# Trolley Line Trail Design Sketchbook

FOR DISCUSSION TROLLEY LINE TRAIL COMMITTEE MAY 14, 2020

#### TRAIL DESIGN SKETCHBOOK PROPOSAL

...a trail design guide or "sketch book" of ideas through photos, line-drawings, and graphic renderings to assist local staff with trail design decisions

...a resource, to stimulate discussion on various design elements, and enhance multi-jurisdictional coordination

#### EXPLORING THE POSSIBILITIES

Sketchbook Ideas (for discussion)

- Types of Trail Users
- Trail Corridor Character: setting and context
- Trail Elements: structures, features, amenities, trailheads
- Trails and Green Infrastructure
- Universal Design / Accessibility









Who are the Trail Users?

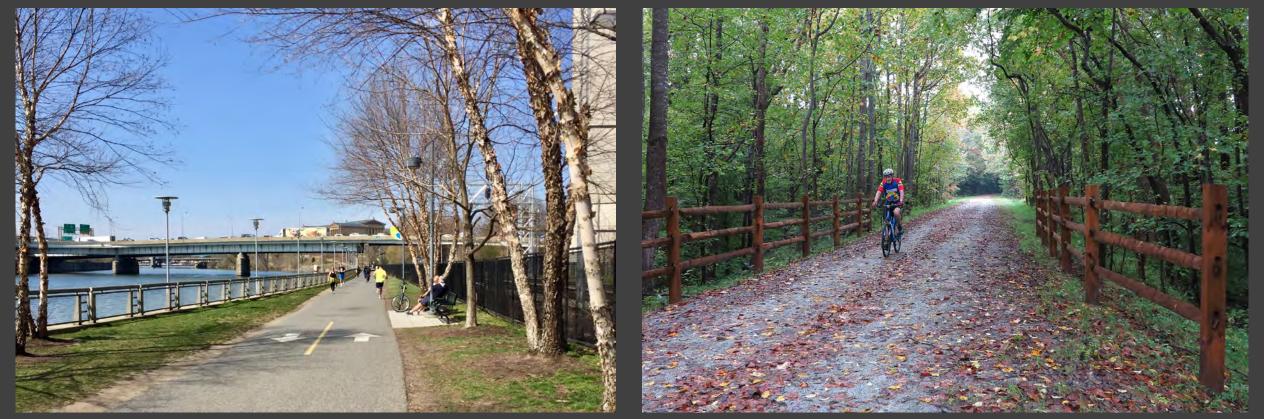






## Trail Character and Context

Rural vs developed; natural setting (field, forest, stream); on-road vs off-road; active utility operations



Schuylkill River Trail

Tobacco Heritage Trail

## Trail Elements



## Trail Surface

Trail Surface: asphalt, crushed stone, concrete, pavers

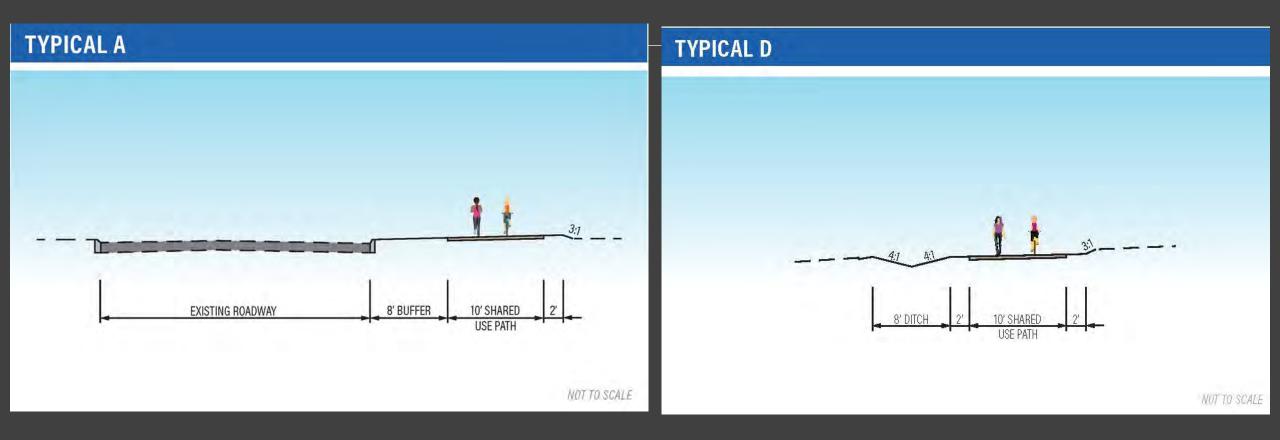


Washington & Old Dominion

Dahlgren Railroad Heritage Trail

Great Allegheny Passage

#### Trail Design - Cross Sections

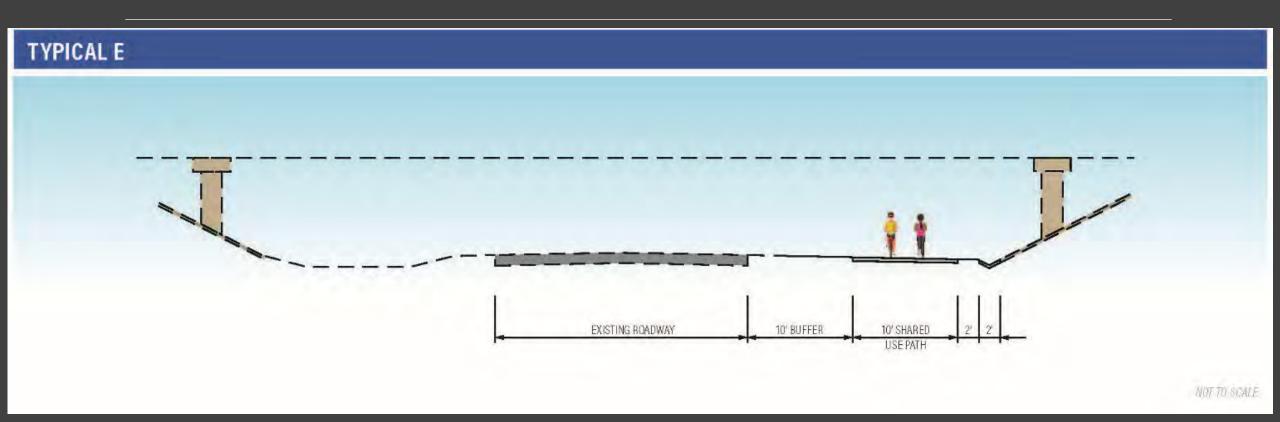


Adjacent to Roadway

Off-road; Trolley Line Right-of-Way

VDOT Ashland to Petersburg Trail Study

## Bridges and Underpasses



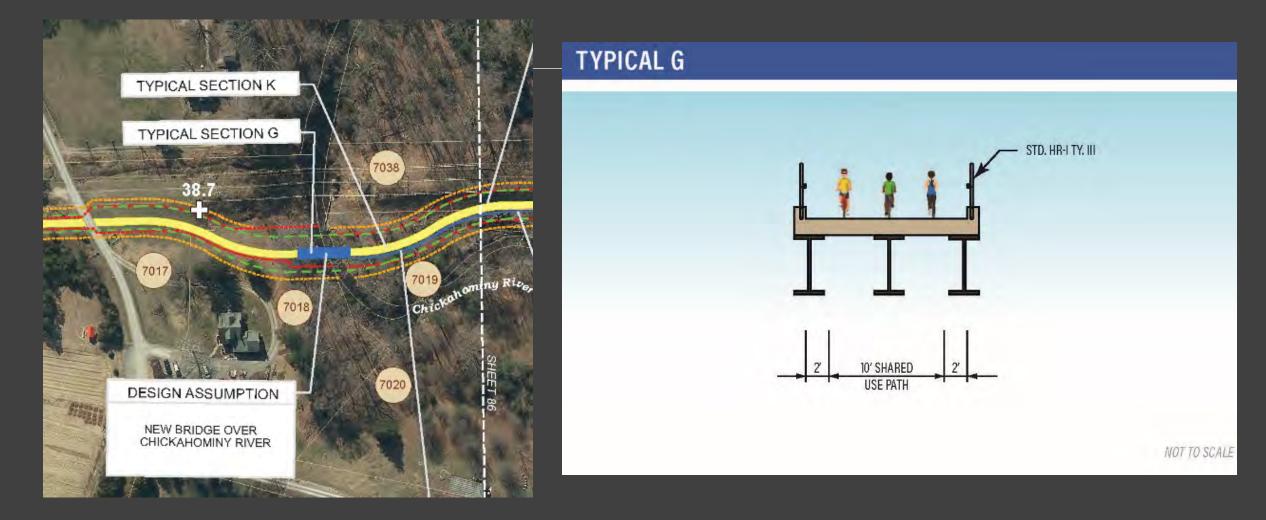
## Example: Trail Underpass



Greenwood Road & I-295 Underpass

Emerald Trail & I-95 underpass; Jacksonville, FL

## Bridges and Underpasses



VDOT Ashland to Petersburg Trail Study

## Example: Trail Bridge



Chickahominy River & Trolley Line Right-of-Way

Tobacco Heritage Trail, Meherrin River







Bike-Ped Bridge, Lynchburg, VA

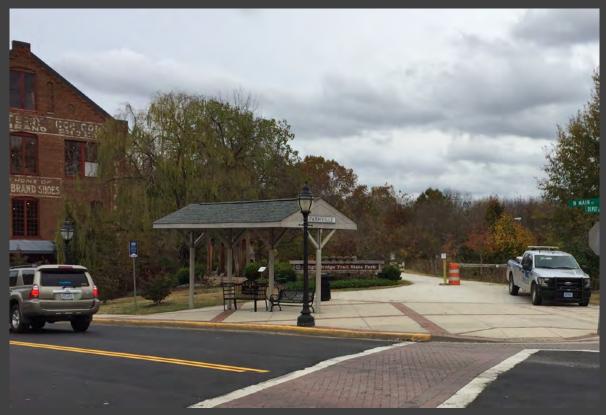
Virginia Creeper Trail, Abingdon, VA

Hawksbill Greenway, Luray, VA

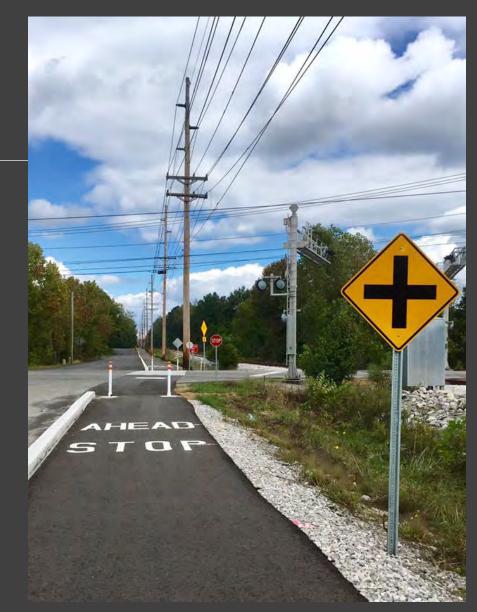
## Example: Boardwalks



## Road Crossings



High Bridge Trail, Farmville



Tennessee Central Trail



Huguenot & River Rd; Henrico County

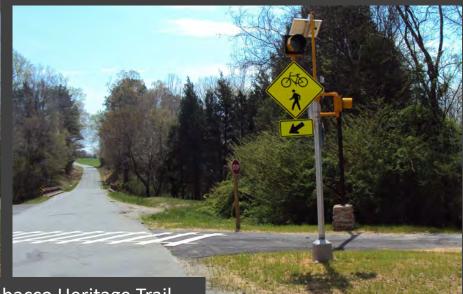


Road Crossings



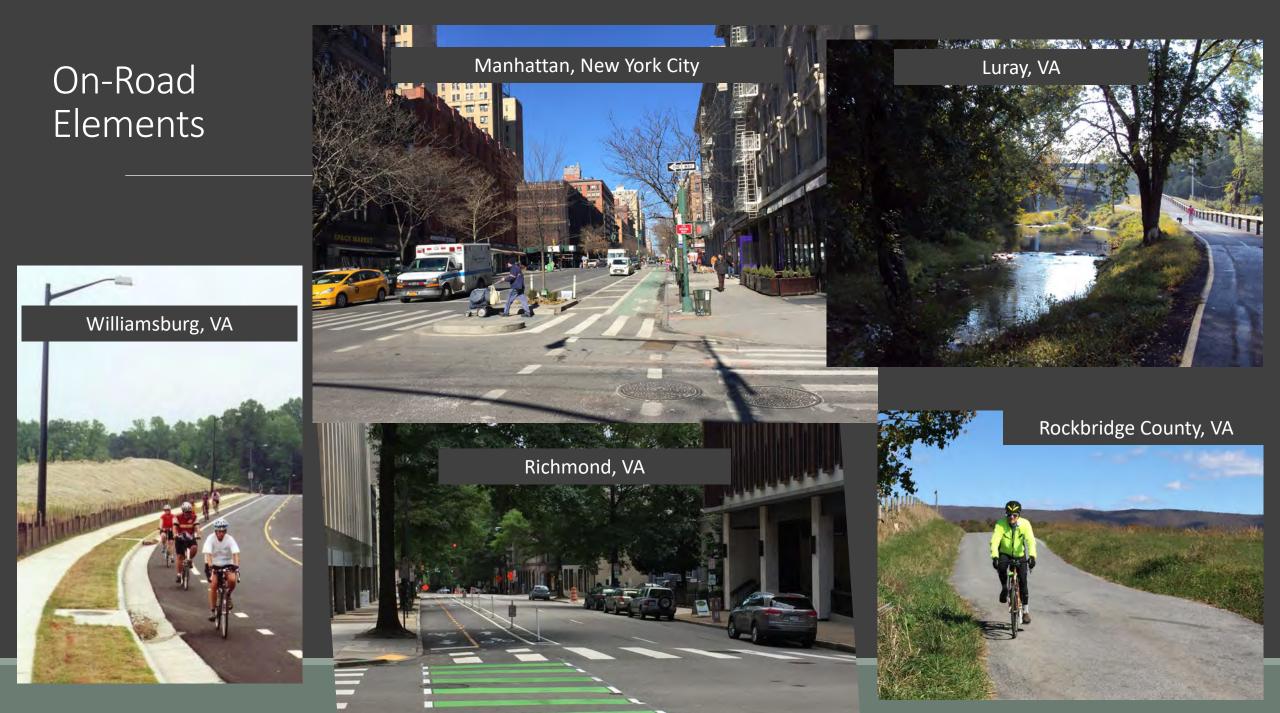


Route 5 & Virginia Capital Trail



Evans Creek Rd & Tobacco Heritage Trail

Hudson River Greenway, NYC





## Bollards and Gates





# Amenities

## Trailside Amenity Structures













# Trail Art











## Trailside Services



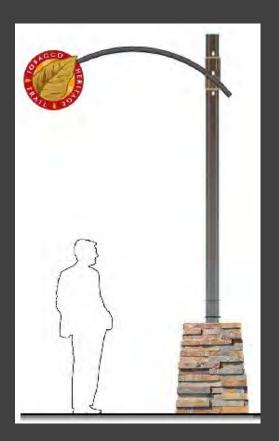






Washington and Old Dominion Trail

## Signage and Wayfinding

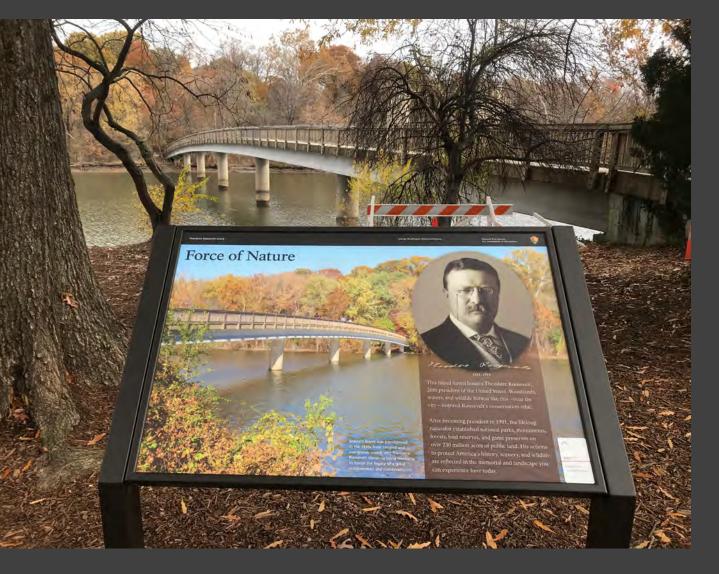




Tobacco Heritage Trail

# Examples: Signage





## Examples: Signage











- 1. Informational
- 2. Directional and Wayfinding
- 3. Regulatory
- 4. Interpretive



## Trailhead Design

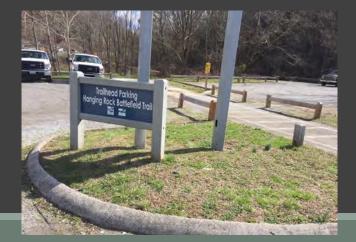
Example: Hanging Rock Battlefield Trail







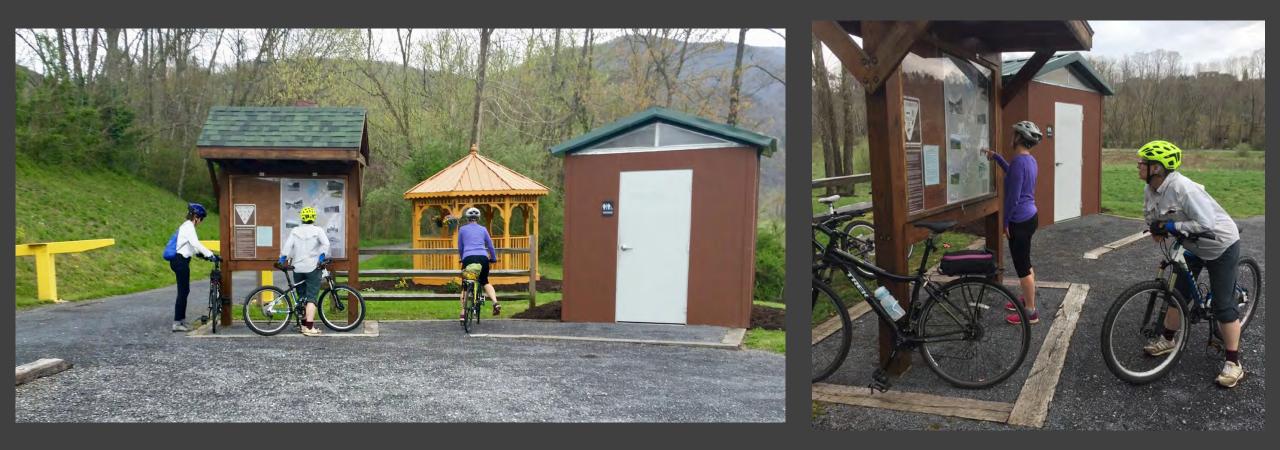








# Trailhead Design Example: Jackson River Trail



## Area of Special Consideration

Trails in Powerline Right-of-Way



Washington and Old Dominion Trail

#### Area of Special Consideration

Trails Adjacent to Residential Development



## Trails and Green Infrastructure

Green infrastructure refers to an interconnected network of natural areas and open space that protects ecosystem functions and contribute to clean air and water. – Mark Benedict and Ed McMahon, 2006

#### Trail Corridors & Ecosystem Service

- Stormwater management
- Conservation of forests and riparian areas
- Wildlife habitat





The project includes four key components:

- construction of a multi-use recreational trail
- removal of invasive plants
- management of storm water
- restoration of Little Westham Creek

"The trail-restoration project turned into a stream-restoration project, which will ultimately result in the planting of 9,000 new trees, and provide space for teaching,"
Rob Andrejewski, University of Richmond, Director of Sustainability

## Accessibility



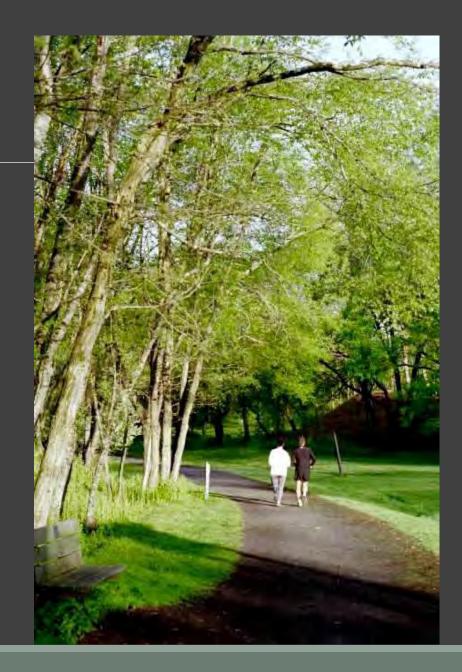


- Architectural Barriers Act (ABA) of 1968
- Americans with Disabilities Act (ADA)
- Rehabilitation Act of 1973

#### US Access Board; Final Guidelines for Outdoor Developed Areas

#### DISCUSSION

- Could a design sketchbook support local trail planning efforts? If so, how?
- Who are your audiences?
- What content should be included?
- What format should be considered?





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