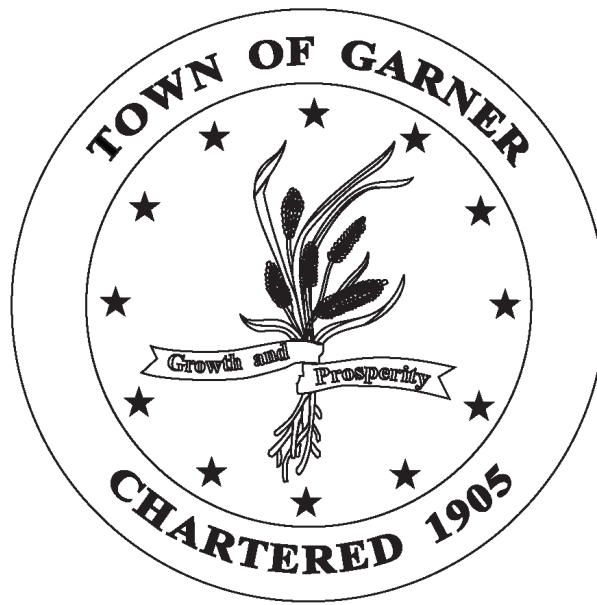


TOWN OF GARNER



TOWN COUNCIL WORK SESSION

May 28, 2019
6:00 P.M.

Garner Town Hall
900 7th Avenue
Garner, NC 27529

**Town of Garner
Work Session Agenda
May 28, 2019**

Dinner will be served for town officials in the Conference Room at 5:15 p.m.

The Council will meet in a Work Session at 6:00 p.m. in the Council Chambers located at 900 7th Avenue.

A. CALL MEETING TO ORDER/ROLL CALL

B. ADOPTION OF AGENDA

C. REPORTS/DISCUSSION

1. Craig Robinson for investment update Page 2
Presenter: Craig Robinson, PFM Investments

Craig Robinson will present an update on the Town's investment program through March 31, 2019.

2. South Garner Greenway Feasibility Study Page 3
Presenter: Matt Roylance, Assistant Town Manager - Operations

The South Garner Greenway Feasibility Study is nearly complete and is ready for Council review and discussion. The Town's consultant, McAdams, will present the study's findings.

3. Development Finance Initiative proposal for pre-development services in
Downtown.....Page 61
Presenter: Mari Howe, Downtown Development Manager

Staff from the School of Government's Development Finance Initiative have been invited to give council an overview of their proposal to provide pre-development services for the site adjacent to the Garner Recreation Center in Downtown Garner and answer questions.

D. MANAGER REPORTS

E. COUNCIL REPORTS

F. ADJOURNMENT

Town of Garner
Town Council Meeting
Agenda Form

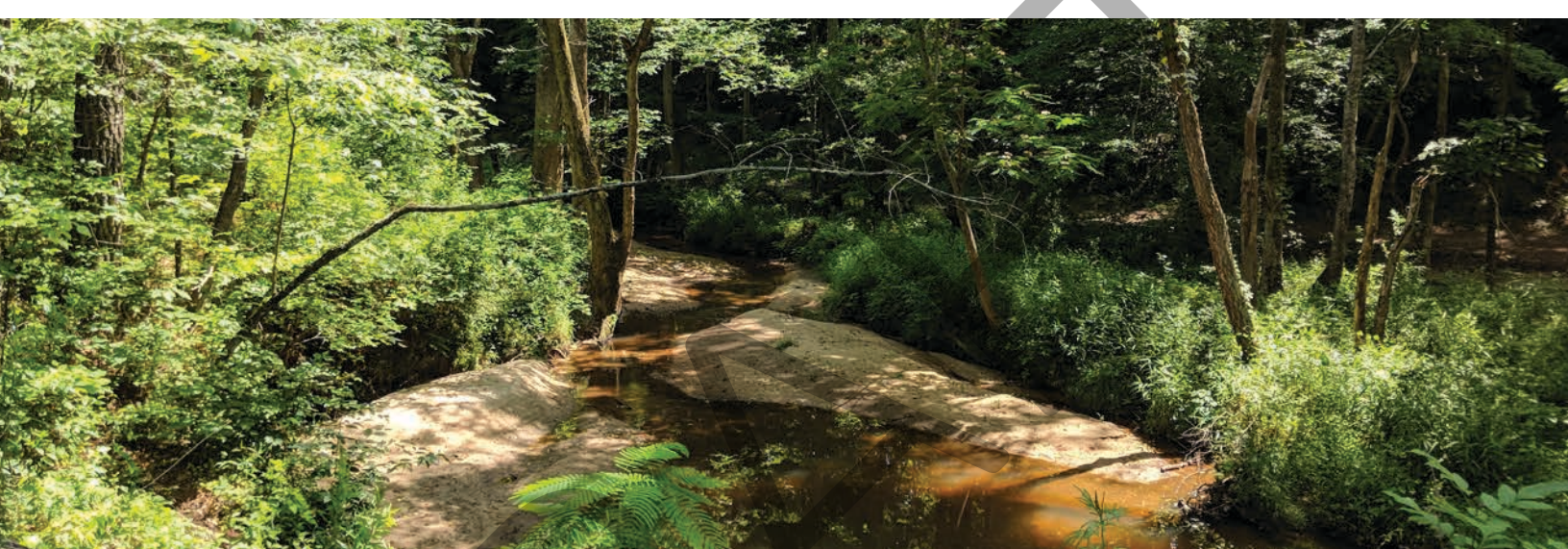
Meeting Date: May 28, 2019		
Subject: Investment Update		
Location on Agenda: Discussion		
Department: Finance		
Contact: Pam Wortham, Finance Director		
Presenter: Craig Robinson, PFM Investments		
Brief Summary: Craig Robinson will present an update on the Town's investment program through March 31, 2019.		
Recommended Motion and/or Requested Action: Receive information		
Detailed Notes:		
Funding Source:		
Cost:	One Time: <input type="radio"/>	Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/>
Manager's Comments and Recommendations:		
Attachments Yes: <input type="radio"/> No: <input checked="" type="radio"/>		
Agenda Form Reviewed by:	Initials:	Comments:
Department Head:	PW	
Finance Director:		
Town Attorney:		
Town Manager:	RD	
Town Clerk:		

Town of Garner
Town Council Meeting
Agenda Form

Meeting Date: May 28, 2019		
Subject: South Garner Greenway Feasibility Study Draft		
Location on Agenda: Discussion		
Department: Administration		
Contact: Matt Roylance, Assistant Town Manager - Operations		
Presenter: Matt Roylance, Assistant Town Manager - Operations		
Brief Summary: The South Garner Greenway Feasibility Study is nearly complete and is ready for Council review and discussion. The Town's consultant, McAdams, will present the study's findings.		
Recommended Motion and/or Requested Action: Receive information - no action required		
Detailed Notes: The body of the report is attached for your review. The full version of the report, including appendices, totals 438 pages and is available on the project web page: https://www.garnernc.gov/about-us/garner-bond-program/south-garner-greenway-extension .		
Funding Source:		
Cost:	One Time: <input type="radio"/>	Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/>
Manager's Comments and Recommendations:		
Attachments Yes: <input type="radio"/> No: <input checked="" type="radio"/>		
Agenda Form Reviewed by:	Initials:	Comments:
Department Head:	MR	
Finance Director:		
Town Attorney:		
Town Manager:	RD	
Town Clerk:		

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Plan best viewed in Adobe Acrobat in two page view mode.
Navigate to View > Page Display > Two Page View



SOUTH GARNER GREENWAY

FEASIBILITY STUDY | DRAFT

2019.05.17



ACKNOWLEDGMENTS

Town of Garner

Matt Roylance – *Assistant Town Manager, Operations*

John Hodges – *Assistant Town Manager, Development Services*

Sonya Shaw – *Parks, Recreation and Cultural Resources Director*

Katie Lockhart – *Outdoor Education and Parks Manager*

Het Patel – *Senior Planner*

Forrest Jones – *Public Works Director*

Derek Walsh – *Public Works, Parks Superintendent*

Dell Adams – *Public Works, Street Superintendent*

Tony Chalk – *Town Engineer*

McAdams Company, Design Lead

Graham Bruns – *Greenway Engineer*

Iona Thomas – *Principal-In-Charge*

Rachel Cotter – *Landscape Architect*

Garrett Jenkins – *GIS + Graphics Specialist*

DRAFT



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Parcel Analysis

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1

overview



CHAPTER 1 > OVERVIEW

The South Garner Greenway Connector is a proposed 1-mile greenway corridor that will connect White Deer Park with a proposed Wake County greenway and surrounding neighborhoods. This feasibility study provides a framework for implementing a successful greenway trail project by evaluating the opportunities and constraints of the study area such as environmental, experiential, property acquisition and financial aspects of the project.

PREVIOUS PLANNING EFFORTS

Previous planning efforts evaluated potential alignments and developed preliminary cost estimates. However, given rapidly rising construction costs and evolving community needs, the Town sought an update to the previous planning studies. Previous planning studies include the following:

COMPREHENSIVE PLANS

- › Wake County Greenway Master Plan – Level 2, connect to parks and lakes
- › Garner Comprehensive Parks, Recreation, and Greenways Master Plan (2007)
- › Garner Forward Comprehensive and Transportation Plans

CORRIDOR SPECIFIC STUDIES:

- › Basic alignment study by McKim & Creed in 2013 – Options B and Revised B
- › Breezeway Area Trail Connector Study, June 2013 by W.K. Dickson & Co., Inc.

Relevant planning studies can be found in the Appendix of this feasibility study.



PROJECT GOALS

The overarching goal of this feasibility study is to recommend the most constructible and cost-effective trail alignment that is supported by the community. The feasibility study presents design considerations for a greenway trail that will meet ADA requirements and connect the area's parks and neighborhoods in a cohesive and pleasurable manner.

Specifically, the proposed trail corridor intends to connect several residential neighborhoods to White Deer Park. The proposed trail corridor also considers a connection from the study area [Figure 1], to a proposed Wake County greenway trail, allowing Garner's trail system to join a larger, regional greenway network.

CONNECTIONS TO PARKS

White Deer Park is located on Buffaloe Road, North of Lake Benson Park. Covering approximately 96 acres, White Deer Park is Garner's largest municipal park and offers a 2,500 square-foot LEED certified nature center, two playgrounds, five shelters and over two miles of trails. A greenway connection to White Deer Park would expand the user reach and connect the park to the greater parks system.

Lake Benson Park is also located on Buffaloe Road, south of White Deer Park. Encompassing 64 acres, the Park includes large open spaces, shelters, a boat house and nearly two miles of paved and unpaved trails. Lake Benson offers approximately 400 acres of open water for non-motorized water recreation activities.

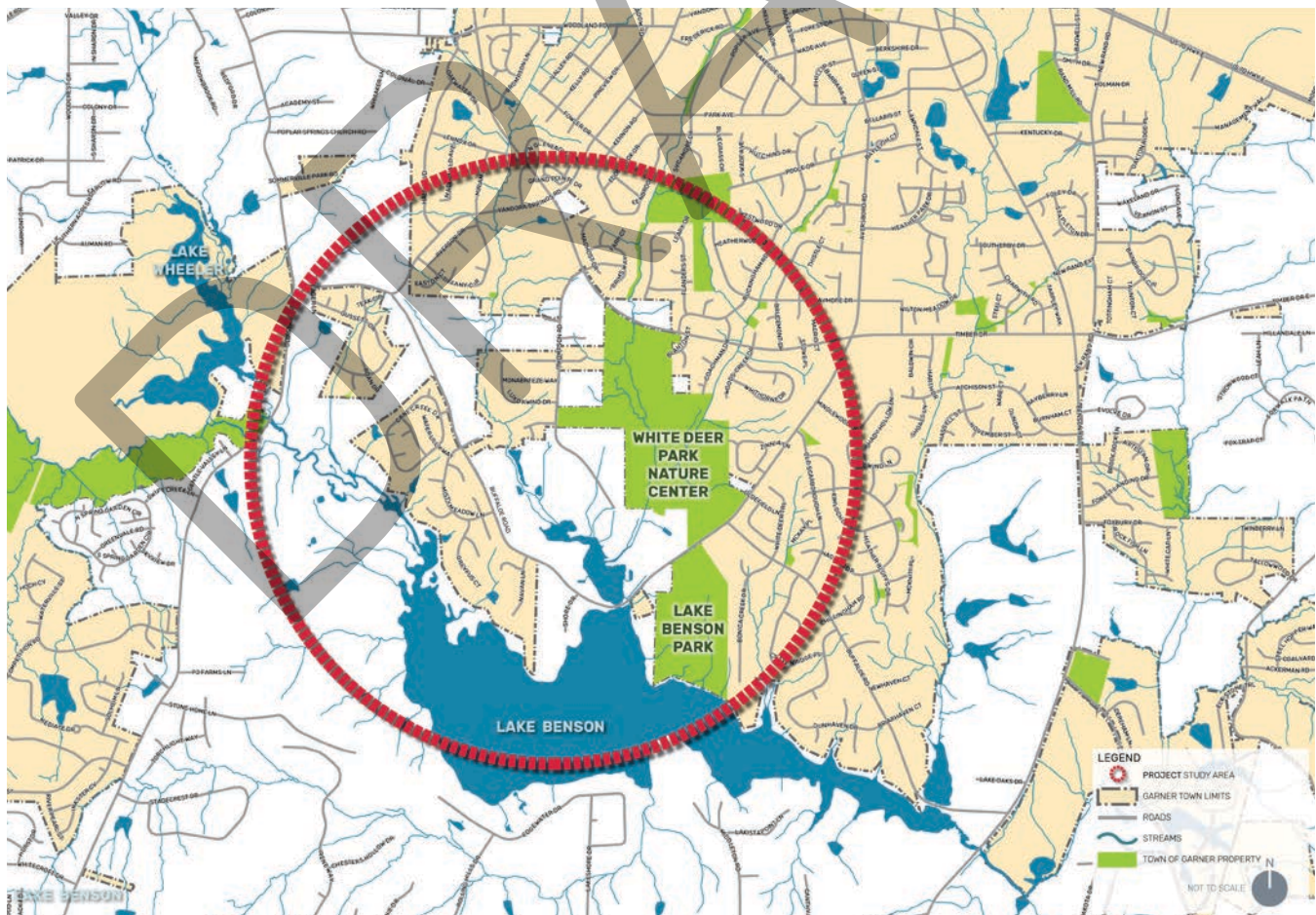


Figure 1 - Study Area

CONNECTIONS TO NEIGHBORHOODS

The project study area as depicted in the map the bottom left serves residents within eight neighborhoods including:

- › Lake Shore
- › Landings at Lakemoor
- › Lakemoor
- › The Mead at Lakemoor
- › Lakewood
- › Breezeway
- › Breezeway South
- › Breezeway East

CONNECTIONS TO EXISTING PEDESTRIAN INFRASTRUCTURE

The South Garner Greenway will connect sidewalks that currently terminate at the Vandora Springs Road / Buffalo Road roundabout to White Deer Park. White Deer Park, the common eastern terminus of each proposed greenway alignment, contains a network of over two miles of paved trails. The proposed greenway corridor will provide residents with safe non-vehicular access to local parks and trail networks. Such access will foster a more meaningful experience for trail and park users and expand opportunities for connection to nature, leisure and recreation.

Completed in 2013, The Vandora Springs Road / Buffalo Road roundabout added an adjacent multi-use path terminating at the extents of roadway construction. The proposed multi-use path along Buffalo Road would connect White

Deer Park to the multi-use path at that roundabout. Depending on the alternative selected, the proposed greenway corridor would connect the area's neighborhoods with other nearby parks as discussed, in addition to Thompson Road Park.

The Breezeway neighborhoods adjacent to Thompson Road Park contains existing 5' wide sidewalks within the streets' public right-of-way. These sidewalks connect the interior lots of the neighborhoods with Thompson Road and Thompson Road Park. Currently, the paths end at Thompson Road where sidewalks do not exist. Option A would provide a direct connection from the Breezeway neighborhoods to Thompson Road Park and White Deer Park, and from Vandora Pines and Lakemoor neighborhoods to Thompson Road Park, White Deer Park and Lake Benson Park.

CONNECTIONS TO WAKE COUNTY GREENWAY SYSTEM

As depicted in Wake County's Greenway Master Plan [Figure 2], the County intends to connect the Swift Creek Greenway Corridor to Buffalo Road, thus, the South Garner Greenway would be connected to the larger Wake County Greenway System. The Town also shows the connection on page 52 of the 2018 Transportation update to the Forward Garner Plan, see [Figure 3].

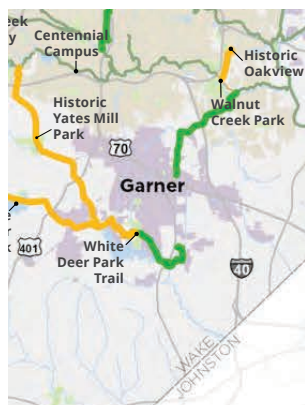


Figure 2 - Wake County Greenway Master Plan: Connect to Parks and Lakes

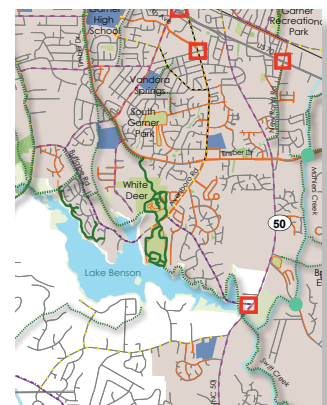


Figure 3 - Garner Forward Transportation Plan



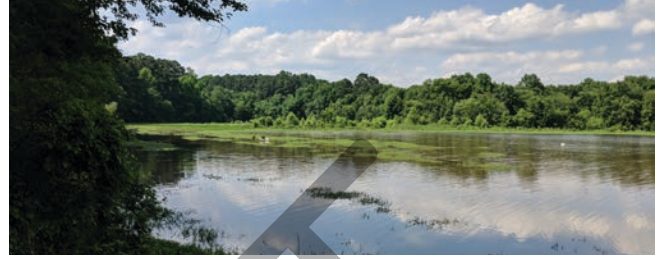
2 existing conditions



CHAPTER 2 > EXISTING CONDITIONS

NATURAL ENVIRONMENT

Lake Benson is a manmade reservoir covering approximately 400 acres to the south of the study area. A boathouse and adjacent trails provide anglers and non-motorized watercraft users access to the generally shallow waters. Lake Benson is fed mainly by three stream sources: Buck Branch, Reedy Branch and Swift Creek.



BUFFERS, STREAMS + WETLANDS

The study area falls within Wake County's Neuse River Basin. The Neuse Riparian Buffer Rule requires maintenance of a 50-foot riparian buffer on surface waters that are subject to the rule. Certain uses are permitted within the riparian buffer, including greenway trails. While allowed, greenway trails require a buffer authorization from the NC Division of Water Resources (DWR) before proceeding with construction. As part of the permitting process, the applicant must demonstrate that impacts to buffers have been avoided and minimized to the greatest extent practicable.

The study area is also located within a Conservation Buffer Area (CBA) as outlined in Town of Garner Unified Development Ordinance Article 4.8 & 7.2D. Within the CBA, buffers from 50 to 100 feet are required on the lakefront and streams depending on their distance from Lake Benson. Buffers include the 100-year floodplain, if one is present, plus the required buffer width. Greenway trails are permitted within CBAs.

Jurisdictional streams and wetlands exist within the study area. Rivers, streams, lakes, ponds and wetlands are considered "waters of the United States" and are subject to the jurisdiction of Section 404 of the Clean Water Act. Impacts to these resources require a Section 404 permit, typically a Nationwide Permit (NWP), from the US Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification (WQC) from the DWR. USACE and DWR have a joint application process for impacts to buffers, streams and wetlands. Justification for requested impacts and demonstration of avoidance and minimization of impacts to waters of the U.S and riparian buffers will be required during the permitting process.

A NWP can be utilized if the project is designed to impact less than 0.5 acres of jurisdictional waters of the U.S., including wetlands, and/or a maximum of 300 linear feet of jurisdictional stream. Pre-construction notification and approval will be required for jurisdictional stream and wetland impacts. The processing time is 45 days for a NWP and 60 days for a WQC.

Cumulative impacts for Recreational Facility projects over the NWP thresholds will require an Individual Permit. Individual Permits require an analysis to determine that the proposed impact to waters of the U.S. is the least environmentally damaging practical alternative, typically require compensatory mitigation, notification to adjacent property owners, a public notice and may require a public hearing.



Project Impacts to Buffers, Streams and Wetlands

Regardless of the final alignment selected, the South Garner Greenway must cross both Reedy Branch and Buck Branch. Use of an existing culvert over Buck Branch would minimize impacts to the stream and riparian buffers and limit construction costs associated with a boardwalk or bridge crossing. Similarly, a connection to the trail system within White Deer Park would require construction of a stream crossing over Reedy Branch. The final alignment should minimize impacts to buffers, streams and wetlands and the associated costs of impacts if possible.

Stream, Wetland, and Riparian Buffer Mitigation

The USACE can require mitigation for any stream or wetland impacts. In most cases, mitigation is not triggered for stream impacts less than 150 linear feet and wetland impacts less than 0.1 acre. Table 1 lists the current fee schedule from the NC Division of Mitigation Services (DMS), allowing for payment to offset wetland and stream impacts when required.

FEE CATEGORY	FEE
Stream per linear foot	\$507
Riparian wetland per acre	\$60,187

Table 1 - 2018-19 DMS Stream & Wetland Mitigation Rates

FLOODPLAINS

Both FEMA floodway and one percent annual chance flood hazard zone (100-year floodplain) exist within the study area as shown on the FEMA Flood map firm panels 3720160900J, 3720161900J, 3720170000J, and 3720171000J.

When working within the regulatory floodway, trail design (regardless of surface type) should minimize any change in ground elevation where possible. Any construction or increase in ground elevation within the floodway triggers detailed hydraulic modeling and required approvals through the Federal Emergency Management Agency (FEMA). Alternatively, while a local Floodplain Development Permit may be required, FEMA does not regulate greenway trail development within the floodplain.

The trail alignment connecting Buffaloe Road to White Deer Park will cross both floodway and floodplain associated with Reedy Branch and Buck Branch. The final alignment through the

floodway will maintain the existing base flood elevation to eliminate the need for detailed flood studies. This can be achieved by locating the trail where minimal grade change is required to maintain ADA grades of less than five percent longitudinal slope, and less than two percent cross slope. Alternatively, a boardwalk or bridge can be used to span the regulatory floodway and eliminate any changes to the existing base flood elevation.

Designing the trail outside of the regulatory floodway reduces the possibility of adding fill and triggering a detailed flood study. However, maintenance considerations still exist. Known to experience periodic flooding, greenway trails within the 100-year floodplain should be paved and will likely require additional maintenance from sedimentation and other debris.

TOPOGRAPHY + DRAINAGE

Topography across the study area is gently sloping, with areas of steep grade change. As depicted in the below slope analysis map [Figure 4], slopes range from zero percent to over 25 percent. The most challenging steep slopes are located behind the residential parcels located east of Buffalo Road.

To maintain ADA compliant slopes, the greenway must traverse a longer distance in areas where steep slopes currently exist. Outside of this area of steep slopes, the proposed trail alignments can, for the most part, remain at existing grade and will require minimal grading.

Aside from the likely culvert replacement at Buck Branch, drainage structures are not anticipated to be necessary for stormwater conveyance. Depending on the Town's capacity for trail maintenance, stormwater and runoff may either be conveyed in a swale on the uphill side of the trail, or sheet flow directly across the trails surface. While sheet flow across the trail surface may require additional maintenance, it is the preferred method of stormwater conveyance. A swale on the high side of the trail increases the limits of disturbance and in turn, grading costs. Additionally, the concentrated flow will necessitate the installation of additional drainage structures leading to the final outfall location where a structure to disperse concentrated flow in a non-erosive manner should be installed.

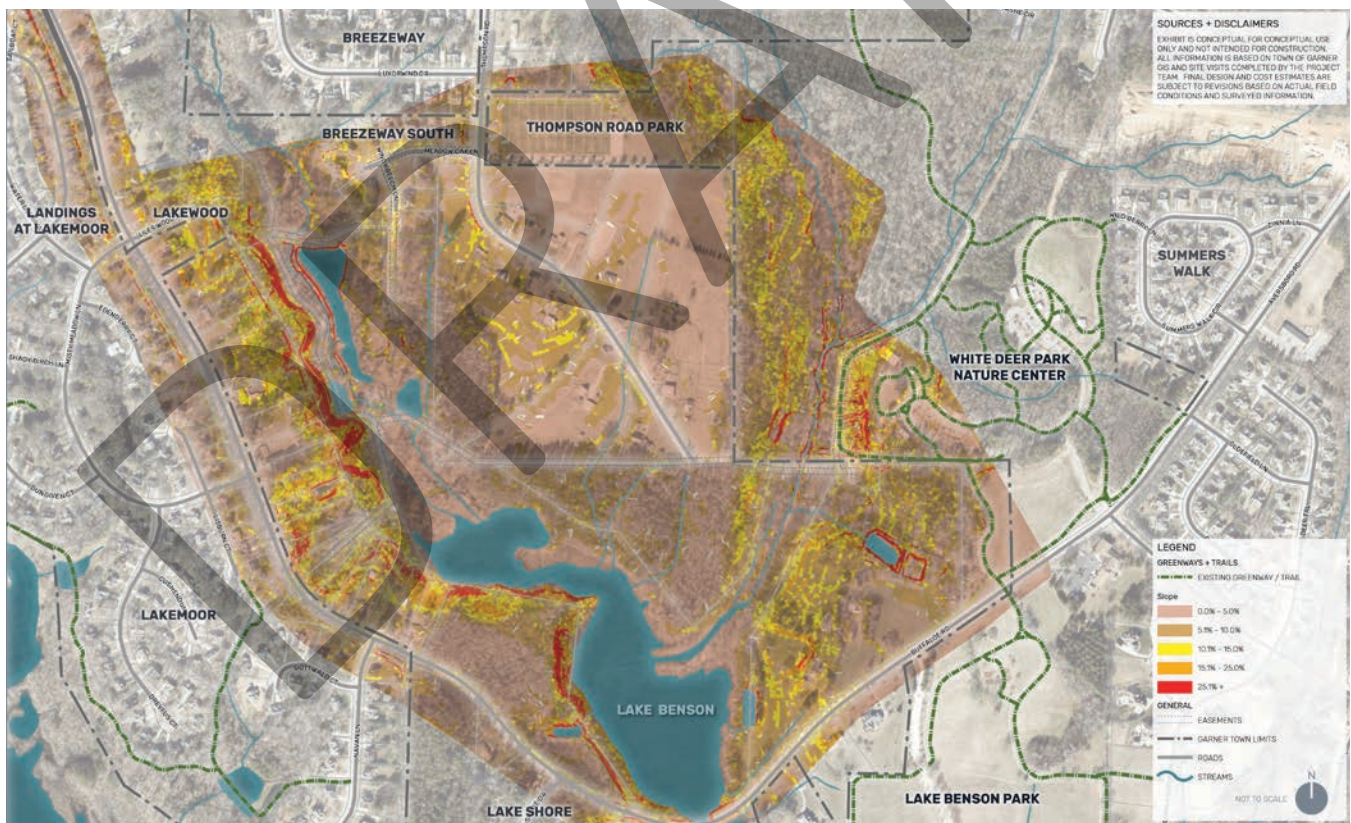


Figure 4 - Slope Analysis Map

THREATENED AND ENDANGERED SPECIES

Plants and animals with Endangered or Threatened status are protected under the Endangered Species Act (ESA) of 1973 (16 US 1531 et seq.). While not included in the scope of this feasibility study, subsequent engineering should include a review of the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) online tool and the NC Natural

Heritage Program (NHP) online database to generate an official list of any federally protected species that may be found within the project area. If protected species are known to occur near or within the study area, additional field verification may be required.

BUILT ENVIRONMENT

The intent of the South Garner Greenway is to connect the neighborhoods within the study area to White Deer Park and Lake Benson Park. Using readily available GIS data, this analysis identified existing utilities, historic resources, roads and drainage structures. Further site reconnaissance confirmed the presence or absence of existing site features within the study area. All visible observations were documented via digital photography. This allows the project team to develop alternatives within the context of field-verified existing conditions.

The GIS data analysis coupled with site reconnaissance revealed the presence of multiple sanitary sewer easements and overhead utilities including power, phone and cable. The location of such utilities can be seen on the Slope analysis Map [Figure 5] and the Property Ownership map [Figure 6]. The three trail alignment options presented avoid the construction of structures in a sanitary sewer easement that are typically not permitted. Based on documented field data, overhead utilities were only observed within the Buffalo Road and Thompson Road rights-of-way and therefore it does not appear the proposed trail alignments conflict with the presence of overhead utilities. Verification of underground utilities was not completed as part of this study.

Subsurface utility exploration (SUE) should be completed as part of future design phases to confirm the presence and location of any and all underground utilities.

Based on review of readily available GIS data provided by the North Carolina State Historic Preservation Office, it appears no historic structures are located within the project study area. Prior to development of construction drawings, the Town should seek concurrence from the State Historic Preservation Office to document the final trail alignment will not impact historic structures.

Finally, the site reconnaissance revealed the presence of one visible existing drainage structure within the project study area. The culvert servicing the Buck Branch crossing would be affected if Alternative A is selected as the preferred trail alternate. Visual inspection revealed the culvert on Buck Branch would need replacement and / or repair to improve conveyance of Buck Branch and provide structural integrity to the proposed trail if Alternative A is selected. This improvement has been considered as part of the Alternative A cost estimate.

PARCEL ANALYSIS

One driver for selecting a preferred trail alignment is the ability to secure easements or property for trail construction. The below property ownership map [Figure 5, next page] identifies property owners along the proposed trail alignments from which easements or property would need to be acquired. Limiting the number of property owners from which the Town needs to secure land or easements has the potential expedite project implementation. Similarly, selecting trail alignments that traverse Town or other publicly owned land have greater potential for immediate parcel control.

Figure 5, a map depicting property owners and land use is located on the next page.

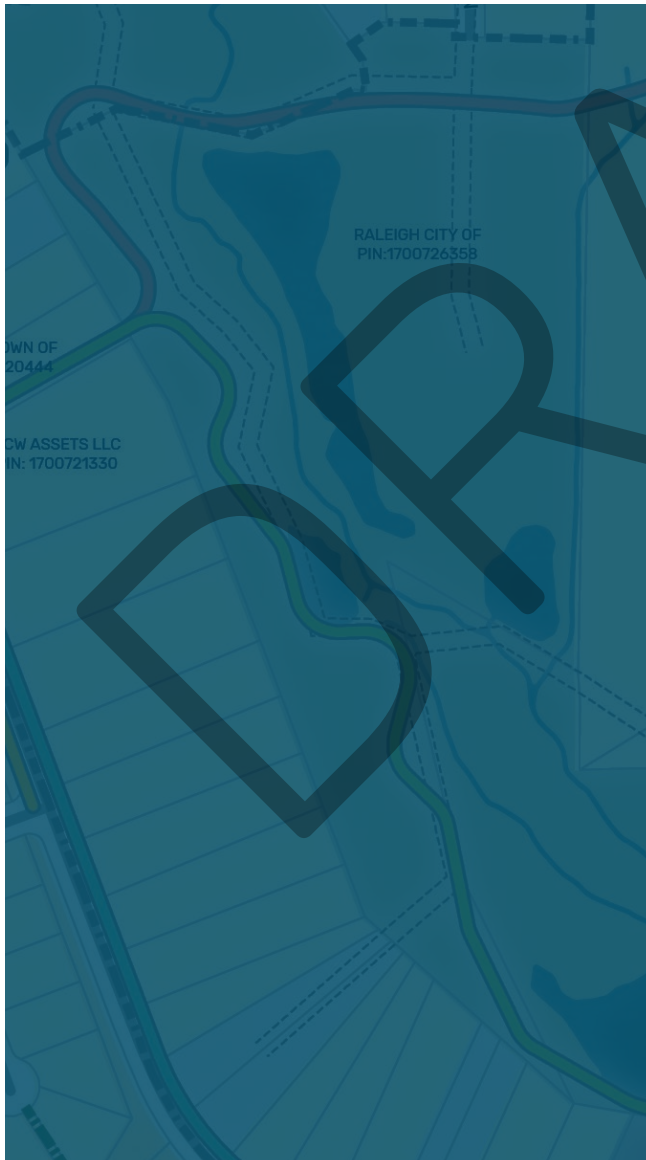
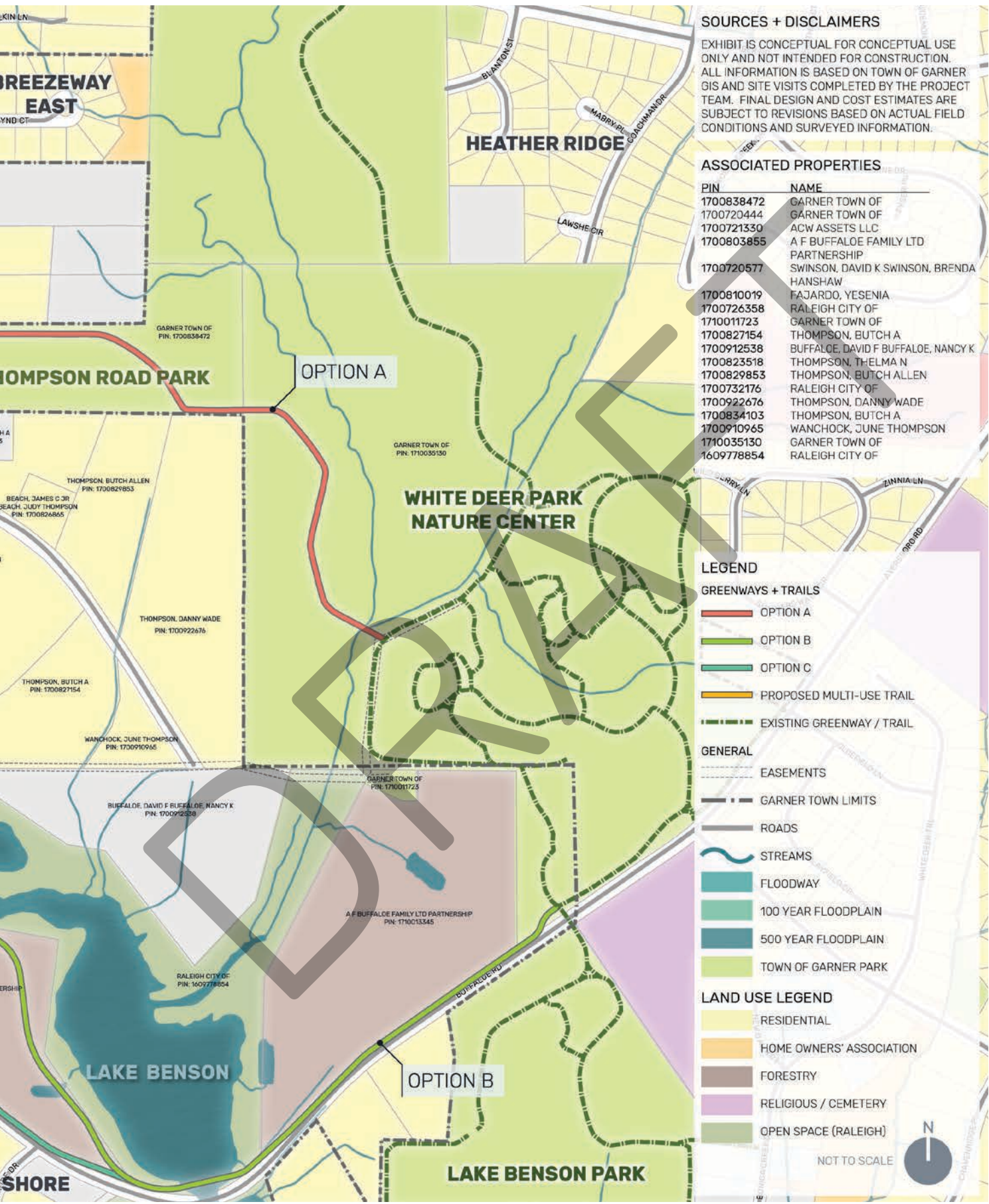




Figure 5 - Property Ownership and Land Use Map



EXISTING CONDITIONS



3 public input



CHAPTER 3 > PUBLIC INPUT

Public input is an essential part of any planning process. The most effective plans are firmly rooted in the realities and visions of the communities that created them. This feasibility study collected public input through an online questionnaire and at a public drop-in meeting. This section summarizes all public input received during the planning process.

Dates

Public Drop-in Meeting: October 25, 2019

Online Questionnaire distributed through October and November.

Number of Attendees

Public Drop-in Meeting: 54 attendees

Online questionnaire received 55 responses

Purpose

To inform the public about the project, educate about greenway design and construction in general and gather input regarding the public's overall opinion of the project and desired alternative.

SUMMARY OF FINDINGS

The public input meeting enabled Town staff and the project team to present the trail alignment alternatives and solicit feedback regarding residents' preferred alternative, questions, and concerns. The meeting was held at White Deer Park Nature Center near the project site.

Meeting results indicate overall positive support of the project, with 75 percent of meeting attendees responding "Yes" I am excited about the South Garner Greenway Project. Approximately 17 percent of attendees responded "No" I am not excited about the South Garner Greenway Project, and 8 percent of attendees did not respond.

Responses indicating excitement about the project coalesced around three main ideas. First, residents indicated a desire to have more places to be active in order to improve their physical health and wellbeing. Health and wellbeing goals ranged from wanting a place to access nature, to managing chronic illnesses with exercise.

Second, many residents indicated that they are excited to use the facilities with their families and friends. Residents reported that they would like to have group bike rides, walk their pets, and teach children how to confidently ride a bicycle.

Finally, many residents are excited about the increased connectivity the facility will create in their community. Many people indicated excitement about the possibility to connect safely to Lake Benson Park and White Deer Park.

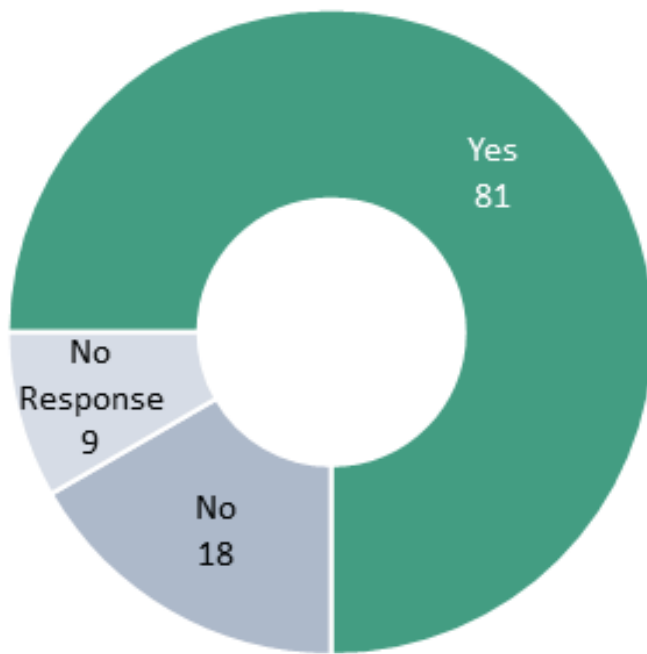


Figure 6 - Responses to "Are you excited about the South Garner Greenway Project?"

Residents who indicated they were not excited about the project cited concerns about encroachment on private property, the project's impact on the natural environment, cost of the project and safety.

Figure 7 below summarizes respondents preferred trail alignment options. Option B received the most first choice responses, followed by Option A and Option C nearly tying. Option B appears to be the most popular option among meeting respondents.

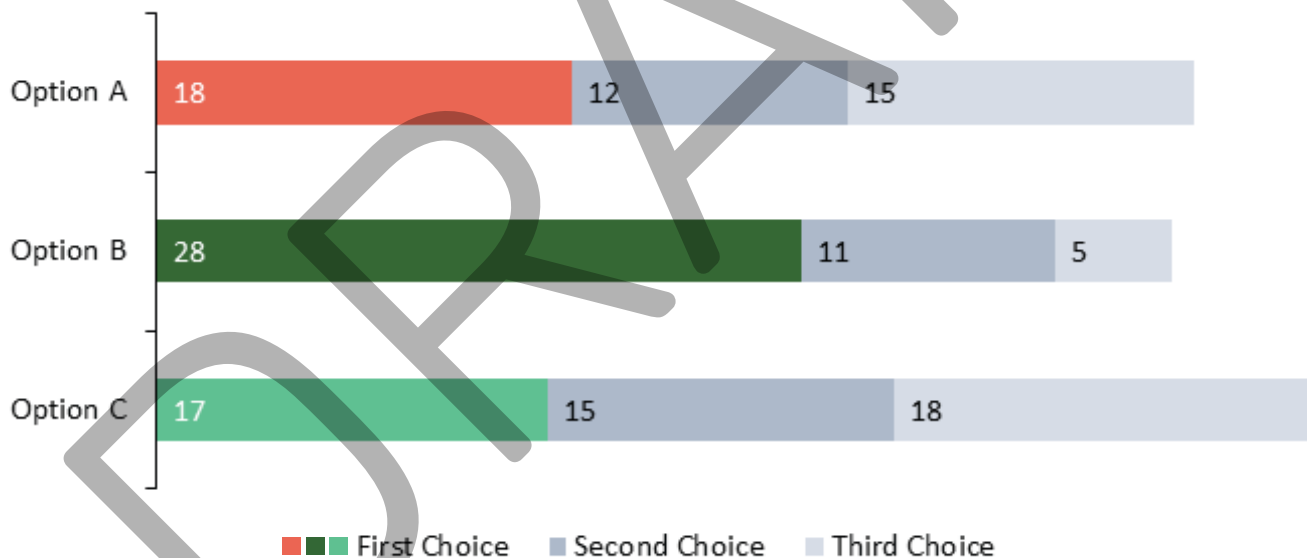


Figure 7 - Responses to "Of the three options shown, please rank from most preferred to least preferred."

PUBLIC INPUT WITHIN THE DECISION MATRIX

Public input is an important evaluation criteria in weighing the alignment options for the South Garner Greenway. Public engagement revealed reservations of homeowners near the Option A trail corridor, but overall community support for the project is high. Within the decision matrix, each alignment will be rated on a scale of 1 to 3

with a score of 1 reflecting "Public did not want" and a score of 3 reflecting "Public preferred". Based on the results of this engagement process, Option A and Option B received a score of 2, and Option C received a score of 1.

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PUBLIC INPUT



4 preliminary design



CHAPTER 4 > PRELIMINARY DESIGN

This feasibility study presents three typical trail cross sections that will define trail surface, width and relation to on-road facilities. For each of the corridor alternatives, one or more of the three trail cross sections have been selected with safety, trail use, location, and cost in mind.

TYPICAL CROSS SECTIONS

GREENWAY

This study defines a greenway as a trail corridor located within a dedicated easement or public utility right-of-way and typically not associated with a road corridor. Greenways are typically paved and wide enough to accommodate a variety of trail users from walkers to runners and bicyclists.

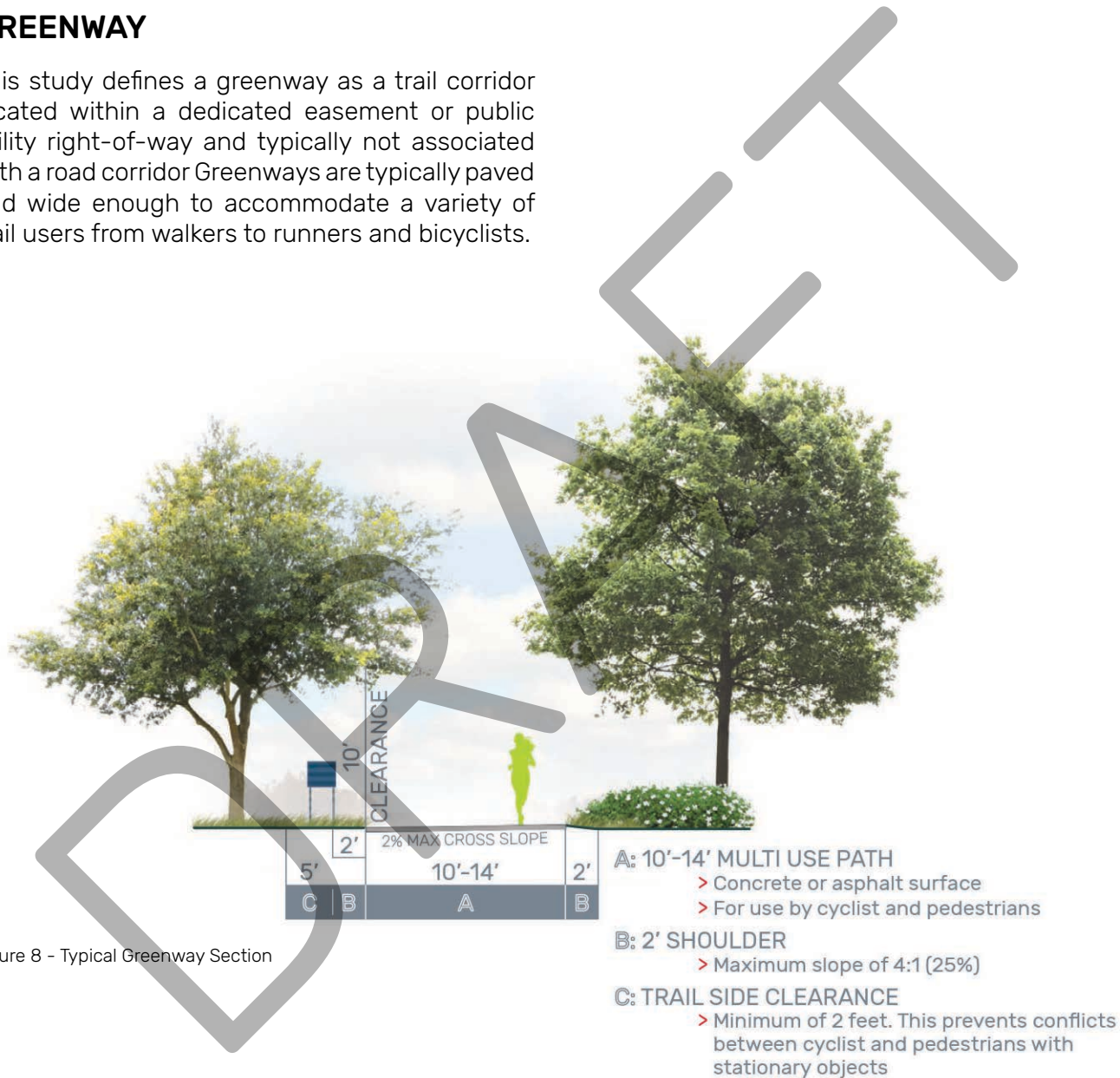


Figure 8 - Typical Greenway Section

GREENWAY SIDE PATHS

Greenway Side Paths share the right-of-way (ROW) with streets and vehicular corridors. Usually located immediately adjacent to a street, a vegetated buffer or other separation is typically provided between the street / motor vehicles and the pedestrian path of travel.

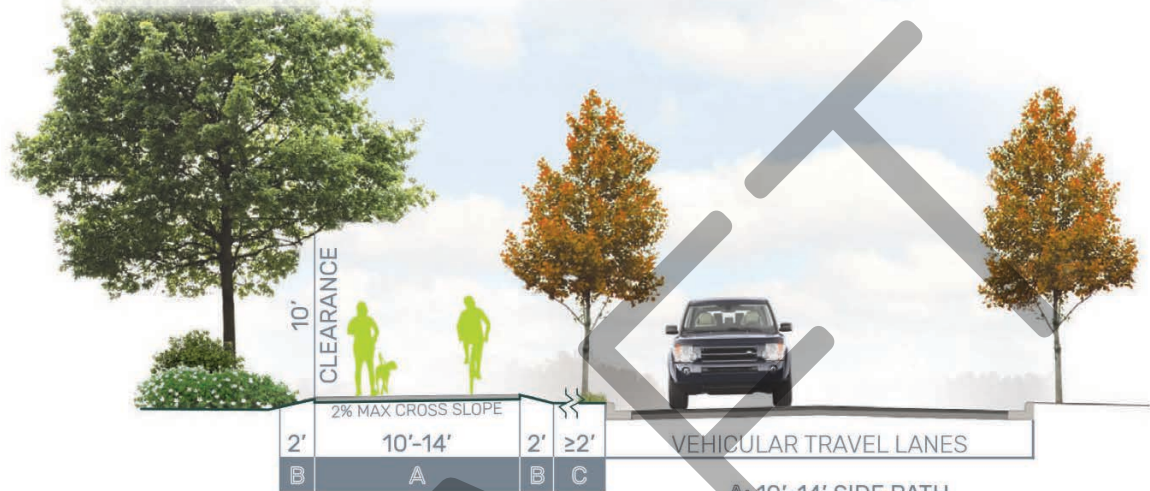


Figure 9 - Typical Side Path Section

A: 10'-14' SIDE PATH

- > Concrete or asphalt surface
- > For use by cyclist 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.

NATURAL SURFACE TRAIL

Natural surface trails are often narrower in width and located in natural settings such as adjacent stream or river corridors. Natural surface trails offer an opportunity to install a corridor with screenings or aggregate surface material and phase implementation of more expensive surfacing such as asphalt or concrete.



Figure 10 - Typical Natural Trail Section

A: 10'-14' NATURAL SURFACE TRAIL

- > Concrete, asphalt or natural surface
- > For use by cyclist and pedestrians

B: 2' SHOULDER

- > Maximum slope of 4:1 (25%)

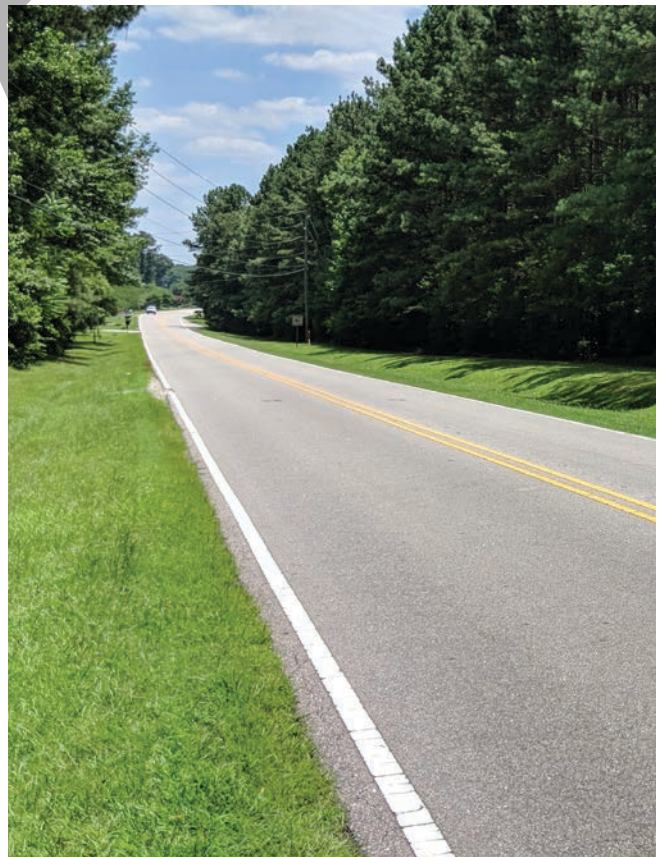
C: TRAIL SIDE CLEARANCE

- > Minimum of 2 feet. This prevents conflicts between cyclist and pedestrians with stationary objects

OPPORTUNITIES + CONSTRAINTS

Implementation of each trail alignment alternative will require encroachment agreements, permitting and environmental compliances, all of which influence the greenway location and alignment. Weighed with other factors such as cost and community preference, alignments with fewer regulatory hurdles are typically given priority. At a minimum, the below will likely be required prior to construction of any of the trail alignments:

- › NCDOT Encroachment Agreement
- › 401/404 Permits through USACE and NCDEQ
- › NCDEQ Soil Erosion and Sediment Control Permit
- › FEMA Compliance, either no-rise or CLOMR/LOMR
- › NCDEQ Buffer Permit – Neuse River



STUDIED ALIGNMENTS

Three corridor alignment options [Figure 11] were studied as part of the report and are described below. All three alignment options include, a proposed greenway side path adjacent to Buffalo Road would connect the stubbed existing paths at the Vandora Springs roundabout with Lakemoor neighborhoods before providing access to the greenway alignment options' western trailhead at Buffalo Road.

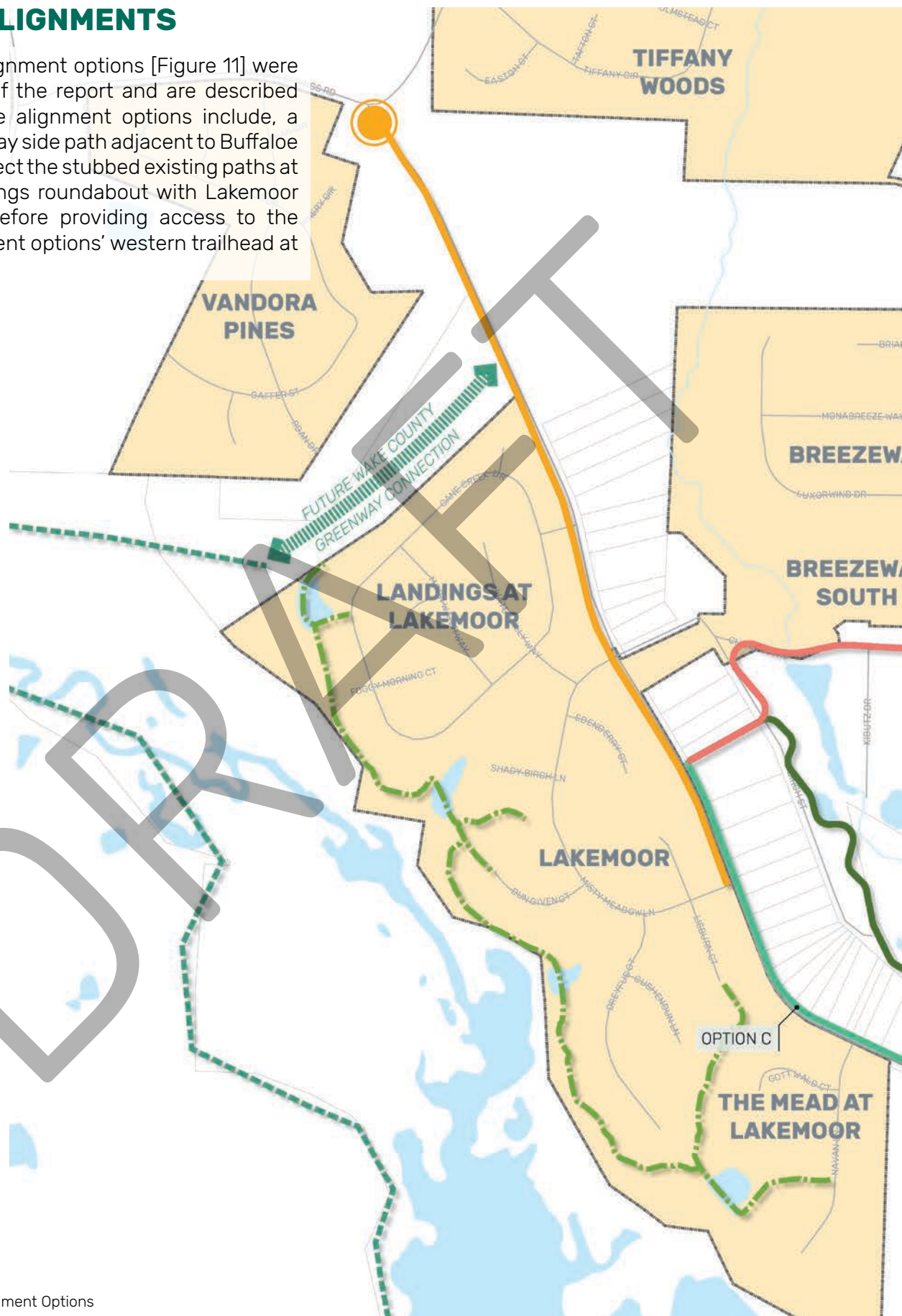
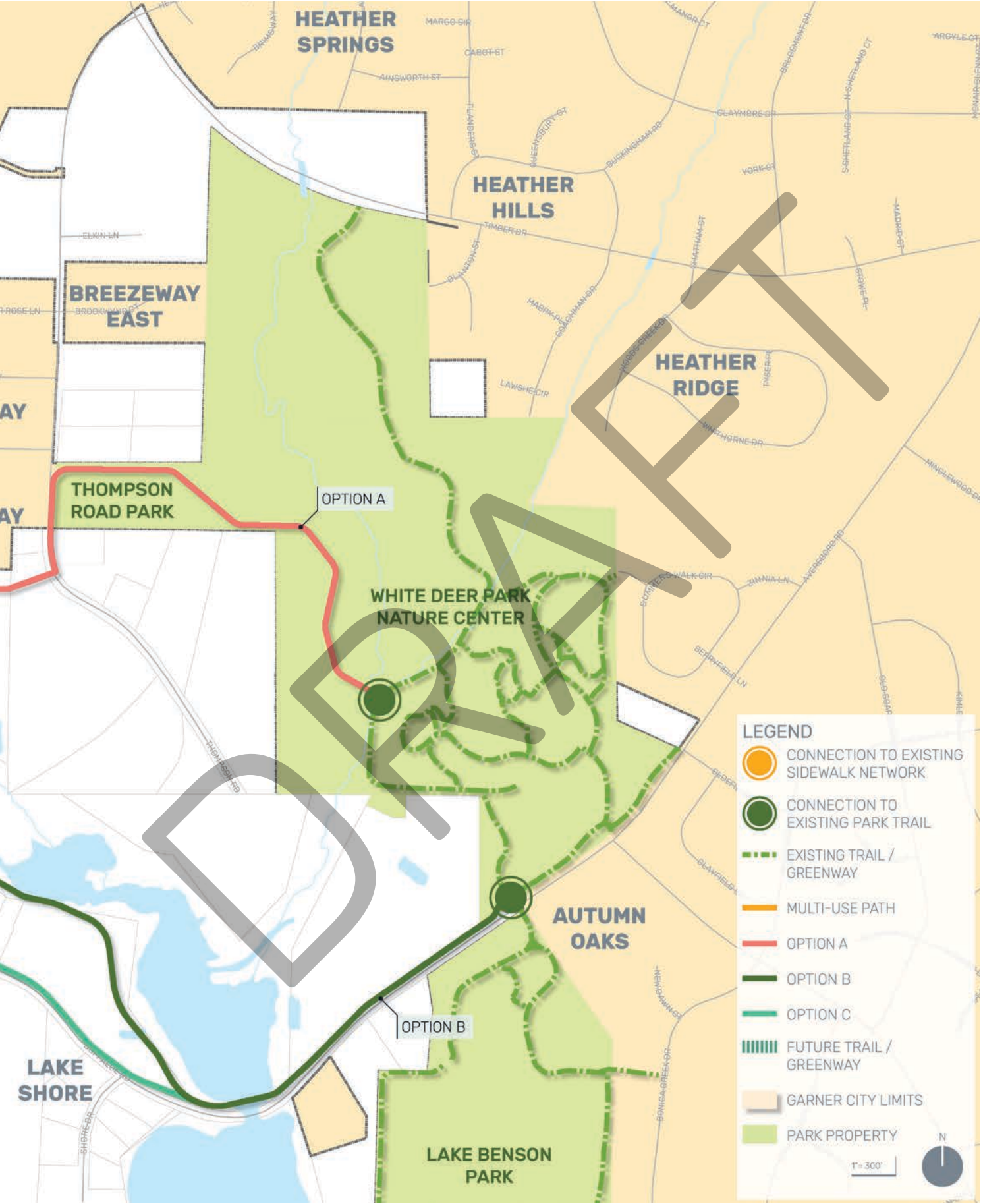


Figure 11 – Corridor Alignment Options



PRELIMINARY DESIGN

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GREENWAY OPTION A

Greenway alignment Option A begins at the proposed trailhead on Buffalo Road. Out of the three options, this option provides the best user experience by pulling the trail away from vehicular infrastructure and placing it within the natural environment through easements and land acquisition. As a result, the right-of-way needs are minimal and exposure to the natural environment is maximized.

Option A directly connects the Buffalo Road neighborhoods with Thompson Road Park and White Deer Park as a greenway trail. Heading eastwards from the proposed Buffalo Road trailhead, the trail meanders through native stands of trees and crosses Buck Branch at an existing culvert associated with an old roadbed. The route crosses then briefly follows Thompson Road as a greenway side path before connecting with Thompson Road Park.

Proceeding through the park, Option A creates an alternative and safe from of transit, potentially reducing the number of vehicles at Thompson Road Park. The trail continues east through an additional stand of trees before crossing Reedy Branch with a boardwalk and pedestrian bridge before connecting with the trail system at White Deer Park.



See next page for Greenway Option A map, Figure 12



Figure 12 - Greenway Option A Map



PRELIMINARY DESIGN

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GREENWAY OPTION B

Greenway alignment Option B starts at a proposed trailhead on Buffalo Road where it would head east/southeast, meandering through forested property primarily owned by The City of Raleigh, across wetlands associated with Lake Benson and ultimately meeting again with Buffalo Road as greenway side path. A bridge would be required to carry pedestrians over Lake Benson parallel to the Buffalo Road vehicular bridge. From this point, greenway alignment B follows the north side of Buffalo Road as a greenway side path before meeting with the path at White Deer Park.

The implementation of Option B would result significant of right-of-way acquisitions and extensive grading and drainage along a portion of Buffalo Road to accommodate the additional runoff and banking of the existing roadway.



See next page for Greenway Option B map, Figure 13

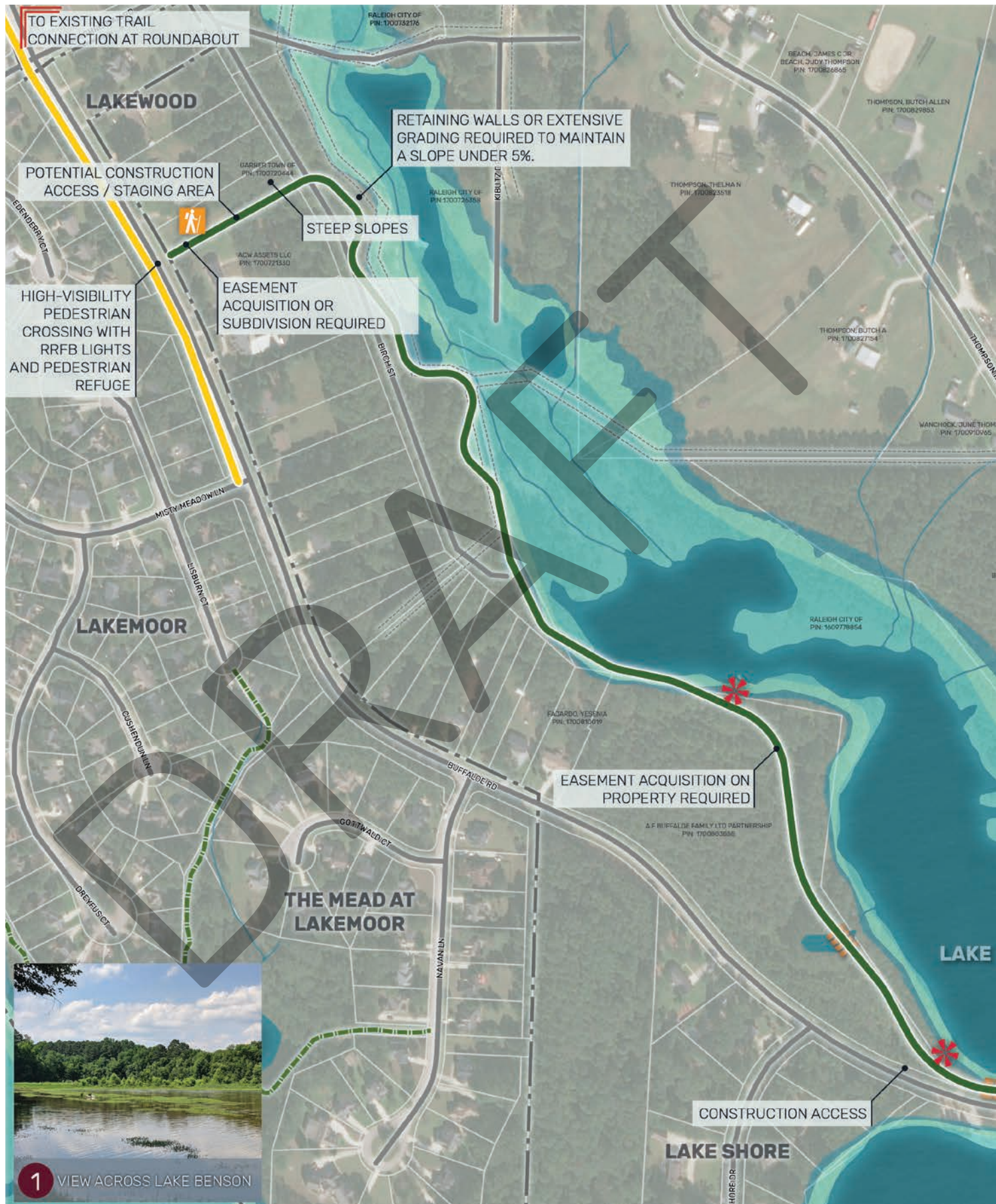


Figure 13 - Greenway Option B Map



DRAFT

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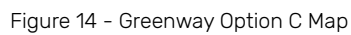
GREENWAY OPTION C

Greenway alignment Option C starts at a proposed trailhead on Buffalo Road where it would head east/southeast as a greenway side path, paralleling Buffalo Road within the right-of-way. Similar to Option B, a bridge would be required to carry pedestrians over Lake Benson parallel to the Buffalo Road vehicular bridge. The alignment would continue along Buffalo Road where it would ultimately connect to White Deer Park.

Option C parallels Buffalo Road for the entirety of the corridor. This option does not offer an off-road experience until reaching White Deer Park and limits user experience regarding access to nature. Out of the three options, Option C would require the most right-of-way acquisitions given the number of private property owners and parcels along Buffalo Road.



See next page for Greenway Option C map, Figure 14





ESTIMATES OF PROBABLE CONSTRUCTION COST

This feasibility study includes preparation of an estimated construction cost for each trail alignment option. The cost estimates are for planning purposes only and are derived from linear foot construction costs for greenway trail, boardwalks, bridges, erosion control, temporary traffic control and other typical project elements required for implementation. The linear foot costs are based on unit price bid averages from ten comparable greenway projects constructed within the last four years. The cost estimates also include soft costs such as design fees, permitting costs, Construction Engineering and Inspections (CEI), and contingency.

Typical elements for each estimate include but are not limited to:

- Cost per linear foot (LF) of 10-foot asphalt trail – \$178.87/LF. This price includes grading, base materials, basic drainage, and asphalt.
- Cost per linear foot (LF) of boardwalk – \$1,136.29/LF. This price includes piles for foundation, boardwalk substructure, decking, and handrails.
- Cost per linear foot (LF) of bridge – \$3,341.36/LF. This price includes bridge foundations, end bents and caps, prefabricated bridge, and bridge erection.
- Cost per linear foot (LF) of erosion control: \$21.78/LF. This price includes silt fence and outlets, temporary crossings, construction entrances, etc.
- Cost per mile (MI) of temporary traffic control for construction: \$9,894.35/MI. This price includes signs, traffic cones/barrels, temporary concrete barriers, flagmen, etc.

Each estimate includes a 20% contingency line for unforeseen or unknown costs that may arise during design and construction of projects. Unforeseen or unknown costs may include any flood study permit fees, such as CLOMR/LOMR, any additional construction material costs that may vary over time like steel, utility relocation, etc.

Engineering and Planning Services (design costs) can range between 8-14% of construction costs. Survey and wetland delineation are included in the design costs as well as whether a FEMA study is needed. Please note that the estimated design costs will be higher on projects that encounter:

- The inclusion of structures such as bridges and boardwalks
- Impacts to FEMA regulated floodways; will require detailed flood modeling and permitting
- Where federal funding is utilized – this requires a high level of regulatory compliance

Construction Engineering and Inspection (CEI) services account for a third party CEI firm providing to the Town documentation of the construction, reviews submittals, approval of pay applications, and coordination with NCDOT on federally and state funded projects. Fees for CEI services range between 8% and 12% of the construction costs. The Town may also provide CEI services in-house for non-state or non-federal funded projects as a cost savings option.

2019 Construction Estimate (Basis for Calculations):	(Basic elements of the project) x (linear feet x unit cost)
Estimated CEI Services ±2%	10% of escalated cost +/-2%
20% Contingency:	20% of construction estimate
Estimated Design Services ±3%	11% of 2019 Basis cost +/-3%
Total Estimated Budget Recommendation:	Total

Table 2 – Estimated Budget Recommendation Key

These costs are based on the current construction year (2019) and should be escalated using the equation:

$$A = P(1 + r)^{rt}$$

Where P is the current year cost, r is the rate of escalation, compounded yearly, and t is the number of years from the current year. It is recommended to use an escalation rate of 5% annually.

For example, to find the construction cost of Option A for the year 2025 you would use the following:

$$t = \text{Year } 2025 - 2019 = 6, P = \$3,139,000, r = .05:$$

$$A = P(1 + r)^t = \$3,139,000(1 + 0.05)^6 = \$4,206,560$$

It is important to note that all base data used to prepare the alignment options and cost estimates are from Wake County Geographic Information Systems (GIS) rather than a topographic survey. Easement costs are based on land valuations taken from Wake County tax records and applied on a per square foot basis.

The below table represents preliminary estimates of probable construction cost for each section of greenway trail, including all three options. For the purposes of this study, the alignment options have been broken down into sections and represented by color (salmon, green, teal).

SOUTH GARNER GREENWAY ALIGNMENT OPTIONS			
	OPTION A	OPTION B	OPTION C
Estimated Construction Cost: <i>Covers the cost of materials, construction, permits, and fees + Buffalo Road Multi-Use Path</i>	\$3,139,000	\$4,188,000	\$4,208,000
Construction Engineering and Inspections (CEI) Services: <i>Covers construction project management + Material testing and inspections</i>	\$314,000	\$503,000	\$505,000
20% Contingency: <i>Built in to include unexpected costs</i>	\$628,000	\$838,000	\$842,000
Planning + Engineering Cost Range: <i>Engineering and design pertaining to the alignment</i>	\$314,000 to \$628,000	\$419,000 to \$838,000	\$421,000 to \$842,000
2019 (Current) Total Capital Cost Range:	\$4,395,000 to \$4,709,000	\$5,948,000 to \$6,367,000	\$5,976,000 to \$6,397,000

Table 3 - Corridor Cost Estimates

It is our understanding these estimates reflect an increase in construction cost from previous studies completed. It is important to note previous estimates were based on recession level prices and market conditions while today's economy

reflects exponential increases in materials and labor. Also, the booming development market and significant number of projects for contractors to choose from can make public projects less attractive.

NOTE:

These estimates of probable costs are preliminary and based upon the conceptual design for each alignment dated May 2019, which are subject to change through the detailed construction drawings process. McAdams has no control over unforeseen subsurface conditions, the cost of labor and materials, the general contractor's or any subcontractor's method of determining prices or competitive bidding and market conditions. These estimates of probable costs of construction are made on the basis of experience, qualifications, and best judgement of McAdams. McAdams cannot and does not guarantee the proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.



5 recommendation



CHAPTER 5 > RECOMMENDATIONS

The final recommended trail alignment selection is informed by several criteria including public input, cost of construction and maintenance, and environmental impacts to name a few. To more clearly articulate and validate the design decision, a scoring matrix is used as a quantitative approach to determine the best trail alignment alternative.

SCORING MATRIX

Use of a scoring matrix can inform and validate design decisions when evaluating multiple trail alignments. Each category has also been weighted based on priorities and values of the Town administration, staff and community. As a point-based system, the scoring matrix uses a quantitative approach to select a final trail alignment that best achieves the following objectives:

Right-of-way (ROW) Impacts

Each alignment requires a certain amount of ROW be secured from private property owners. Whether obtaining an entire parcel or an easement, lower scores reflect a greater number of private property owners impacted.

Flood Study Impacts

A flood study is typically required when there is disturbance near a stream or body of water that is regulated by FEMA. When construction material is added to the floodplain, additional modeling and documentation is required to maintain compliance. If the modeling reveals the flood elevation changes with trail construction, a Conditional Letter of Map Revision (CLOMR) must be submitted to FEMA prior to construction. A Letter of Map Revision (LOMR) follows the completion of construction.

If flood modeling reveals the flood elevation will not change on account of greenway construction, a No-Rise Letter is required. This is a much shorter permitting process at the local floodplain manager level versus through the formal federal review of a CLOMR as described above.

Higher scores within the matrix represent detailed flood studies and modeling are avoided.

Utility Impacts

Each alignment has been analyzed for utility conflicts based on above ground visible utilities. Based on this study's analysis, it appears that any utility relocations would happen within the ROW and thus considered "Utility By Others" (UBO). UBO means that the utility owner would be responsible for relocating any facilities required for trail construction. More utility relocations would score lower in the matrix. All alternatives would require about the same amount of utility relocations.

Structures (Boardwalks, Retaining Walls, Bridges)

Structures add complexity to a project as well as costs. Construction of structures must be completed in a certain sequence that may involve special machinery (cranes, pile drivers, concrete pump trucks) or additional ROW encroachments for construction access. The more structures an alignment required, the lower the matrix score.

User safety - Safety is one of the highest priorities for any trail design. All proposed options were designed to minimize conflicts with vehicular traffic, avoid steep slopes, and maximize visibility of the trail user.

User Experience

User experience combines safety with how a user perceives their surroundings. Generally, greenway users seek opportunities for leisure and recreation that connect them with nature, offer scenic views and minimize exposure to roads and vehicular traffic. The longer the length of trail with experiential qualities such as scenic views, the higher the option was scored in the matrix.

Complexity / Constructability

Similar to structures, specialty items such as pedestrian activated signals or special drainage features can add complexity to a project and in turn increase construction costs. All options for the project are anticipated to have few specialty items but may need such things as custom signage and wayfinding and special crosswalk elements for the Buffalo Road crossing.

Public Input

The Town invited public participation in the evaluation of each alignment option. Comments were recorded, compiled, and evaluated based on positive or negative responses. Mixed input reflects both positive and negative responses for a given alignment. More support for an option scores higher, less support or negative reactions to an option scores lower.

Maintenance

Longevity of the trail after it is built is considered during the planning process. Given the significant capital investment for initial greenway construction, options with lower recurring maintenance costs is preferred. Scoring maintenance can be difficult because of the many outside factors that can influence a trail after it is built. Trails that incorporate timber and are in the floodplain score the lowest, trails using mainly concrete and are out of the floodplain score higher.

Connectivity

Connecting residents to Town and County amenities was evaluated. The more connections to popular destinations, the higher the matrix score.

Costs

High level cost estimates were completed for each alignment option. Higher construction costs receive a lower score in the matrix while lower construction costs receive higher scores in the matrix.

ROUTE ALTERNATIVE SELECTION CRITERIA	WEIGHT	SOUTH GARNER GREENWAY ALIGNMENT OPTIONS		
		OPTION A	OPTION B	OPTION C
RIGHT OF WAY IMPACTS High - (1) - 3+ Properties or Complex Easements Medium - (2) - 1 to 2 Properties Low - (3) - No Right of Way Needed	15	1	1	1
FLOOD STUDY IMPACTS High - (1) - CLOMR/LOMR Probably Required Medium - (2) - No-Rise Probably Achievable Low - (3) - Outside the Floodplain	10	2	1	1
UTILITY IMPACTS High - (1) - Utility Relocation Required Medium - (2) - UBO only conflicts Low - (3) - No Conflicts	5	2	2	2
STRUCTURES - BOARDWALKS, RETAINING WALLS, BRIDGES Low - (1) - 4+ structures Medium - (2) - 2-3 structures High - (3) - 0-1 structures	10	2	1	2
USER SAFETY Low - (1) - Trail Users with Traffic Medium - (2) - Traffic Signage / Signal Protected High - (3) - Fully Separated	10	2	2	2
USER EXPERIENCE Low - (1) - Limited experiential value or connection to nature; trail is primarily off-road Medium - (2) - Combination of on-road and off-road experiences, moderate connection to nature High - (3) - Maximum experiential value or connection to nature	10	2	2	1
CONSTRUCTION COMPLEXITY High - (1) - More than 50% special design and construction Medium - (2) - Less than 50% special design and construction Low - (3) - All standard details	5	2	2	2
PUBLIC INPUT Low - (1) - Public did not want Medium - (2) - Public input was mixed High - (3) - Public preferred	15	2	2	1
MAINTENANCE High - (1) - Southern Yellow Pine Construction Medium - (2) - More than 50% route out of floodway Low - (3) - Low maintenance materials	5	2	2	2
CONNECTIVITY Low - (1) - Few connections to neighborhoods, parks, and schools Medium - (2) - Some connection to neighborhoods, parks, and schools High - (3) - Multiple connection to neighborhoods, parks, and schools	5	2	2	2
COST 1-3 compared to other route options (highest points for lowest cost, lowest points for highest cost)	20	3	2	1
TOTAL UNWEIGHTED RAW SCORE		22	19	17
TOTAL WEIGHTED SCORE		225	185	150

Table 4 - Corridor Scoring Matrix

Based on the total weighted matrix score, Option A is considered the preferred route, followed by Option B, with Option C the least preferred. All three routes include a greenway side-path from Vandora Springs Road down Buffalo road and it

is recommended that this section of the study be built. It may also be worth pursuing this section as its own standalone project funded by the Town if issues arise with Options A, B, or C.

FINAL SELECTED TRAIL ALIGNMENT

It is the recommendation of this study for the Town to pursue implementation of trail alignment Option A. As with all trail alignment options, this alignment requires construction of the greenway side path from the roundabout at Vandora Springs Road and Buffalo Road down to the property owned by the Town in order to provide a connection between neighborhoods within the study area. This corridor will also offer the potential for a future connection with the Swift Creek Greenway as shown on the Wake County Greenway Plan. This section of greenway side path can be constructed using sidewalk funds and can be a stand-alone project if need be.

The greenway would begin at the town-owned parcel which would also serve as a trailhead. A high-visibility pedestrian crossing with Rectangular Rapid Flashing Beacon (RRFB) lights and a pedestrian refuge is required for users to cross Buffalo Road. The multi-use path would continue through vacant, private land to Thompson Road where a second high-visibility crosswalk is required to usher pedestrians to the east side of Thompson Road where it continues along the road as a greenway side path to Thompson Road Park. Continuing through Thompson Road Park, mature wooded forest of White Deer Nature Park, and across Reedy Branch Creek, the greenway will terminate in a connection to the internal trail network within White Deer Park.

Rights-of-way and easement acquisition present the greatest challenge to Option A. However, this option offers the most advantages such as being

the most cost-effective solution, connecting the most neighborhoods and Town parks, and providing the best user experience compared to the other options studied. Refining the final trail alignment and collaborating with private land owners will be critical to securing right-of-way and easements for trail construction.

If right-of-way and easement acquisition cannot be secured for Option A, Option B presents a strong alternative as reflected by the matrix score. This option presents fewer rights-of-way and easement acquisition challenges, but is more expensive to construct, and limits trail connections to the Breezeway neighborhoods and Thompson Road Park.

While conducting this study, a fourth option, Option D, became available as another potential route connecting Buffalo Road to Thompson Road just north of the Breezeway neighborhoods. This greenway would begin on the east side of Buffalo Road across from the future Wake County Greenway connection. A detailed evaluation of this corridor was not completed as part of this study or evaluated in the scoring matrix. Without adequate evaluation and analysis, presentation of this option to the public and Town Council was postponed until further assessment can be completed. If Option D continues to present opportunities for the Town, a more detailed corridor study can be completed as part of the ongoing Parks, Recreation and Cultural Resources Master Plan.

ADDITIONAL DESIGN CONSIDERATIONS

Prior to beginning construction, the following additional design considerations should be studied:

SHPO + Fish & Wildlife Concurrence

The State Historic Preservation Office oversees historic places and structures throughout North Carolina. Trail implementation would need to coordinate with their office to ensure there are no such sites along the alignment and to mitigate those sites if they cannot be avoided.

Concurrence with the US Fish & Wildlife office must be secured to document that no threatened or endangered species will be negatively impacted by the trail construction.

Categorical Exclusion

Completion of a Categorical Exclusion (CE) is typically required if NCDOT or Federal funding is used for trail construction. Greenway trails fall within the class of actions that a Federal agency has determined does individually or cumulatively have a significant effect on the human environment and for which, therefore, neither an environmental assessment (EA) nor an environmental impact statement (EIS) is normally required.



6 funding strategies

CHAPTER 6 > FUNDING STRATEGIES

Next to land acquisition, funding can be one of the more challenging steps in the greenway implementation process. Below are several funding sources that can be leveraged to provide the necessary dollars to plan, design, and/or construct the proposed greenway trail. The following sources of funding have been instrumental in the successful development of bicycle and pedestrian networks in other North Carolina communities.

FEDERAL FUNDING

Federal Transportation Funding

Many North Carolina communities have partnered with the Federal Highway Administration to build multi-use paths, greenways, sidewalks, bike-lanes and improve crossings. Each of these programs is administered by NCDOT through the Locally Administered Projects Program (LAPP). Communities wishing to access Federal Funding must submit their candidate projects to their MPO or RPO so that the project can be entered into the Strategic Transportation Investment Mobility Formula. This formula ranks projects and identifies those to be funded in the State Transportation Improvement Program (STIP). These funds require a 20% match from the locality.

Transportation Alternatives Program

The Transportation Alternatives Program provides federal funds for community-based projects that expand travel choices and enhance the transportation experience by integrating modes and improving the cultural, historic, and environmental aspects of our transportation infrastructure. Projects types include:

- › on-road and off-road pedestrian and bicycle facilities
- › infrastructure projects for improving non-driver access to public transportation and enhanced mobility
- › community improvement activities
- › environmental mitigation
- › safe routes to school projects
- › streetscape improvements
- › refurbishment of historic transportation facilities
- › other investments that enhance communities

Congestion Mitigation & Air Quality in North Carolina

Congestion Mitigation & Air Quality (CMAQ) is a Federal program that funds transportation projects and programs in air quality nonattainment and maintenance areas to help achieve and maintain national standards for air quality pollutants. In North Carolina, NCDOT serves as the administrator for this program. Funding is apportioned to North Carolina based on the population in non-attainment and maintenance areas of the state and the severity of air quality problem. NC's allocation of CMAQ funding is split in three pots available for funding, as follows:

- › Statewide CMAQ funds are administered by NCDOT and are awarded to prioritized NCDOT-driven CMAQ eligible projects either on a statewide tier facility or involving a system wide improvement within nonattainment and maintenance areas. Statewide CMAQ funds are not subject to regional or subregional allocations or the allocation formula. This category accounts for 35% of the total North Carolina CMAQ apportionment.
- › Regional CMAQ funds are locally-administered and awarded to projects spanning more than one air quality region that cannot be considered subregional projects. Air quality regions are Catawba, Great Smoky Mountains National Park, Metrolina, Rocky Mount, Triad and Triangle. The local project sponsor is responsible for providing the required match. This category accounts for 5% of the total North Carolina CMAQ apportionment.
- › Subregional CMAQ funds are locally-administered and awarded at the MPO/RPO level to projects within eligible counties. The local project sponsor is responsible for providing the required match and meeting federal funding requirements. This category accounts for 60% of the total North Carolina CMAQ apportionment.

Recreational Trails Program (RTP)

The intent of the RTP is to help fund trails and trail-related recreational needs at the State level. Funding for the RTP comes from federal gas taxes paid on non-highway fuel used in off-highway vehicles. The program is administered at the Federal level by the Federal Highway Administration. Grants range from \$10,000 - \$100,000 and require a 25% match by the locality. Approved Uses - New Trail/Greenway Construction Trail/Greenway Renovation Approved Trail/Greenway Facilities & Trail Head/Trail Markers Purchase of Tools to Construct &/or Renovate Trail/ Greenway Land Acquisition for Trail Purposes Planning, Legal, Environmental, and Permitting Costs - up to 10% of grant amount Combination of the Above.

<https://files.nc.gov/dncr-trails/documents/files/rtp-general-information.pdf>

Community Development Block Grant (CDBG)

The CDBG program is a flexible program that provides communities with resources to address a wide range of unique community development needs. Beginning in 1974, the CDBG program is one of the longest continuously run programs at HUD. The CDBG program provides annual grants on a formula basis to 1,209 general units of local government and States. Over a 1, 2, or 3-year period, as selected by the grantee, not less than 70 percent of CDBG funds must be used for activities that benefit low- and moderate-income persons. In addition, each activity must meet one of the following national objectives for the program: benefit low- and moderate-income persons, prevention or elimination of slums or blight, or address community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community for which other funding is not available.

STATE FUNDING

STATE TRANSPORTATION FUNDING

Bicycle & Pedestrian Facilities with Roadway Projects

NCDOT's Complete Streets Policy calls for the design and construction of roadways that complement the context and character of the communities they serve. For many roadway improvement projects in urban, suburban and small towns bicycle and pedestrian accommodation is appropriate. There is discretion within NCDOT for how these elements of a roadway improvement projects are funded and maintained. Communities should work with their MPO/RPOs, local transportation planning officials, NCDOT Division and Central staffs to identify priority projects and negotiate details associated with the type, location, funding and maintenance of biking and walking infrastructure associated with upcoming projects.

Independent Bicycle & Pedestrian Facilities

Historical state funding has been a critical component in funding independent bicycle and pedestrian projects, including the 34-mile-long Neuse River Greenway, early sections of Little Sugar Creek Greenway and many more. The 2013 Strategic Transportation Investment Law prohibited state investment in stand-alone or independent bicycle and pedestrian facilities. Currently there are no state transportation funds available to communities in North Carolina. There is a great deal of support throughout North Carolina for removing this prohibition from the STI Law.

STATE PARKS FUNDING

There are dollars available through the Parks and Recreation Trust Fund (PARTF), which provides dollar-for-dollar matching grants to local governments for parks and recreational projects to serve the public. PARTF is the primary source of funding to build and renovate facilities in the state parks as well as to buy land for new and existing parks.

<https://www.ncparks.gov/more-about-us/parks-recreation-trust-fund/parks-and-recreation-trust-fund>

LOCAL FUNDING

Bonds

Wake County, the City of Raleigh, and the City of Wilmington have all passed bonds to protect open space corridors and build greenway networks. These bonds generally pass with high community support and often lead to future bond initiatives to keep building the network. Other communities that have used bonding for greenways include, the Town of Chapel Hill, Town of Cornelius and the City of Greenville. Often multi-use paths and greenways are included in municipal transportation bond packages.

Successful bond campaigns require a well-

defined plan with specific projects supported by the community. Bond campaigns should be well organized with a community's public affairs department and thoroughly coordinated across all internal departments. Public outreach during the campaign is essential to educate residents about the benefits of infrastructure investment and to understand which projects garner the highest community support. Communication should continue after a successful bond to inform voters how bond dollars are being spent and to highlight when projects are completed. This is an essential step that will make future bond campaigns more successful.

PUBLIC PRIVATE PARTNERSHIP

The City of Greensboro is leading North Carolina in leveraging public-private partnerships to complete their Downtown Greenway Loop. Through the Action Greensboro Foundation, the

project has raised over \$10M in private funds by working with foundations and private givers. This money leverages over \$21 M in local and federal funds.

DEVELOPER DEDICATED LAND

The Town of Cary built its first greenway 40 years ago and now has more than 80 miles of greenway trails. A big part of their network development has been the result of developer-built trails. The Town of Cary works with developers to set aside important open space that provides trail connectivity, wildlife habitat corridors, and water quality protection. Per the Cary Land Use Ordinance developers must dedicate land or make payment in lieu for public park and or greenway development to serve the recreational needs of the residents. Land dedications for greenways are required for both residential and commercial development for those locations in the Town's latest greenway master plan. Easement dedication for greenway purposes is a separate requirement from parkland dedication. Though the land dedicated for greenway purposes may be counted towards parkland dedication requirements with the exception of easements for street-side trails. If the Town of Cary's Parks, Recreation and Cultural Resources Facilities Master Plan indicates a future greenway through a proposed development, whether residential or non-residential, a strip of greenway land through

this area shall be dedicated to the Town, at a minimum of thirty (30) feet, but not to exceed fifty (50) feet in width; widths of easements may be reduced to twenty (20) feet in those cases where the developer is constructing the greenway trail. Widths of greenway easements for street-side trails [see Section 7.10.4 (C)] shall be determined by the Parks, Recreation and Cultural Resources Director.

CHARITABLE DONATIONS / FOUNDATIONS

Greenway Foundations focus on developing and maintaining trails and green corridors on a County-wide basis. The Town could seek land leases along their trails as a funding source, in addition to selling miles of trails to community corporations and nonprofits in the Town. The development rights along the trails can also be sold to local utilities for water, sewer, fiber optic, and cable lines on a per mile basis to support development and management of these corridors. Some greenway foundations have created its own specific Greenway Trail license plate to help support the development, maintenance, and expansion of trails in their city. The cities get \$45 dollars from each greenway tag sold. This could really be expanded if promoted on trails, in publications and on the Town's website.

Greenways Conservation Groups

Greenway conservation groups adopt green corridors to support the operations and capital costs for specific greenway corridors. These groups raise needed money for designated greenways for capital and operations costs.

Another strategy used by several communities is the creation of a greenway trust fund for land acquisition and facility development that is administered by a private greenway advocacy group, or by a local greenway commission. A trust fund can aid in the acquisition of large parcels of high priority properties that may be lost if not acquired by private sector initiative. Money may be contributed to the trust fund from a variety of sources, including municipal and county general funds, private grants, and gifts.



6

conclusion + implementation



CHAPTER 7 >

CONCLUSION & IMPLEMENTATION

Thorough analysis has been completed for the three trail alignment options and included field visits and ground-verification, public engagement, collaboration with staff and a quantitative assessment of 11 evaluation criteria. Combined, the outcome of these tasks has informed a recommendation to implement construction of trail alignment Option A. This study further outlines additional studies, design considerations and funding strategies to catalyze the implementation of trail construction.

NEXT STEPS

While securing funding, the Town should begin negotiating with private property owners to secure rights-of-way and easements required to begin trail construction. Once rights-of-way and easement negotiations are in place and funding secured, the Town can pursue preparation of construction drawings, followed by a public bidding process and trail construction.

Additionally, the greenway sidepath from Vandora Springs road down Buffalo road may be better positioned as its own standalone project as no additional Right of Way will be required and the Town may want to use sidewalk funding for construction. McAdams recommends including this section in the budget with Option A, B, or C for any outside funding applications and grants but does not recommend getting a grant for just this section as the cost/benefit ratio would most likely be too high because of the additional requirements put on the project.

If Rights-of-way and easement acquisition prove impractical, the Town may choose to revisit one of the other trail alignment Options. Further investigation of Option D that takes advantage of new development and greenway easement dedication should also be considered to complete this connection.



A appendix



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Town of Garner
Town Council Meeting
Agenda Form

Meeting Date: May 28, 2019		
Subject: SOG Development Finance Initiative Proposal for Pre-development Services in Downtown		
Location on Agenda: Discussion		
Department: Economic Development		
Contact: Mari Howe, Downtown Development Manager		
Presenter: Mari Howe, Downtown Development Manager		
<p>Brief Summary:</p> <p>Staff from the School of Government's Development Finance Initiative have been invited to give council an overview of their proposal to provide pre-development services for the site adjacent to the Garner Recreation Center in Downtown Garner and answer questions.</p>		
<p>Recommended Motion and/or Requested Action:</p> <p>Provide guidance on proposal from DFI</p>		
<p>Detailed Notes:</p> <p>John Hodges will provide a brief contextual overview of downtown plans and public investment that has led to the development of this site; Mari Howe will present on steps taken by the DGA Downtown Development committee in preparation for site development and how DFI will continue that work with the committee as the project steering committee. Marcia Perritt and DFI staff will present the proposal for pre-development services that was requested by town staff.</p>		
<p>Funding Source:</p> <p>Redevelopment Bond Funds</p>		
Cost: \$78,200	One Time: <input checked="" type="radio"/>	Annual: <input type="radio"/> No Cost: <input type="radio"/>
<p>Manager's Comments and Recommendations:</p> <p>Bond Counsel has reviewed and approved this expenditure as an allowable use of Redevelopment Bond Funds.</p>		
<p>Attachments Yes: <input type="radio"/> No: <input checked="" type="radio"/></p>		
Agenda Form Reviewed by:	Initials:	Comments:
Department Head:	MH/JH	
Finance Director:		
Town Attorney:		
Town Manager:	RD	
Town Clerk:		



Development Finance Initiative

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The Development Finance Initiative (DFI) at the School of Government assists local governments with attracting private investment for transformative projects by providing specialized finance and development expertise. DFI partners with communities on projects including the following:

- Building reuse
- Community development
- Downtown revitalization
- Economic development
- Neighborhood redevelopment

What services are available from DFI?

DFI services support implementation of local community and economic development priorities that require private investment. DFI can be thought of as an extension of a local government's planning, finance, and economic and community development departments. DFI services include the following:

- Assessment of distressed properties
- Creation of Requests for Proposals (RFPs) to attract private development into underserved areas
- Real estate finance and structuring, including identification of investors, lenders, tax credit equity sources, and other partners
- Advising on public-private partnerships and development incentives
- Assistance with pre-development including market value, cost assumptions, project budgets, operating statements, and marketing data
- Evaluation of development proposals, agreements, and contracts
- Assessment of developer experience and capacity
- Development of small business finance programs

What development finance tools can DFI help our community to implement?

The DFI team's experience touches on a range of development finance tools that are designed to attract private investment into local community and economic development projects, including the following:

- Targeted financing (Tax Increment Financing or TIF, Municipal Service Districts or MSDs)
- Tax credit financing (historic preservation, new markets, brownfields, low-income housing)
- Loan funds (revolving loan funds, microenterprise loans, and innovative debt and equity hybrid products)
- Secondary market and securitization programs (loan loss reserve funds, supporting the growth of secondary markets)
- Equity (community development venture capital)
- Federal grant programs (CDBG, HUD, EDA)

How can I get DFI engaged in our community?

DFI is a fee-based service offered by the School of Government at UNC-Chapel Hill. Costs for smaller towns and economically distressed communities may be subsidized by third-party partners. Assistance is available on an ongoing or project-by-project basis depending on the needs of the community. For more information, contact Marcia Perritt at 919.538.1545 or mperritt@sog.unc.edu. Initial contact may be followed by a site visit and a letter of agreement for DFI services.

For more information

To learn more about DFI and other community and economic development programs, visit sog.unc.edu/dfi

The Development Finance Initiative has been made possible by a generous grant from Local Government Federal Credit Union.

MEMORANDUM

To: John Hodges, Assistant Town Manager - Development Services, Town of Garner
Mari Howe, Downtown Development Manager, Town of Garner

From: Marcia Perritt, Associate Director, Development Finance Initiative

Date: March 8, 2019

Re: Proposal to provide Pre-Development Services to the Town of Garner

UNC-Chapel Hill Development Finance Initiative

The UNC Chapel Hill School of Government (SOG) established the Development Finance Initiative (DFI) in 2011 to assist North Carolina communities with achieving their community economic development goals. DFI partners with communities in North Carolina to attract private investment for transformative projects by providing specialized finance and real estate development expertise.

Request for Technical Assistance

The Town of Garner requested a proposal for technical assistance from DFI in February 2019 to attract a private development partner to a Town-owned site in Garner's downtown, adjacent to the Town's new Parks and Recreation Center, which is currently under construction. The Town of Garner and its Main Street Committee have explored the site's redevelopment potential as a transformative mixed-use development that could include commercial, office, and/or residential uses and extend the downtown corridor.

While that visioning work is helpful in gaining consensus among key stakeholders for a general development concept, to make the concept become a reality, it should be tested through feasibility analysis and brought to the market—that is, the concept should be proven in a way that would satisfy developers, investors, and lenders that the vision is feasible given current market and development conditions. DFI proposes to conduct this necessary feasibility analysis and create a market-feasible program of development, while regularly seeking feedback and engagement with Garner officials. Once a market-feasible development program has been endorsed by Town Council, DFI will identify development partners with the experience and track record to make the vision a reality within the context of the actual market in Garner.

Scope of Services

The following Scope of Services outlines the pre-development activities that DFI would conduct to support the Town of Garner in attracting private investment to the downtown site, herein referred to as the “Project”, and executing the Town’s community economic development goals as it relates to downtown.

1. Conduct a community scan, which is an analysis of market-relevant demographic and socioeconomic data, as well as a review of current and historic plans, visioning documents, studies, research, development proposals, conceptual renderings, notes from public input sessions, and other materials relevant to the Project;
2. Collect and analyze relevant data for a Parcel Analysis to understand current market conditions (sales trends, code enforcement violations, vacancy, land use, ownership, and underutilization) for the Project;
3. Establish guiding public interests for the Project in collaboration with the Town and stakeholders;
4. Conduct a market analysis to assess the demand for development, to include an evaluation of market feasibility and demand drivers for different uses for the Project including retail, residential, and office;
5. Perform site constraints analysis to determine what the site can actually support given topographical conditions and other limitations and to test fit potential development programs for the Project;
6. Conduct a financial feasibility analysis, preparing a financial model for development program (i.e., development budget, operating cash flows, sources of capital, etc.) for the Project to determine financial feasibility for private partners and scale of public investment, if necessary;
7. Evaluate options for financing and structuring public participation in development or redevelopment, if necessary, including use of development finance tools (tax credits, district designations, etc.);
8. Obtain Town approval of a feasible development program and a solicitation for development partners), and assist Town with developing criteria to inform Town’s selection of eventual partner(s);
9. Actively market and discuss the solicitation with qualified development partners with the goal of receiving competitive proposals from qualified developers who are capable of accomplishing the Town’s approved development program;
10. Support Town officials in development partner selection process by carrying out due diligence of potential partners, preparing investment summaries, and evaluating solicitation responses using Town’s criteria;

11. Support the Town in negotiating deal points with the development partner selected to execute the approved development program pursuant to the solicitation. Deal points include development parameters for public-private partnerships and milestones, which are typically memorialized first in a non-binding memorandum before being finalized in a development agreement; and
12. Support the Town through the point that the above-referenced development partner closes on financing for the project, by regularly evaluating changes proposed by the development partner to pro forma financials and public participation options, in order to verify developer assumptions about revenues, development costs, operating expenses, and debt and equity structuring as market conditions evolve.

This Scope of Services does not include services that require a licensed broker or licensed attorney to perform. In addition, the scope does not include tasks associated with site planning expertise from architects or engineers, nor does it include site preparation expenses such as land survey, soil samples, and environmental testing (if such services are required, DFI will advise Town to obtain such services from third parties).

Deliverables

Deliverables include presentations, summaries, and other documentation intended by DFI to be delivered to the Town regarding the Scope of Services.

Timeline

The timeline for completing Activities 1-8 is estimated to be 9 months, commencing upon execution of a Letter of Agreement. DFI intends to help the Town attract private investment into the Project (Activities 9-12) as quickly as possible and in a way that maximizes overall value and serves the public interests.

Fee

The flat fee for the above Scope of Services is \$78,200, payable over two fiscal years in two installments of \$39,100 each.

The Town fee would cover only part of DFI's cost of services, with the balance being "at risk," to be paid by developer(s) who partner with the Town or to whom the Town transfers property. DFI's pre-development services will not only assist the Town in accomplishing its goals, but will also benefit the ultimate private developers by eliminating predevelopment work, risk and expense. In order to minimize the Town's costs, we require the ultimate developer to pay for the value of that benefit in the customary way, as a portion of the developer's fees on the project(s). If the Town is successful in

executing a Development Services Agreement with a private partner, DFI will receive a Development Services Fee. This Development Services Fee paid by the private partner would be 1% of total project costs.

This arrangement benefits the Town in several ways. It aligns DFI's interests with the Town in terms of finding developer(s) for the Project to attract private investment. It also ensures the developer(s) pays for a significant share of the Town's costs associated with the pre-development work. And it gives the Town ongoing support from DFI throughout negotiations with the developer(s) and during the full life span of development in the Project (i.e. DFI has "skin in the game"). The consequences for DFI are clear—DFI will get the bulk of its fee only if there are developer(s) for the Project who successfully execute agreement(s) with the Town.