

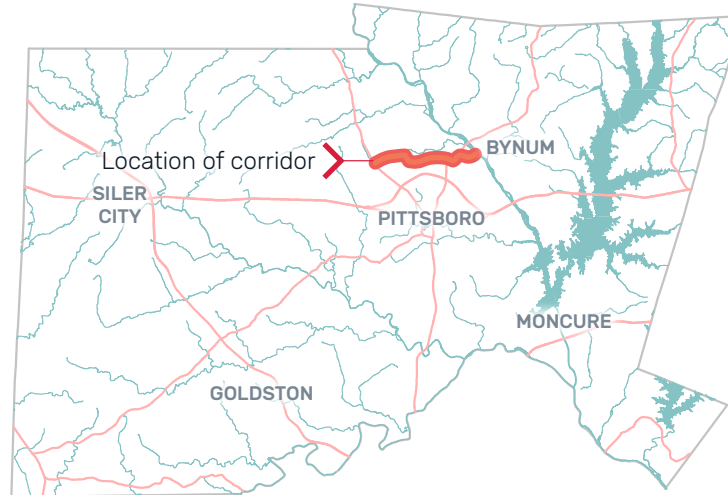
BROOKS CREEK > GREENWAY FEASIBILITY STUDY

PROJECT BACKGROUND

This feasibility study represents an initial step towards planning for a more connected Chatham County. As an initial study, this plan has not been formally adopted by the Board of Commissioners, nor have plans for construction been discussed. This study represents was prepared in response to recommendations presented in Plan Chatham, the County's 2017 comprehensive Plan.

Project Snapshot

- > **Project Location:** Between Highway 87 near Silk Hope Gum Springs Road and Old Bynum Bridge
- > **Project Type:** Greenway and Multi-Use Path
- > **Length of Project:** 5.67 Miles
- > **Estimated Construction Year:** 2027*
- > **Trail Trip Generators**
 - Brooks Creek
 - Old Bynum Bridge
 - Lower Haw River State Natural Area



Potential Right of Way Needs

- > Total estimated area needed: 8.6 AC
- > Number of impacted parcels (not County owned): 5
- > Number of impacted property owners: 5

Potential Permitting Needs

- > Erosion Control
- > 401/404 permitting
- > NCDOT Encroachments
- > CLOMR/LOMR flood modeling permits

Potential Funding Sources

- > CRMPO/LAPP funding
- > NCDOT/STI funding
- > Chatham County CIP funding
- > NCDOT Complete Street Policy

*The estimated construction year (2027) is used to demonstrate cost escalation only and does not indicate the actual construction year or potential for phased implementation.

Estimated Project Cost

2020 Construction Cost Estimate (Basis for Calculations):	\$ 6,847,000.00
Escalated Construction Cost Estimate (FY2030):	\$ 11,734,000.00
10% Contingency:	\$ 1,173,400.00
Estimated Right of Way Costs:	\$ 56,300.00
Estimated Design Services ±3% *adjust per project	\$ 1,370,000.00
Estimated CEI Services ±2% *adjust per project	\$ 1,409,000.00
TOTAL ESTIMATED BUDGET RECOMMENDATION:	\$ 15,742,700.00

This plan recognizes the need to expand transit especially through promotion of active transportation. The Plan recommends working with public and private partners to build a connected network of greenways and trails. The Plan further details recommendations to enhance regional trails and greenways, improve river access, and provide greenway connections to Pittsboro, Siler City, Moncure, Cary and Apex.

Based on the updated 2019 Parks and Recreation Comprehensive plan natural trails and a greenway trail system are rated as top five priorities. Therefore one of the recommendations in the master plan is to create a regional trail network to connect people to places they want to go. The consultants identified 14 proposed corridors for the county. In the updated Parks and Recreation Comprehensive Master Plan, the corridors were priorities based on a vote by the public, and five additional criteria were

met. Brooks Creek Corridor was one of the top three corridors and the first feasibility study of many corridors was done for it.

PROJECT LOCATION

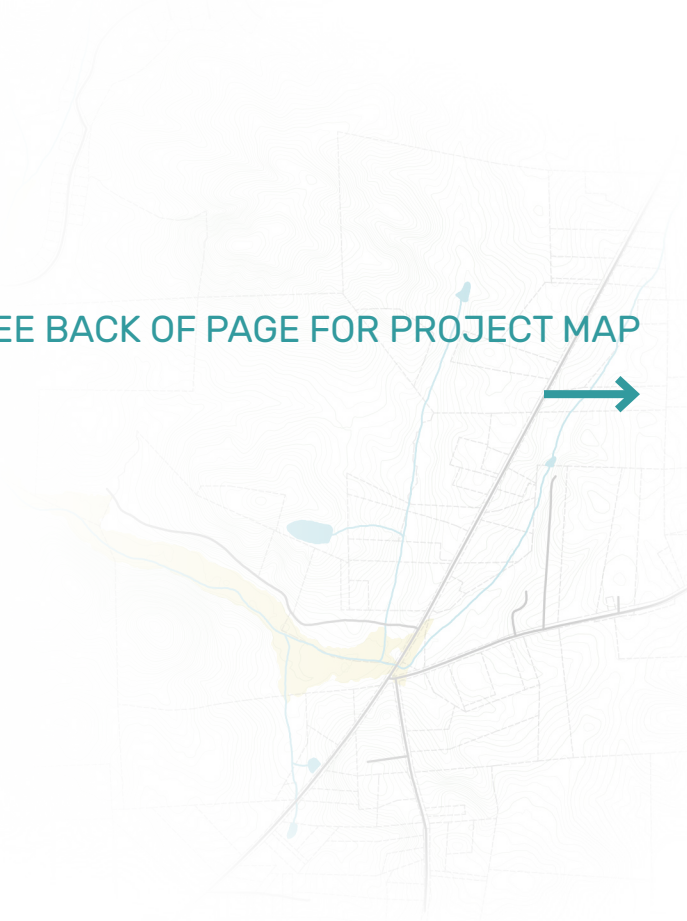
Nestled between the historic communities of Bynum and Gum Springs, the Brooks Creek Greenway would connect the communities with a nearly 6-mile thread of paved trails and paths. The proposed alignment of the greenway corridor gently follows Brooks Creek before paralleling Old Graham Road, Russell Chapel Church Road, U.S. Highway 15, and Bynum Road. The connection to the Old Bynum Bridge provides an adequate, existing crossing of Haw River into the community. Safe pedestrian crossings along the greenway would be available at all intersections with roads.

Preliminary in nature, this study represents the most feasible trail alignment when considering cost, constructability, safety and environmental impact. Input from the public and surrounding property owners is important to any greenway planning project. This plan also considers public comments from a public meeting held on January 21, 2020 where the preliminary alignment was presented.

PROJECT COSTS + TIMELINE

Accurate project costs become a benchmark for project success. This study uses the linear length of trail segment and unit prices to establish an estimated construction cost and includes hidden costs such as escalation and contingency that are too frequently forgotten. While the cost estimate indicates a construction year of 2027, this date is simply used to demonstrate annual cost escalation for this type of project. The County will consider this project along side many others and determine the implementation time frame based on available funding and other project priorities. It is also possible to phase implementation of the trail corridor so the burden of all costs are not realized at one time. Similarly, the County intends to seek grant funding to help offset the construction costs.

SEE BACK OF PAGE FOR PROJECT MAP

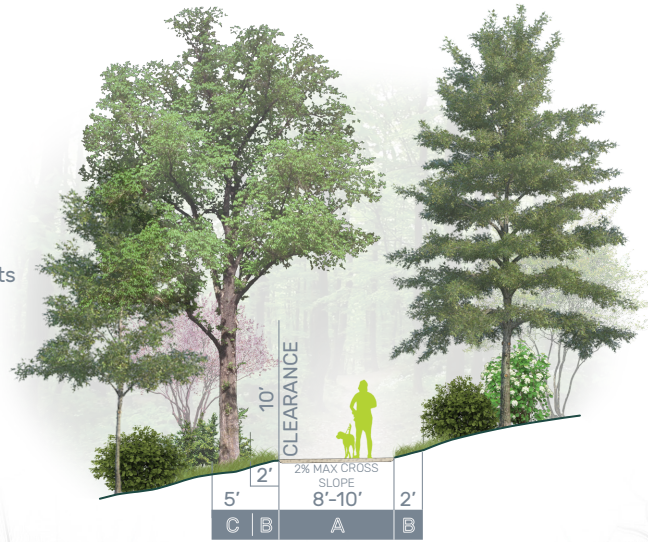


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PROJECT MAP

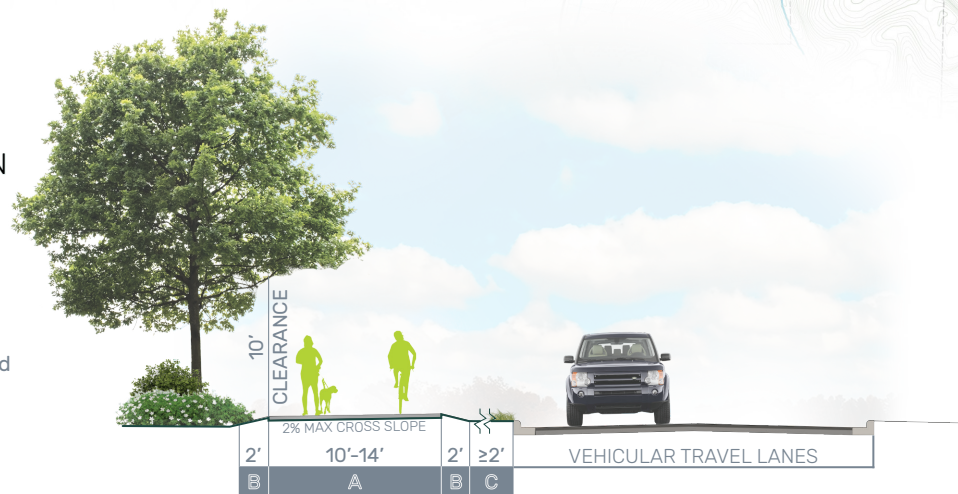
TYPICAL GREENWAY TRAIL SECTION

- A: 10'-14' MULTI USE PATH**
 - > Concrete, asphalt or natural surface
 - > For use by cyclists and pedestrians
- B: 2' SHOULDER**
 - > Maximum slope of 4:1 (25%)
- C: TRAIL SIDE CLEARANCE**
 - > Minimum of 2 feet. This prevents conflicts between cyclists and pedestrians with stationary objects



TYPICAL MULTI-USE PATH SECTION

- A: 10'-14' SIDE PATH**
 - > Concrete or asphalt surface
 - > For use by cyclists and pedestrians
- B: 2' SHOULDER**
 - > Maximum slope of 4:1 (25%)
- C: TRAIL SIDE ZONE**
 - > Minimum of 2 feet. Width determined by traffic volume and speed, and pavement edge treatment.



LEGEND

- █ PROPOSED GREENWAY TRAIL
- █ PROPOSED MULTI-USE PATH
- EXISTING STREET
- ~ STREAM
- █ FLOODWAY
- █ FLOODPLAIN
- PEDESTRIAN CROSSWALK
- POTENTIAL TRAILHEAD PARKING

