

POTOMAC RIVER GENERATING STATION

COMMUNITY MEETING #8

FEBRUARY 24TH, 2022



 **Hilco**TM
Redevelopment Partners

WIRE GILL LLP

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consultants

CLARK
CONSTRUCTION

GOROVE SLADE
Transportation Planners and Engineers

 **SUSTAINABLE**
BUILDING PARTNERS

 **WALKER**
CONSULTANTS

 **Michael Blades & Associates**
Elevator and Escalator Consulting

 **LERCH BATES**
Building Insight

AGENDA

1. PROJECT OVERVIEW

2. ENVIRONMENTAL REMEDIATION + SITE PREP

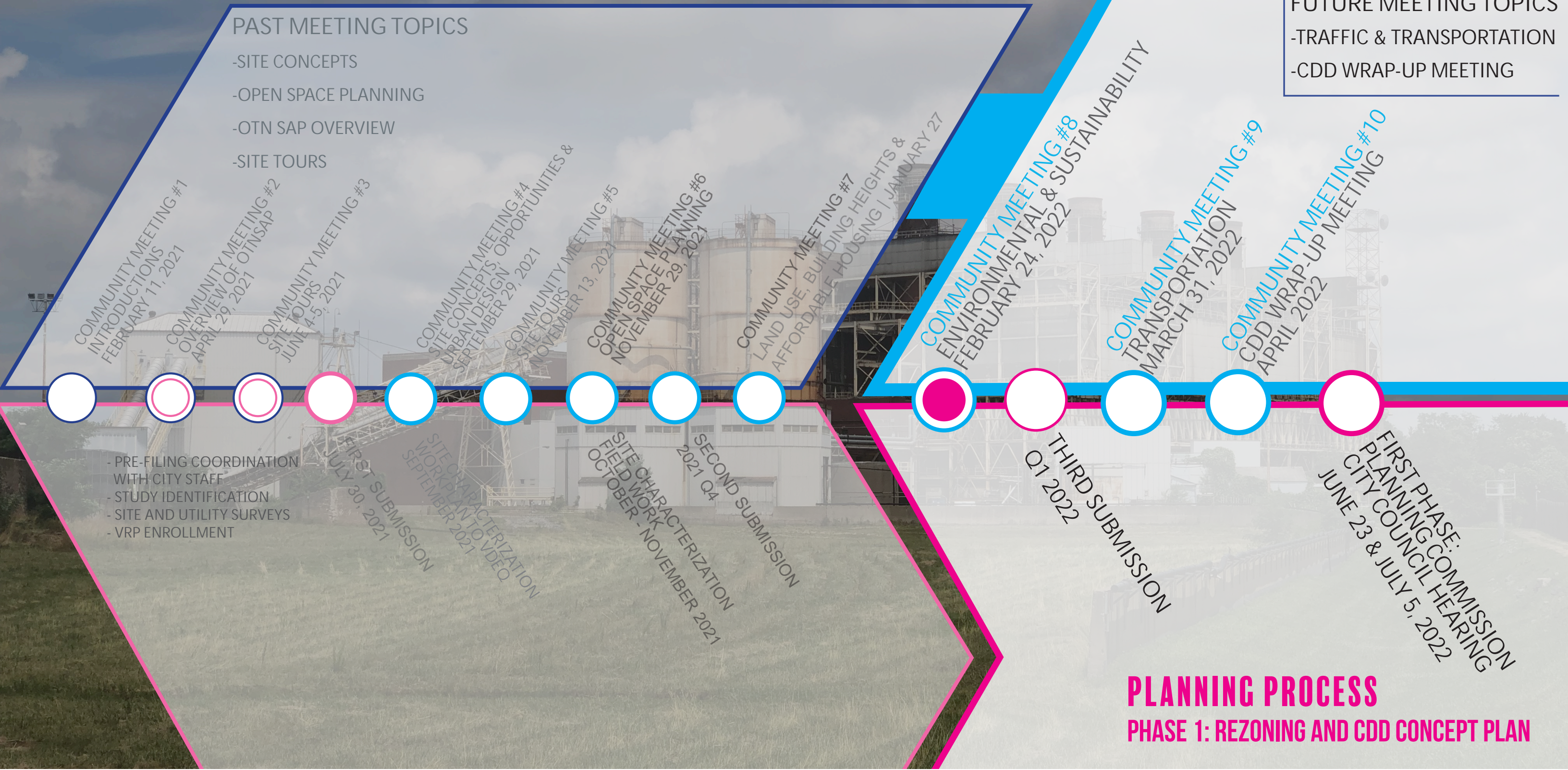
3. SUSTAINABILITY

4. NEXT STEPS AND HOW TO STAY INVOLVED

SCHEDULE & PROCESS

STEPS FORWARD

- COMMUNITY OUTREACH**
- FUTURE MEETING TOPICS
- TRAFFIC & TRANSPORTATION
 - CDD WRAP-UP MEETING



COMMUNITY ENGAGEMENT + OUTREACH

- February 11 – Community Meeting #1
- April 28 – National Park Service Kicko Meeting
- April 29 – Community Meeting #2
- June 4 & 5 – Public Site Tours/ Community Meeting #3
- June 29 – National Park Service Meeting
- July 30 – CDD-1 Submission
- September 9 – National Park Service Meeting
- September 29 – Community Meeting #4
- September 30 – Taste of Old Town/ NOTICe Tours
- October 21 – National Park Service Meeting
- October 29 – Marina Towers Property Visit
- November 08 – NOTICe Meeting
- November 08 – Affordable Housing Kicko Meeting

- November 10 – National Park Service Meeting
- November 13 – Community Site Tour/ Community Meeting #5
- November 15 – Marina Towers Board Meeting
- November 18 – National Park Service Meeting
- November 29 – Community Meeting #6
- December 8 – CDD-2 Submission
- January 13 – National Park Service Meeting
- January 20 – Parks & Recreation Meeting
- January 27 – Community Meeting #7
- February 1 – Planning Commission Work Session
- February 22 – City Council Work Session
- February 24 – Community Meeting #8
- February – Completeness Submission *

- March – UDAC Meeting *
- March –Marina Towers Board Meeting*
- March – Old Town North Community Partnership Meeting *
- March 10 – NOTICe Meeting *
- March 15 – Old Town North Alliance Board*
- March 31– Community Meeting #9 *
- April 7 – AHAAC (Alexandria Housing Affordability Advisory Commission) *
- April 18 – EPC (Environmental Policy Commission) *
- April 19- Waterfront Commission *
- April – Community Meeting #10 *
- April – Transportation Commission Meeting *
- June 23 & July 5 – Planning Commission and City Council Public Hearings *

Key

* Future Engagements (in italics)
CDD Submissions (in blue)

Engagements in the next month

A SHARED VISION FOR THE REDEVELOPMENT OF PRGS

Community Benefits



Environmental Remediation

The abatement and deconstruction of a former coal-fired power plant left vacant for a decade

Site remediation in coordination with Virginia Department of Environmental Quality (VDEQ)

\$60 Million





Economic Benefit

Estimated **1,100 construction-related** jobs and estimated **+/- 2,000 permanent jobs** at full build

Estimated **\$35 million** in total net taxes to Alexandria over anticipated 11-year construction and initial occupancy period

Estimated **\$12-15 million net annual taxes** after full completion

+/- \$35 Million Net Taxes (over 11 years)





Affordable Housing & Subsidized Arts Uses

Affordable Housing:

- Voluntary Monetary Contributions
- Approx. **60 on-site units** through use of bonus density
- Approx. **100 on-site units** through potential Public-Private Partnership

Arts:

- Approx. **15,000 SF** of subsidized arts space through use of bonus density

\$48-111 Million / \$16 Million



** Early estimates of costs and values in 2021/2022 figures*

A SHARED VISION FOR THE REDEVELOPMENT OF PRGS

Community Benefits



Open Space & Activation



Environmental Sustainability



Transportation & Connectivity

A combined **14.2 acres** of publicly accessible open space will be created or improved.

Coordination with the City of Alexandria and NPS to provide recreation areas and **improved cyclist and pedestrian connectivity**.

Mix of **active & passive open spaces**, including community gathering space at **woonerf** and **central plaza**.

Potential reuse of former pump house for **waterside dining**.

Comprehensive approach to environmental sustainability including **reduced energy usage, renewable energy, storm water management**, and decreased reliance on vehicles.

Aggressive carbon reduction targets that exceed city policies and requirements.

Reconnection to Old Town North neighborhood at N. Fairfax, N. Royal Streets & Slaters Lane.

Bike infrastructure connects to regional network including Mount Vernon Trail.

Woonerf provides pedestrian and cyclist priority at center of new district.

Below-grade parking garage improves pedestrian experience.

\$30-\$35 Million

\$65 Million

\$177 Million



** Early estimates of costs and values in 2021/2022 figures*

PROJECT VISION

Primary Design Drivers

1

integrate the site into
old town north

CREATE A MIXED-USE, PEOPLE-CENTRIC
ENVIRONMENT THOUGHTFULLY
CONNECTED TO OTN

2

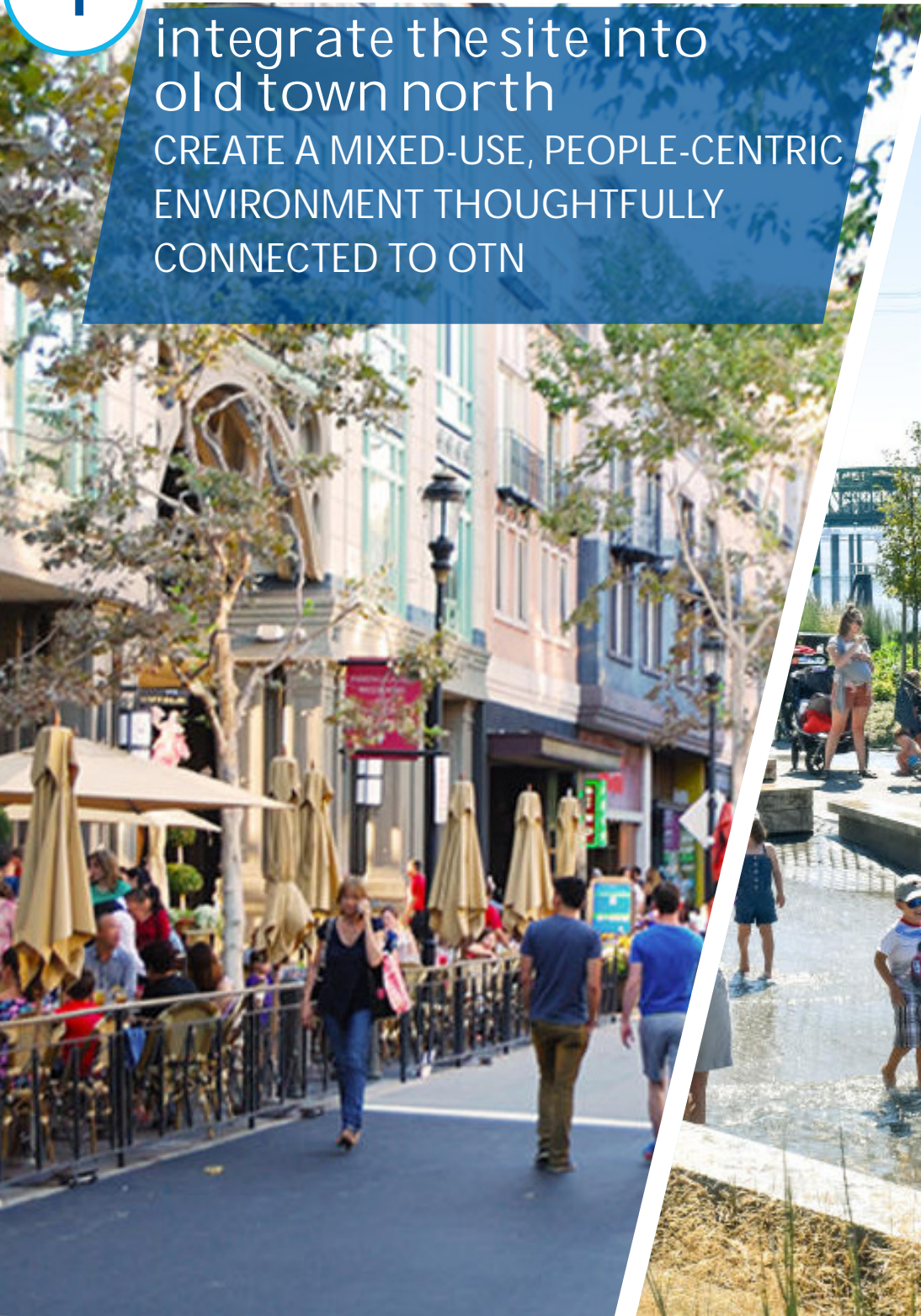
connect people
to the waterfront

EXPAND EQUITABLE ACCESS
TO ALEXANDRIA'S WATERFRONT

3

provide meaningful and
varied open space

CREATE PLACES FOR A VARIETY OF
ACTIVITIES SEAMLESSLY CONNECTED
TO NEIGHBORING PARKS



1 INTEGRATE THE SITE

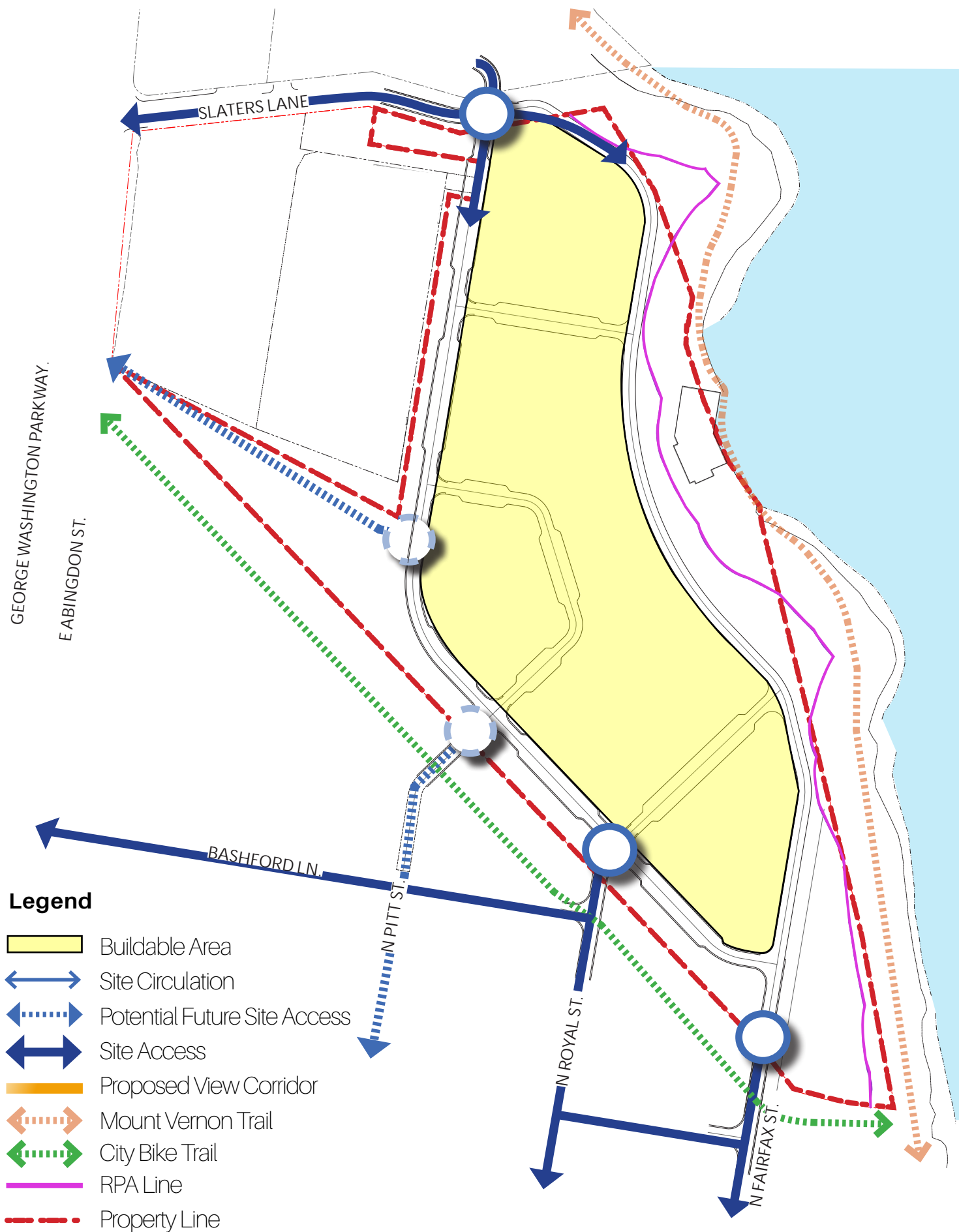
Site Access: Roadway Connections

Site Access

- Three site access points are proposed.
- North Royal and North Fairfax Street connections are planned at the southern side of the site. These will require an easement over the Norfolk Southern property or other arrangements with NSP.
- One connection of Slaters Lane is proposed at the north side of the site.
- These connections are consistent with the Old Town North Small Area Plan.

Future Access

- Two additional potential future connections may be possible. These will require cooperation with abutting property owners.
- To the west, a connection to the GW Parkway via East Abingdon Street may be possible.
- An additional southern connection at North Pitt Street may be possible.



2 CONNECT PEOPLE TO THE WATERFRONT

Optimize Waterfront Views and Access

- Optimize views by shortening distance
- Turn peoples' views toward the waterfront
- Shorten physical and visual distance

HOW CLOSE DO YOU NEED TO BE TO SEE THE WATERFRONT?
WISCONSIN AVENUE IN GEORGETOWN

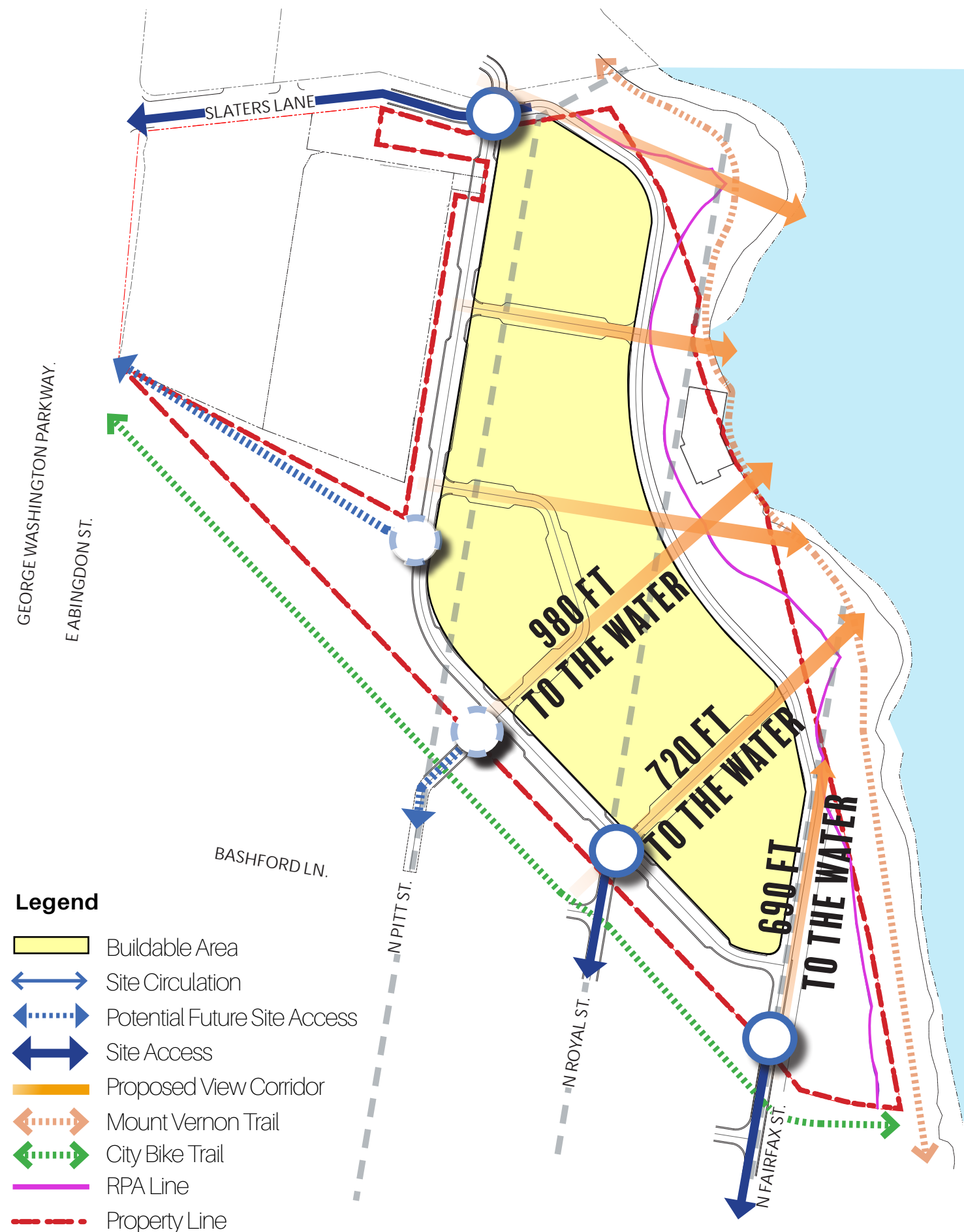
1300'



1000'



700'



3 PROVIDE MEANINGFUL OPEN SPACE

On-site Open Space & Adjacent Open Space

Open Space on PRGS Property

- Waterfront Park: 3 acres
- Linear Park: 1.7 acres
- Central Plaza: 0.7 acres
- Pepco Liner: 0.4 acres

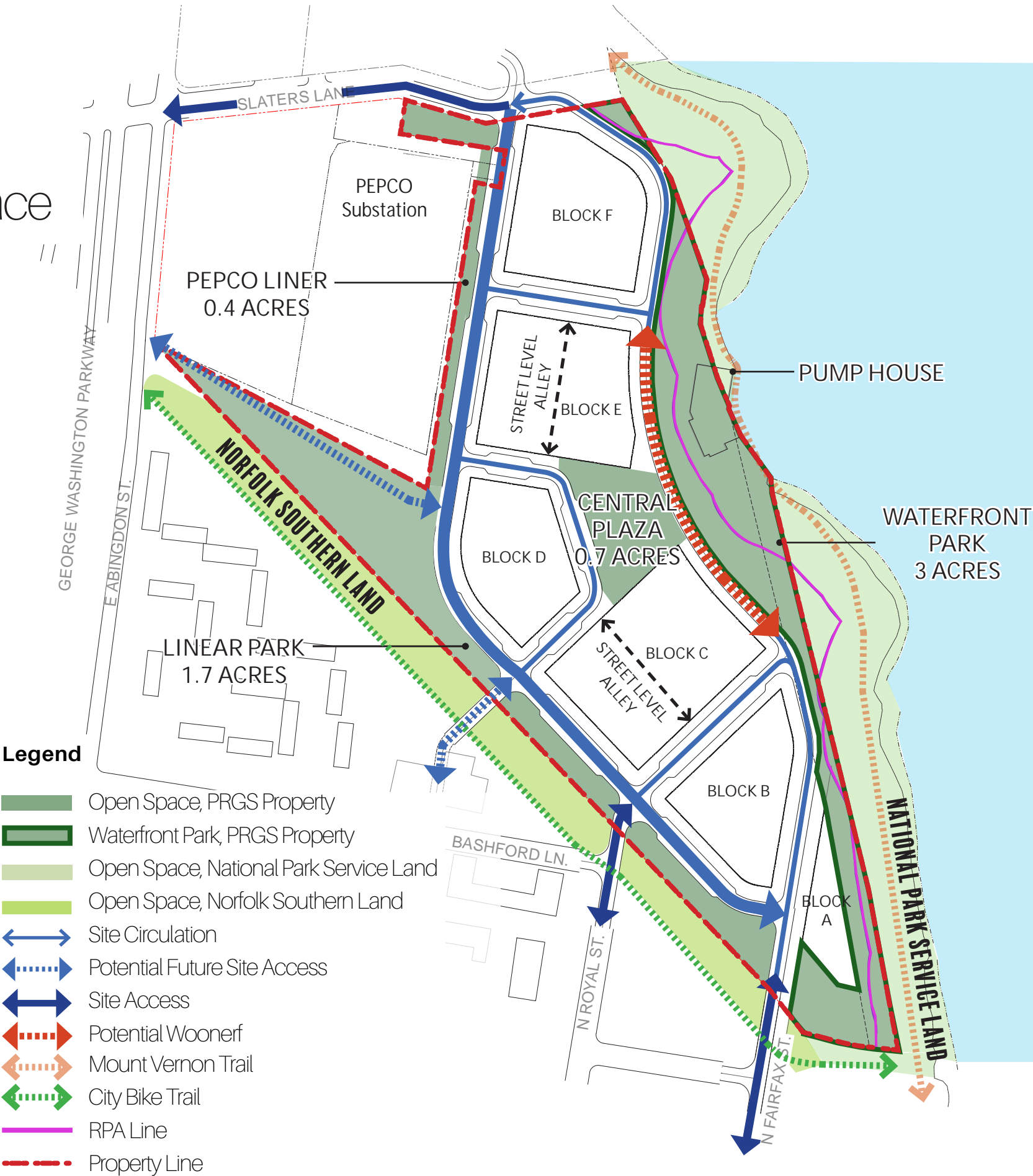
Total: Approximately 5.8 acres

Open Space on Adjacent Property

- National Park Service: 5.3 acres
- Norfolk Southern Land: 3.1 acres

Total: Approximately 8.4 acres

Total Combined Open Space: Approximately 14.2 acres





*Many look at sites like this
and see an old blight*

The Bellwether District- Philadelphia, PA

We see opportunity



The Bellwether District- Philadelphia, PA

February 24, 2022

 **Hilco**
Redevelopment Partners

Gensler OJB

POTOMAC RIVER GENERATING STATION COMMUNITY MEETING #8 12

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PRIOR TO DECONSTRUCTION START

- HRP will hold public informational meetings in advance of deconstruction start.
- Planning for deconstruction includes the following:
 - o Construction Management Plan (CMP) will be coordinated per the City's requirements.
 - o Rodent Control Plan will be established and include regular site inspections.
 - o Noise and Vibration Control Plans will include on-site monitoring.
 - o Dust Monitoring Plan will be established.
 - o Worker Parking Plan will be established.
 - o Existing Conditions Survey for immediately adjacent abutting properties.



ENVIRONMENTAL BACKGROUND

Voluntary Remediation Program

- HRP enrolled the property in the Virginia Department of Environmental Quality (VDEQ) Voluntary Remediation Program (VRP).
- The first step under the VRP was to sample soil and groundwater in potentially contaminated areas.
- Initial sampling work was completed in the Fall of 2021.

Known Petroleum Release Area

- In 2013, a release of fuel oil from two underground storage tanks (UST) was identified.
- The prior owner conducted remediation activities, but did not finish remediation prior to sale to HRP.
- HRP took over responsibility for this release when it acquired the property.
- HRP is currently monitoring this area.



VRP AREAS OF INTEREST

- Known Petroleum Release Area (light green)
- Former Chemical Storage and Use Areas (blue)
- Former Power Plant Buildings (orange)
- Drain Lines and Outfalls (yellow)
- Former Coal and Ash Storage Areas (dark green)
- Transformers and Electrical Equipment (red)
- Rail Yard (brown)



VRP SAMPLING PLAN

- HRP submitted a Voluntary Remediation Program (VRP) Site Characterization Work Plan to Virginia Department of Environmental Quality (VDEQ) in September 2021.
- The Work Plan was approved by VDEQ in October 2021.

KEY

- Proposed soil sampling location (orange and black circles)
- ✕ Proposed groundwater monitoring wells (pink and white symbols)
- ✕ Existing groundwater monitoring wells (black and white symbols)



FALL 2021 - SAMPLE LOCATIONS

- Soil Sampling
 - o 49 soil samples were collected from 22 locations and submitted for laboratory analysis
 - o Chemical analysis included metals, petroleum hydrocarbons, polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOC), and volatile organic compounds (VOC)
- Groundwater Sampling
 - o Groundwater samples were collected from 9 newly installed monitoring wells and 4 existing wells and submitted for laboratory analysis
 - o Chemical analysis included metals, petroleum hydrocarbons, PCBs, SVOCs, and VOCs
- Soil and groundwater sampling beneath the power plant building will be conducted at a later time when this area is accessible



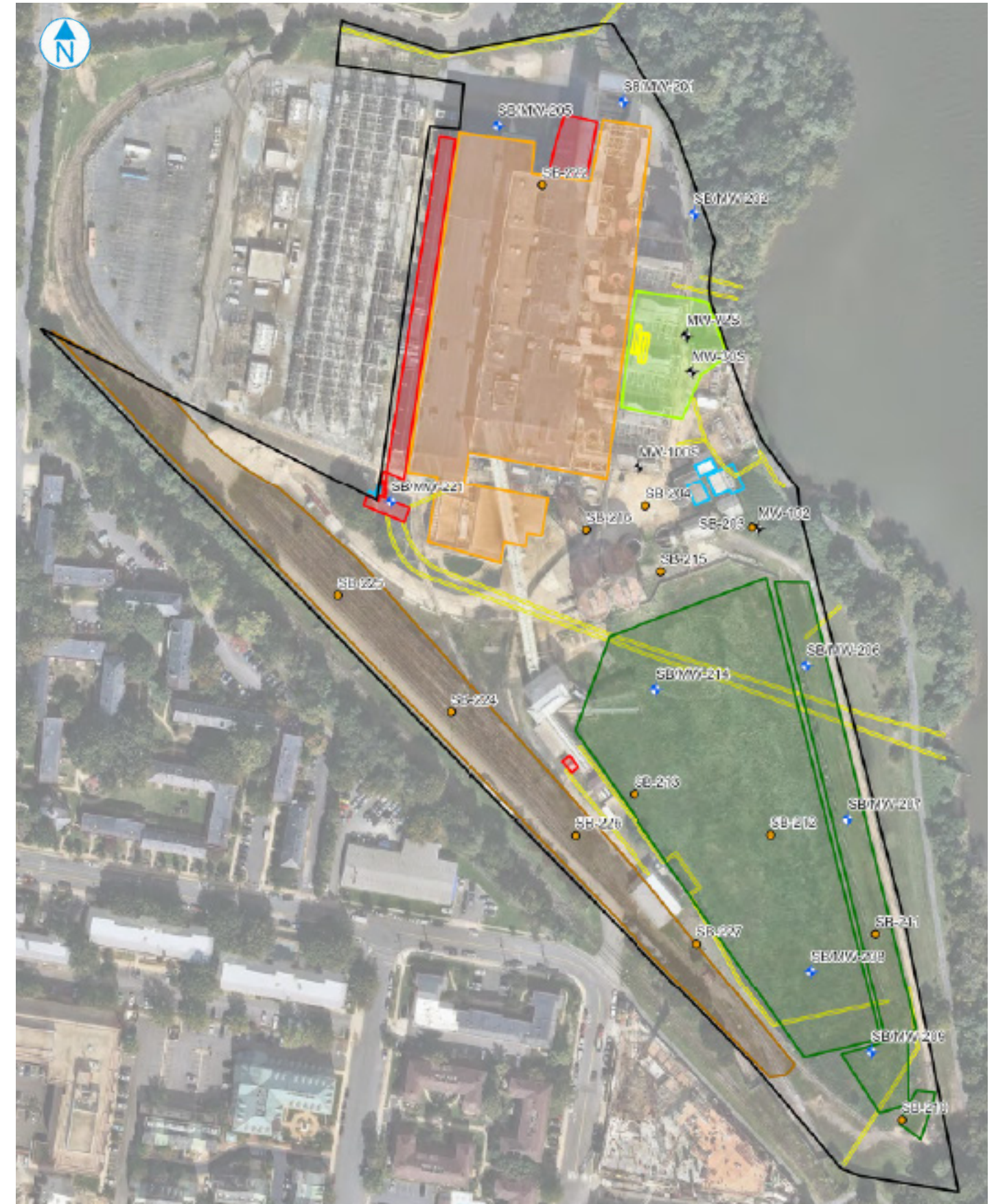
FALL 2021 - SOIL SAMPLE RESULTS

- Metals
 - o Concentrations were generally below VDEQ Screening Levels
 - o Thallium, iron, and manganese were detected above screening levels at a few locations
- Petroleum Hydrocarbons
 - o Concentrations were generally below VDEQ Action Level
 - o In the rail yard, a few samples had concentrations above the Action Level
- Polychlorinated Biphenyls (PCB)
 - o PCBs were not detected
- SVOCs
 - o Concentrations were below industrial Screening Levels
- VOCs
 - o Concentrations were below industrial Screening Levels



FALL 2021 - GROUNDWATER SAMPLE RESULTS

- Metals
 - o Concentrations were generally below VDEQ Screening Levels
 - o Manganese was detected above screening levels at a few locations
 - Petroleum Hydrocarbons
 - o Concentrations were below VDEQ Action Level, except in the known petroleum release area
 - Polychlorinated Biphenyls (PCB)
 - o PCBs were not detected
 - SVOCs
 - o Concentrations were below industrial Screening Levels
- VOCs
- o Concentrations were below industrial Screening Levels



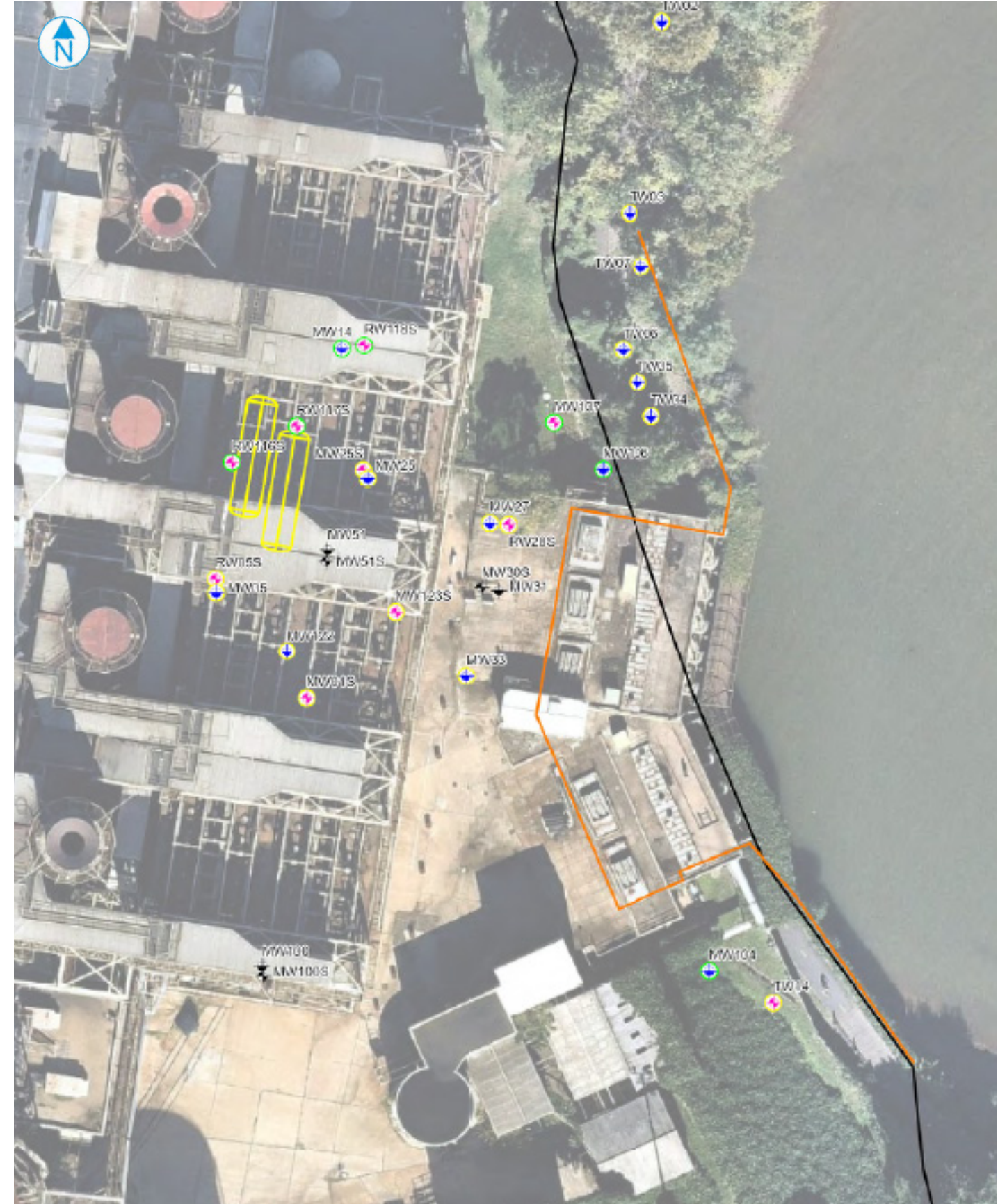
VRP NEXT STEPS

- Results from the Fall 2021 sampling will be documented in a Preliminary Site Characterization Report, which will be submitted to VDEQ
- Additional sampling will be conducted in currently inaccessible areas (beneath buildings, near active utilities) and documented in a Site Characterization Report
- After additional sampling is complete, locations where concentrations exceed VDEQ Screening Levels will be evaluated in a Human Health Risk Assessment
- Results of the Human Health Risk Assessment will be used to identify areas where remediation is warranted
- Remedial actions will be selected, designed, and implemented in coordination with deconstruction and redevelopment



MONITORING OF KNOWN PETRO

- HRP took over responsibility for this release when it acquired the property
- Regular monitoring of this area
 - o Groundwater sampling and analysis
 - o Gauging of monitoring wells from the presence of petroleum
- Status Reports documenting the monitoring activities and results are submitted to Virginia Department of Environmental Quality (VDEQ) twice per year
- The most recent Status Report was submitted in February 2022
- Additional remediation activities will be conducted in coordination with demolition and redevelopment work



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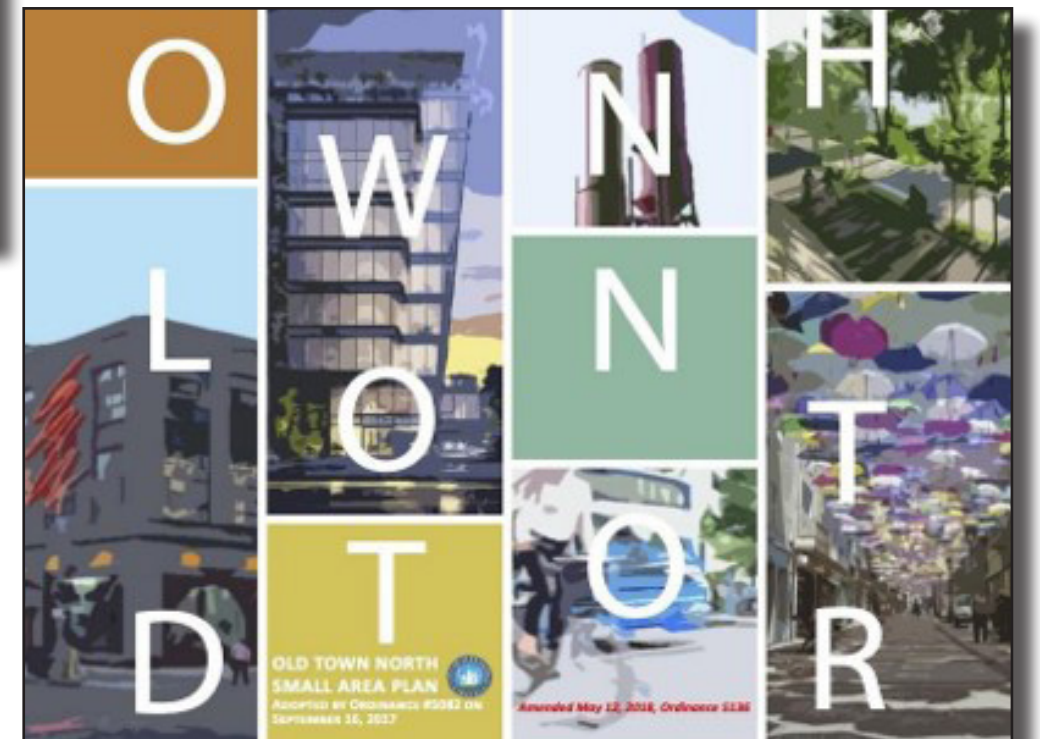
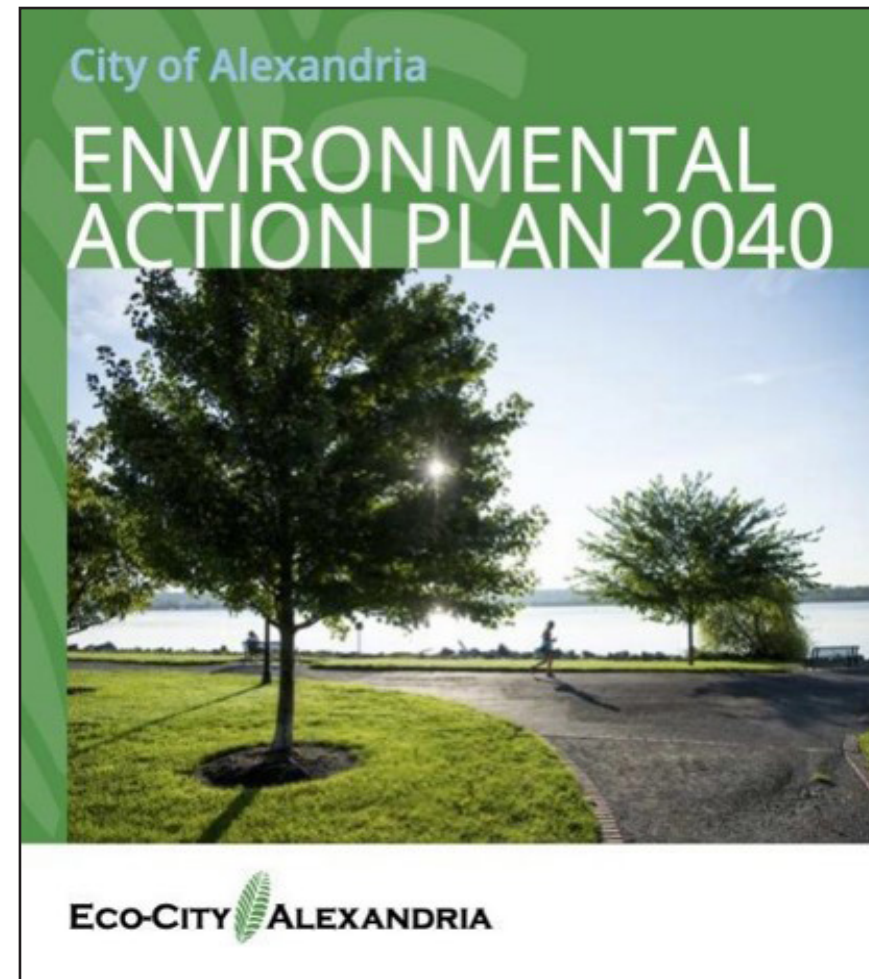
2. ENVIRONMENTAL REMEDIATION + SITE PREP

3. SUSTAINABILITY

4. NEXT STEPS AND HOW TO STAY INVOLVED

SUSTAINABILITY FRAMEWORK

- Existing sustainability guidance for development on the PRGS site includes:
 - o Old Town North Small Area Plan (2017)
 - o City of Alexandria Green Building Policy (2019)
 - o City of Alexandria Environmental Action Plan 2040 (2019)



OLD TOWN NORTH SMALL AREA PLAN



III. ENERGY AND GREEN BUILDING

A. District-Wide Sustainability Measures – Former Power Plant Site

10. Require plan area-wide sustainability through LEED-ND silver or comparable.
11. Require the submission of a Sustainability Master Plan for the former power plant site as part of the submission of the first development special use permit (DSUP) that demonstrates the compliance with the goals and recommendations of the Plan and identifies short-term, mid-term, and long-term strategies and targets to achieve the goal of district-wide sustainability measures. The Sustainability Master Plan should be updated with each subsequent block(s) and/or building(s) to show how the project achieves the Plan's goals.
12. The redevelopment of the former power plant site should strive to achieve carbon neutrality by 2040 and strive to achieve carbon neutral buildings by 2030.
13. Explore the development of district energy systems for heating and cooling on the former power plant site that take advantage of local renewable energy sources, including, but not limited to, geothermal energy, sewage heat, anaerobic digestion, and waste heat from buildings.

B. Energy Use

14. Encourage on-site generation and storage of renewable electricity from solar photovoltaic (PV) and other available renewable resources.

CITY OF ALEXANDRIA GREEN BUILDING POLICY

The City of Alexandria Green Building Policy requires Leadership in Energy and Environmental Design (LEED) Silver certification plus performance points across the following categories:

- Energy Efficiency
- Renewable Energy
- Advanced Energy Metering
- Indoor Water Use Reduction
- Outdoor Water Use Reduction
- Low Emitting Materials
- Construction IAQ Management
- Thermal Comfort



CITY OF ALEXANDRIA

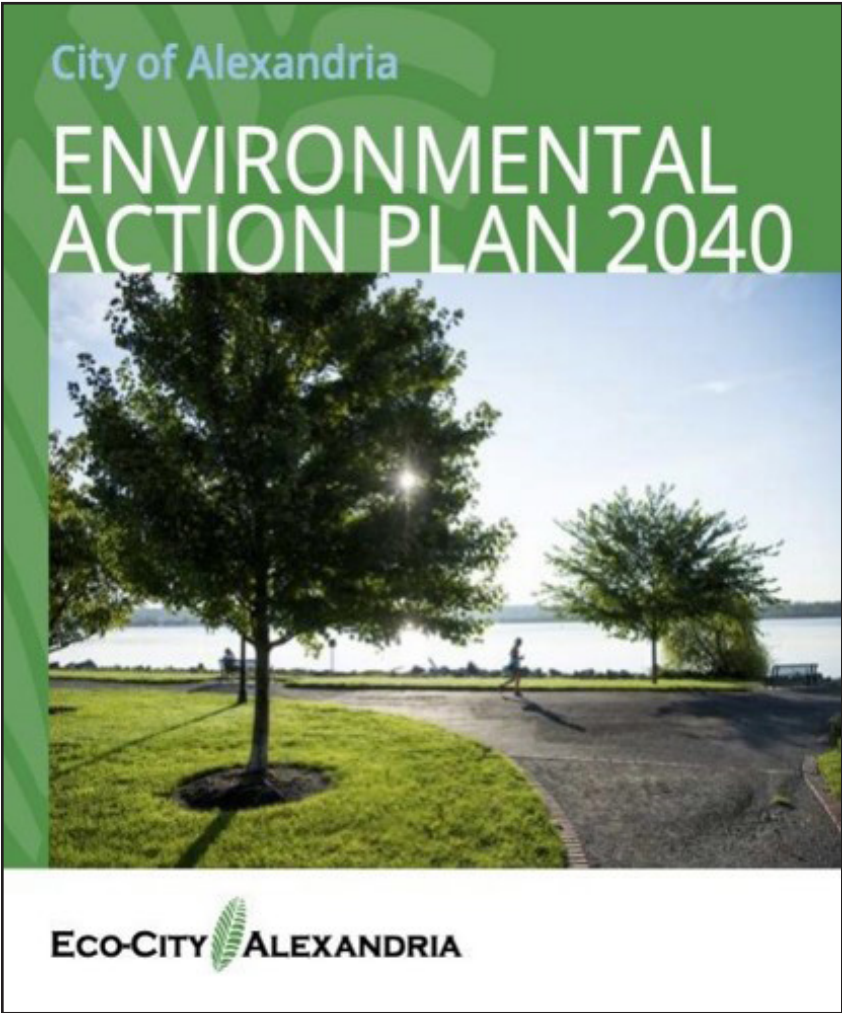
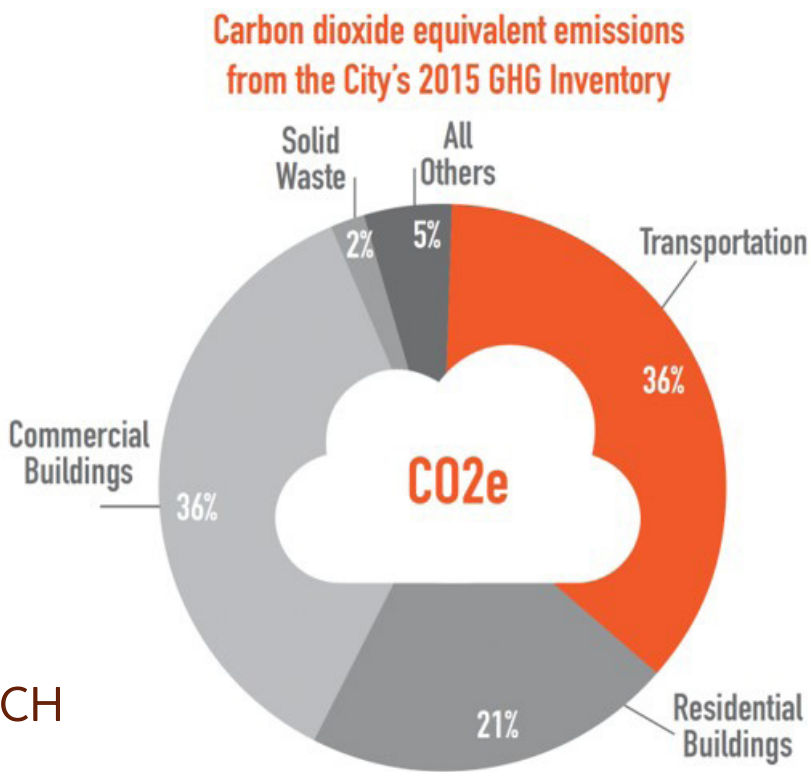
2019 Green Building Policy



CITY OF ALEXANDRIA ENVIRONMENTAL ACTION PLAN

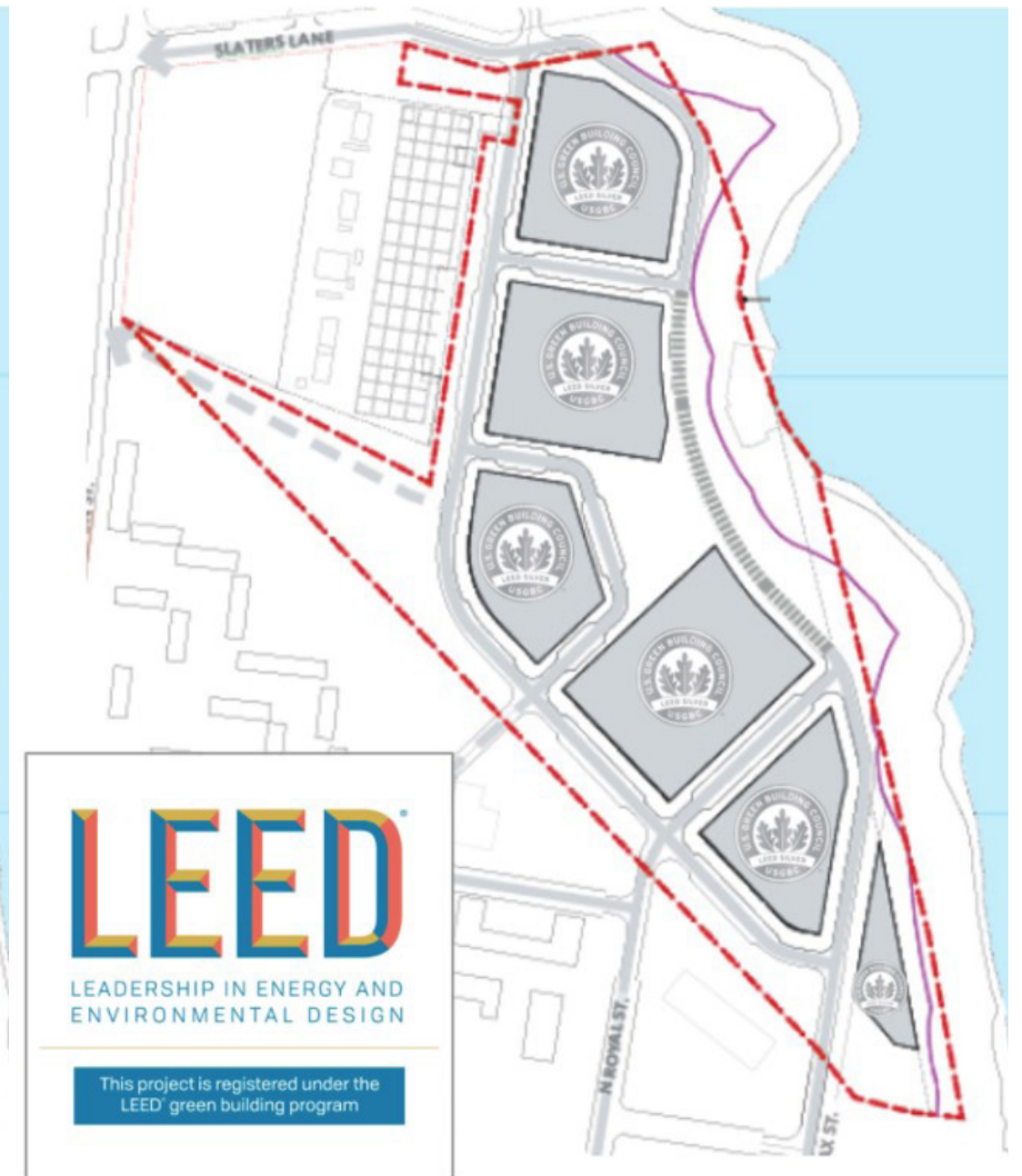
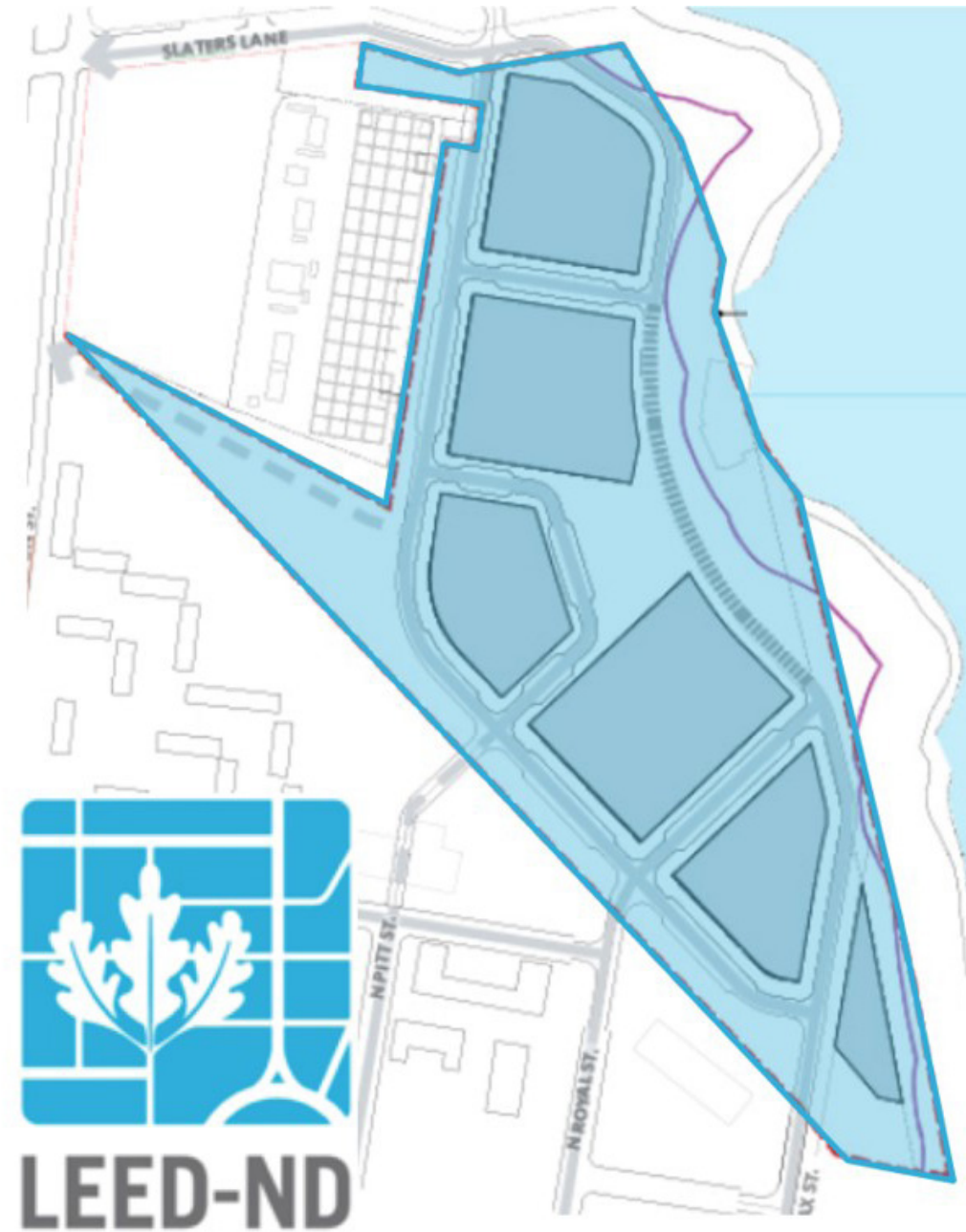
The EAP 2040 identifies short-, mid-, long-term actions covering the following categories:

-  CLIMATE CHANGE
-  ENERGY
-  GREEN BUILDING
-  LAND USE & OPEN SPACE
-  SOLID WASTE
-  WATER RESOURCES
-  TRANSPORTATION
-  ENVIRONMENTAL HEALTH
-  AIR QUALITY
-  IMPLEMENTATION, EDUCATION, AND OUTREACH



APPLICABLE LEED FRAMEWORKS

- The Old Town North Small Area Plan (OTN SAP) envisions that the PRGS site applies the green building rating system Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND). This is a plan level certification.
- Each building will also be LEED Silver certified, at minimum. This is a building certification.



WHAT IS CARBON NEUTRALITY?



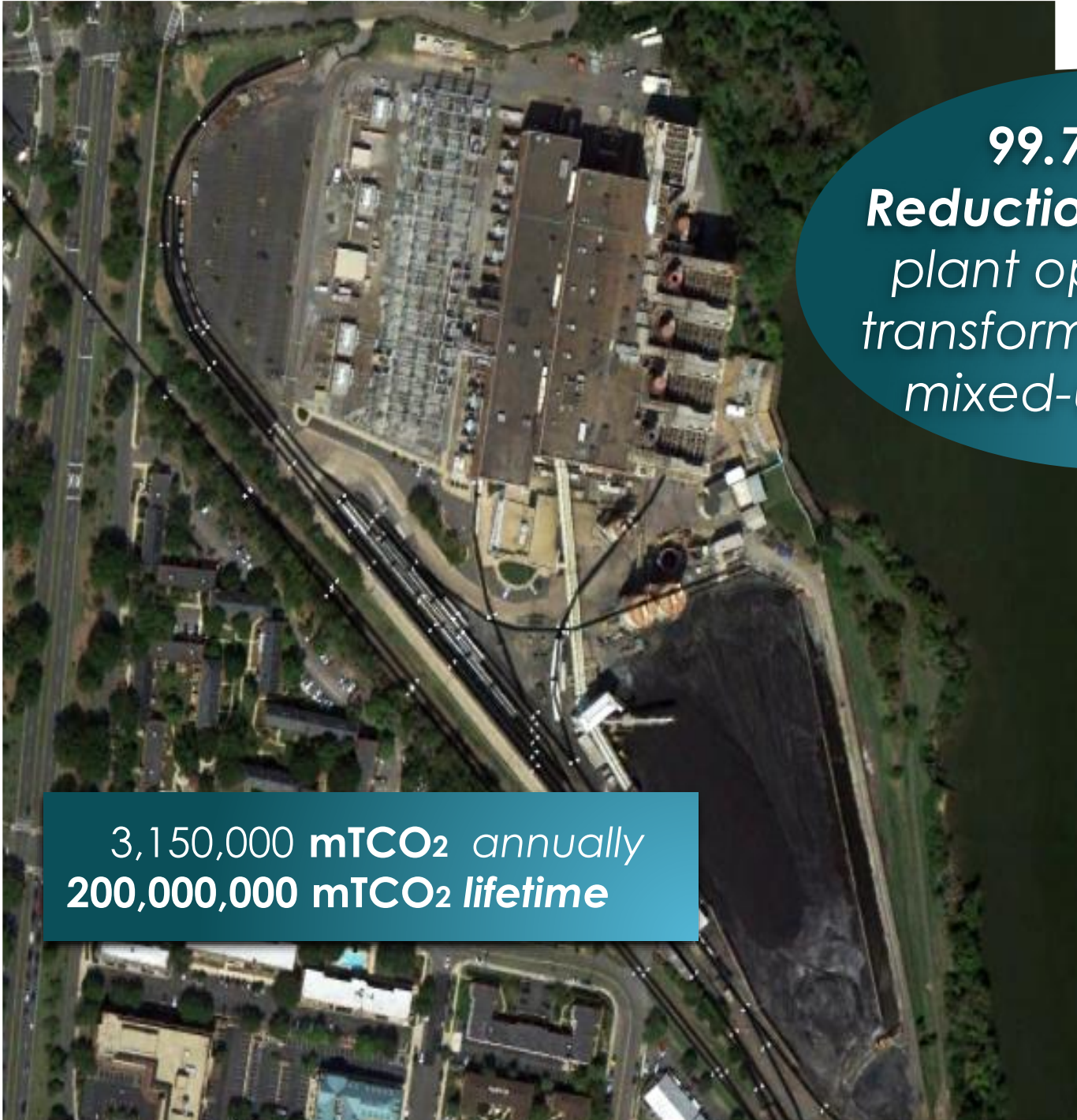
WHAT DOES THAT MEAN?

WHERE DO WE START?

HOW DO W

*TO NEUTRALIZE THE LIFE-CYCLE CARBON EMISSIONS ASSOCIATED WITH THE
DESIGN, CONSTRUCTION, AND OPERATIONS OF THE PROJECT*

HISTORY OF THE PRGS SITE'S CARBON FOOTPRINT



99.7% CO₂
*Reduction from coal
plant operation to
transformation into a
mixed-use district*

3,150,000 mTCO₂ annually
200,000,000 mTCO₂ lifetime



8,800 mTCO₂ annually

DECOMMISSIONED IN 2012 THANKS TO COMMUNITY ADVOCACY

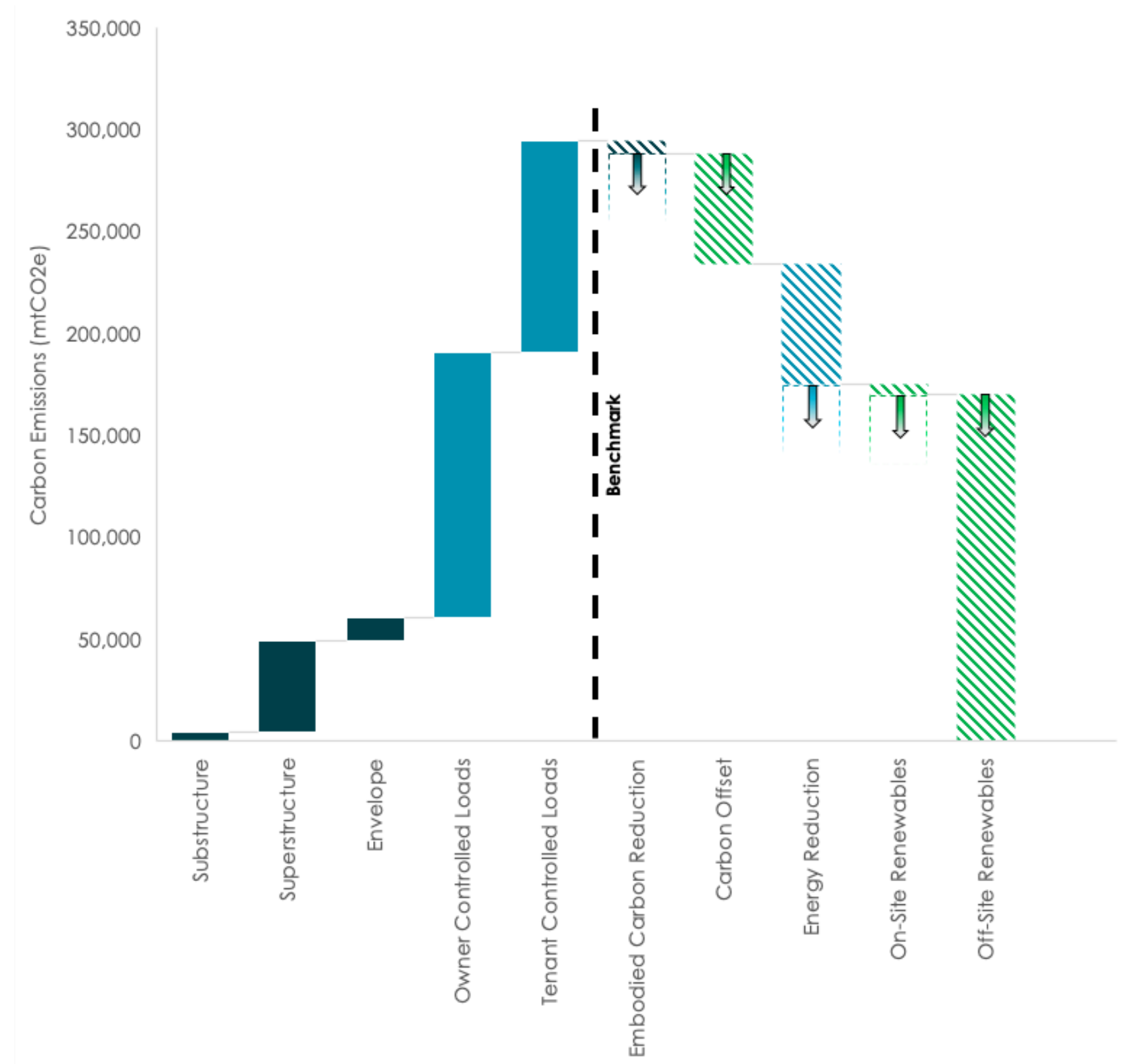
PATH TO CARBON NEUTRALITY

OPERATIONAL CARBON	EMBODIED CARBON	ELECTRIFICATION	ONSITE RENEWABLE	OFFSITE RENEWABLE
Exploring site-wide strategies that target a minimum of 25% energy savings	Exploring options for minimum of 10% embodied carbon reduction	Emphasizing appropriate Electrification and relationship to the grid	Incorporation of onsite renewable energy generation	Will explore the potential for off-site renewable (PPAs, RECs, Offsets) energy generation



PATH TO CARBON NEUTRALITY

- The primary contributors to carbon emissions at a concept level include building materials and operational energy.
 - Envelope and Structure (embodied carbon)
 - Owner versus tenant controlled elements (operational carbon)
- Pathway includes ability to adjust levers:
 - Establish performance thresholds
 - Manage competing priorities
 - Optimize building's relationship to the utility



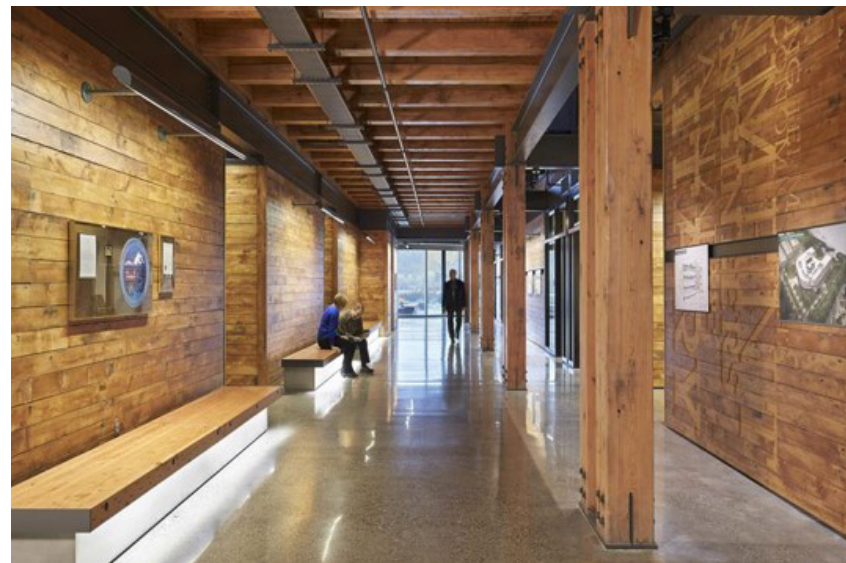
OPERATIONAL CARBON (ENERGY REDUCTION)

- Energy efficiency and demand reduction is the most critical strategy to reduce carbon emissions.
- Energy loads for base building systems (elevators, common area lighting, ventilation, etc) and tenant-controlled loads (plug loads, individual unit lighting, appliances, etc) represent over half of a building's operational energy use.
- Of the base building loads, ventilation represents roughly 1/3 of the total owner-controlled operational energy use.
- Advancements in scalable heat pump technology are a critical component of achieving operational carbon reductions.
- The team is currently evaluating the feasibility of "district-wide" (central utility plant, GSHP, etc.) and localized energy efficient HVAC systems.

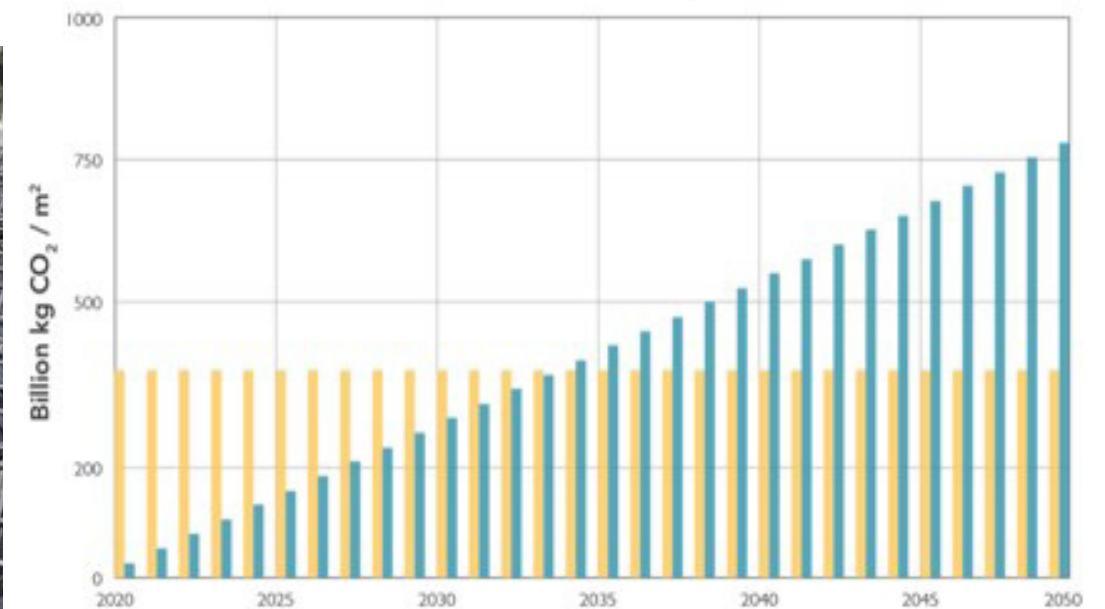


EMBODIED CARBON (MATERIALS)

- Embodied carbon is the impact of building materials from cradle-to-grave.
- The embodied carbon is fixed once construction is complete.
- The embodied carbon of the project equates to at minimum 6 years of operational carbon.
- Heightened awareness and selection around the environmental impact associated with material choices. Environmental Product Declarations (EPDs)
- Sourcing local and carbon sequestration opportunities will also be explored.



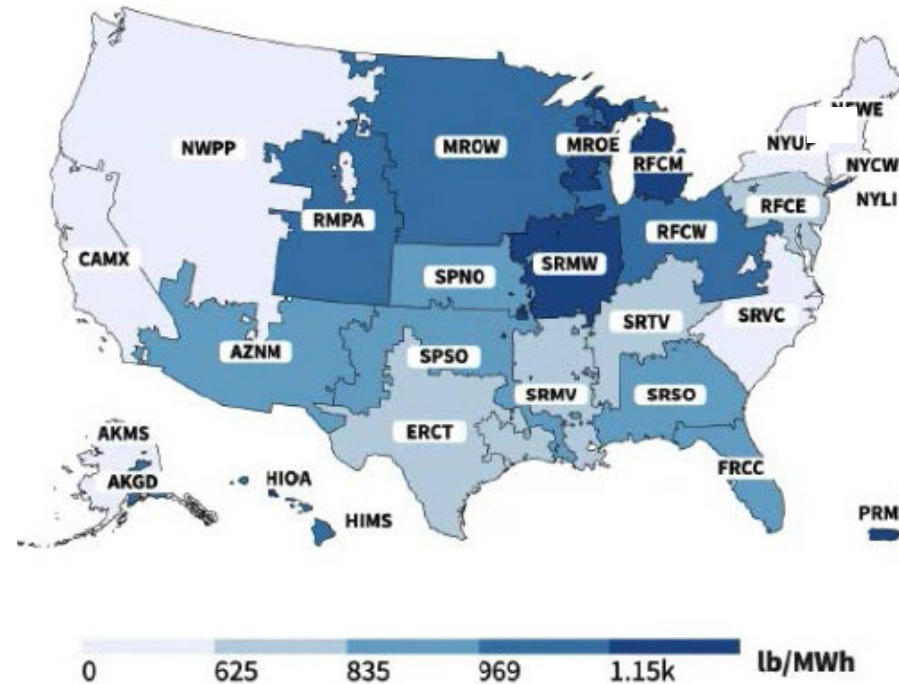
Total Carbon Emissions of Global New Construction
ever year from 2020-2050
Business as Usual Projection



ELECTRIFICATION

- Minimizing onsite combustion is an important step in carbon neutrality. Appropriate electrification will be explored to the extent feasible.
- Virginia Clean Economy Act (VCEA) requires Dominion Energy Virginia to be carbon-free by 2045.
 - o SVRC (Service Region for Virginia and Carolina) is 6th cleanest grid in the US
- 2018 743lbs CO2/MWh
- 2019 675lbs CO2/MWh (9%reduction relative to 2018)
- 2020 626 lbs CO2/MWh (7%reduction relative to 2019)
- Minimizing electric resistance heating, which is extremely inefficient, is an important energy efficiency consideration.

CO₂ total output emission rate (lb/MWh)
by eGRID subregion, 2020



ON-SITE RENEWABLE ENERGY

- On-site renewable energy is an important strategy for immediate response to reducing operational carbon.
- Implementation of rooftop solar needs to account for competing priorities associated with available roof and open space.
- The technology of solar energy continues to improve.
- There are limitations to how much on-site renewable energy generation can offset energy use in urban environments.



OFF-SITE RENEWABLE ENERGY

- New off-site renewable energy generation and on-site electrification alignment is critical (such as grid-interactive buildings)
- New development can stimulate new sources of clean renewable energy in the grid
- Exploring new mechanisms to allow for tenant level procurement of off-site renewable energy sources
- Advancements in the availability of small scale Power Purchase Agreements (PPA)
- Utility's ability to meet the increasing demand for electricity without introducing new fossil fuel based energy source



Maplewood Solar 120 MW Facility
Pittsylvania County, Virginia



Proposed 2,600 MW Facility
Coastal Virginia

SUSTAINABILITY MASTER PLAN

The Sustainability Master Plan (SMP) runs in parallel to the Infrastructure DSUP to be submitted later this spring.

The purpose of the SMP is to:

- Establish metrics for sustainable performance thresholds across several impact categories
- Demonstrate how the project complies with goals and recommendations of the city
- Establish a variety of short-term, mid-term, and long term strategies
- Emphasize important elements of sustainability related to the development



SUSTAINABILITY MASTER PLAN



Site

- Stormwater
- Open Space
- Habitat and Ecosystems
- Heat Island



Waste

- Construction
- Infrastructure
- Operation



Water

- Potable Reduction
- Reuse Opportunities
- Process Water



Carbon

- Embodied Carbon
- Operational Carbon
- Renewables
- Transportation



Health & Wellness

- Materials
- Indoor Air Qualities
- Comfort



Resiliency

- Infrastructure
- Essential Systems
- Adaptable Buildings

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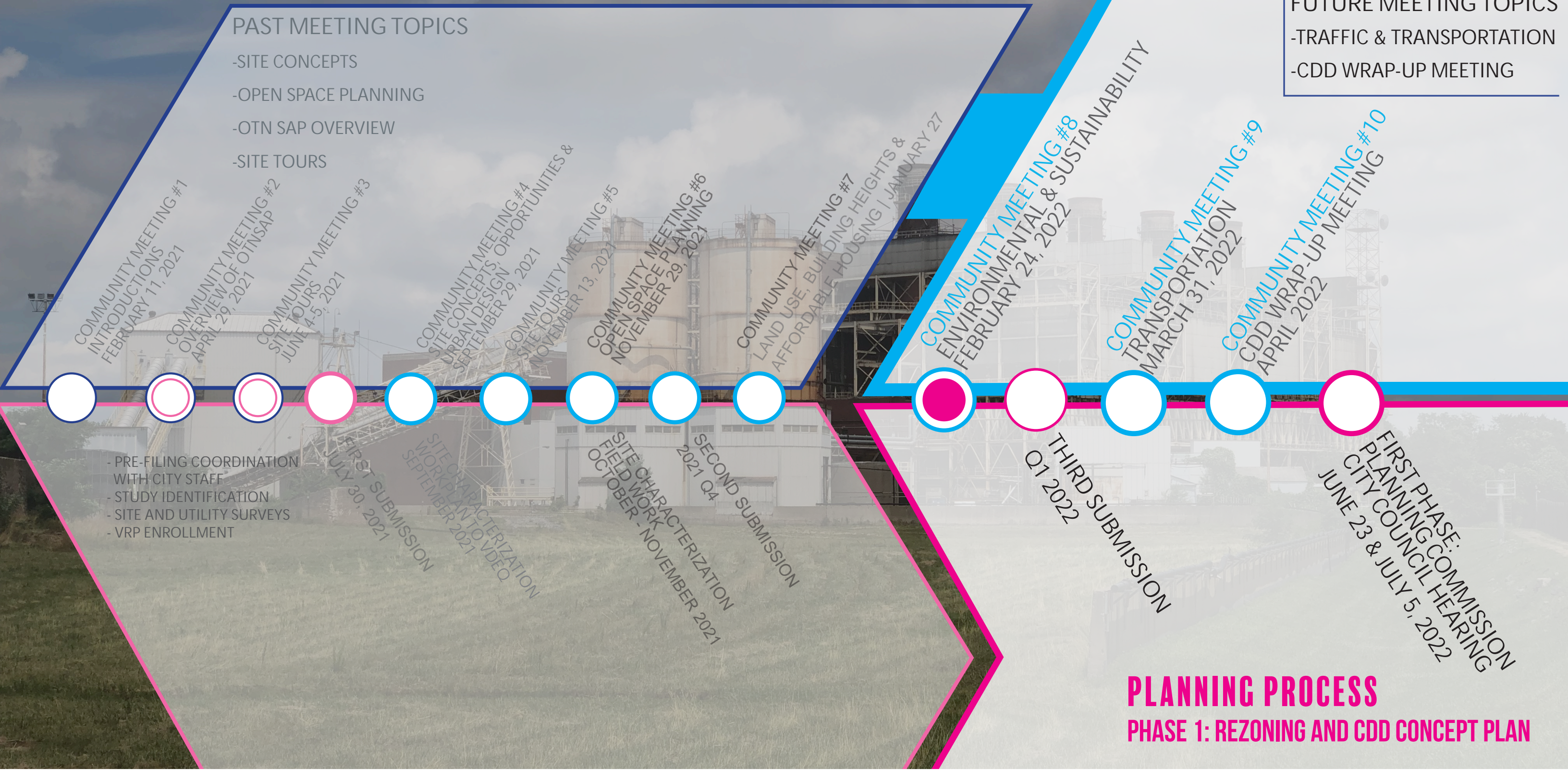
SCHEDULE & PROCESS

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FUTURE MEETING TOPICS

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THANK YOU!

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