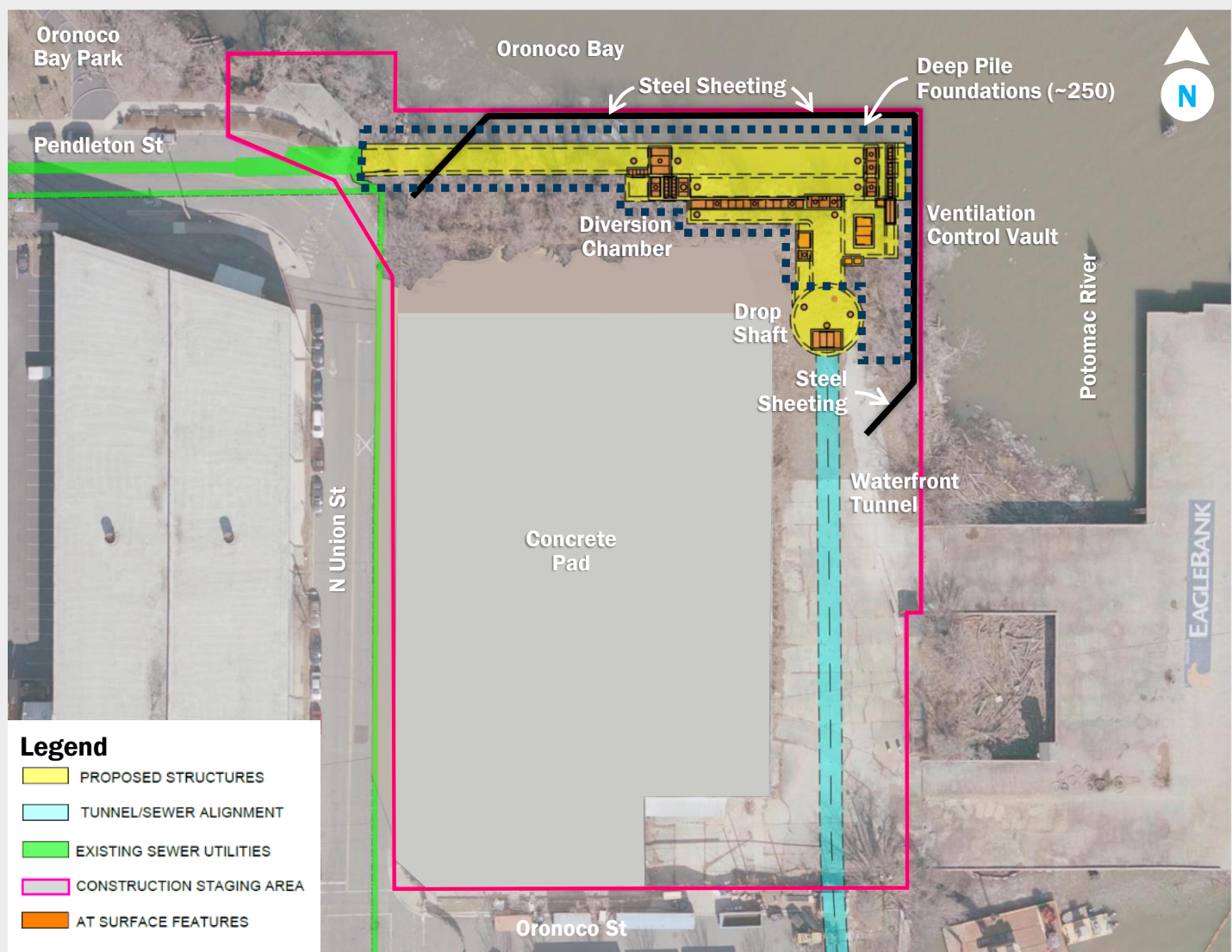
Site	Activity	Noise variance	Hauling	Dates
<b>Pendleton Street</b>	Shaft excavation	5 a.m. – 11 p.m. (Mon-Fri)	7 a.m. – 6 p.m. (Mon-Fri)	Dec 2022 – May 2023
	TBM removal	24/7	7 a.m. – 6 p.m. (Mon-Fri)	Oct 2023 – Dec 2023
<b>AlexRenew</b>	Tunnel construction	24/7	7 a.m. – 6 p.m. (Mon-Fri)	Aug 2022 – Oct 2023

# Status of Hazel the TBM

- 300 feet mined
- 10 gantries installed
- 61 rings (366 segments)
- 1 intervention to date



# Pendleton Street Site design and construction update.

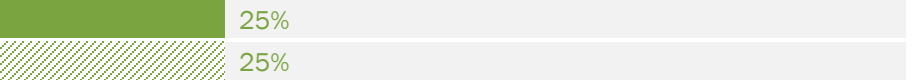


### Design Progress

■ Actual ▨ Planned As of Dec 31, 2022



### Construction Progress



Nov 2024 ▲

### Major Activities

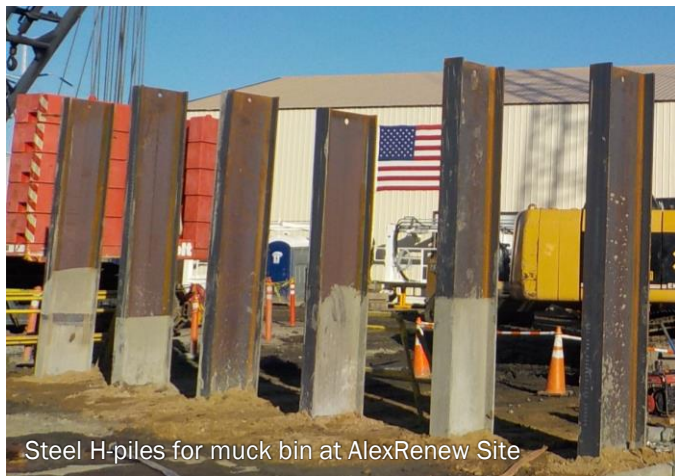
- Shaft excavation ongoing
- Preparing site for pile driving





# Pile driving at the Pendleton Street Site will start in February and last through June.

- 250 steel H-piles to depth of 100-feet
- Vertical and angled
- Foundation for diversion facility and promenade
- Accelerated schedule to meet milestone
- 9 a.m. – 6 p.m., Mon-Fri



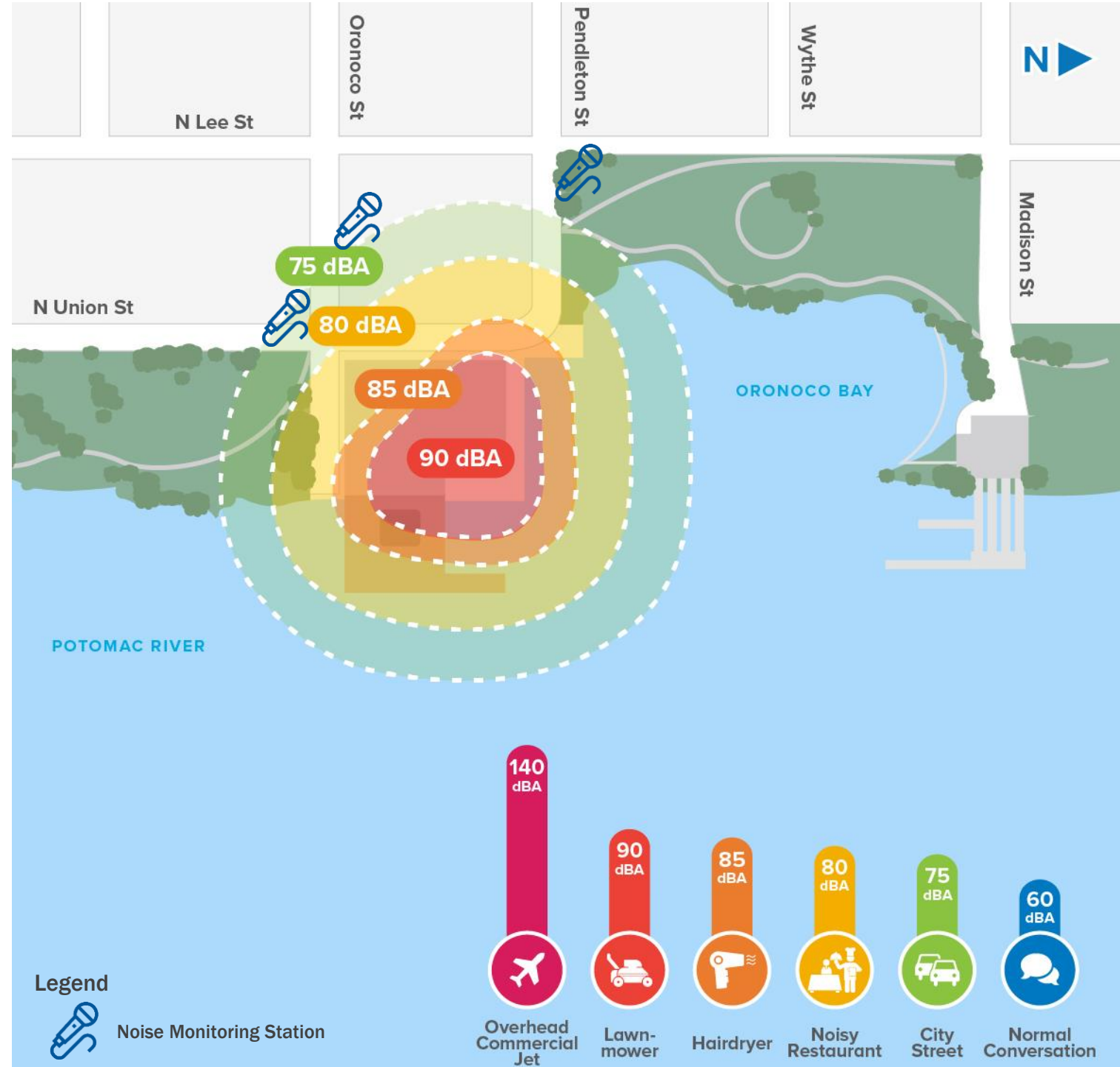
Vibrations associated with pile driving are not anticipated to cause impacts to existing structures.



# Anticipated sound levels associated with pile driving at the Pendleton Street Site

Note: Sound levels are measured in decibels (dB). The higher the decibels, the louder the noise. A dBA is a weighted scale for judging loudness that corresponds to the hearing threshold of the human ear.

Pile driving restricted to 9 a.m. – 6 p.m. (Mon-Fri)



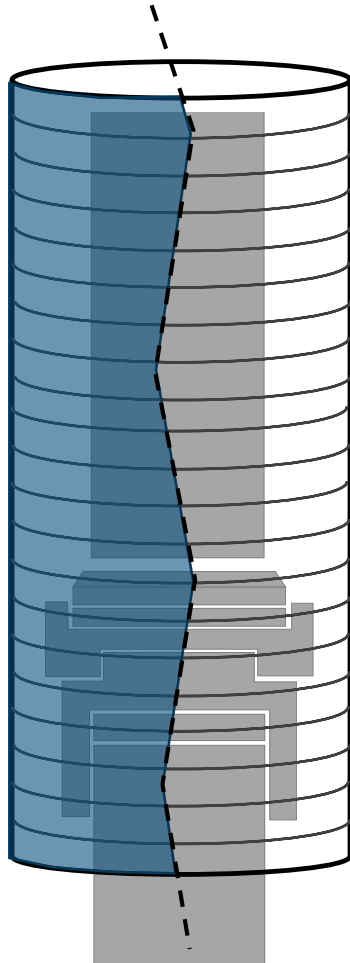
# Mitigation approaches to minimize sound levels associated with pile driving activities.



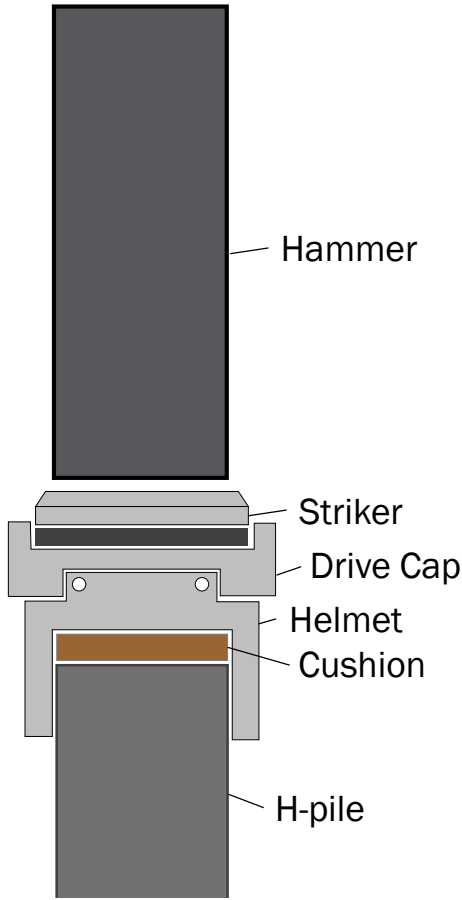
✓ **Stacked conex boxes** to deflect noise away from the community.



**Sound blankets** along fence to dampen noise



**Enclosure** to shroud the impact hammer



**Cushion** to dampen contact with H-pile



**Vibrate** piles initially



**Evaluate** use of hydraulic vs diesel hammer



✓ **Continuous noise monitoring**



**Personal use** items

# Update on Pendleton Street Site pile driving community outreach campaign.

- Sip 'n See:
  - Thursdays 11 a.m. – 1 p.m.
  - “Special Edition”
- Flyer distribution
- Electronic messaging board
- Updates through SAG
- Emails
- Website updates
- Social media posts

**Pile Driving Activities at the Pendleton Street Site**

**Pendleton Street site overview**  
On rainy days, outdated combined sewer infrastructure in Old Town Alexandria pollutes the Potomac River from an outfall located at the end of Pendleton Street. To capture these overflows, AlexRenew is constructing a diversion facility at this site as part of the RiverRenew Tunnel Project. The diversion facility will connect to the Waterfront Tunnel, which will transport captured combined sewer flows to AlexRenew's wastewater treatment plant for purification.

Following construction of the diversion facility, a new promenade will connect the community to a healthier Potomac River.

**What is pile driving?**  
To install steel H-piles at the Pendleton Street site, crews will use a diesel-powered impact hammer to drive each pile deep into the stiff Potomac Clay soil layer. Piles are oriented either vertically or at a slight angle.  
Unavoidably, this process emits a repeated hammering sound that may be disruptive to those sensitive to noise. Diesel-powered impact hammers produce repeated "whoosh" and "ding" sounds as they strike piles, which happens 40-60 times per minute during installation activity.

Sound levels are measured using a weighted decibel scale that corresponds to the hearing threshold of a human ear. Pile driving activity will emit sounds between 75 and 90 dBA, which roughly correlates to soundscapes ranging from a busy city street to a running lawnmower.

**Reducing noise as we build for healthier waterways**  
AlexRenew will continuously monitor sound levels and employ several noise mitigation techniques to help lessen the impact on the Alexandria community. These techniques include lining the perimeter of the site with sound blankets, stacking conex (shipping container) boxes along Union Street, using vibratory equipment in upper soil layers, cushioning the impact hammer, and employing personal mitigation measures.

**When will this occur?**  
Pile driving activity will last from February 2023 through June 2023 and take place only between the hours of 9 a.m. and 6 p.m., Monday through Friday.

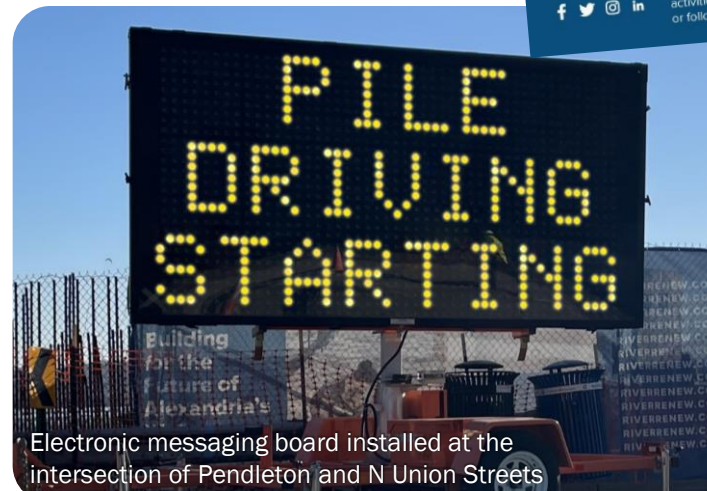
Note: Schedule is generalized and subject to change.

**Pile driving at Pendleton Street**  
The Pendleton Street Diversion Facility and associated promenade require a sturdy foundation supported by 250 steel H-piles. RiverRenew crews must install these vertical and angled piles to depths of 100 feet in order to support the coming infrastructure. Crews will drive piles within the purple area depicted in the image on the right.  
Pile driving is required to keep the RiverRenew Tunnel Project on schedule to meet a mandated completion date of July 1, 2025.

**Representation**

To stay up to date on construction at the Pendleton Street's activities, sign up for alert emails on [RiverRenew.com/cons](https://www.riverrenew.com/cons) or follow us on social media.

To learn more about this essential work, scan the QR code to visit [RiverRenew.com](https://www.riverrenew.com), or email us directly at [AskRiverRenew@alexrenew.com](mailto:AskRiverRenew@alexrenew.com).



Electronic messaging board installed at the intersection of Pendleton and N Union Streets

# Major construction activities in the next 6 months at Pendleton Street Site.

Feb	Mar	Apr	May	Jun	Jul
Shaft Excavation		Permanent Concrete (Shaft and NSS)			
Near Surface Structures (NSS) Deep Foundations and Support of Excavation (SOE)					



5 a.m.– 11 p.m.  
Mon–Fri

No anticipated impacts to sidewalks, bicycle routes, or travel lanes

70 trucks/day

**Shaft Excavation**



9 a.m.–6 p.m.  
Mon–Fri

No anticipated impacts to sidewalks, bicycle routes, or travel lanes

15 trucks/day

**Near Surface Structures Deep Foundations  
(Pile Driving Activities)**



7a.m.–6p.m.  
Mon–Fri

No anticipated impacts to sidewalks, bicycle routes, or travel lanes

70 trucks/day

**Permanent Concrete Construction**

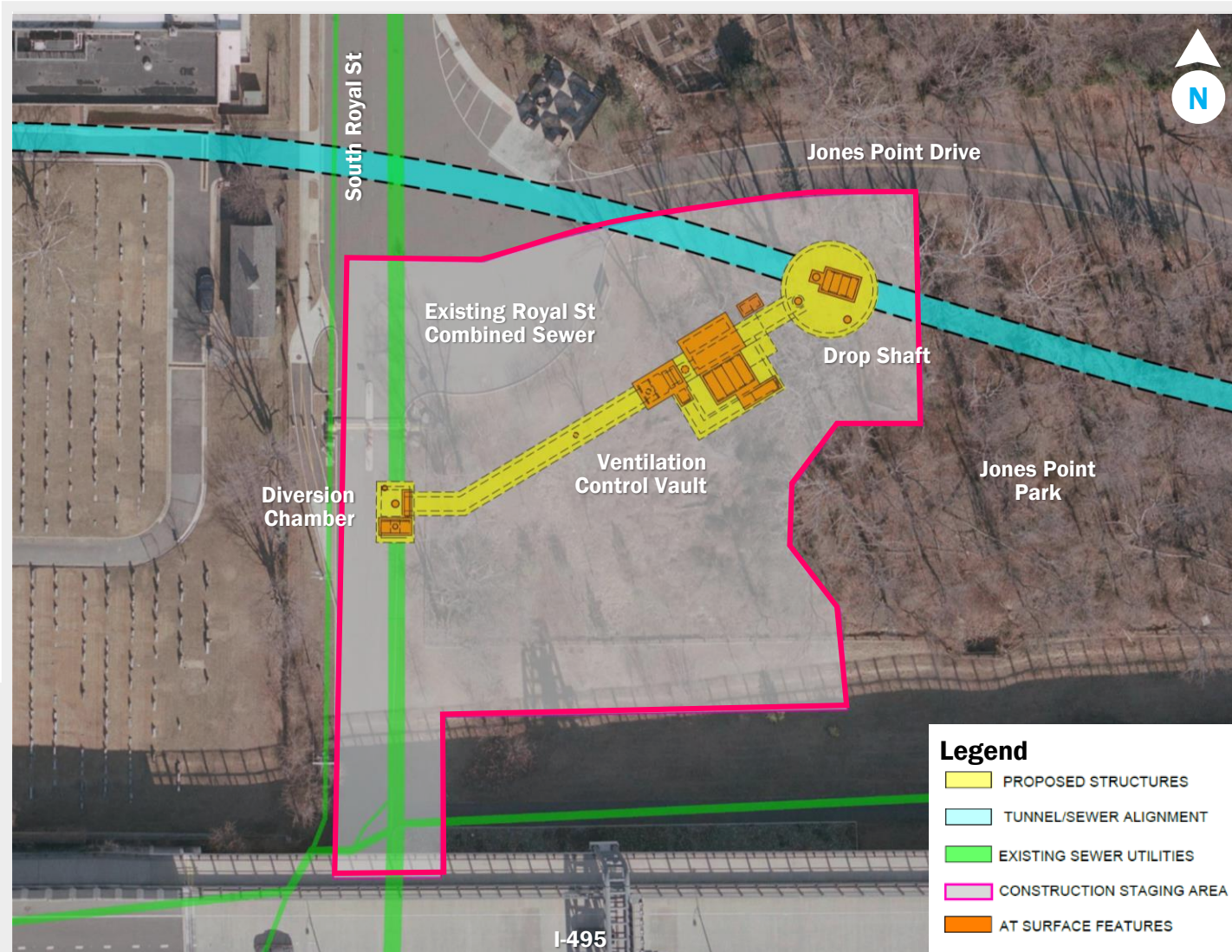


Note: Pictures representative of upcoming construction work



Variance (see Slide 6)

# Royal Street Site design and construction update.



## Design Progress

■ Actual ▨ Planned As of Dec 31, 2022



## Construction Progress



## Major Activities

- Near surface structure support of excavation ongoing

# Parking restrictions near Royal Street Site

- Steel beam deliveries
- Additional deliveries in February

## Heads Up!

### Parking Restrictions on Franklin and S Royal Streets

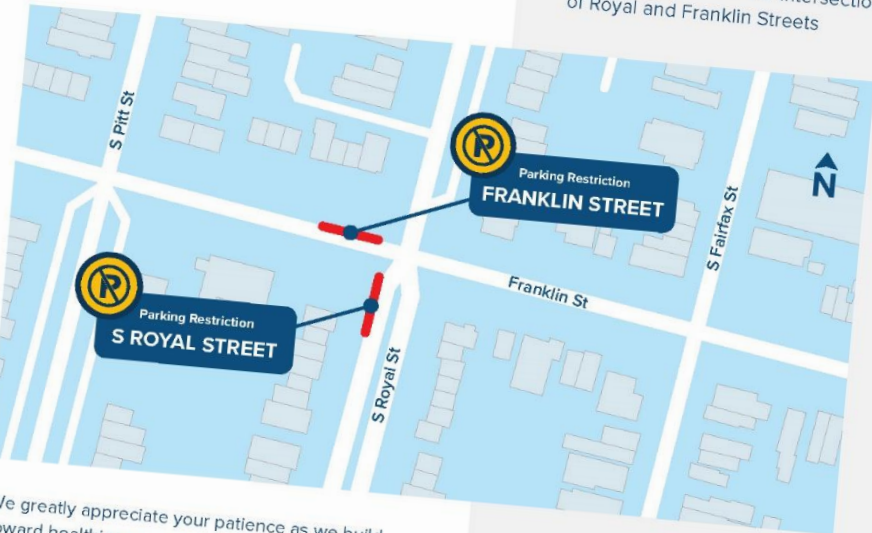
\*Dates subject to change pending material delivery schedule

RiverRenew crews are building a diversion facility at the **ROYAL STREET** site as part of our mission to prevent millions of gallons of combined sewage from polluting local waterways each year.



In order to complete this essential infrastructure, RiverRenew crews need to deliver long, steel beams to the site. These beams will be delivered to the site on January 13 and 18.

**What you can expect:**

- Parking restrictions on Franklin and S Royal Streets (see map below)
  - 8 a.m. - 1 p.m.
  - January 13 and January 18
  - Future dates in February
- Flaggers present at the intersection of Royal and Franklin Streets


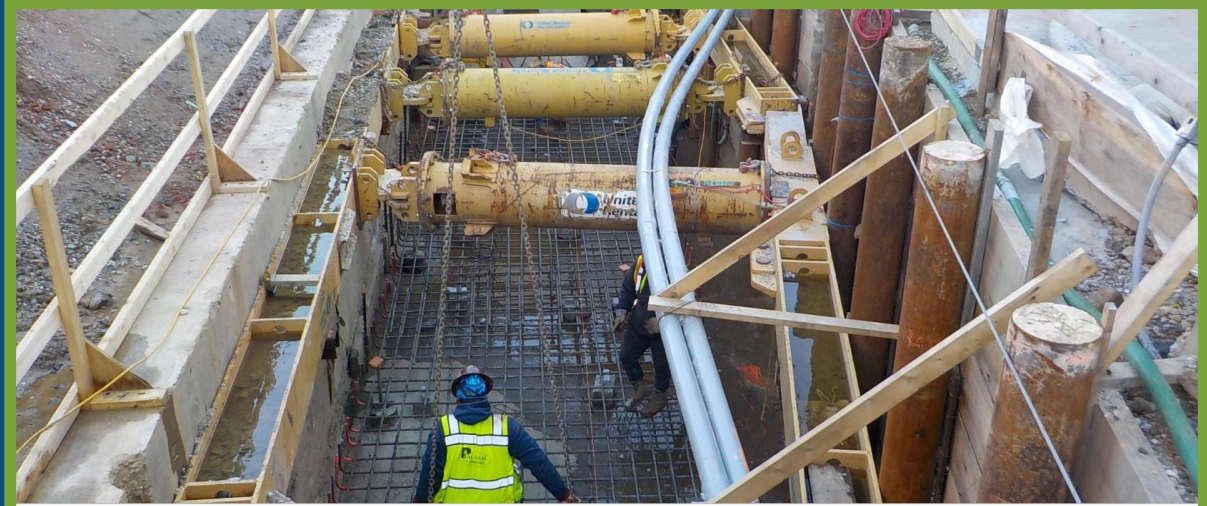


We greatly appreciate your patience as we build toward healthier waterways for Alexandria. Email us at [askriverrenew@alexrenew.com](mailto:askriverrenew@alexrenew.com) or call the construction hotline at **1.800.234.6592** with any questions.





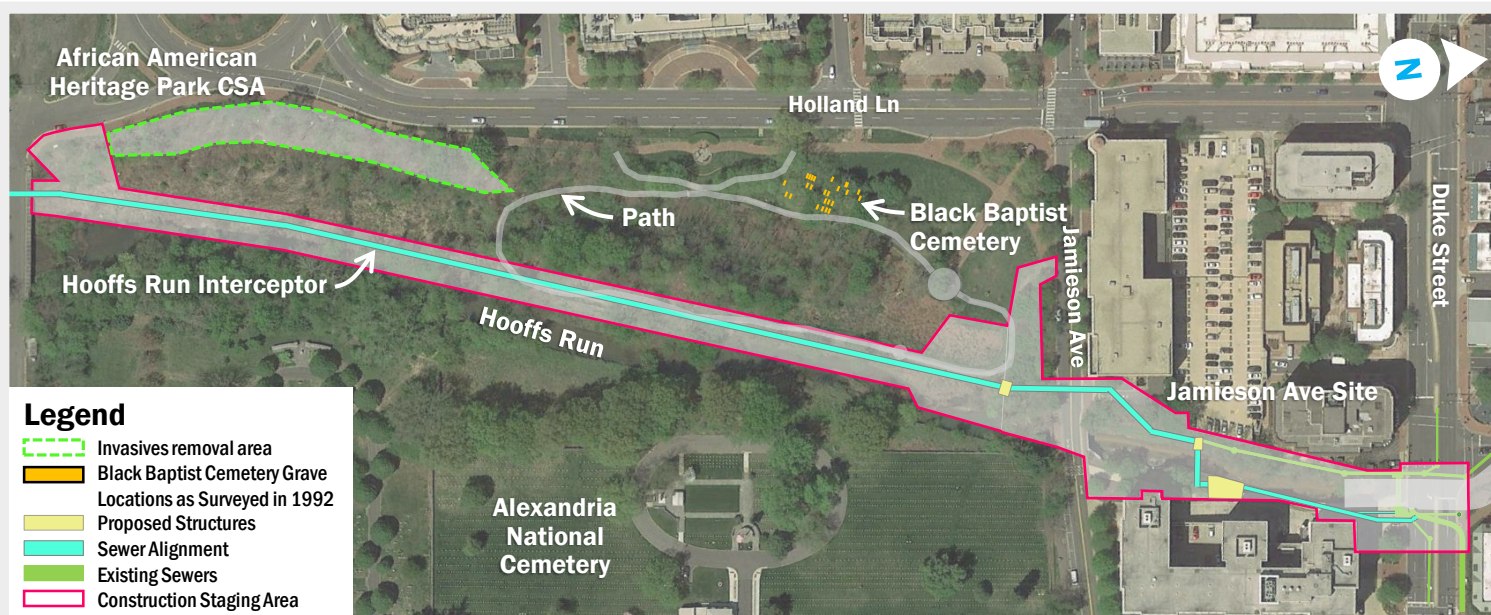
# Major construction activities in the next 6 months at Royal Street Site.

Feb	Mar	Apr	May	June	July
Near Surface Structures Support of Excavation (SOE) and Foundation Piles				Near Surface Structures Construction	
					
<p align="center"><b>7am-6pm</b> Mon-Fri</p>				<p align="center"><b>7am-6pm</b> Mon-Fri</p>	
<p align="center">Occasional parking restrictions along haul route No anticipated impacts to sidewalks, bicycle routes, or travel lanes</p>				<p align="center">No anticipated impacts to sidewalks, bicycle routes, or travel lanes</p>	
<p align="center"><b>20 trucks/day</b></p>				<p align="center"><b>30 trucks/day</b></p>	
<p align="center"><b>Near Surface Structures Support of Excavation and Foundation Piles</b></p>				<p align="center"><b>Near Surface Structures Construction</b></p>	



Note: Pictures representative of upcoming construction work

# Hooffs Run Interceptor design and construction update.



## Design Progress

■ Actual ▨ Planned As of Dec 31, 2022



## Construction Progress



## Major Activities

- Jamieson Ave Site diversion chamber and extension sewer construction ongoing
- African American Heritage Park Site manhole construction ongoing

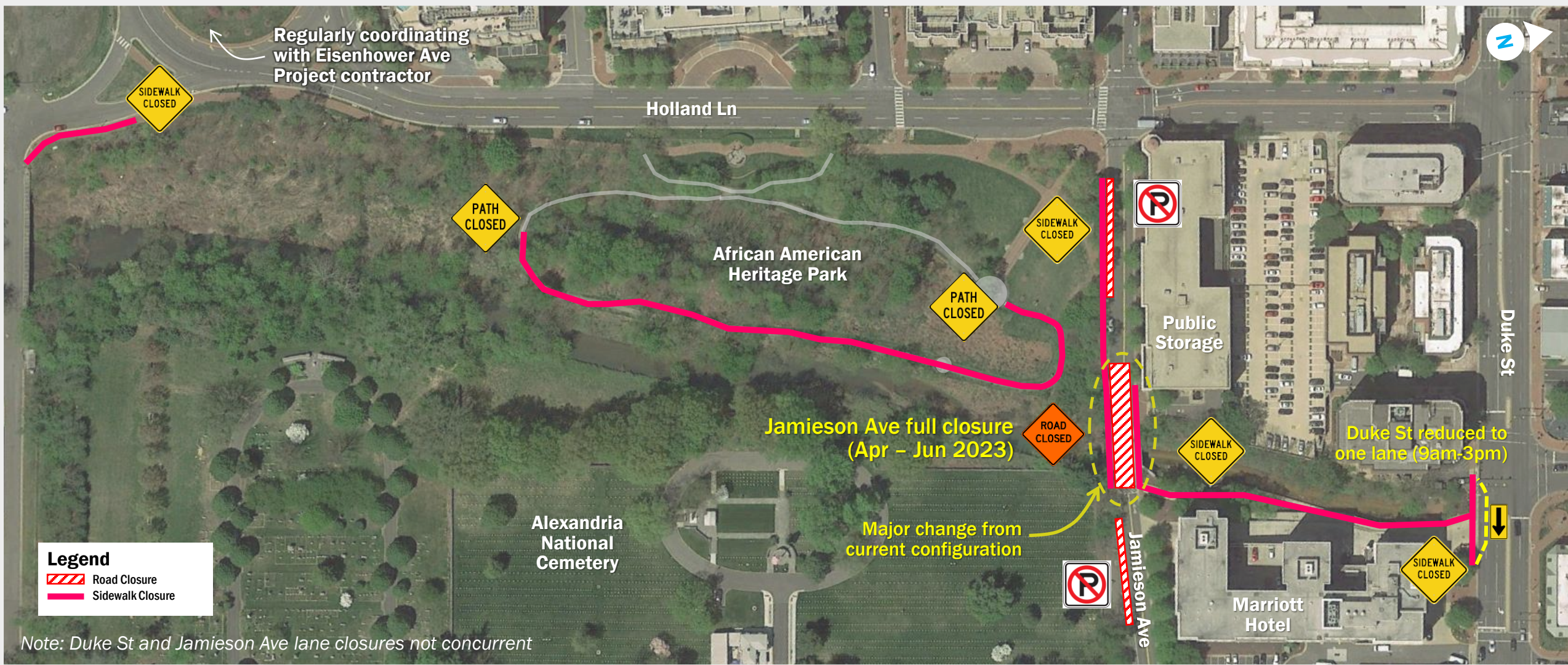


◀ African American Heritage Park Site



◀ Jamieson Avenue Site

# Upcoming road and sidewalk changes associated with Hooffs Run Interceptor (April – June 2023).



# Major construction activities in the next 6 months at Jamieson Avenue Site.

Feb	Mar	Apr	May	June	July
Diversion Chamber, Junction Chamber and Manhole			Open-Cut		

Jamieson Avenue full closure

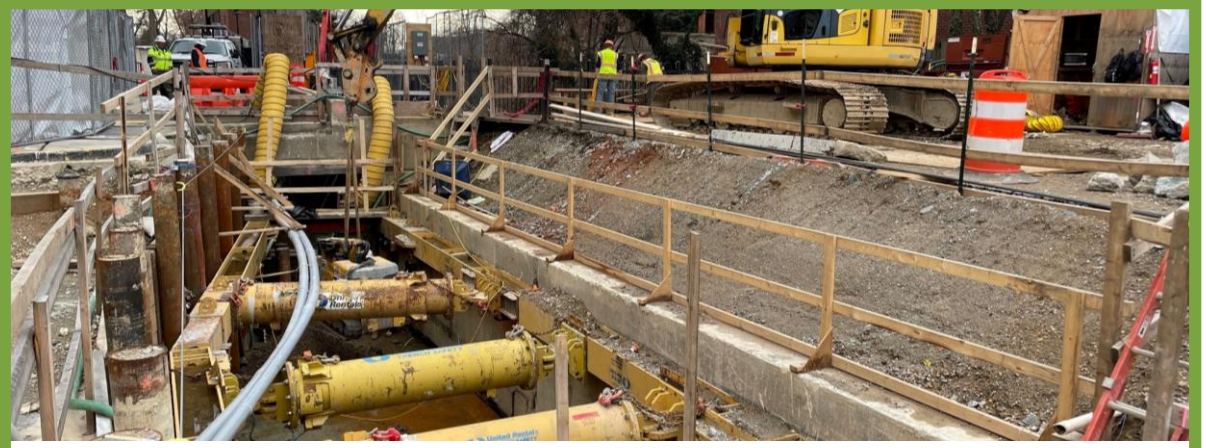


**7am-6pm**  
Mon-Fri

Lane and sidewalk closures:  
Duke St and Jamieson Ave

**30** trucks/day

**Diversion Chamber, Junction Chamber,  
and Manhole Construction**



**7am-6pm**  
Mon-Fri

Lane and sidewalk closures:  
Duke St and Jamieson Ave

**10** trucks/day

**Open-Cut Construction**



Note: Pictures representative of upcoming construction work

# Major construction activities in the next 6 months at African American Heritage Park Site.

Feb	Mar	Apr	May	Jun	July
Manhole	Open-Cut	Sheeting	Open-Cut	Sheeting	Open-Cut



**7am-6pm**  
Mon-Fri

Sidewalk closures (intermittent):  
Jamieson Ave, Holland Ln  
Parking restrictions (24/7): Jamieson  
Path closures (24/7): AAHP

**30 trucks/day**

**Manhole Construction**



**7am-6pm**  
Mon-Fri

Sidewalk closures (intermittent):  
Jamieson Ave, Holland Ln  
Parking restrictions (24/7): Jamieson  
Path closures (24/7): AAHP

**30 trucks/day**

**Open-Cut Construction**



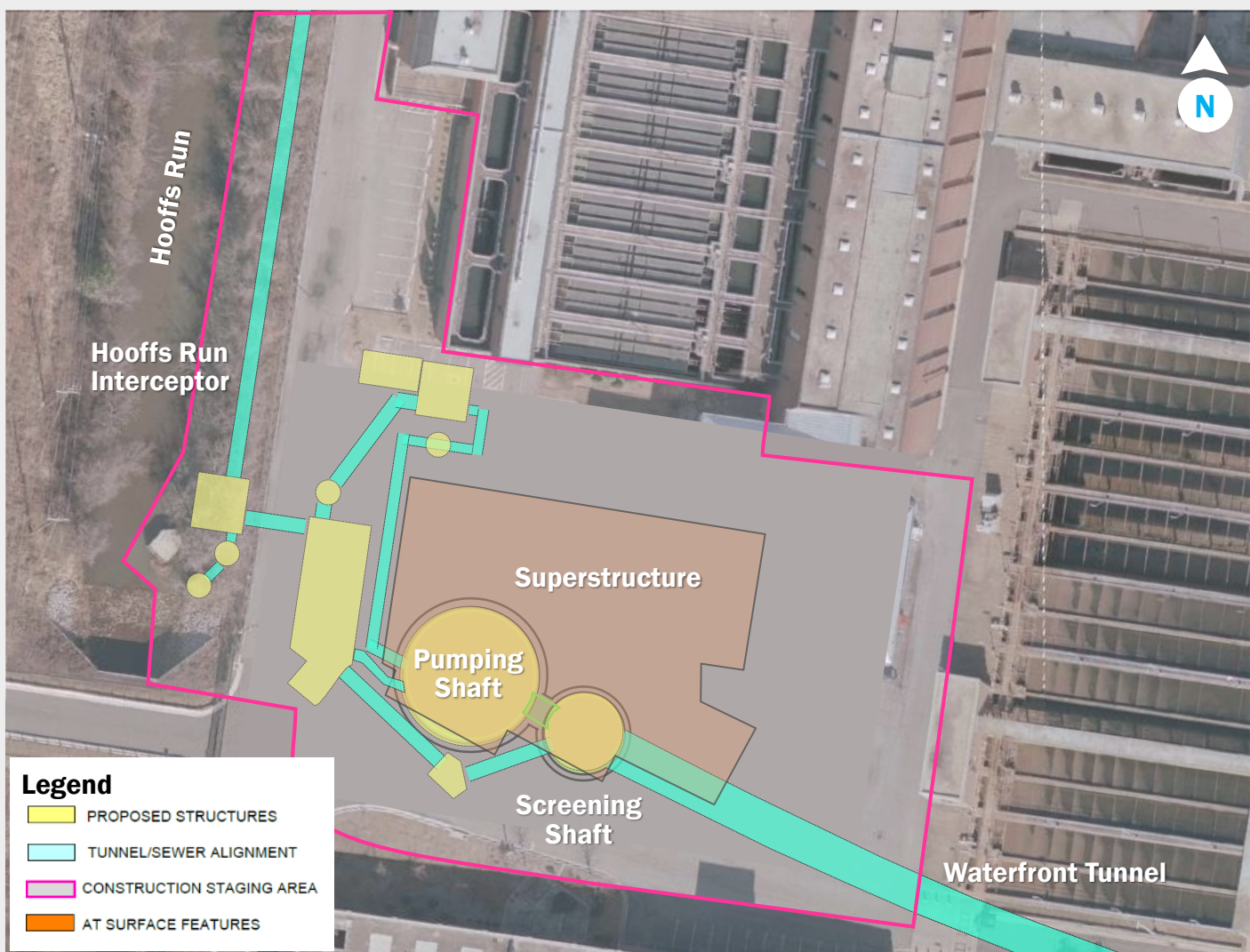
**7am-6pm**  
Mon-Fri

Sidewalk closures (intermittent):  
Jamieson Ave, Holland Ln  
Parking restrictions (24/7): Jamieson  
Path closures (24/7): AAHP

**10 trucks/day**

**Support of Excavation (Sheeting)**  
*Impact hammer required at times*

# AlexRenew design and construction update.

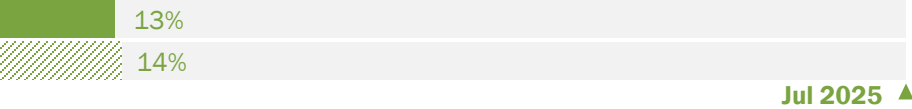


### Design Progress

■ Actual ▨ Planned As of Dec 31, 2022



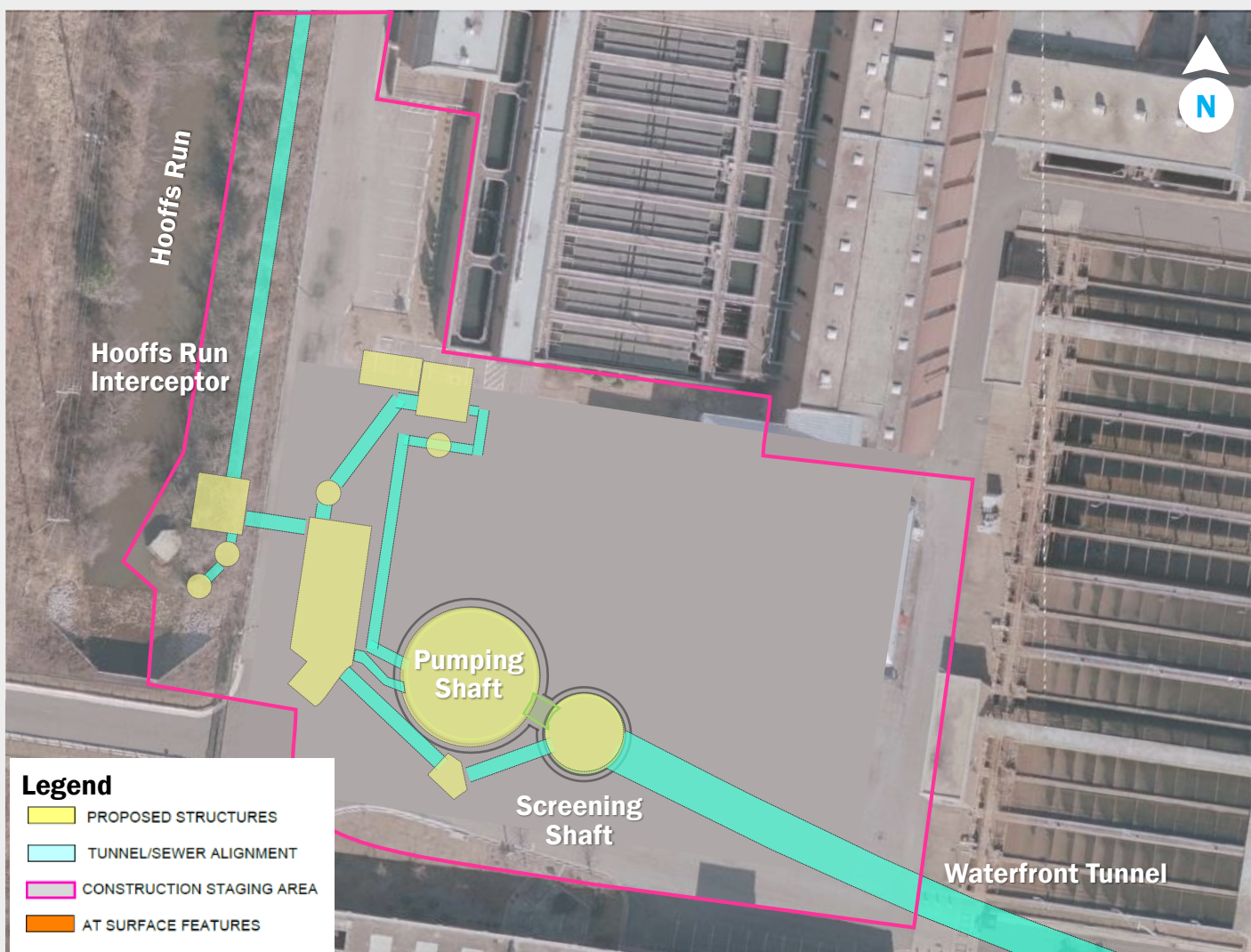
### Construction Progress



### Major Activities

- Near surface structure support of excavation ongoing
- Ground improvement for Hooffs Run Interceptor (microtunnel) ongoing

# Waterfront Tunnel design and construction update.

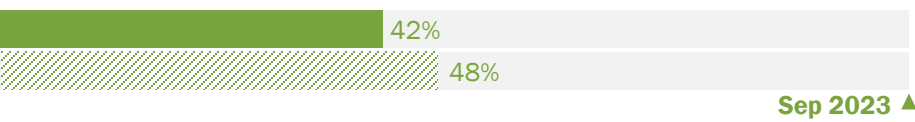


### Design Progress

■ Actual ▨ Planned As of Dec 31, 2022



### Construction Progress

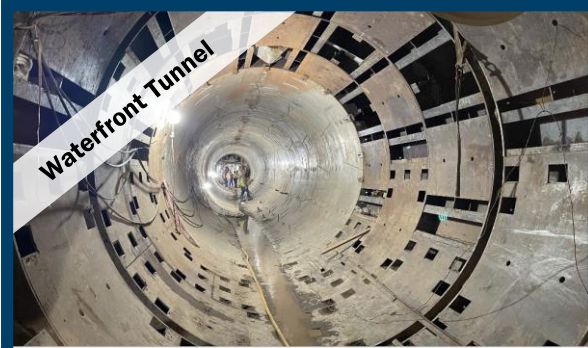


### Major Activities

- TBM mining ongoing
- Assembling tunnel muck support structures

# Major construction activities in the next 6 months at AlexRenew Site.

**!** Variance (see slide 6)



Waterfront Tunnel

7a.m.–6p.m.  
Mon–Fri

50 trucks/day



7a.m.–6p.m.  
Mon–Fri

30 trucks/day



**!** 24 hours/day  
7 days/week (Hauling 7a.m.–6p.m.)

120 trucks/day

Mine 700' Set up Muck Conveyor

Tunneling

Feb

Mar

Apr

May

Jun

Jul

Near Surface Struct. SOE

Microtunneling

Permanent Concrete Structures



Hooffs Run Interceptor & Pumping Station

7a.m.–6p.m.  
Mon–Fri

50 trucks/day



7a.m.–6p.m.  
Mon–Fri

50 trucks/day



7a.m.–6p.m.  
Mon–Fri

30 Trucks/day



# Community Outreach Update

**Cleaner waterways,  
happier holidays.**  
Season's greetings from RiverRenew

# Historic signage development update

- Presented signage introduction to **SAG** in May 2022
- Completed **further research for AAHP topics** over Summer 2022
- Met with **Mr. Myers** to get feedback on signage development and additional ideas in October 2022
- Worked with **Dutton & Associates** to advance research and develop cohesive narrative for AAHP in Fall 2022
- Coordinated with the City to **finalize signage locations and topics for AAHP** in December 2022
- Designs to be **substantially complete** by Summer 2023
- Signs to be **installed** Spring 2025



Sanctuary

Freedom

Civil Rights

Remembrance

# Upcoming community outreach.



### Community Listening Sessions

**Pendleton St:** March 6, 6:30-8:30 PM  
**Hooffs Run:** March 7, 6:30-8:30 PM  
**Royal St:** March 9, 6:30-8:30 PM

## 2023-24 Stakeholder Advisory Group Meeting

- March 16

# TUNNEL TOURS

MAY 6 2023

### Sip 'n See Events

**Hooffs Run:** Tues 11-1  
**Royal St:** Weds 11-1  
**Pendleton St:** Thursdays 11-1 and "Special Edition"

# Meeting Takeaways

- Pile driving upcoming at Pendleton Street (Feb – Jun)
  - Community outreach campaign is underway
- Near surface structure SOE ongoing at Royal Street Site
- Jamieson Avenue full closure anticipated Apr – Jun
  - Bike, pedestrian, and vehicle detours
- Waterfront Tunnel construction underway
- Listening Sessions Mar 6, 7, and 9
- Waterfront Tunnel Tour May 6

