# Little Pimmit Run at Chesterbrook Road

Stream Restoration Project

April 22, 2021

Department of Public Works and Environmental Services Working for You!

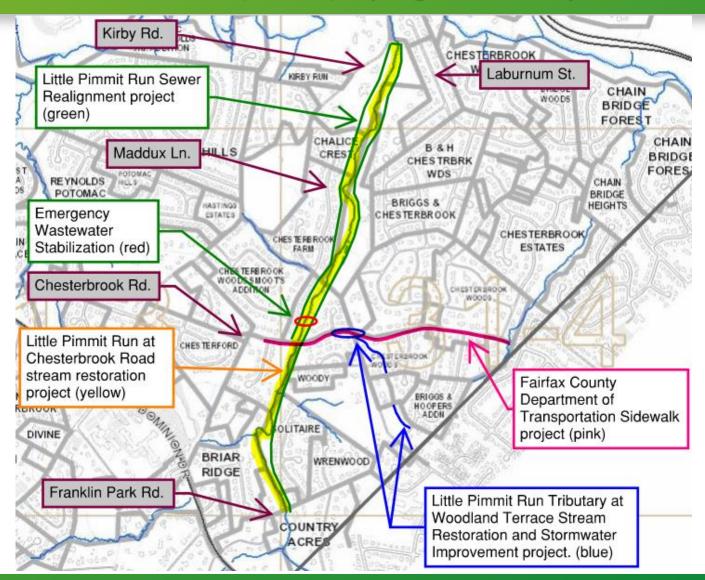


### Agenda

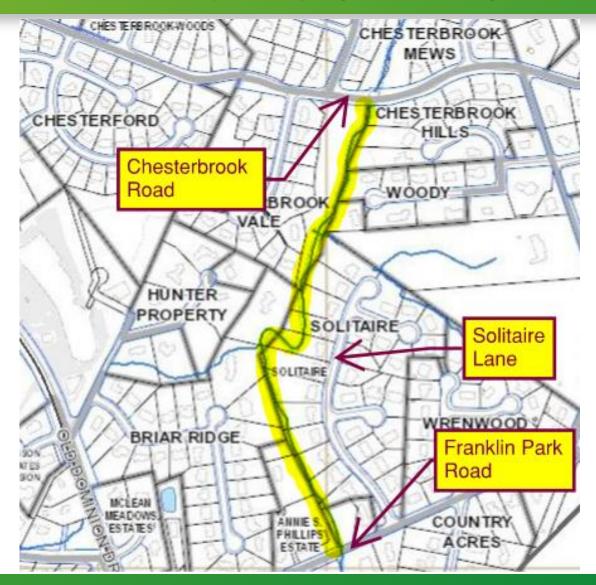
- Vicinity Maps
- Project Goals
- ➤ Social Goals
- Program Drivers
- > Environmental Benefits
- > Typical Structures

- Existing Conditions
- ➤ Construction Examples
- ➤ Completed Work
- Design
- ➤ Next Steps
- Contact Information

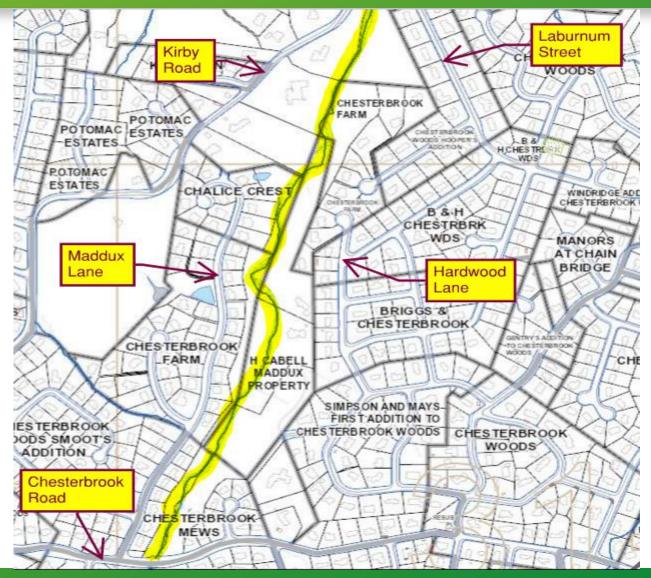
### Vicinity Map (Big Picture)



### Vicinity Map (Phase 1)



### Vicinity Map (Phase 2)



### Project Goals

- 1. Restore up to 7,100 feet of stream channel and connecting tributaries
  - Reduce sediment transport
- 2. Protect existing infrastructure
  - Coordinate with Little Pimmit Run Sewer Realignment Project
- 3. Maintain close coordination with stakeholders



#### Social Goals

- Maintain open dialog and share information.
- 2. Coordinate with all the stakeholders and the community.
- 3. Build partnerships with local organizations such as homeowners associations.
- 4. Design Team:
  - Fairfax County Public Works
  - Fairfax County Park Authority
  - Wetland Studies and Solutions, Inc.



### Stormwater Program Drivers

- Municipal Separate Storm Sewer Permit (MS-4)
- Chesapeake Bay Total Maximum Daily Loads (TMDL)
  - Regulates amount of pollutants in waterways
- Local TMDLs
- Dam Safety Regulations
- Maintenance of Existing Facilities
- Public Safety /Emergency Response

#### **Environmental Benefits**

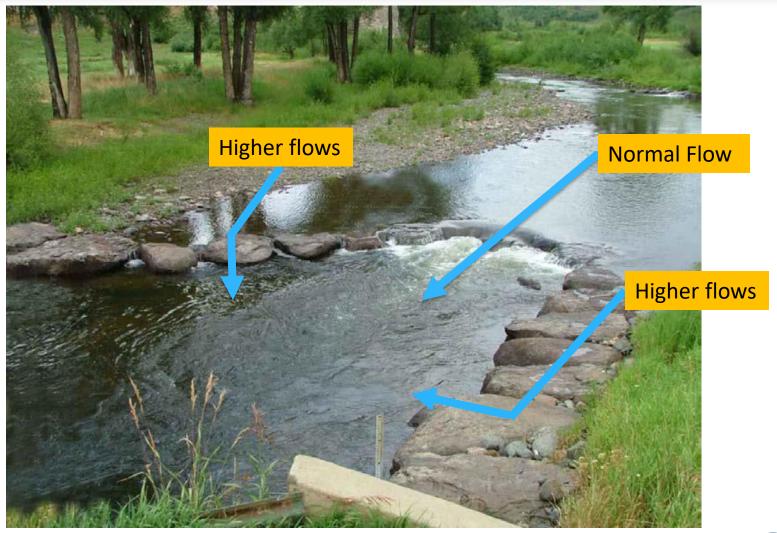
Improve watershed conditions and reduce downstream

impacts through....

- ➤ Control velocity
  - Reduce erosion
  - Protect infrastructure
  - Protect vegetation
- > Restore riparian corridor
- > Restore instream habitat



### Typical Structures Used – Cross Vanes



### Typical Structures Used – Root Wads



### Typical Structures Used – Boulder Clusters



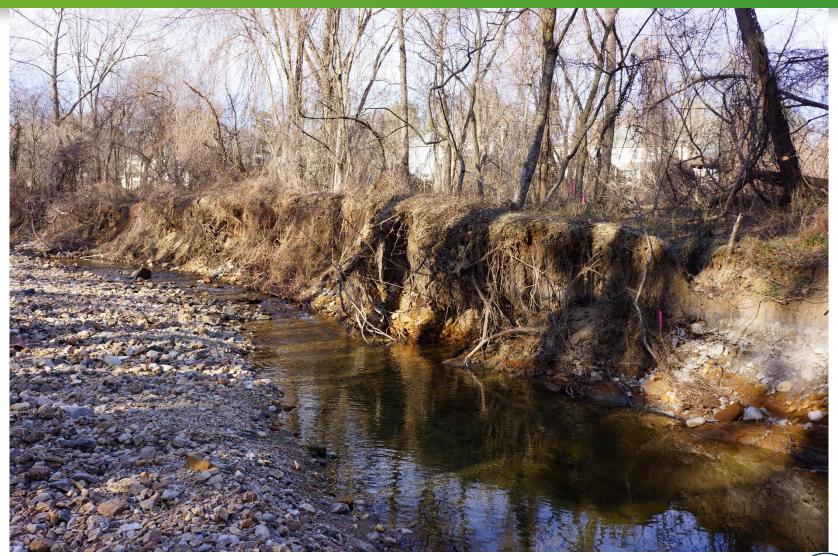
### Typical Structures Used – Boulder Clusters









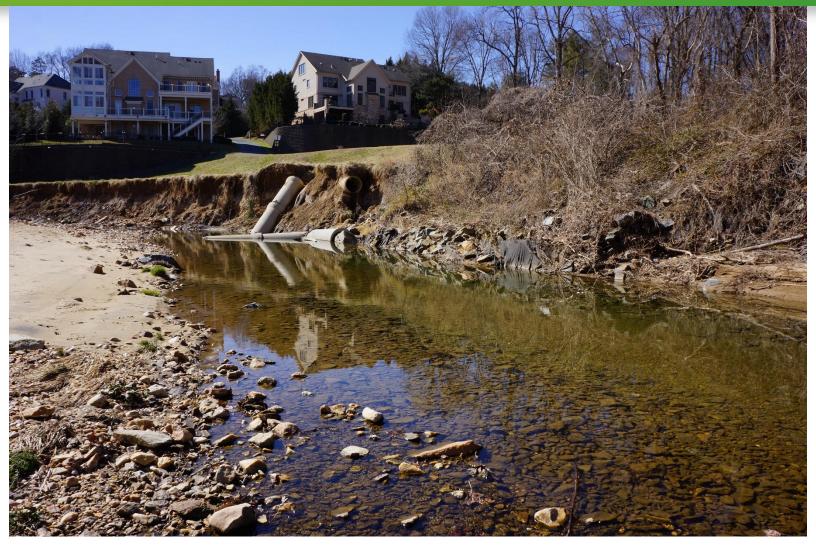












### Construction Access Road



### Construction Example – Channel Grading



### Construction Example – Channel Grading



### Before and After Examples

#### Flatlick Confluence





January 2011

September 2015

### After Construction

#### **Banks Park**





November 2014

September 2018

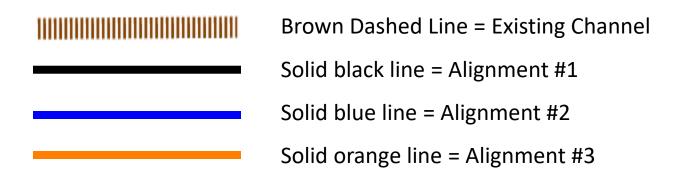
### Proposed Design Alignments

Alignment #1 – Establishes a balance between using the existing channel while increasing curves in the proposed channel.

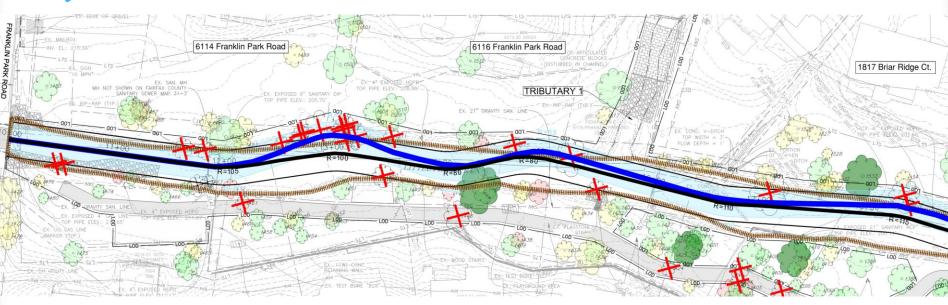
Alignment #2 – Adds the most curves to the proposed channel.

<u>Alignment #3</u> – Utilizes the existing channel to the greatest degree (limited sections in phase 2)

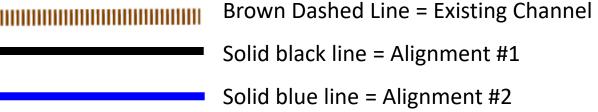
\*All alignments largely utilize the existing over widened channel scar to minimize disturbance.

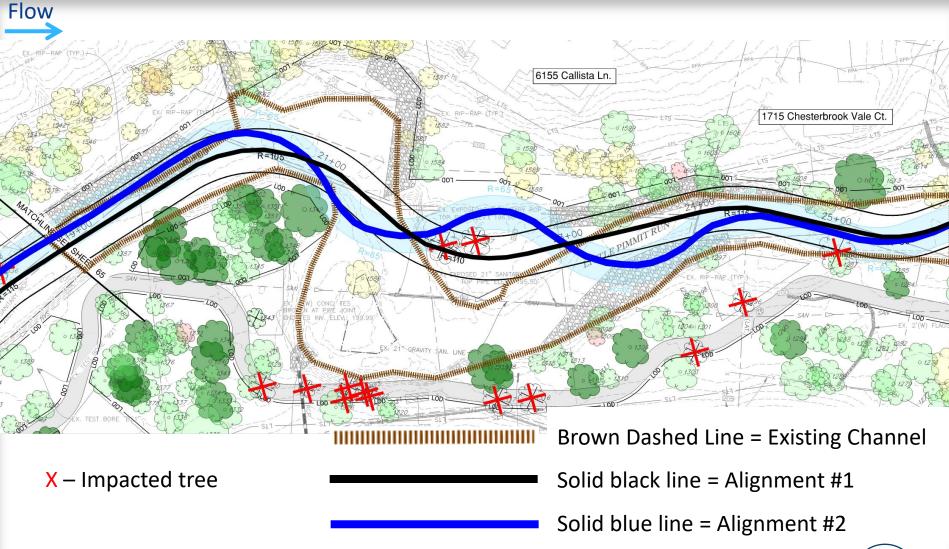




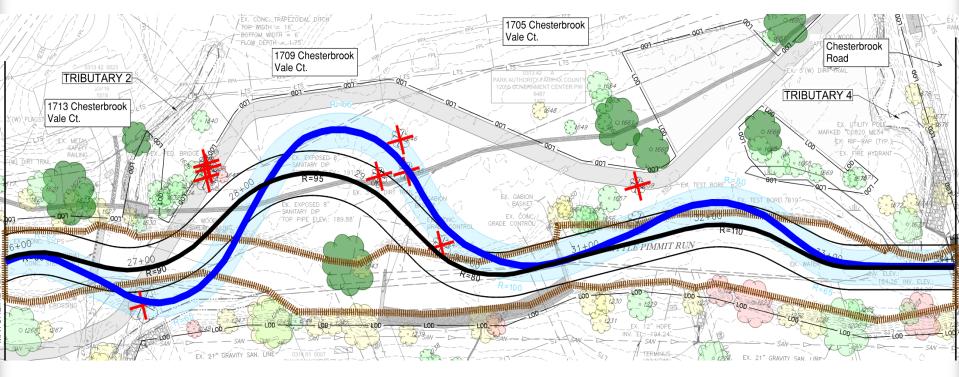


X – Impacted tree





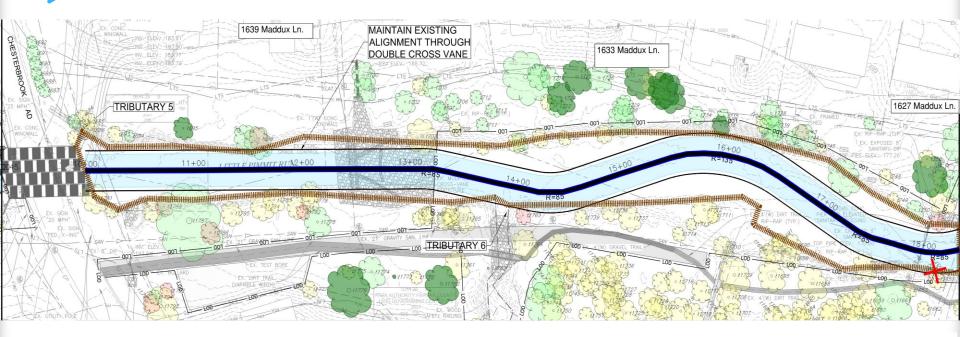




X – Impacted tree

Solid blue line = Alignment #2

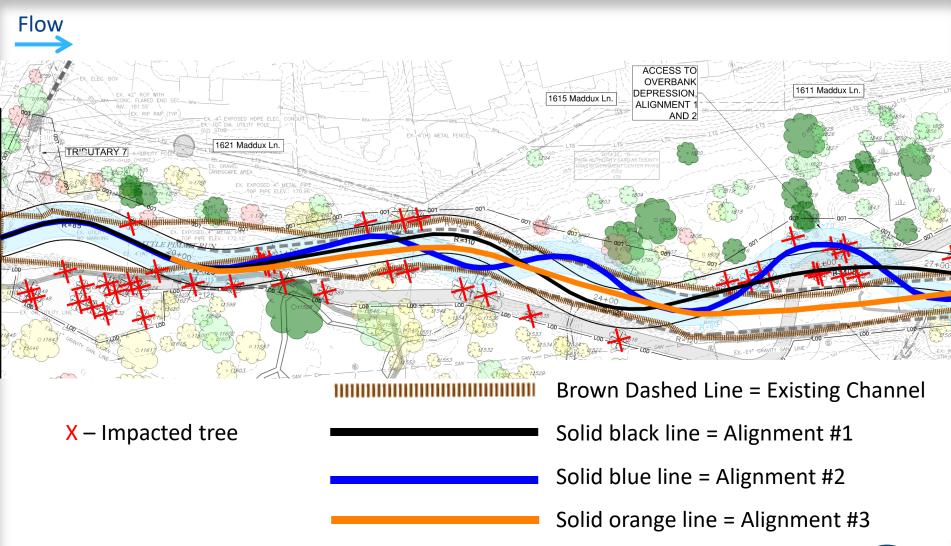


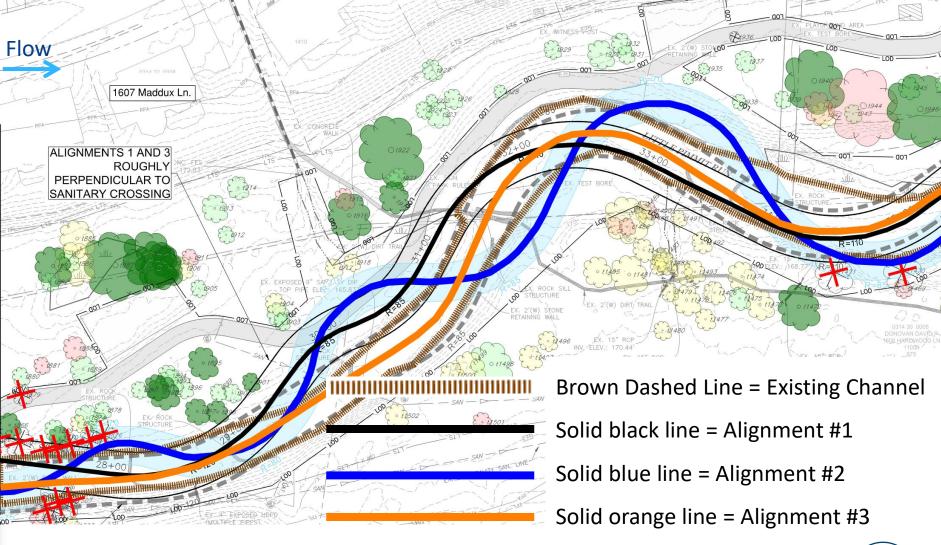


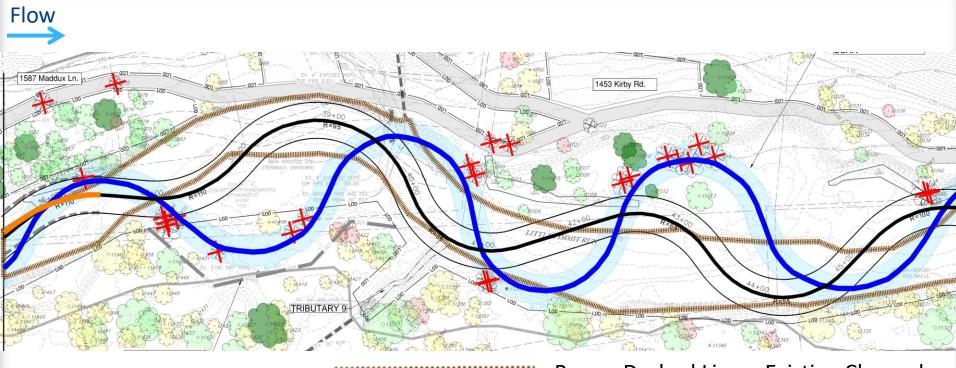
X – Impacted tree

Three solid black lines = Alignment #1

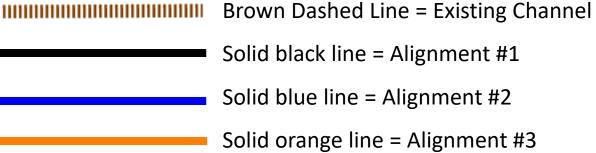
Shaded blue area = Alignment #2

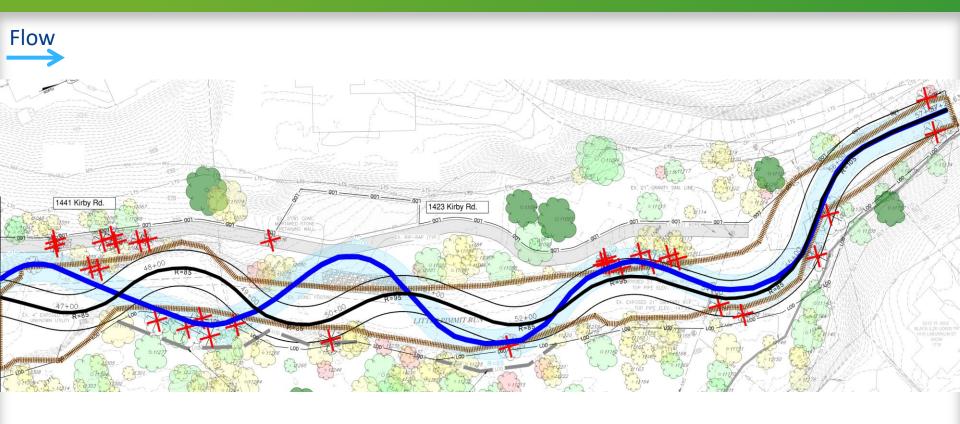


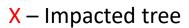


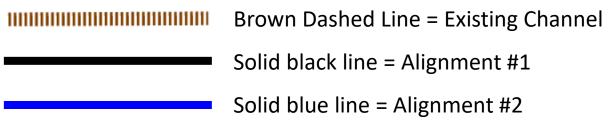


X – Impacted tree









#### Schedule

- Community meeting on Pre-design/Channel alignments –
   April 22, 2021
- Concept design submission September 2021
- Concept design community meeting November 2021
- Land Acquisition
  - Easements required prior to final design
- Construction <u>To be determined</u>
  - Pending date of completed design



### Contact Information



#### **Contact Information**

#### Design

Fred Wilkins – Project Manager 703-509-0511

Fred.Wilkins@fairfaxcounty.gov

Stormwater Planning Division 703-324-5500, TTY 711 12000 Government Center Parkway Suite 449 Fairfax, Virginia 22035

www.fairfaxcounty.gov/publicworks/stormwater

To request this information in an alternate format call 703-324-5500, TTY 711

#### Online Resources

#### **Stormwater Planning Division Website**

https://www.fairfaxcounty.gov/publicworks/stormwater/

#### **Northern Virginia Soil and Water Conservation District**

http://www.fairfaxcounty.gov/nvswcd/newsletter/planning.htm

#### Middle Potomac Watersheds Management Plan (Includes Pimmit Run)

https://www.fairfaxcounty.gov/publicworks/stormwater/middle-potomac-watersheds

#### Little Pimmit Run at Chesterbrook Road Stream Restoration and Stormwater Improvement Project

Little Pimmit Run at Chesterbrook Road

Stream Restoration (SD-000031-246) |
Public Works and Environmental Services
(fairfaxcounty.gov)



## Questions?