

Grosvenor Stream Restoration

Virtual Public Meeting

June 14, 2021

Tuckerman Station/ Gables, South of
Tuckerman Ln & Grosvenor Park Areas



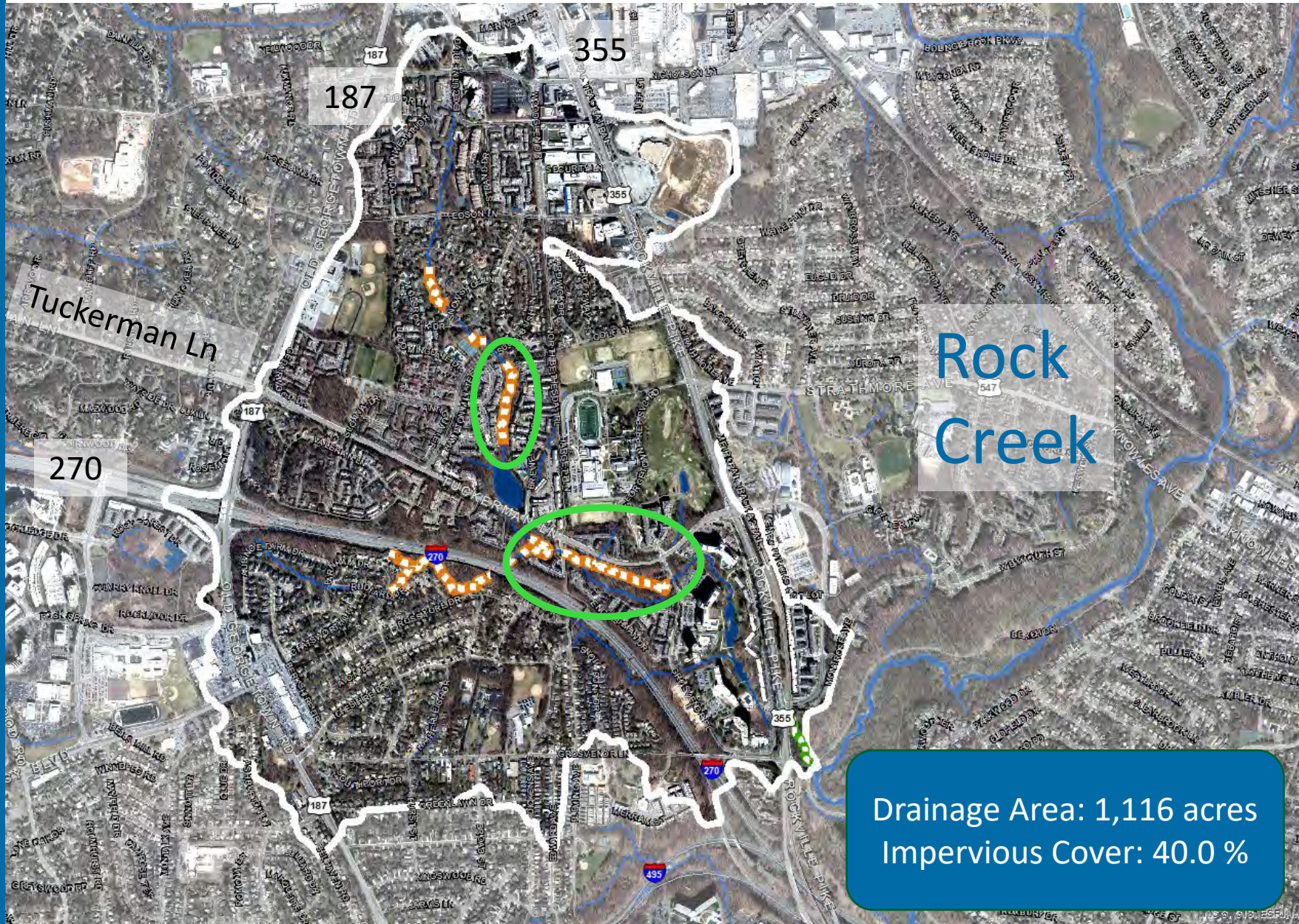
**DEPARTMENT OF
ENVIRONMENTAL
PROTECTION**
MONTGOMERY COUNTY • MARYLAND

Agenda

- Project Background
- New Stream Design
- What to Expect
- Questions



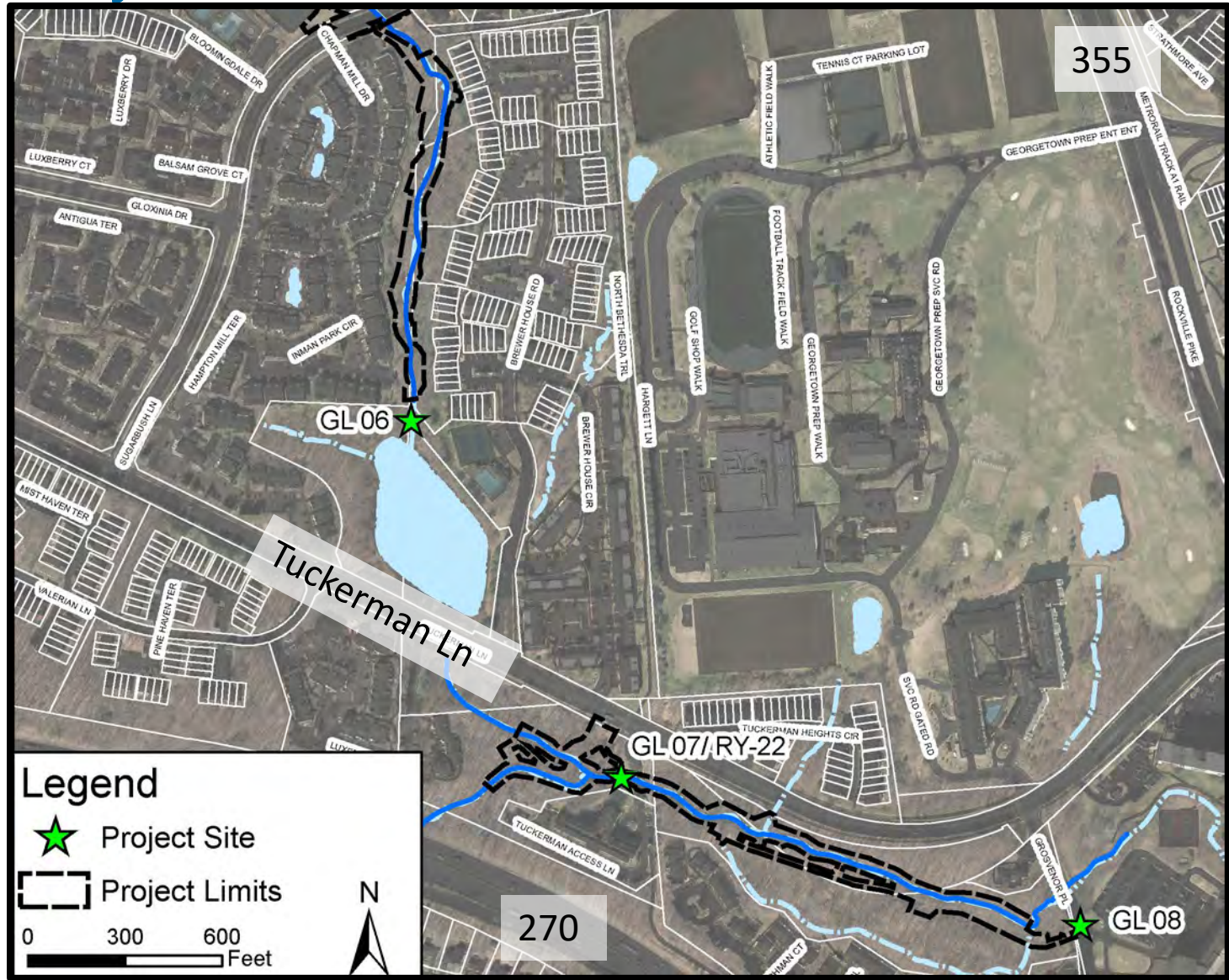
Grosvenor Tributary – Rock Creek



Rock
Creek

Drainage Area: 1,116 acres
Impervious Cover: 40.0 %

Project Location



Recognize This?



Recognize Now?



Watershed Changes – 70 years



Why is stream restoration being done?

Because increased impervious and uncontrolled/under-controlled stormwater is impacting our streams



Stream in a Watershed with 8% impervious cover.



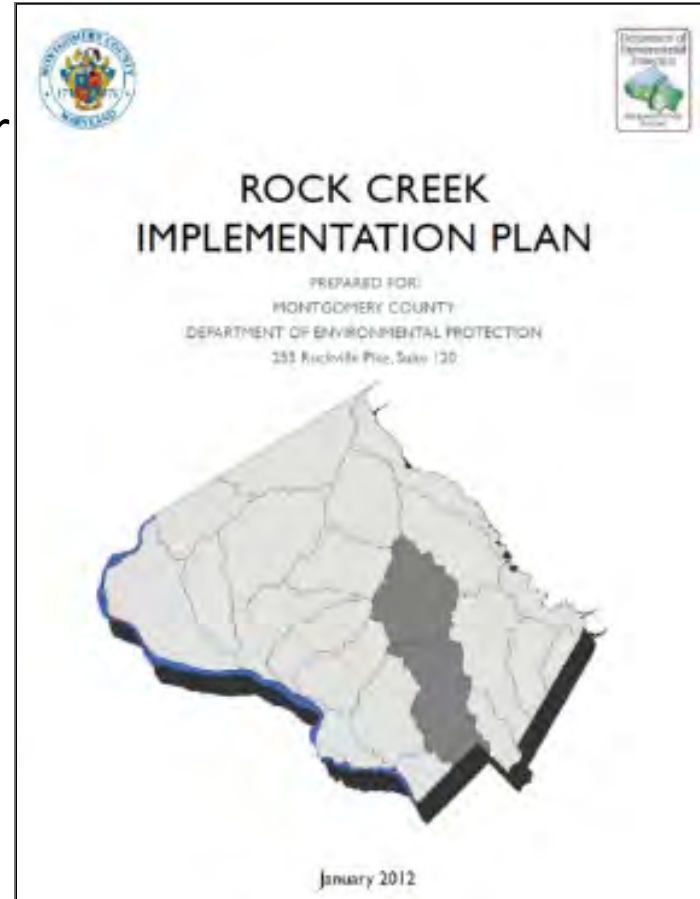
Stream in a Watershed with 20% Impervious Cover



Stream in a Watershed with 30% impervious Cover

Project Selection

- Constructed in the 1960-1980s
- Located in a key watershed (Rock Creek) for restoration
- Erosion of banks threatening utilities and natural resources
- Opportunity for water quality and ecological improvements



Watershed Restoration



Current Stream Condition (Tuckerman Station/ Gables)



Current Stream Condition (Tuckerman Station/ Gables)



Current Stream Condition (South of Tuckerman Ln)



Current Stream Condition (South of Tuckerman Ln)



Current Stream Condition (Grosvenor Park Area)



Current Stream Condition (Grosvenor Park Area)



Project Objectives

- Improve water quality
- Improve riparian buffer between stream and properties
- Stabilize stream banks to lessen future erosion



Stream Restoration Approach

- In-Stream Structures (Cross Vane, Step Pool, etc.)
- Habitat enhancement
 - Riffle/pool system for aquatic habitat and fish passage
 - Diverse and native plant communities, forested wetlands
- Pollutant Reduction
 - Erosion prevention & Sediment trapping



Riffle/ Pool Sequence



Step Pool System



Rock Sill



Cross Vane



Cross Vane & Riffle



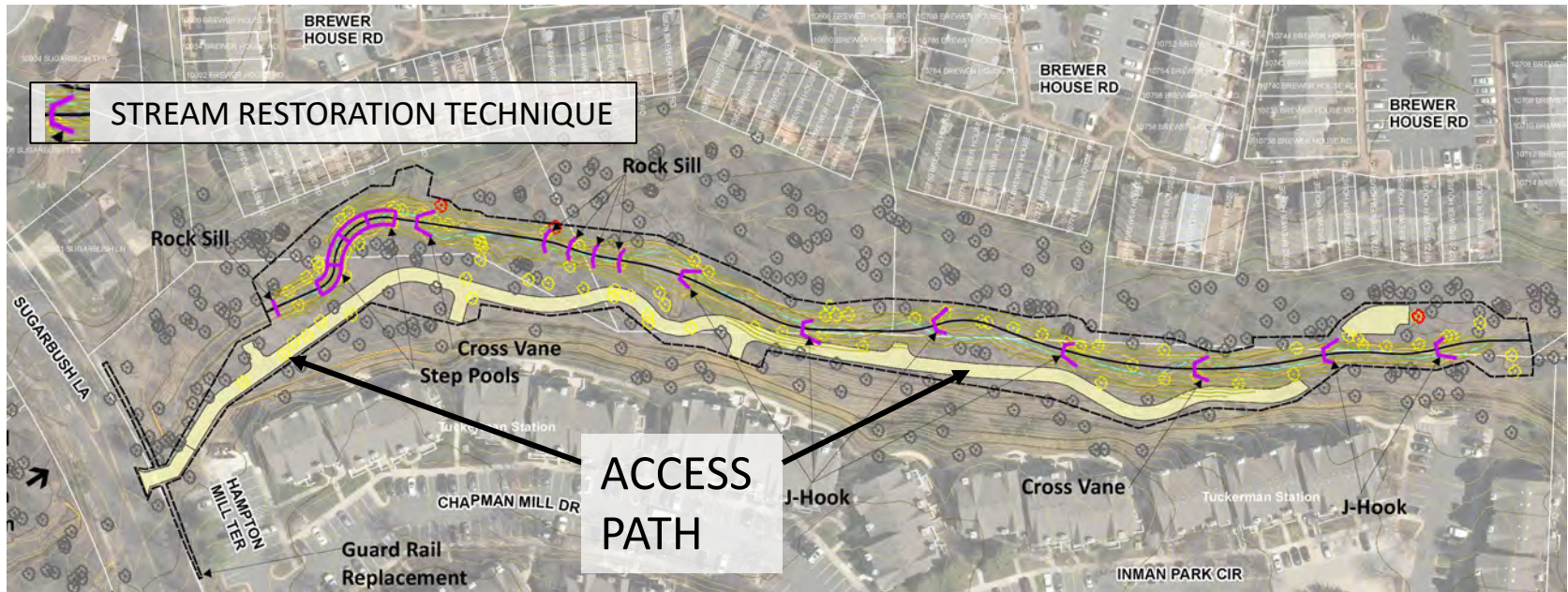
Rock Toe



Imbricated RipRap Wall

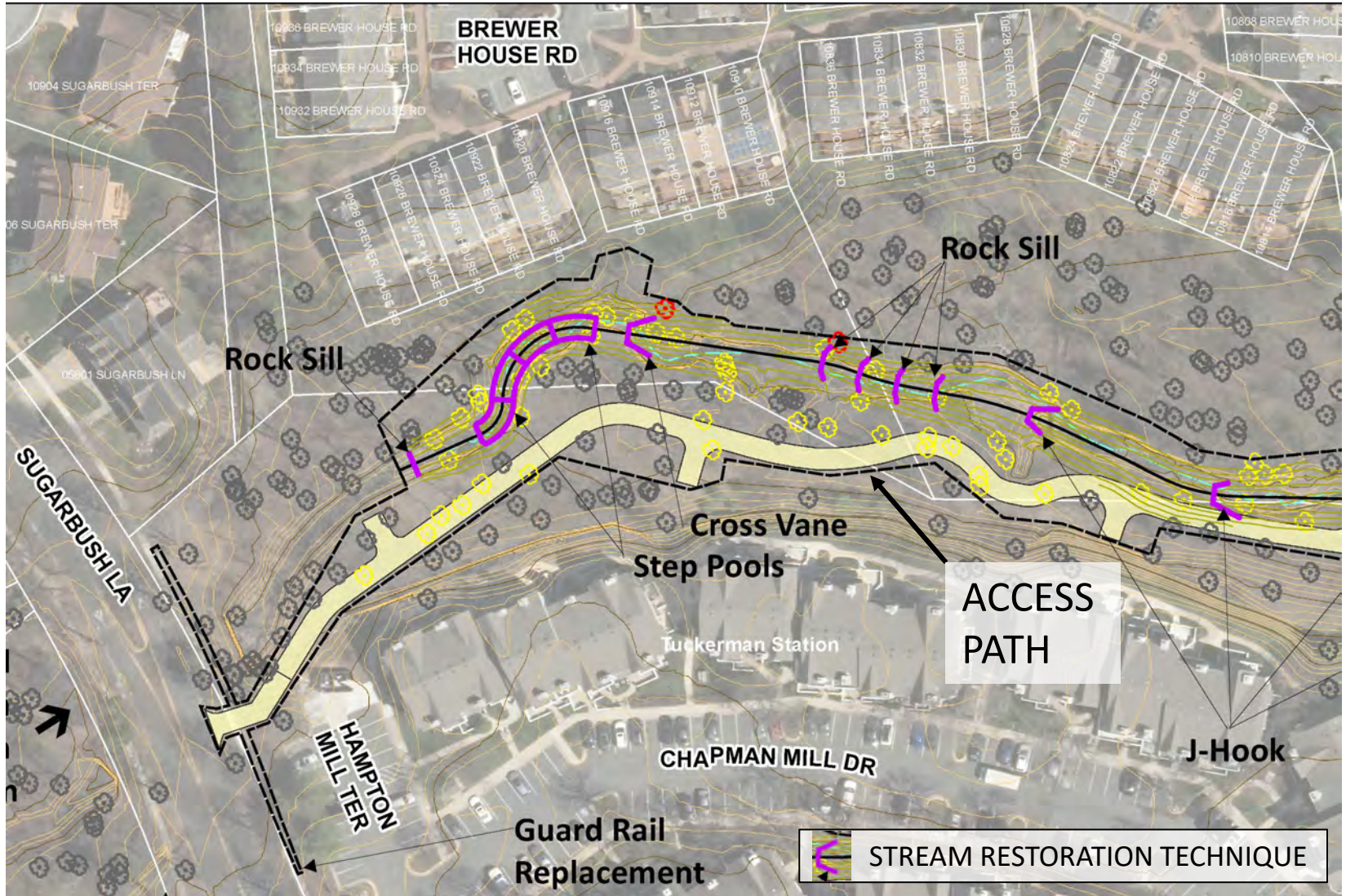


Stream Restoration Design (Tuckerman Station/ Gables) Overview

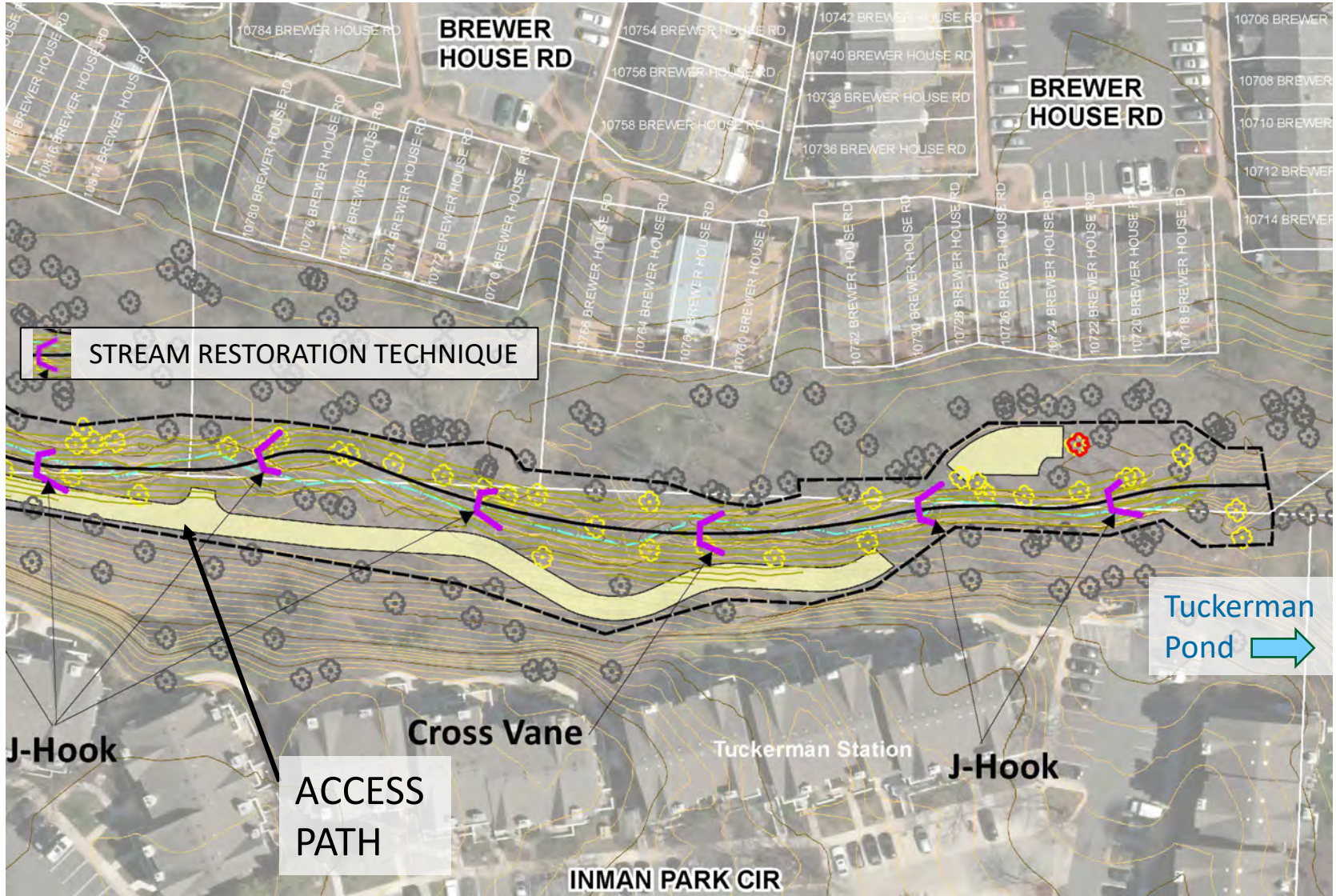


- 0.21 miles of stream restored on this reach
- 1.13 miles of stream restored on this project
- Staging Areas will be located within the project limits

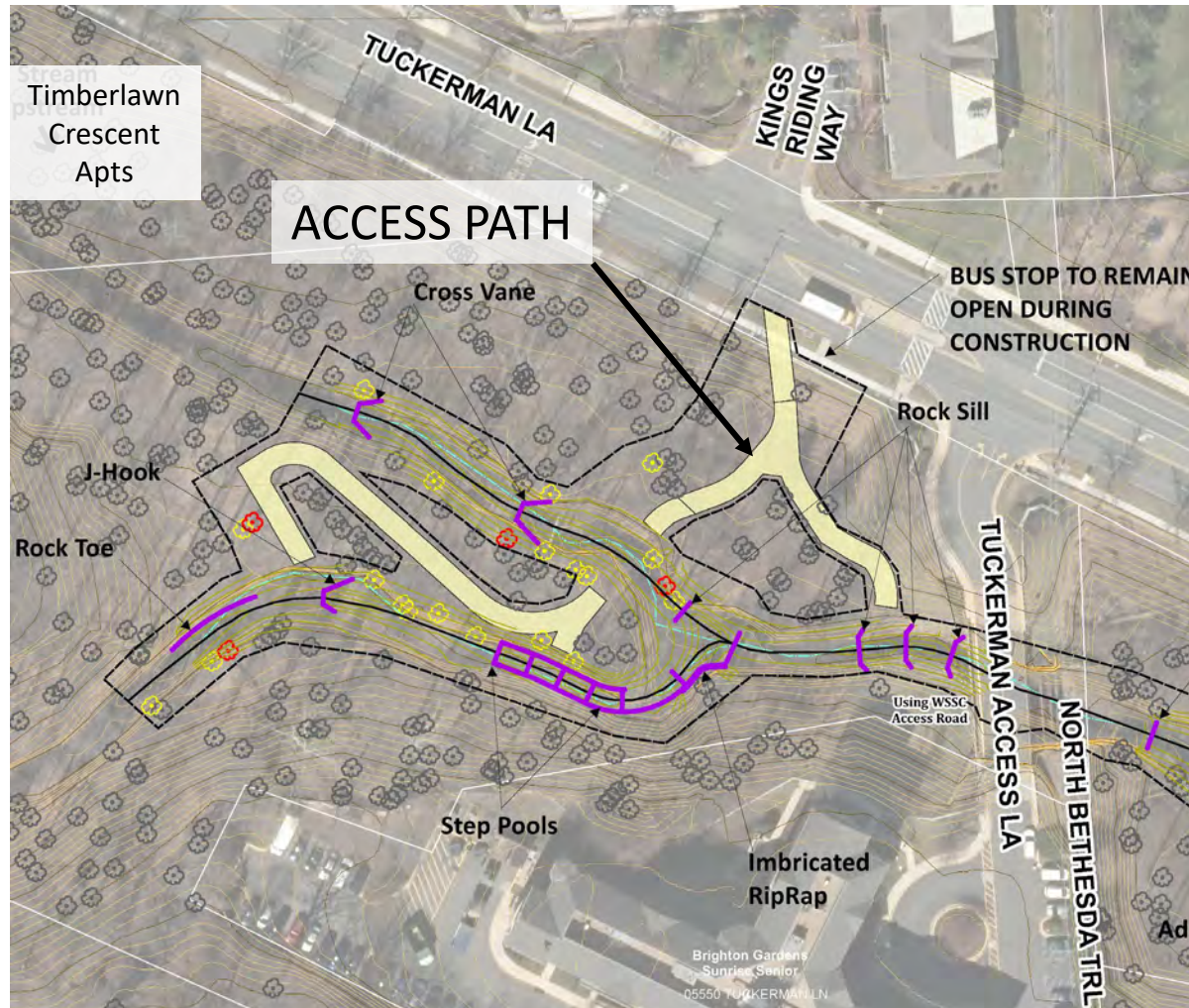
Stream Restoration Design (Tuckerman Station/ Gables) Close Up – North Side



Stream Restoration Design (Tuckerman Station/ Gables) Close Up – South Side



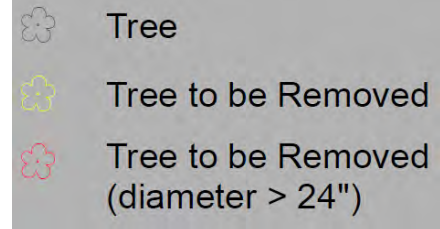
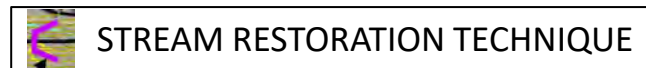
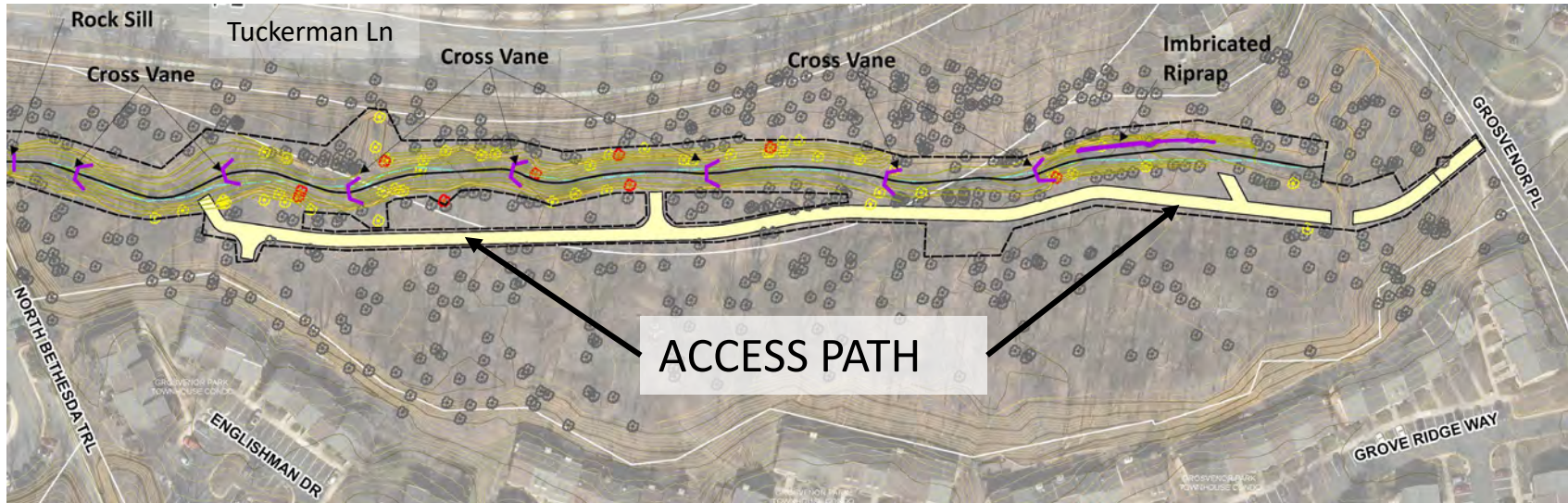
Stream Restoration Design (South of Tuckerman Ln)



- 0.11 miles of stream restored on this reach
- 1.13 miles of stream restored on this project
- Staging Areas will be located within the project limits

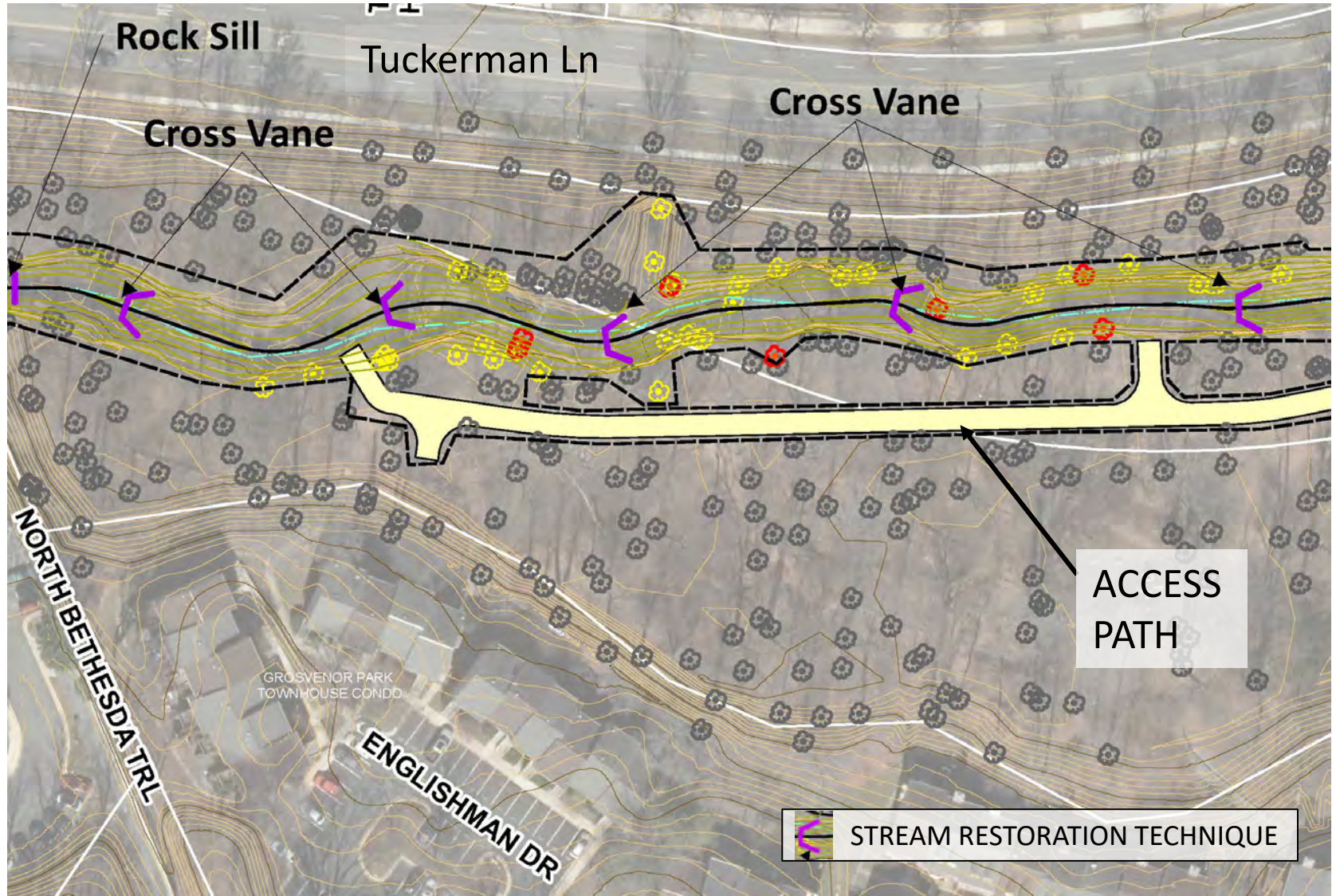


Stream Restoration Design (Grosvenor Park Area) Overview

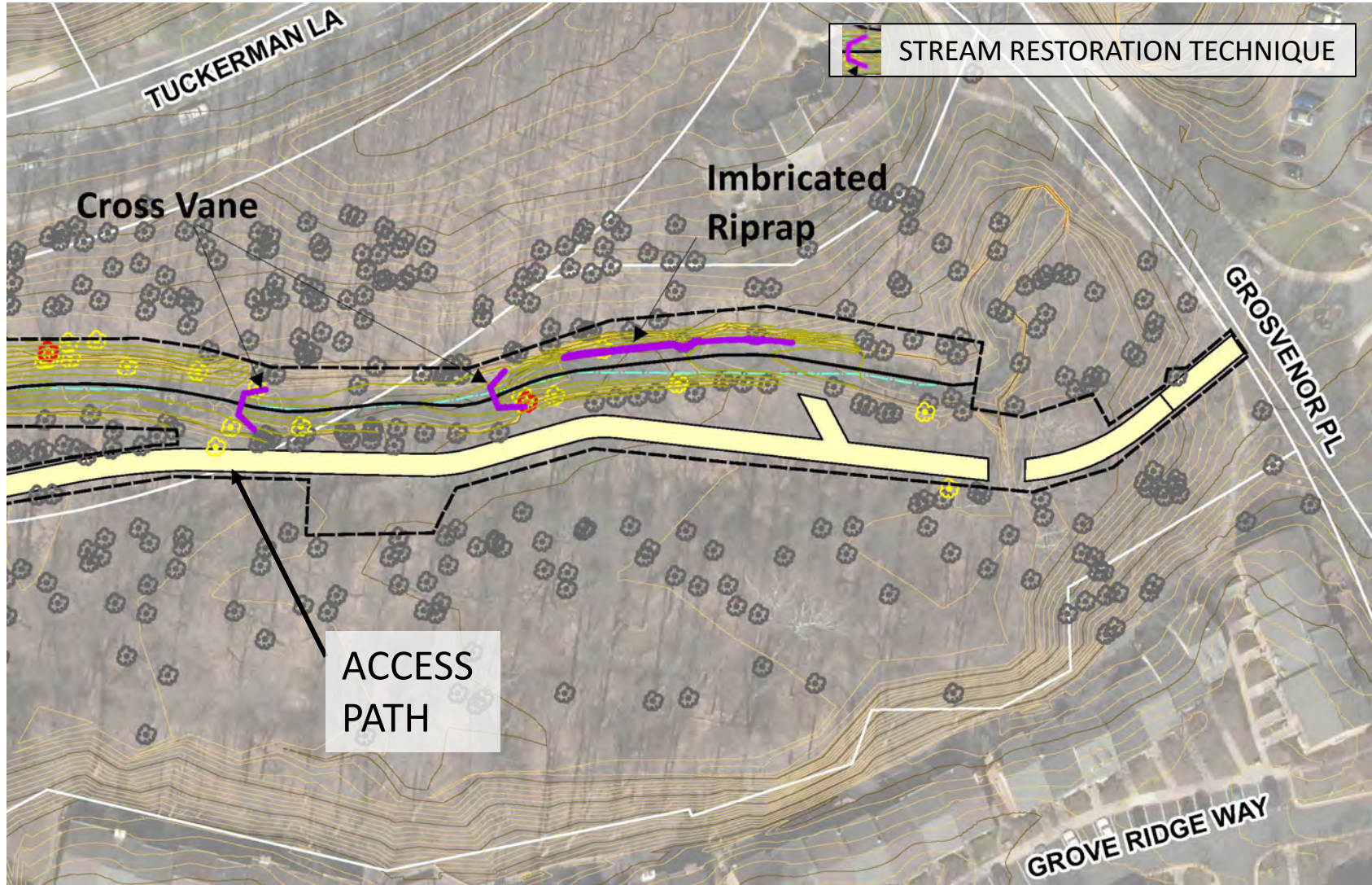


- 0.38 miles of stream restored on this reach
- 1.13 miles of stream restored on this project
- Staging Areas will be located within the project limits

Stream Restoration Design (Grosvenor Park Area) Close Up – North Side

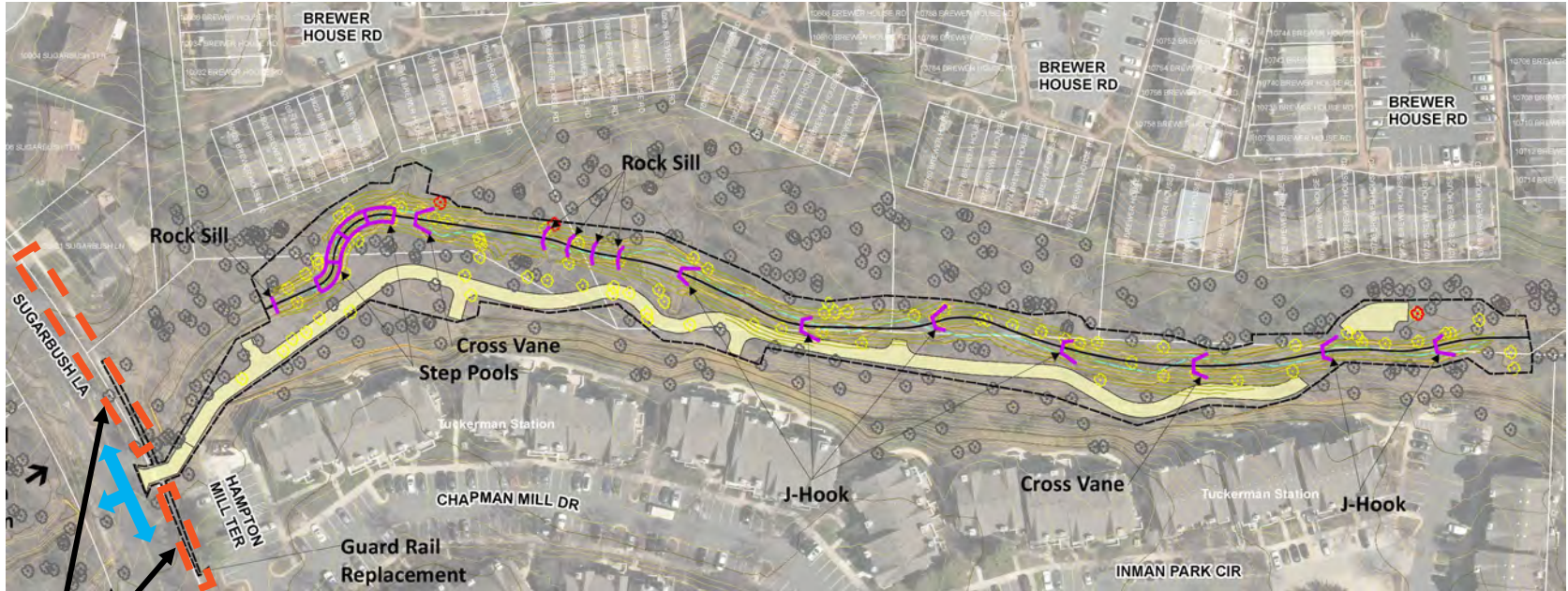


Stream Restoration Design (Grosvenor Park Area) Close Up – South Side



Construction Access (Tuckerman Station/ Gables)

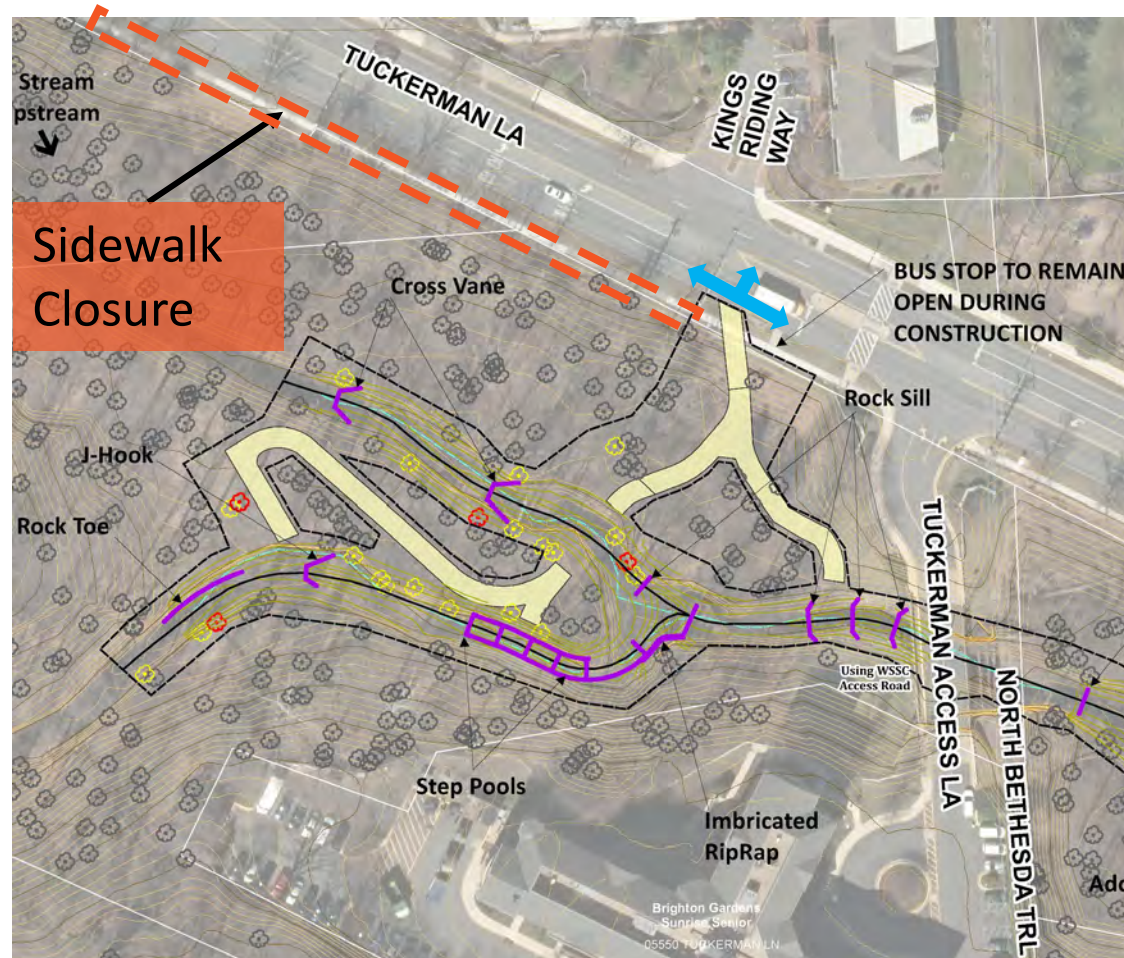
- Pedestrian sidewalk access will be closed in this construction area but will be safely routed across the road at existing crossings with signage.



Sidewalk Closure

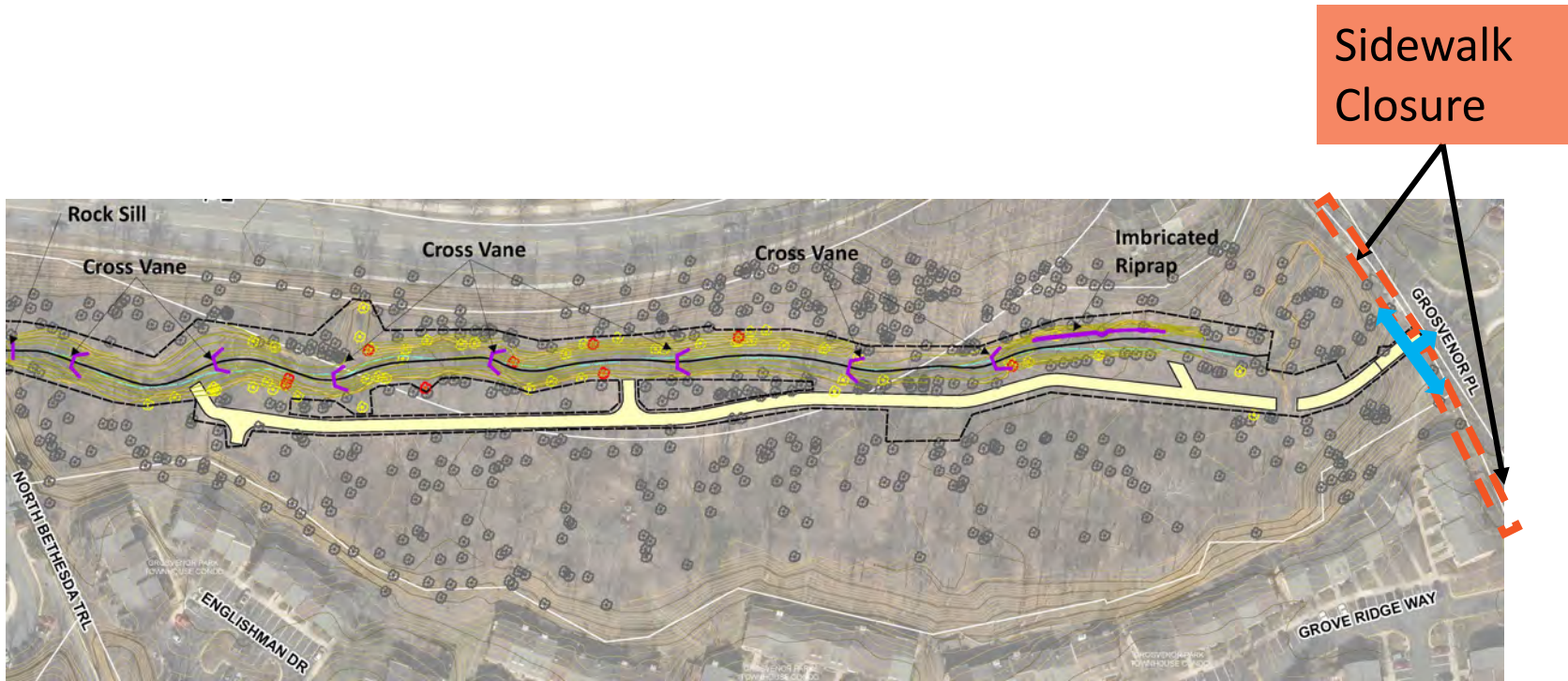
Construction Access (South of Tuckerman Ln)

- Pedestrian sidewalk access will be closed in this construction area but will be safely routed across the road at existing crossings with signage. Bus stop will remain open during construction.

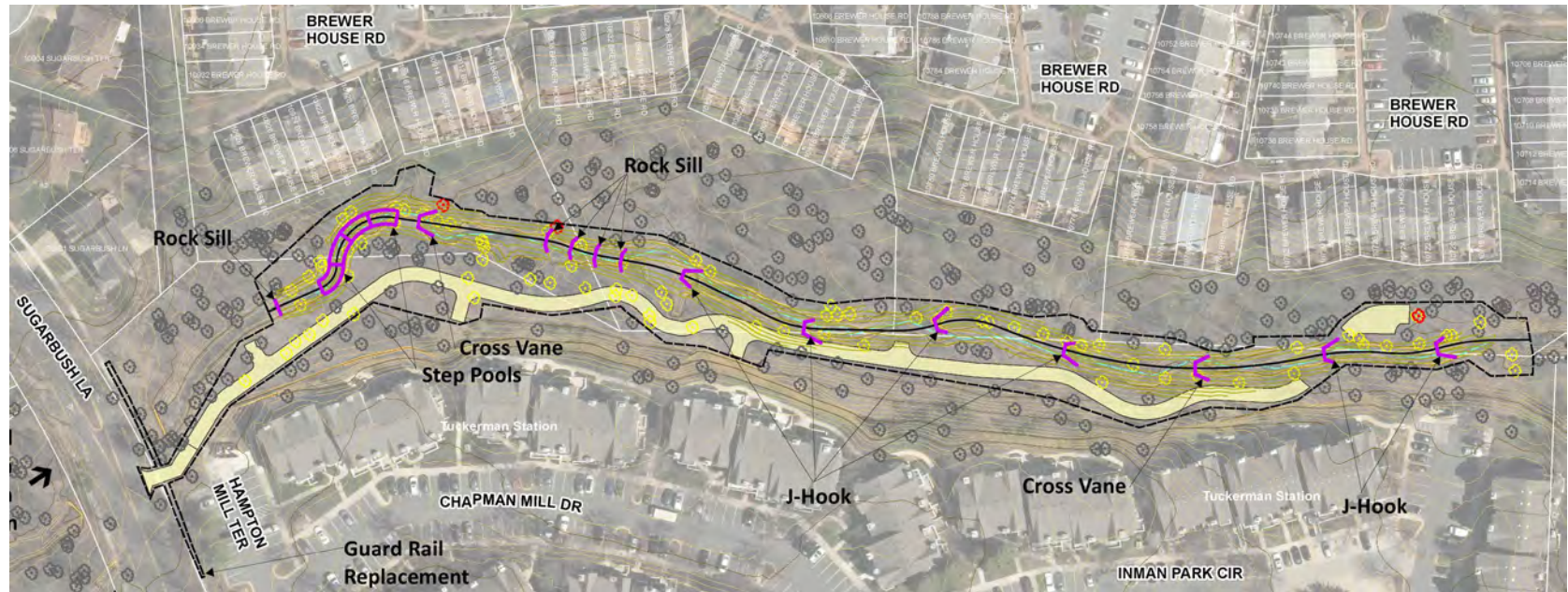


Construction Access (Grosvenor Park Area)




- Pedestrian sidewalk access will be closed in this construction area but will be safely routed across the road at existing crossings with signage.



Tree Impacts (Tuckerman Station/ Gables)

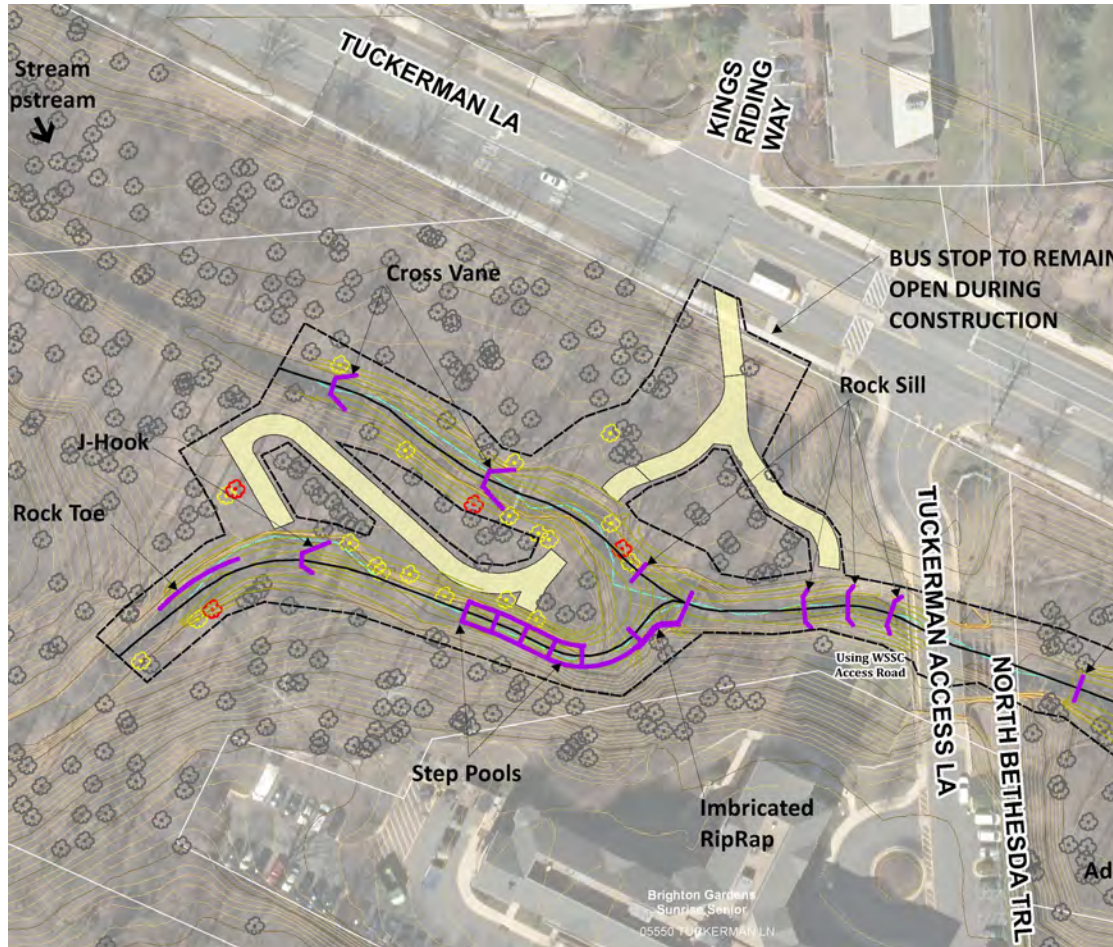


GL-06 TREES TO BE REMOVED (Diameter >= 24")	
COMMON NAME	CONDITION
24" Green Ash	Poor, emerald ash borer, crown dieback
28" Green Ash	Dead, emerald ash borer
27" Tuliptree	Good, vines removed

-  Tree
-  Tree to be Removed
-  Tree to be Removed (diameter > 24")

Additional Bankside Trees (Yellow) To Be Removed – majority eroded at roots

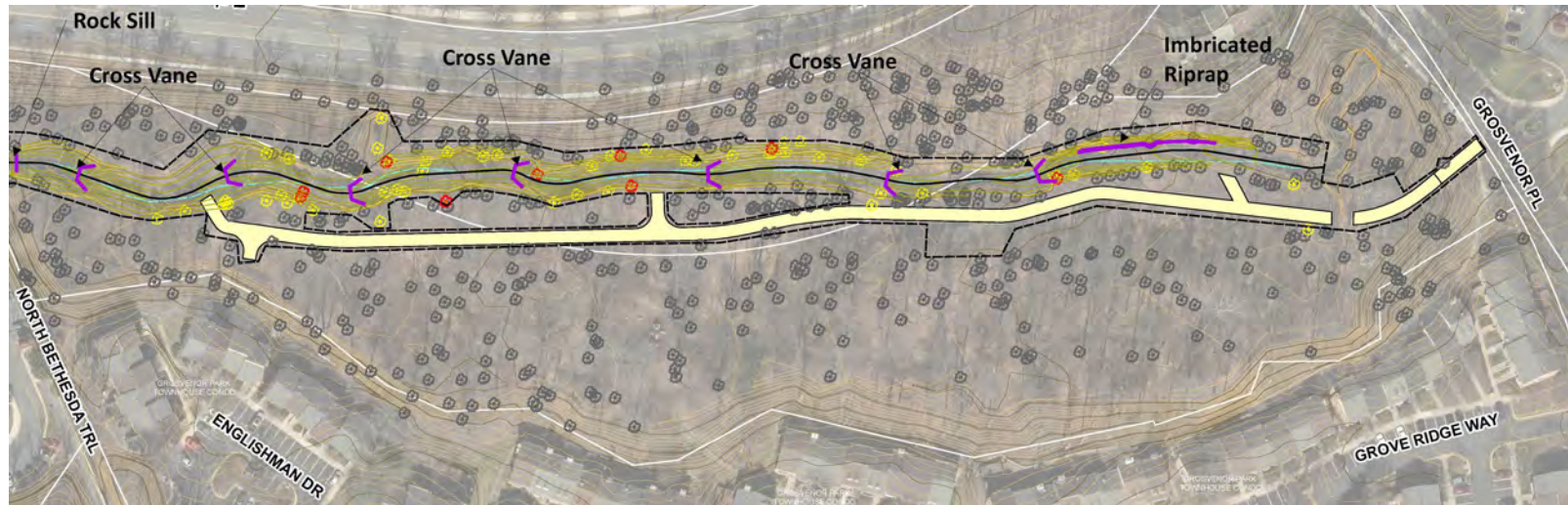
Tree Impacts (South of Tuckerman Ln.)



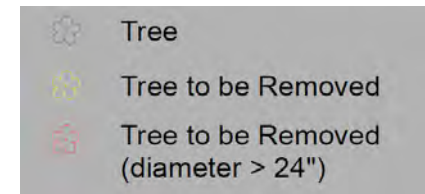
RY-22/GL07 TREES TO BE REMOVED (Diameter >= 24")	
COMMON NAME	CONDITION
36" Tuliptree	Hazard Tree - Poor, trunk hole/ rot
27.5" Tuliptree	Fair, trunk damage, broken leader
26" American Beech	Dead - Poor, vines, completely fallen
30" Northern Red Oak	Fair, very undermined

Additional Bankside Trees (Yellow) To Be Removed – majority eroded at roots

Tree Impacts (Grosvenor Park Area)

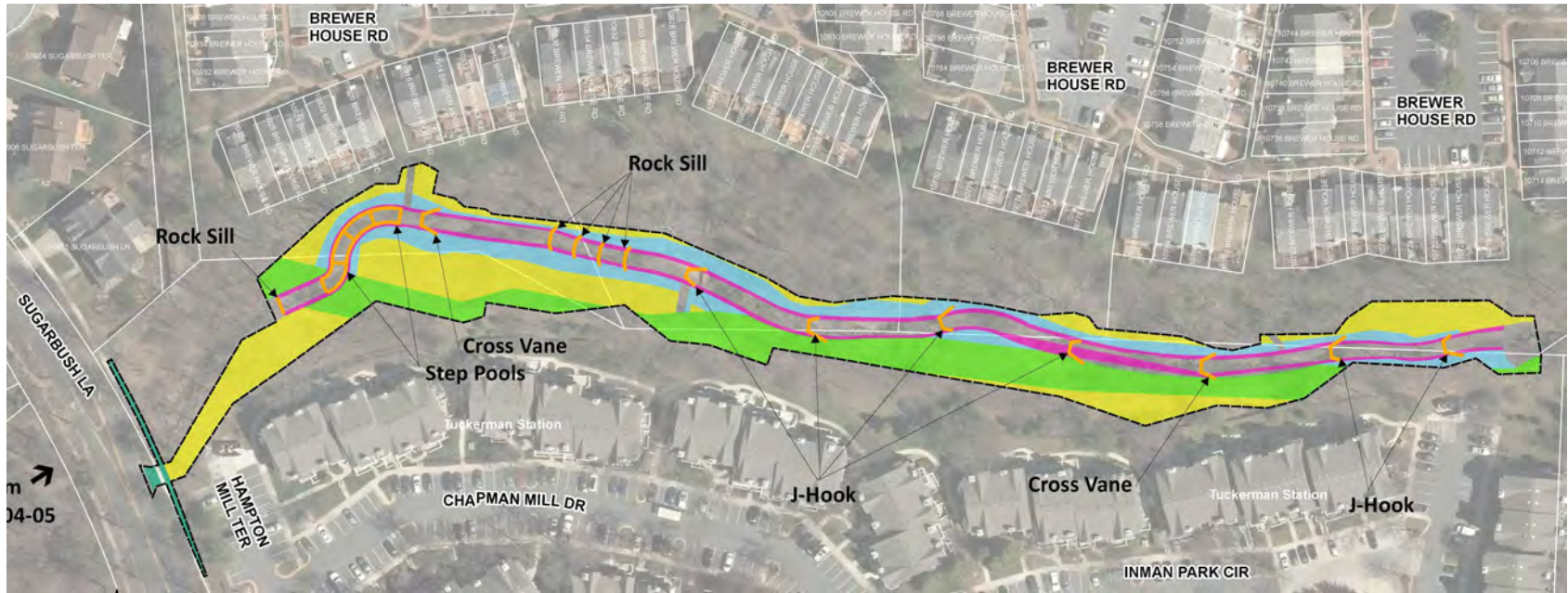


GL-08 TREES TO BE REMOVED (Diameter >= 24")	
COMMON NAME	CONDITION
30" Tuliptree	Fair, undermined
25.5" American Sycamore	Fair, undermined
24.5" Green Ash	Hazard Tree - Poor, emerald ash borer, dying/ possibly dead
28" American Beech	Dead, fallen, cut-up
25.5" Northern Red Oak	Fair, undermined, dead limbs
24" Tuliptree	Fair, leaning, few dead limbs
24" White Oak	Good, slightly undermined
28" American Beech	Poor, undermined, leaning
24" Northern Red Oak	Fair, reduced canopy, dead limbs, leaning



Additional Bankside Trees (Yellow) To Be Removed – majority eroded at roots

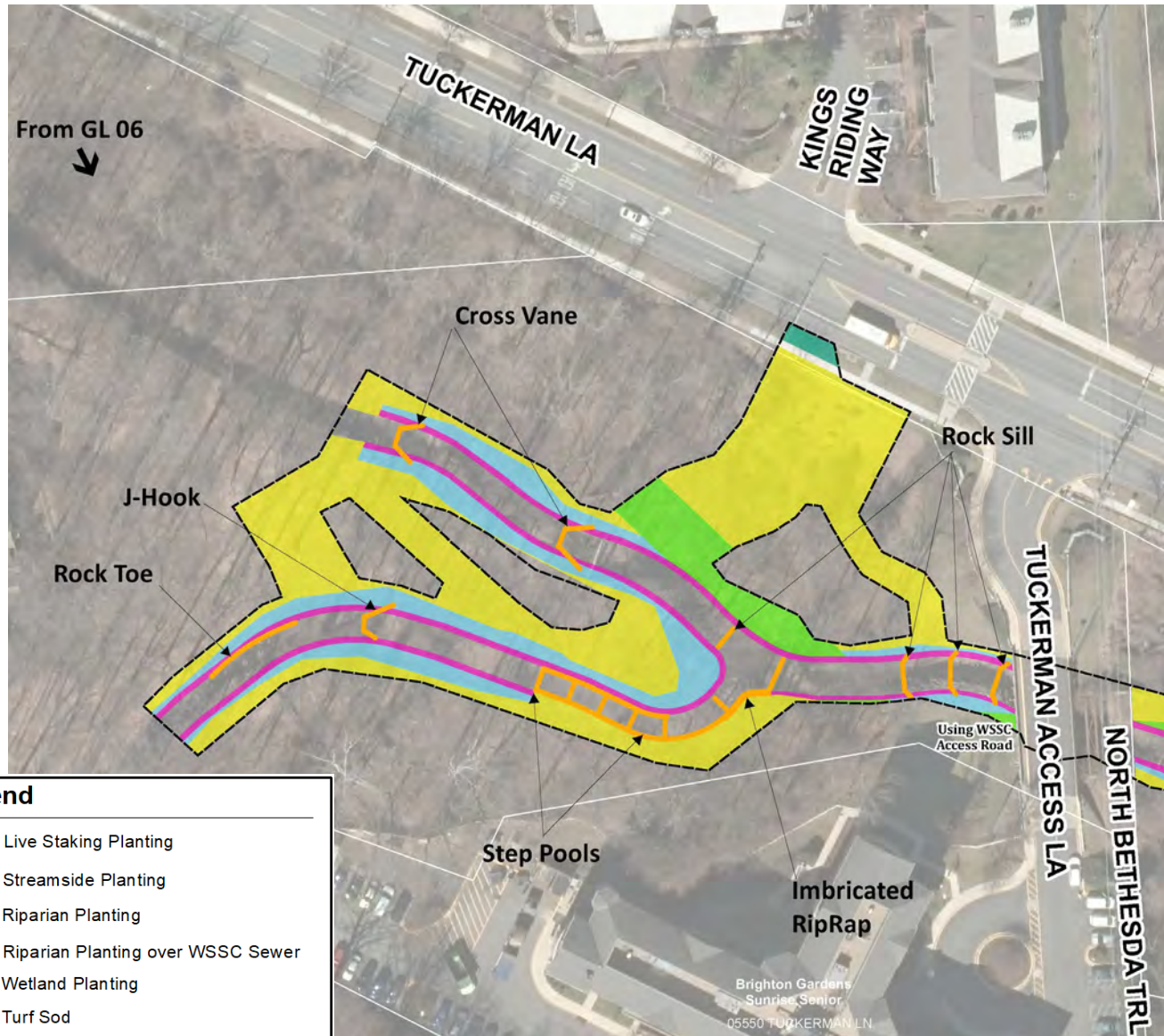
Landscape Planting (Tuckerman Station/ Gables)



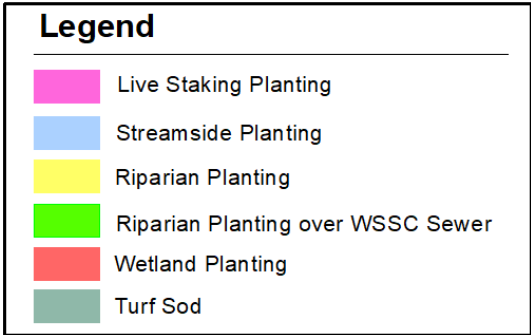
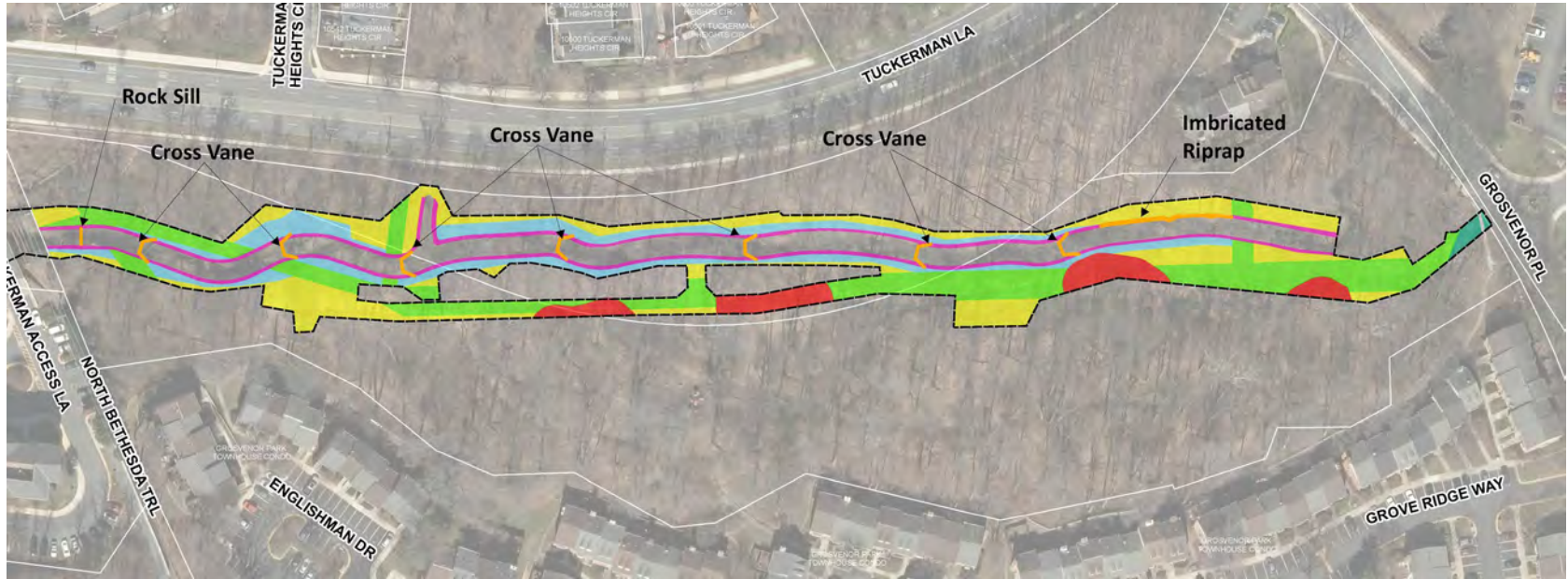
Legend

- Live Staking Planting
- Streamside Planting
- Riparian Planting
- Riparian Planting over WSSC Sewer
- Wetland Planting
- Turf Sod

Landscape Planting (South of Tuckerman Ln.)



Landscape Planting (Grosvenor Park Area)



Proposed Plantings

Live Staking



Silky dogwood



Spice Bush



Red Maple



Sycamore



Streamside/ Riparian Planting

- Streamside Planting: Steeper slopes right against the stream banks
- Riparian Planting: Flatter slopes further away from the stream (larger overstory trees/ shrubs)



Live Stake Planting

- Live Stake Planting: These plants are placed along the toe of the new stream edge and will remain wet from base-flow.



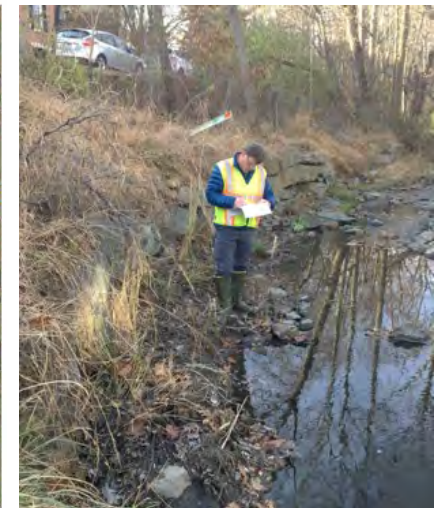
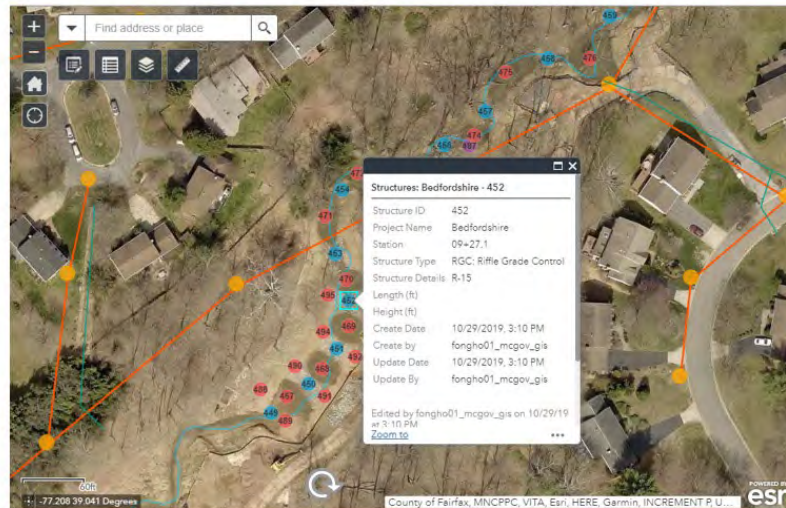
Monitoring

- After proposed planting, invasive species will be monitored and managed by Montgomery County for 5 years to support forest establishment.



Restoration Monitoring

- Biological Monitoring
- Stream Cross Sections
- Stream Restoration Structures



Hollywood Stream Restoration



Stream Before



Stream After

Woodlawn Stream Restoration

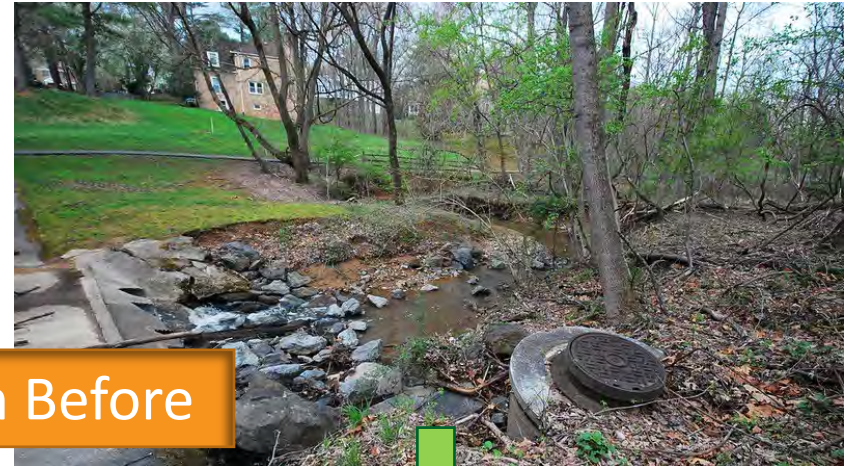


Stream Before



Stream After

Falls Reach Stream Restoration

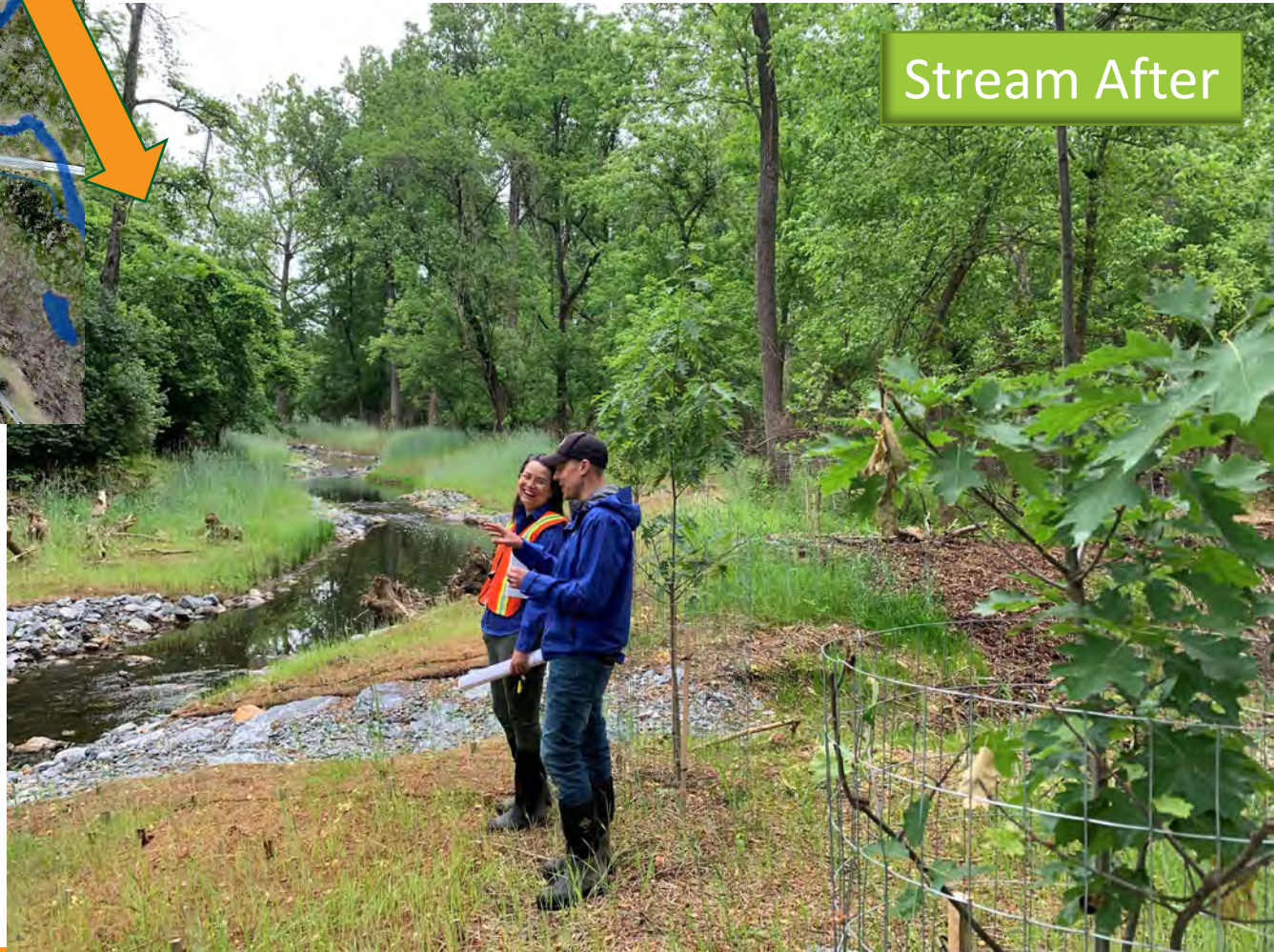


Stream Before



Stream After

Grosvenor - Parks Stream Restoration



Stream After

Stream Restoration Easements

Montgomery County Department of Environmental Protection 2425 Reedie Drive, 4 th Floor Wheaton, MD 20902	GRANT OF STREAM RESTORATION EASEMENT	Parcel ID # _____
TO		
Montgomery County, Maryland		
<hr/>		
THIS GRANT OF STREAM RESTORATION EASEMENT (the "Easement"), made this day of _____, 20____, is by and between _____, its successors and assigns (the "Grantor") and MONTGOMERY COUNTY, MARYLAND, its successors and assigns (the "County"), (the Grantor and the County together "the Parties").		

- Grants County legal access to construct and maintain project
- **Temporary, Permanent, or Both**
- No Change to Property Ownership
- Permanent Easements are in Land Records
- Required Prior to Construction

Retrofit Schedule

- Easement Signatures Summer 2021
- Design and Permitting Ongoing - Fall 2021
- Permits Secured Fall 2021
- Construction Bidding Winter – Early 2022
- Construction Begins Spring 2022 (6-8 months)
for Part of Project Area

What to Expect During Construction

- **Resident Notification**

- Project Website
- Project Sign

- **Duration**

- About 6-8 months

- **Construction Hours**

- Monday through Friday, 7AM – 4PM

- **Safety**

- Fencing around construction
- Follow applicable COVID-19 precautions at time

- **Traffic**

- Minor from entering and exiting construction traffic and contractor parking during the day
- Sidewalk Detour



Project Completion



Donnybrook – 2015 Celebration

Other DEP Programs for Residents

- RainScapes – rainscapes.org



- Tree Montgomery – treemontgomery.org



- Organic Lawn Care

- www.montgomerycountymd.gov/lawns

- Residential Energy Program

- www.montgomerycountymd.gov/green/energy/home

- Volunteer

- www.montgomerycountymd.gov/water/volunteer



Questions?

Contact: Christy Ciarametaro

Watershed Project Planner

Christy.Ciarametaro@montgomerycountymd.gov

240-777-7720

Project Website:

<https://www.montgomerycountymd.gov/water/restoration/grosvenor-luxmanor-stream.html>

OR

