



CITY OF COLUMBIA PLANNING COMMISSION

Public Meeting Notice

February 17, 2013
4:00 P.M.

1136 WASHINGTON STREET • PLANNING AND DEVELOPMENT SERVICES 2ND FLOOR CONFERENCE ROOM • COLUMBIA, SC

MARK JAMES • MARYELLYN CANNIZZARO • GENE DINKINS, JR. • JOHN TAYLOR
RICHARD COHN • PAIGE TYLER • MORYAH JACKSON • BRIAN STERN • JOSHUA McDUFFIE

I CALL TO ORDER/ROLL CALL

II AGENDA

1. Presentation from staff and discussion related to land use planning.
2. Devine Street/ Fort Jacksons Boulevard Commercial Node Plan Presentation and Discussion

III OTHER BUSINESS

1. Adjourn.

CONSENT AGENDA

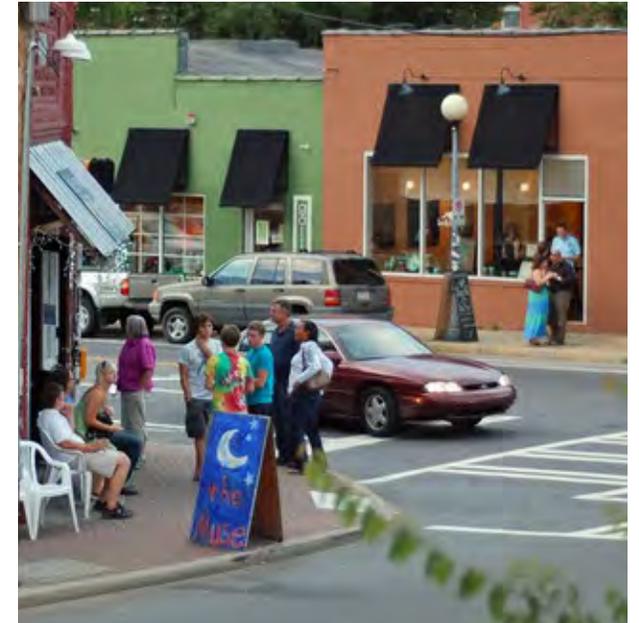
The Planning Commission uses the consent agenda to approve non-controversial or routine matters by a single motion and vote. Examples of such items include approval of site plans, annexations, and street names. If a member of the Planning Commission or the general public wants to discuss an item on the consent agenda (at the beginning of the meeting), that item is removed from the consent agenda and considered during the meeting. The Planning Commission then approves the remaining consent agenda items.

MEETING FORMAT

Applicants with requests before the Planning Commission are allotted a presentation time of 10 minutes. This time should include but is not limited to an overview of the project, case history, and any pertinent meetings held regarding the request. This time also includes all persons presenting information on behalf of the applicant such as attorneys, engineers, and architects. This time limit does not include any questions asked by the Planning Commission or staff regarding requests. Members of the general public are given the opportunity to address their concerns in intervals of 2 (two) minutes. The Planning Commission reserves the right to amend these procedures on a case-by-case basis.

DEVINE STREET /
FORT JACKSON BOULEVARD

Commercial
Node Plan



Prepared For:

City of Columbia

Prepared By:

LandDesign

IN ASSOCIATION WITH

CDM Smith

Kimley-Horn & Associates

Quackenbush Architects + Planners

NOVEMBER 2013

Acknowledgements

Thank you to all the organizations and individuals who committed their time, energy and resources to this effort. This plan would not have been possible without the support of many throughout the process.

Advisory Committee

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1 : Introduction

Introduction

The intersection of Devine Street, Fort Jackson Boulevard and Cross Hill Road is a primary gateway and commercial node in the City of Columbia. Over time and through periods of economic growth and decline, the area has grown from a small collection of neighborhood-serving shops to a regional commercial center with a variety of local and national tenants. Today, many of the older storefronts are either vacant or in disrepair. However, catalyzed by the recent redevelopment of the Cross Hill Market which includes the region's only Whole Foods grocery store, the area is again experiencing a period of renaissance.

To maintain this momentum, the City initiated a planning process to study the area and prepare a plan and supporting implementation strategies. By defining a direction forward with the participation of the community members and other stakeholders, public investment decisions can be better informed and result in catalyst projects that that will improve

the area's vibrancy, walkability and aesthetics, and will potentially stimulate subsequent private investment. This will strengthen the opportunity for this commercial node to act as a welcoming gateway into the City, a unique destination in the City, a neighborhood center, and a place where people and businesses want to be.

This plan presents a clear vision for the future of the area; addresses development design, transportation, and related issues and opportunities; establishes standards for future development to ensure cohesiveness; and outlines strategies so the public and private sectors can jointly implement the plan.



By defining a direction forward ... public investment decisions can be better informed and result in catalyst projects that that will improve the area's vibrancy, walkability and aesthetics and will potentially stimulate subsequent private investment.

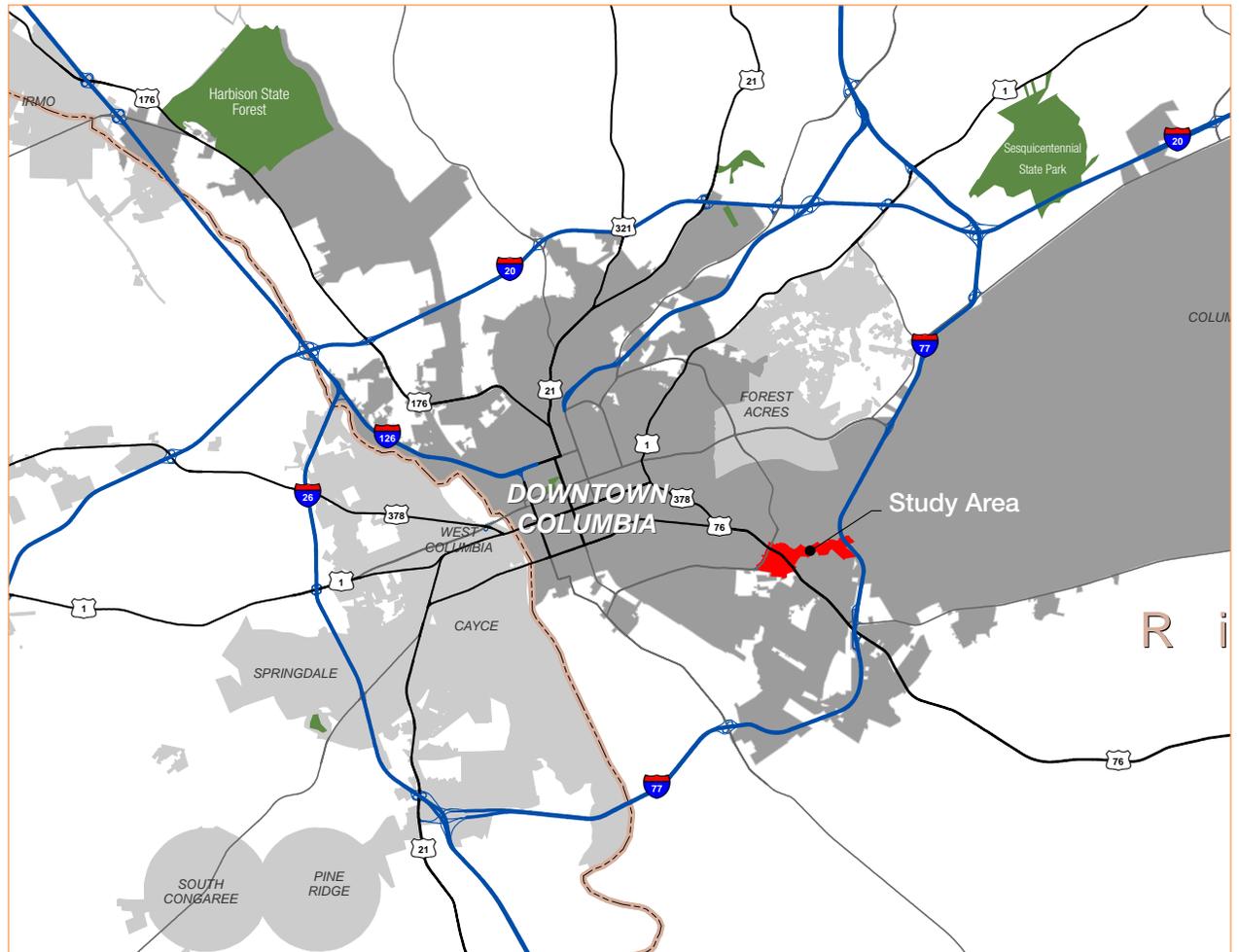
Purpose

This document conveys the vision for the area and provides policy direction to guide growth and development that enhances the character of the area, creates safe connections to existing neighborhoods and promotes a destination that is unique in the Columbia market.

This plan addresses key land use, transportation, urban design and placemaking opportunities and issues identified through the planning process. The recommendations included in the plan provide guidance for future land use and infrastructure decisions to support desired development and redevelopment in the study area.

The Study Area

The Devine Street/Fort Jackson Boulevard Commercial Node study area comprises approximately 300 acres on the east side of Columbia near Fort Jackson. The study area incorporates the properties clustered around the intersection of Fort Jackson Boulevard, Devine Street and Cross Hill Road as well as the properties adjacent to Beltline Boulevard, Rosewood Drive, Blossom Street and Wildcat Road.



The Context Map shows the location of the study area.



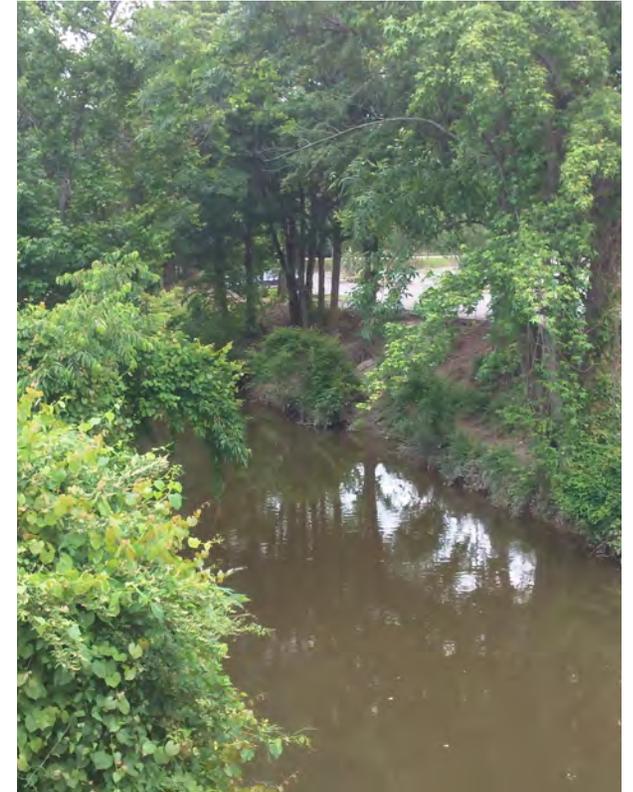
Midlands Technical College anchors the western portion of the study area, adding to the daytime population in the area.

Key Opportunities & Issues

From the analysis of existing conditions and with the feedback received from the Advisory Committee and public during the planning process, the consultant team identified a set of critical opportunities to explore and challenges to overcome. The concept plans, presented in the next section, were developed to address these key opportunities and issues.

OPPORTUNITIES

- **Proximity to major institutional anchors:** The study area benefits from the activity generated by Midlands Technical College, Fort Jackson, the University of South Carolina Medical School and the William Jennings Bryan Dorn VA Medical Center. There is an opportunity for more retail, service and housing options to accommodate the student, resident, service and employee populations at each of these facilities to the area. Connection to and access from these facilities is critical to the successful revitalization of the area.
- **Gills Creek:** The restoration and enhancement of Gills Creek presents the opportunity to transform the Devine Street/Fort Jackson Boulevard Commercial Node into a unique destination in Columbia and greater Richland County. There are potentially numerous recreational, economic, and environmental benefits including the creation of an amenity that is the focal point of this destination, of an urban outdoor experience in a regional system of greenways and blueways, a unique retail and living experience on the banks of Gills Creek and an enhanced waterway that mitigates environmental issues such as flooding and habitat fragmentation



A key opportunity that will likely redefine this area is the revitalization corridor of the Gills Creek.

OPPORTUNITIES CONTINUED:

- **Interstate highway access:** The eastern edge of the study area includes the interchange of Fort Jackson Boulevard and I-77. Whole Foods already draws from a regional base. Commercial development at the interchange as well as a diverse mix of national, regional and local retailers internal to the node could attract both regional and local consumers to the area.
- **Gateway to Downtown Columbia:** The node serves as one of the primary gateways into downtown Columbia from points east including Sumter County and Shaw Air Force Base. In addition, Devine Street which turns into Garners Ferry Road is one of the parallel routes to the coast. There is an opportunity to create a sense of arrival and a gateway into the City that is unique to area and the City.
- **Existing businesses:** There are numerous business in the area exclusive in the Columbia market including Whole Foods. There is an opportunity to support existing businesses by generating more foot traffic from adjacent neighborhoods through improvements to streetscape, existing facades and the pedestrian realm.
- **Adjacent neighborhoods:** Within a ten-minute drive of the intersection of Fort Jackson Boulevard and Devine Street are seven of Columbia's wealthiest neighborhoods. In addition, directly adjacent are a number of neighborhoods that add to the economic and social diversity of the study area. There is an opportunity to provide safer, accessible connections to the commercial heart to capture more local revenue. In addition, by providing amenities that



The area benefits from being surrounded by a diversity of neighborhoods.

draw neighbors into the study area there is an opportunity for the node to become a lively and distinctive destination in Columbia.

- **Townhome and multi-family opportunities:** There is an opportunity to develop higher-end multi-family properties to accommodate the aging population that wants to remain in the neighborhood. Townhomes, apartments and condominiums also attract young professionals and single-person households to the area.



The recent redevelopment of the Cross Hill Market includes the area's only Whole Foods Market.

ISSUES:

- **Traffic congestion:** Devine Street and Fort Jackson Boulevard are heavily used regional and cross-town arterials. Much of the traffic does not originate or end in the study area. The 2005 COATS (Columbia Area Traffic Study) Model indicates that segments of Devine Street, Fort Jackson Boulevard and Wildcat road have a level of service rating of “C” which indicates the roads are near capacity.
- **Lack of safe pedestrian connections:** Due to the large volume of traffic and street configuration there are a limited number of safe pedestrian crossings in the study area. Local residents indicate an inability to safely walk to and from major destinations.
- **Lack of bicycle facilities:** The only on-road bicycle facility in the study area is the lane on Cross Hill Road. The Palmetto Trail, a statewide trail, does pass through the study area on existing sidewalks. Local residents suggest additional bike facilities are needed to accommodate a growing biking population.
- **Streetscape:** The streetscape along the major corridors in the study area is in poor condition. Cracked sidewalks, no curb and gutter, lack of landscaping are characteristic of the existing conditions along many of the corridors including portions of Devine Street, Crowson Road, Beltline Boulevard, and Fort Jackson Boulevard.
- **Deteriorated buildings:** A number of properties are vacant with buildings in poor condition, contributing to area blight.
- **Environmental constraints:** The areas adjacent to Gills Creek flood. The ability to develop and redevelop these areas is restricted in the floodway and limited in the floodplain. In addition, the waterway is among the largest urban impaired watersheds in South Carolina. Stormwater runoff from development and non-point source pollution continue to impact the quality of water in the creek.



Traffic congestion, deteriorating facilities and the lack of streetscape contribute to the blight.

Planning Process

The process to develop the Devine Street/Fort Jackson Boulevard Commercial Node Plan was divided into five phases. The first phase focused on project initiation tasks such as data collection, a review of existing plans and studies and a kick-off meeting and study area tour with representatives from the City of Columbia Planning and Development Services Department, elected officials, business owners and representatives from the Gills Creek Watershed Association. During Phase Two the consultant team inventoried existing conditions in the study area to provide an overview of issues and opportunities to be considered in subsequent phases. Land use concepts supported by illustrations and imagery were developed in Phase Three. Based on the results of the previous phases, a set of recommendations and implementation strategies that support the concepts were developed during Phase Four. The final phase of the process consisted of merging all plan components into a single comprehensive document. This report is the deliverable of this final phase of work.

Guiding development of the plan was an inclusionary public engagement process. Understanding community values today ensures that this plan, implemented in accordance with the recommendations, supports and advances those priorities over the long term.





Community members gave crucial input at two public meetings conducted at key points in the project process.

ADVISORY COMMITTEE

This effort was guided by the Advisory Committee, made up primarily of residents and property owners in the area, and also included representatives from City and County Council, County Planning Staff, Gills Creek Watershed Association, and the development community. This group met regularly through the process to set goals, provide feedback, and advise the project team on plan concepts and recommendations.

A list of the Advisory Committee members can be found in the Acknowledgements section of this document.

STAKEHOLDER INTERVIEWS

Stakeholder interviews were conducted to verify and supplement the data gathered and mapped, to explain the conditions observed and to further understand the issues and opportunities that affect the study area. Their input supplemented the feedback received directly from citizens and property owners participating in the process. The stakeholders included key personnel from City departments as well as representatives of interest groups who addressed questions about the following topics: economic development, transportation, neighborhoods, utilities, and Gills Creek.

COMMUNITY MEETINGS

A community meeting was held on August 15, 2013 at the Sherwood Forest ARP Church on Beltline Boulevard. This meeting provided an opportunity for property owners, residents and other interested stakeholders to learn about the process, provide comments on existing conditions and react to initial concepts developed by the consultant team. All feedback provided during the community meeting was considered during the refinement of the concepts. A second meeting was held on October 17, 2013. During this meeting community members reviewed the final plan concepts, discussed recommendations to implement the vision and prioritized action steps.



2 :: Plan Concepts

Plan Concepts

Walkable. Safe. Vibrant. Active. A thriving neighborhood. A commercial destination. A unique amenity. These are all qualities desired for the future of the area. The community envisions a place where neighbors are able to safely walk and bike; a destination that offers a variety of activities and opportunities for people to shop, eat and recreate and a neighborhood with a variety of living options. One of the centerpieces of the plan is the potential redevelopment opportunities catalyzed by the restoration of Gills Creek. Not only will the improvements provide a recreational amenity along the greenway but the restored watershed provides an opportunity for a series of unique developments that front the water's edge and take advantage of the resource to create an experience that is unique in the Columbia market.

A generalized land use concept and supporting illustrative subarea concepts were created to communicate the vision for the area. All are presented in this section to further communicate the community's expectations for the study areas as redevelopment, spurred by public and private investments, occurs over the next twenty years.



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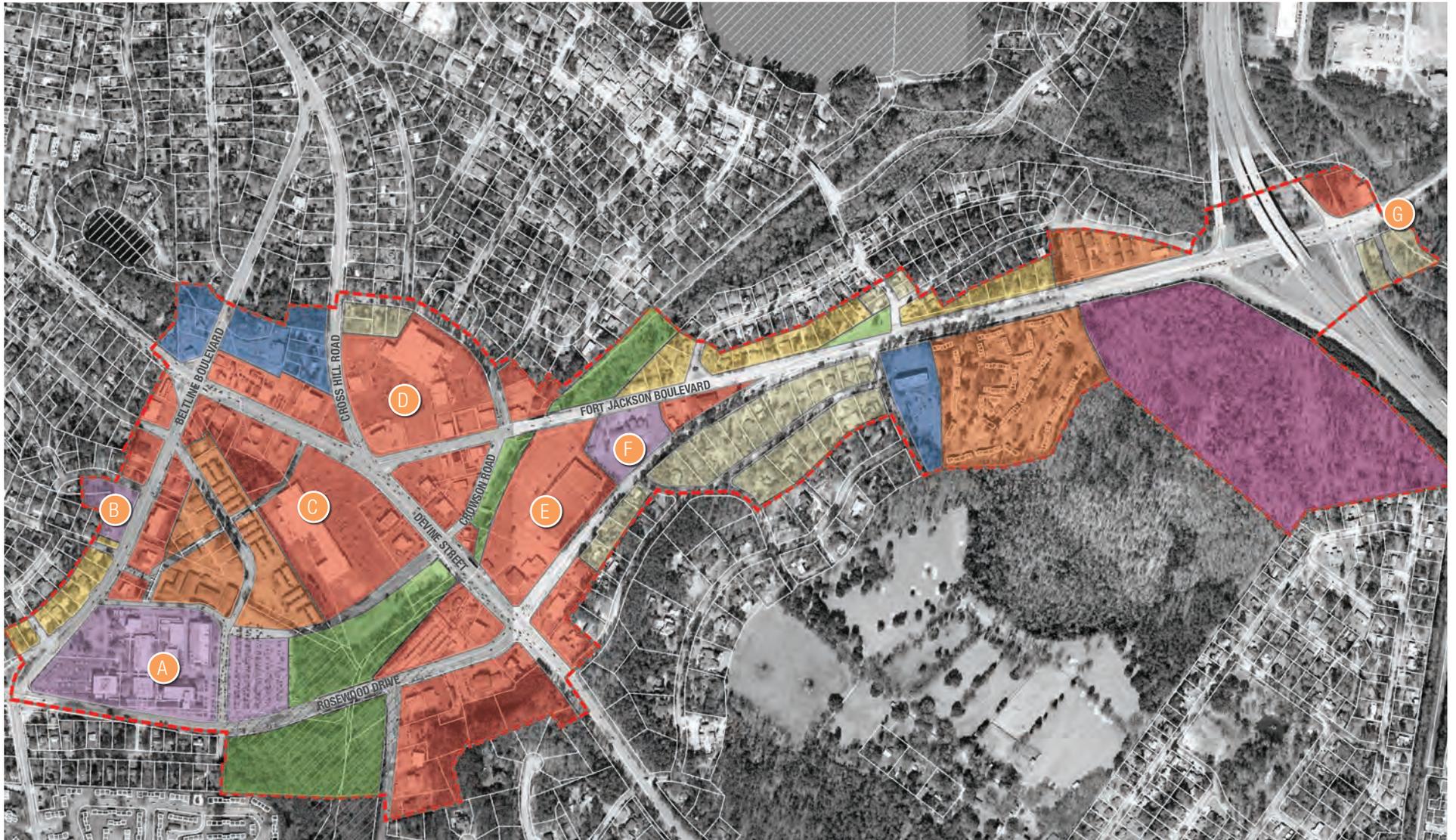
Generalized Land Use Concept Plan

- A Midlands Technical College
- B Sherwood Forest ARP Church
- C BiLo Shopping Center
- D Cross Hill Market

- E Rosewood Crossing
- F The Church of Jesus Christ of Latter Day Saints
- G Fort Jackson

- Study Area Boundary
- Green Space
- Single- Family Residential
- Townhomes
- Apartments/Condominiums

- Neighborhood Mixed Use
- Highway Commercial
- Office
- Institutional



Land Use Concept

The Land Use Concept is an illustration of the development patterns envisioned for the future of the study area. The map is descriptive, not prescriptive, conveying the community's desires for the future and the flexibility needed to accommodate unforeseen opportunities.

Eight land use categories are depicted on the map. Each category is intended to indicate a predominant use-or set of uses-as well as other features that define the character of category. A brief description is provided. Each description is consistent with the ideas and vision the community has for the future development pattern. These descriptions do not propose a change to existing development; instead, they suggest a direction moving forward and list qualities to be embodied by new development and redevelopment.

GREEN SPACE

Green Space characterizes the areas along Gills Creek that will either remain largely undeveloped due to environmental constraints or will be improved as part of the Gills Creek Greenway project. In addition, Green Space also includes the triangle at the intersection of Fort Jackson Boulevard and Kilbourne Road. This use category indicates opportunities for preserving natural areas, restoring environmentally degraded areas, and providing new or improved park and recreation space. All such areas will also enhance the built environment.

SINGLE-FAMILY RESIDENTIAL

The Single-Family Residential area is intended to create, maintain and promote single-family residential neighborhoods. It is

intended to preserve the land to provide housing opportunities for individual households. By maintaining these as single-family, there is an opportunity for strengthening and, in some instances, stabilizing the existing neighborhoods within and at the periphery of the study area.

MULTI-FAMILY RESIDENTIAL - TOWNHOMES

Given the proximity to Midlands Technical College and commercial uses, this area could redevelop from single-family homes into townhomes. The shallow depth of the parcels and difficult access due to the traffic volumes on Beltline Boulevard limit the possibilities for redevelopment. This category provides an opportunity to maximize development of these parcels by increasing the density with a product that is suitable for their location and configuration. In addition, this would provide a new housing option in the node and be a complementary transitional use from the commercial corridor to adjacent neighborhoods.

MULTI-FAMILY RESIDENTIAL - APARTMENTS & CONDOMINIUMS

Over time, the existing apartment and condominium complexes will likely redevelop into new multi-family product. This use category maintains this type of housing option in close proximity to major commercial areas and transportation corridors.

NEIGHBORHOOD MIXED USE

The Neighborhood Mixed Use area is intended to encourage the development of a pedestrian-friendly core of retail, office, civic and recreational uses to support nearby residents. Development within the area should promote a safe and walkable environ-

ment while providing a sensitive transition between higher intensity uses and neighboring residences. It is recommended that no new single tenant commercial use shall occupy a space greater than 50,000 square feet. In addition, higher density residential including townhomes, apartments and condominiums should be encouraged.

HIGHWAY COMMERCIAL

The Highway Commercial area is intended to allow auto-oriented commercial development at major interchanges. The use category encourages a full range of retail and service uses drawing from a local or regional market area, particularly those with larger footprints (greater than 50,000 square feet) than cannot be easily accommodated in Neighborhood Commercial. Development is intended to be accessible for motorists, but access for transit users, bicyclist, and pedestrians shall be supported.

OFFICE

The Office category is intended to maintain existing and accommodate new small office uses. It should support a range of employment opportunities, particularly neighborhood-serving businesses, such as doctors' and real estate offices. The area is mostly developed and should redevelop in a way that provides a complementary transition to existing neighborhoods with regard to site and building design.

INSTITUTIONAL

Institutional category is intended to preserve the land for the existing Institutional uses such as Midlands Technical College and places of worship.

Redevelopment Concept Plan

- A Devine Street
- B Beltline Boulevard
- C Gills Creek
- D Crowson Road
- E Crowson Road Extension



Subarea Concepts

Supporting the land use concept are five subarea concepts that illustrate in greater detail the vision for the area. Each of these concepts depict what development could look like if the plan were implemented in accordance with the recommendations. The illustrations are meant to communicate the spirit of development and not define an actual redevelopment or construction program.

The Overall Concept (left) serves as a key map to identify the subareas within the study area for which urban design concepts have been prepared.

Each of these concepts depict what development could look like if the plan were implemented in accordance with the proposed recommendations.



Subarea A, encompassing the intersection of Devine Street and Beltline Boulevard, can be enhanced with façade and streetscape improvements.

A NEW CORNER BUILDING PROVIDES A GATEWAY INTO THE DISTRICT

UTILIZE A SHARED PARKING CONCEPT FOR EXISTING RETAIL USES TUCKED BEHIND BUILDINGS

ENHANCE PEDESTRIAN CROSSWALKS

PEDESTRIAN SAFE ENVIRONMENT, EXTEND SIDEWALK WITH PARALLEL STREET PARKING.

ENHANCE CORNER LANDSCAPE FOR GATEWAY

AREAS FOR CORNER PLAZAS - COULD INCLUDE PLACES FOR LANDSCAPE, SEATING AND PUBLIC ART

NEW BUILDINGS SHOULD BE DESIGNED IN A MANNER TO FRONT THE STREET WITH ACTIVE STOREFRONTS; ENTRANCES OFF THE STREET; PARKING BEHIND

THE GATEWAY AT DEVINE AND BELTUNE

CREATE A GATEWAY CORNER ENHANCED BY INFILL DEVELOPMENT AND STREETSCAPING THAT PROMOTES A PEDESTRIAN-ORIENTED AREA.



Location Key



SUBAREA A

Devine Street Concept

The intersection of Devine Street and Beltline Boulevard is unique in that it serves both as a gateway and potential anchor to the study area. Today, the intersection is unremarkable. Properties on three of the four corners are in various states of disrepair. The sidewalks are cracked, there are no crosswalks and there is a lack of continuous curb and gutter. Pedestrians are exposed and lack safe facilities. In addition, diagonal parking along this section of Devine Street creates unsafe situations with cars backing in to oncoming traffic and there is no clear delineation between the pedestrian and parking zone.

Addressing these challenges will result in long term success for the businesses that located along this portion of Devine Street. At the intersection there is an opportunity to create a gateway. Existing right-of-way could accommodate corner plazas with landscape, seating and public art installations that are uniquely Devine. In addition, enhanced pedestrian crosswalks and streetscape improvements are needed to improve both safety and aesthetics in the area.

To create a more business and pedestrian friendly environment a road diet could be considered on this section of Devine. By taking one of the left-hand turn lanes and narrowing the travel lanes, additional space would be available to create a safe pedestrian environment, on-sidewalk dining opportunities and parallel on-street parking. Improvements behind existing storefronts could provide shared parking opportunities. These type of improvements would result in a more intimate shopping and retail area as compared to the larger footprint retail stores further south. This diversity of shopping options could result in a more vibrant commercial area.

Devine Street Precedent Photos & Renderings



Devine Street Today



OPPORTUNITY TO CREATE A MORE HIGHLY CONNECTED DIVERSE RESIDENTIAL NEIGHBORHOOD WITH TOWNHOMES MULTI-FAMILY MIXED INCOME HOUSING.

NEW COMMUNITY PARK HELPING TO INTEGRATE BOTH SIDES OF BELTLINE BLVD. ENTRANCE TO NEW RESIDENTIAL NEIGHBORHOOD

GREEN BUFFER ALONG CHAPEL DRIVE WITH CONNECTION TO TRAIL WETLAND SYSTEM.

NEW STREET CONNECTION WOULD HELP CONNECT RESIDENTS TO RETAIL OPPORTUNITIES ON CROSS HILL

CREATE A STREET CONNECTION TO BETTER INTEGRATE RESIDENTS WITH RETAIL OPPORTUNITIES.

OPPORTUNITY TO UTILIZE 'BACK OF HOUSE' SPACE FOR CONNECTION TO RETAIL ALONG DOVING STREET.

UTILIZE FLOODPLAIN TO CREATE WETLANDS/HABITAT PARK TO SLOW TREAT RUNOFF PRIOR TO ENTERING CREEK.

TRAIL CONNECTION TO GILUS CREEK.

ADDITIONAL MIDLANDS TECHNICAL COFFEE BUILDINGS FOCUSED ON GREEN SPACE TRAIL.

OPPORTUNITY FOR FUTURE STRUCTURED DECK TO SERVE CAMPUS NEEDS

RESIDENTIAL ALONG THE GREENWAY.

CREATE A UNIQUE RESIDENTIAL NEIGHBORHOOD CONNECTED TO CAMPUS LIFE, RETAIL ENTERTAINMENT OPPORTUNITIES RECREATION ALONG THE GREENWAY.



Location Key



SUBAREA B

Beltline Boulevard Concept

Adjacent to Midlands Technical College, the Beltline Boulevard area is an area in need of redevelopment. Currently the area is a mixture of small retail businesses and multifamily housing. The existing apartment complexes are in various states of disrepair contributing to the overall blighted visual character of the area.

Findings from the market study conclude that the Columbia market and this area especially, could benefit from additional multifamily housing options. Given the proximity to the college, downtown Columbia, and commercial services this area could redevelop into a combination of townhomes and apartments. During the process stakeholders suggested that higher-end, smaller footprint housing was needed to accommodate aging Baby Boomers who would like to remain in the neighborhood but cannot or do not want to maintain a large single-family home. In addition, trends suggest that both aging Boomers and Millennials prefer living where they are able to walk to stores, restaurants and other community facilities. Diverse housing options, accessible open spaces, trail connections, pedestrian facilities, streetscape and lighting treatments would create a unique residential neighborhood in the study area.

This concept also illustrates the extension of Chapel Drive to the Bi-Lo site. This road, whether private or public, could provide an alternative connection for pedestrians, bicyclists and motorists to safely connect to Garners Ferry Road at Crowson Road. Additional details on the benefits of this road connection are discussed in the Bi-Lo Redevelopment Concept.

Midlands Technical College anchors the southwestern portion of the study area. Adjacent to the developed campus is a large surface level parking lot. This concept suggests that as the college grows there is an opportunity for Midlands Tech to turn a front door to Gills Creek, construct additional facilities that front the greenway and provide an open green space for students and faculty to enjoy along the creek.

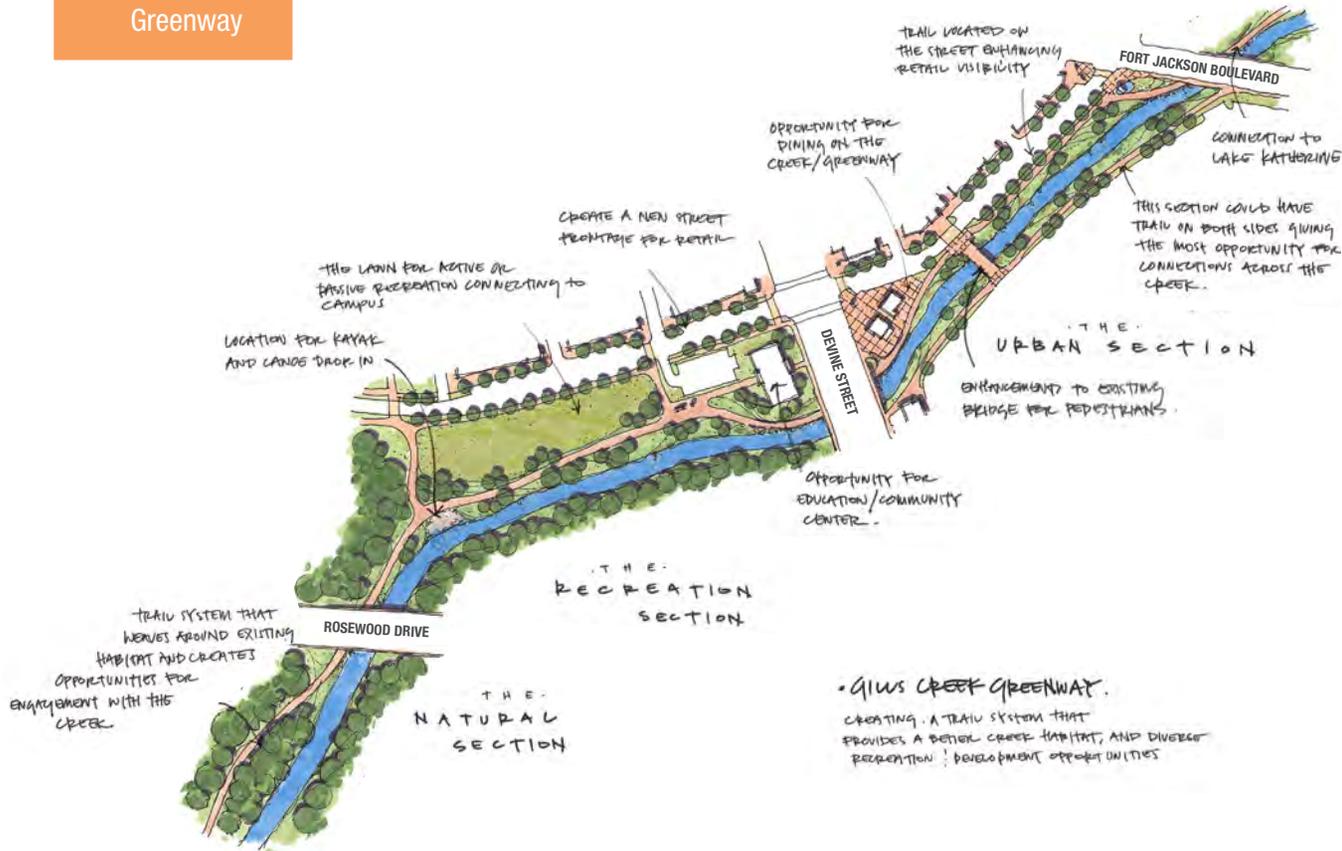
Beltline Boulevard Precedent Photos



Beltline Boulevard Today



Gills Creek Greenway



Location Key



Gills Creek Today



SUBAREA C

Gills Creek Greenway Concept

Gills Creek is an undervalued and underutilized asset in the study area. The creek runs from Lake Katherine through the study area and ultimately connects to the Congaree River. The creek is part of the larger Gills Creek Watershed which is among the largest urban impaired watersheds in South Carolina. Over time the creek has been channelized. Storm water runoff from development and non-point source pollution threaten the quality of the waterway. In addition, flooding is a major concern in areas adjacent to the Creek. Development has encroached up on the capacity of the floodplain to perform natural stormwater management function. Increased run-off from development has exacerbated flooding issues associated with limitations of the floodplain.

Addressing the environmental concerns of the watershed is the first step to enhancement of the creek as a recreation, environmental and economic development asset. The proposed greenway along Gills Creek provides not only a local recreation amenity but has the opportunity to connect a much larger system of trails. Gills Creek intersects the Capital City Passage of the Palmetto Trail, a statewide trail system, at Kilbourne Road and ultimately connects to the Congaree River Blue Trail. The Gills Creek Greenway could become the centerpiece of a regional system of trails and blueways. In addition, similar to the successes at Little Sugar Creek in Charlotte, NC and Falls Park in Greenville, SC, the restoration and enhancement of Gills Creek could potentially catalyze significant development opportunities and result in a place that is a unique destination in Columbia. The concept pictured left illustrate this potential.

For the section of the creek that runs through the study area the concept illustrates three distinct sections. The first section adjacent to Gills Creek Parkway would remain natural and undeveloped. Potential improvements in this area would include creek

restoration and trail construction. The area north of Rosewood Drive adjacent to the Bi-Lo site is envisioned as an area for passive recreation including a location for a kayak and canoe drop-in. As previously mentioned, there is an opportunity to connect Chapel Drive to Crowson Road. This street connection opens up the Bi-Lo site for additional redevelopment opportunities that front the creek. Envisioned for this section are retail uses that capitalize from street frontage on Chapel Drive. In addition, over time, as existing uses reach their useful life, existing buildings which today are currently either partially or wholly built in the floodplain, could be reused as community centers or be demolished and converted into public plazas anchoring each distinct section of the greenway.

The urban section of the creek is the area adjacent to Crowson Street and Rosewood Crossing. This section would be the centerpiece of the overall network of trails. Residents and visitors alike could walk, canoe or bike the trail, stop off in a few shops, grab a bite to eat and return home via the trail system. Existing and infill businesses along Crowson Street would benefit from creek frontage.

Working with property owners, the greenway could run on both sides of the creek. Streetscape improvements and pedestrian enhancements would improve the safety and aesthetics of the amenity. Improvements would result in opportunities for outdoor dining contributing to the vitality of the area. The character and uniqueness of Gills Creek could be reinforced through educational displays, wayfinding signs, lighting and seating along all sections.

Improvements and enhancements to Gills Creek underpin the success of the Devine Street/Fort Jackson Commercial Area as a unique destination within Columbia.

Gills Creek Precedent Photos and Rendering



A study of the edge of Gills Creek improved with a greenway trail.



Crowson Road

Road



Location Key



SUBAREA D

Crowson Road Concept

Today the wedge of development defined by Fort Jackson Boulevard, Crowson Road and Devine Street is an eclectic mixture of new national eateries, small service businesses, local restaurants and vacant buildings. The new restaurant development along Devine Street provides outdoor seating areas and dining options. However, the development along Fort Jackson Boulevard is in various states of occupancy and disrepair. The frontage along Crowson Road is also deteriorating. Similar to the area at the intersection of Devine and Beltline, the sidewalks are cracked, there are no crosswalks and there is a lack of continuous curb and gutter.

This wedge has the potential to redevelop as a centerpiece of the Devine Street/Fort Jackson Boulevard Commercial Area. Crowson Road would benefit from complete street improvements including on-street parking, bike lanes and sidewalks. Improvements to the streetscape, corner details and enhanced crosswalks would provide a safer pedestrian environment and much needed aesthetic improvements to the area. All of these improvements would also compliment the Gills Creek Greenway running through the site.

Infill development, façade improvements and the rehabilitation of existing structures would enhance the existing fabric of buildings and define the edges of the development. Along Crowson Road and adjacent to the greenway on the Rosewood Crossing side there are also opportunities for pop-up retail and outdoor seating options to add to the diversity and vibrancy of the area.

As the centerpiece of the Crowson Road area, the treatment and enhancements to Gills Creek underpin the redevelopment potential of the entire area.

Crowson Road Precedent Photos



Crowson Road Today





Location Key

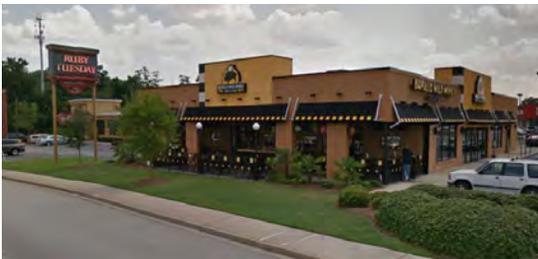


SUBAREA E

Crowson Road Extension Concept

The Bi-Lo shopping center currently has a mixture of regional and national chain retail and restaurants. Extension of Crowson Road to Chapel Drive would provide additional connectivity through the study area and encourage redevelopment that fronts Gills Creek. The proposed buildings would face the extended road. On-street parking, pedestrian improvements, retail frontage, and an improved passive recreation space adjacent to the creek would activate the street and create a lively destination in the study area.

Shopping Center Today



Crowson Road Extension Redevelopment Precedent Photos and Rendering



The land flanking the Crowson Road Extension lends itself to a park along the edge of the greenway, and infill development at the current Bi-Lo shopping center with retail and restaurants overlooking the park.





3 Recommendations

Recommendations

The Plan Concepts provide the basis for the recommendations intended to guide implementation efforts. In developing these recommendations, the issues and opportunities presented earlier were also considered and incorporated as appropriate. Supporting each recommendation are implementation strategies as well as a suggested timeframe and entity responsible for implementation.



This plan presents a set of strategies that, once implemented, will result in a place that is uniquely Devine.

1 General Recommendations

1.1 Adopt the Plan

*Responsibility: City of Columbia Planning & Development
Timeframe: Immediate*

Adopt the Devine Street/Fort Jackson Commercial Node Plan, allowing it to serve as the framework to guide land use decision for the area and set the state for commencing improvements in the area. The plan should be updated every five years to maintain its relevancy and allow for flexibility given changing market conditions and City and community priorities.

1.2 Create a Devine Street/Fort Jackson Boulevard Working Group

*Responsibility: City of Columbia Planning & Development
Timeframe: Immediate*

Create a working group of city staff, key stakeholders and engaged citizens responsible for 1) coordination and prioritization of plan efforts 2) identification of funding opportunities 3) project outreach, education and advocacy efforts.

1.3 Modify Zoning

*Responsibility: City of Columbia Planning Department
Timeframe: Short-term*

In rewriting the zoning ordinance, ensure existing and new districts reinforce the uses and character of place envisioned in the Devine Street/Fort Jackson Boulevard Commercial Node Plan.

1.3.1 Consider a form-based code as a flexible alternative to conventional zoning.

The following are good examples of form-based codes that have resulted in quality development from communities across the United States:

- Beaufort, SC Redevelopment District Overlay:
<http://www.cityofbeaufort.org/Data/Sites/1/media/Departments/planning/udo-version-september-14,-2012-rev.pdf>
- Montgomery, AL SmartCode:
<http://www.cityofbeaufort.org/Data/Sites/1/media/>

[Departments/planning/udo-version-september-14,-2012-rev.pdf](#)

- Downtown Wyandanch and Straight Path Form-Based Code:
http://www.formbasedcodes.org/files/driehaus/DowntownWyandanchStraightPathCorridor_FBC.pdf
- Bradenton, FL Form Based Code:
http://www.formbasedcodes.org/files/driehaus/BradentonFormBasedCode_reduced.pdf

1.3.2 Consider a mixed-use district that promotes a mixture of commercial, institutional and residential uses to encourage pedestrian-oriented development and quality community design.

Promote commercial or retail on the ground floor with a complementing set of uses, residential and/or office, on upper floors. The vertical mixture of residential and non-residential uses can provide the added benefit of extending

the hours of activity in an area making it more vibrant; non-residential activity during the day is replaced by residential activity in the evenings and on weekends. In addition, the total parking required for all uses can be reduced; spaces serving nonresidential uses during the day could serve residential uses outside of business hours.

- Model Mixed-Use Zoning District
<http://www.planning.org/research/smartgrowth/pdf/section41.pdf>
- Overland Park Mixed Use Design Standards
http://toolkit.valleyblueprint.org/sites/default/files/06/overland-park-mu-design-standards_2009.pdf.pdf

1.4 Streamline the entitlement process to reduce carrying costs for development projects that meet project goals.

Responsibility: City of Columbia Planning Department
Timeframe: Mid-Term

Consider the following methods to streamline entitlements within the node:

- **Accelerated Entitlement.** Accelerated entitlement is useful with rezoning, site plan approval, and permitting. Streamlining entitlement can help reduce carrying costs with a quicker approval process. It can also lower attorney fees.
- **Flexible Entitlement.** Flexible entitlement allows developers to accommodate unique physical attributes of specific

sites through a case-specific approval process. This is particularly beneficial for infill projects with significant environmental constraints.

1.5 In partnership with the County, evaluate the possibility of annexing the properties in the County's jurisdiction into the City.

Responsibility: City of Columbia, Richland County
Timeframe: Short-term

2 Land Use Recommendations

2.1. Encourage additional residential development, particularly redevelopment of existing multifamily, which will increase the residential population in the node.

Responsibility: City of Columbia Planning Department
Timeframe: Short-term

- 2.1.1 Consider density bonuses to incentivize higher density development.
- 2.1.2 Allow and promote a mixture of housing types attainable to workers in a broad spectrum of incomes.

Permitting higher densities than what is allowed under by-right zoning can be helpful in attracting development that is consistent with desired planning principles of a jurisdiction. Density bonuses have successfully been used to incentivize infill or redevelopment opportunities.

2.2. Boost investor confidence in the area to attract non-residential development.

Responsibility: City of Columbia Planning Department, City Council, City Manager's Office

Timeframe: Mid-term

- 2.2.1. Consider community development districts or municipal improvement districts.

These districts are defined geographies where parcels are assessed for a service to improve or maintain the area. Landscape maintenance and security are two examples of such services. To pay for the services, a special assessment tax can be levied in relation to the benefit a property receives from a defined service and/or the size of the parcel. A demonstrated commitment from existing property owners to fund such extra services often boosts potential investors' confidence in investing in the area.

2.3 Define and participate in catalyst projects that will continue the momentum that has been built recently with private investment.

Responsibility: City of Columbia Planning Department, Others

Timeframe: Mid-term

Public investment in projects that are typically carried out by private developers may be delayed or never realized without the participation of the public sector. Public-private partnerships that overcome barriers to development can expedite desirable development in the node.

2.3.1. Identify key redevelopment project(s) that have the potential to transform a subarea of the node and stimulate additional investment.

2.3.2 Assemble and acquire key parcels, as needed, to create a development/redevelopment opportunity.

2.3.3 Issue a developer request for proposals (RFP) to partner with the private sector in the development/redevelopment.

2.3.3.1. Define the specific requirements for development as conditions for the partnership.

2.3.3.2. Offer public participation in the project in the form of site-related assistance.

Local governments can assist with development by participating in or taking the lead on a range of development activities pertaining to the site development. The following could be considered as possible responsibilities of the City in partnering with a developer and should be specified in the RFP:

- Donate site (whole or in part) to the developer
- Purchase and demolish existing structures
- Commission environmental reports
- Pay for environmental remediation
- Initiate preliminary design drawings and site planning

- Fund initial site preparation work, such as grading
- Extend or upgrade utilities

2.4 Incentivize new development, including mixed-use development projects.

Responsibility: City of Columbia Planning Department, Others
Timeframe: Mid-term

- **Tax Increment Financing (TIF).** Under South Carolina statutes, municipalities and counties can create TIF districts. Unlike other financing methods, consent of existing property owners is not necessary in the creation of a TIF. Once an improvement is identified, the base property value is determined. Public and private investments will increase the value of the property over the base. Taxes are then levied on the new increment, and used to pay debt service for the bonded improvements.
- **Infrastructure Grant.** Infrastructure grants are project-specific, and can be underwritten by either local or state governments. The amount of the grant is directly related to the capital investment. The cost recovery schedule is based on property taxes. This implementation strategy is common for:
 - » Curb and gutter
 - » Sidewalks
 - » Underground utilities
 - » Signalization

- **General Obligation Bonds.** General Obligation Bonds are municipal bonds with fixed interest rates and terms. These bonds can be used for a variety of improvements, and typically offer a lower interest rate than would be available privately.

- **Revenue Bonds.** Revenue Bonds use fees from services to repay debt. Common forms of Revenue Bonds are for water/sewer improvements, airports, and toll roads.

- **Low Interest Loans.** Low interest loans are underwritten by a public entity to provide debt for specific projects. These loans typically offer lower interest rates than would be available in the private market.

2.5 Rehabilitate and reuse existing buildings for new uses along Devine Street.

Responsibility: City of Columbia Planning Department, Others
Timeframe: Mid-term

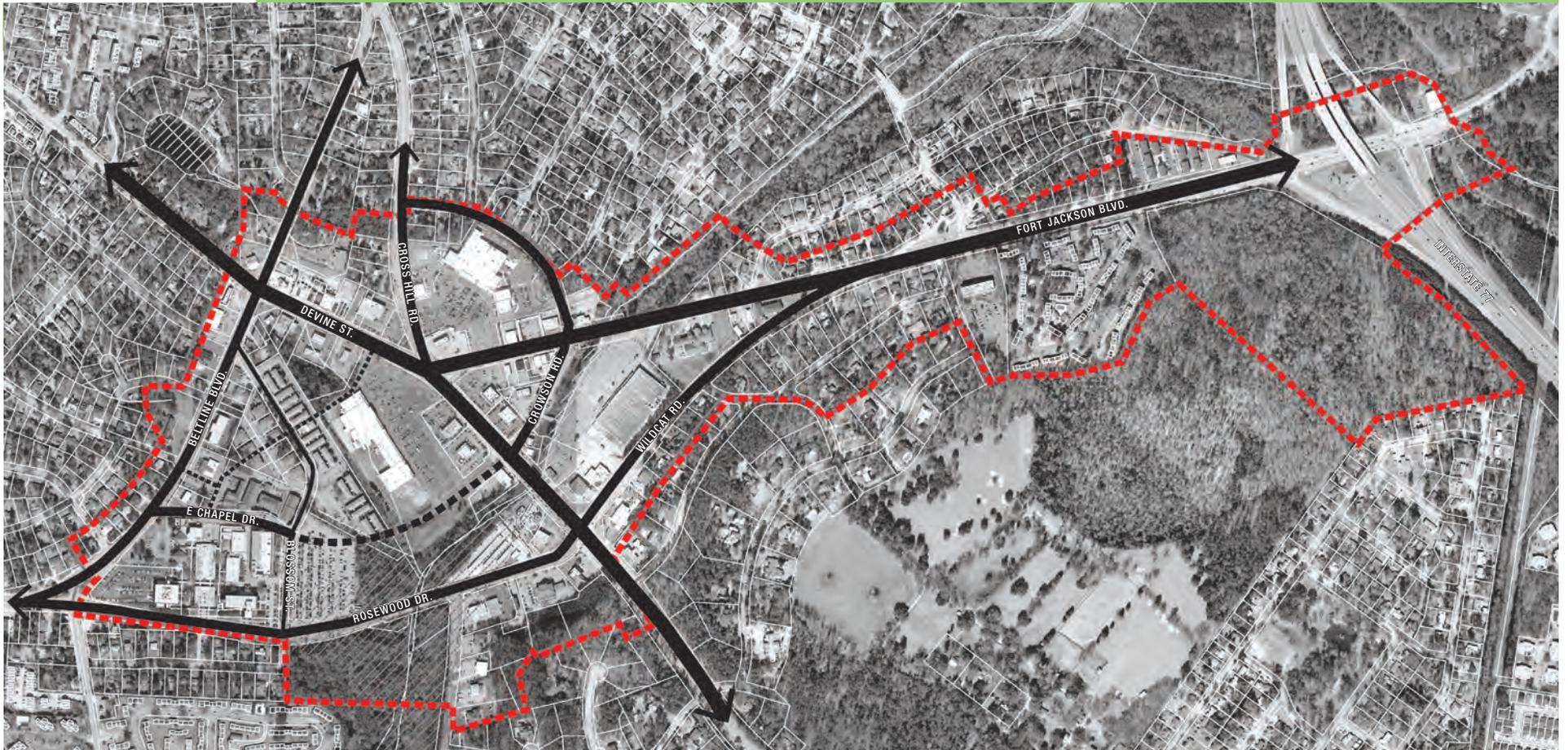
2.5.1 Promote the rehabilitation of the front facades of businesses (including updated signage and window treatments).

2.5.1.1 Expand and fund the Façade Improvement Program to include additional commercial areas such as the Devine Street/Fort Jackson Boulevard Commercial Node.

2.5.1.2 Create a business signage program for businesses to have easy access to signage design standards and manufacturers.

Proposed
Road
Network
Map

- Study Area Boundary
- Existing Roads
- Proposed Roads



3 Mobility Recommendations

3.1 Increase connectivity in the node with street connections, both public and private, that improve access for vehicular, bicycle and pedestrian traffic.

Responsibility: City of Columbia, SCDOT

Timeframe: Mid-term

The existing road network can be extended in a few key locations to ensure local traffic can circulate between uses without adding to congestion on the major arterials. For example, extending Crowson Road through the BiLo shopping center site and connecting to the existing streets that flank the MTC campus will provide a connection that, based on foot traffic today, appears to be a desired link. A new street in this location would provide a public edge to the future Gills Creek greenway, making this future amenity more accessible.

3.2 Consider road diets on all streets with four or more lanes with traffic volumes that can be handled with less than four lanes.

Responsibility: City of Columbia, SCDOT

Timeframe: Mid-term

A road diet reduces the amount of space for motor vehicles, either through eliminating lanes or shrinking the width of lanes. The reclaimed space from a road diet is then re-allocated for other uses, such as turn lanes, bus lanes, pedestrian refuge islands, bike lanes, or more sidewalk space. Road diets typically involve converting a four- or five-lane roadway into three-lane street. There are a number of different situations where a road diet is appropriate. The additional space gained from a road diet can be used for a variety of other uses, such as sidewalks, refuge islands, bus shelters, bike lanes, or landscaping. Potential locations include:

- Crowson Road between Devine Street and Fort Jackson Boulevard
- Devine Street between Cross Hill Road and Beltline Boulevard
- Fort Jackson Boulevard between Devine Street and Kilbourne Road
- Beltline Boulevard between Rosewood Drive and Devine Street
- New road alignments

4.2.1 Study each potential location.

4.2.1.1 Conduct vehicular capacity analyses to understand the effect of road diets on not only the street segment identified, but also the adjacent roadways.

4.2.2 Define specific improvements for the road segments with excess capacity.

3.3 Where adequate dimension exists, install raised medians on Devine Street to improve safety along that corridor.

Responsibility: City of Columbia, SCDOT

Timeframe: Short-term

Raised medians can be used on urban streets where it is desirable to improve traffic safety along a corridor while increasing throughput capacity and reducing delays by controlling or restricting mid-block left turns and crossing maneuvers. Locations for Raised Medians:

- Devine Street between Beltline Boulevard and Cross Hill Road
- Devine Street between Fort Jackson Boulevard and Crowson Street

- Devine Street between Crowson Street and Rosewood Drive

The incorporation of raised medians within Devine Street provides an opportunity to include pedestrian refuge islands at intersection and mid-block crosswalks along Devine Street. Pedestrian refuge islands should be considered when pedestrians are required to cross multiple lanes in each direction and/or where insufficient gaps in traffic make pedestrian crossings difficult.

3.4 Consider bump-outs to improve safety along certain sections of Devine Street, Fort Jackson Boulevard and Beltline Boulevard.

Responsibility: City of Columbia, SCDOT

Timeframe: Short-term

Bump-outs (also known as curb extensions or bulb-outs) extend the sidewalk into an on-street parking area. Bump-outs can reduce the distance that pedestrians must walk in the street when crossing, improve visibility between motorists and pedestrians, and create more space for transit riders waiting for the bus. At intersections, they also reduce turning radii which reduces vehicle turning speeds and eliminate illegal parking in the corner clearance zone.

Bump-outs are appropriate on wide streets and areas with large populations of children and seniors. Bump-outs should also be considered in areas with large volumes of pedestrians or in areas with narrow sidewalks. Bicycle mobility should be considered in the placement of bump-outs. Possible locations:

- Devine Street between Cross Hill Road and Beltline Boulevard
- Fort Jackson Boulevard between Devine Street and Kilbourne Road
- Beltline Boulevard between Rosewood Drive and Devine Street

- Devine Street/Fort Jackson Boulevard/Cross Hill Road intersection.

Note: Extending the sidewalk into the roadway for a bump-out can be costly due to changes to the curbs and drainage. “Floating” bump-outs can be constructed by creating a pedestrian refuge area between the sidewalk and travel lane. These bump-outs do not affect the existing drainage and need to be wide enough to provide safe refuge for pedestrians. Bump-outs can also be created using a combination of striping, bollards, and planters. These are much less expensive but do not provide as much protection for pedestrians; however they do provide a good mechanism to test performance before investing in a permanent solution.

3.5 Consider roundabouts where the benefit of reducing vehicle speeds while maintaining traffic flow through an intersection outweighs the impacts to pedestrian accessibility and connectivity.

Responsibility: City of Columbia, SCDOT
Timeframe: Long-term

Roundabouts are circular intersections where vehicles travel in a counter-clockwise direction and entering vehicles must yield to circulating vehicles. This treatment forces vehicles to slow down when going through an intersection but not necessarily come to a complete stop, thereby reducing the delays of a signalized intersection. Roundabouts also improve the safety at an intersection by minimizing the potential conflict points between vehicles. Possible locations:

- Between the apartments and Midlands Technical College (Note: This may take the form of neighborhood traffic circles as opposed to a full-sized roundabout.)

3.6 Study additional intersection configurations to improve the safety of the Devine Street/Fort Jackson Boulevard/Cross Hill Road intersection.

Responsibility: City of Columbia, SCDOT
Timeframe: Long-term

Fort Jackson Boulevard and Cross Hill Road intersect Devine Street at acute angles and come together at a single point. It is clear from public comments, and on site observation it is necessary to make this intersection easier for pedestrians to cross. One of the next steps for implementation for this area is to conduct a study to determine the potential improvements and their detailed effects on the intersection. The study should take into consideration the following, weighing the benefits of safety against the loss of efficiency in moving vehicular traffic:

- Removing the channelized right turn lanes
- Reducing turning radii
- Prohibiting turns at the intersection
- Providing crosswalks for all movements

To determine if a roundabout is a viable solution for this intersection, it will be necessary to assess the right of way (ROW) required. If ROW is sufficient or not excessive in cost, the roundabout will be need to be designed to ensure that traffic flow would be sufficiently balanced so that vehicles from each of the roadways have

ample opportunities to enter the roundabout. This same principle will also apply for pedestrians to cross each roadway leg.

3.7 Improve basic signage and signalization within the node.

Responsibility: City of Columbia
Timeframe: Short-term

Ensure each lane has clearly marked traffic signals and its own dedicated traffic signal. Utilize reflectorized back plate for each traffic signal head to improve visibility of traffic signal during daylight and nighttime hours.

Note: Signalization recommendations that improve pedestrian safety are detailed in the Pedestrian Recommendations.

3.8 Install speed feedback signs at locations where speeding occurs frequently and in locations with high populations of vulnerable users, such as around schools, parks, or community centers.

Responsibility: City of Columbia
Timeframe: Short-term

Speed feedback signs display passing vehicle speeds. These signs have been shown to increase driver compliance with the posted speed limit. Locations to consider are:

- Rosewood Drive between Beltline Boulevard and Devine Street
- Cross Hill Road
- Beltline Boulevard

3.9 Study the need for bicycle facilities within or along the roads that pass through the study area.

Responsibility: City of Columbia

Timeframe: Short-term

With an understanding of the origins and destinations (O/D) between which bicycle travel exists or is likely (with appropriate accommodations), the street segments that require improvements to meet demand can be identified.

3.9.1 Conduct an O/D study.

3.9.2 Based on the results of the study, define specific improvements to be made.

The range of improvements could include the following:

- Dedicate bike lanes along major corridors through the study area. Bike lanes are lanes along the shoulder of the road demarcated for use by cyclists. Locations may include:
 - » Fort Jackson Boulevard
 - » Beltline Boulevard
 - » Crowson Street, if space permits
- Bike boulevards in residential, low speed local streets. Bike boulevards, are designated streets where bike lanes have priority over cars. Bike boulevards are typically implemented in residential areas on low speed local streets. Locations may include:
 - » Blossom Street west of Beltline Boulevard

- Shared lane markings (SRMs) or Sharrows in areas where there is not sufficient width for a dedicated bike lane. Shared Lane Markings (SRMs) or Sharrows are signs painted on a street that alert car drivers to be on the lookout for cyclists in an area, like along Sumter Street on U.S.C.'s campus. Sharrows are used when there is not sufficient width for a dedicated bike lane. Sharrows also inform cyclists of the proper direction of travel and location within the lane to ride. By riding three feet or more to the left of parked cars, bicyclists can avoid collisions with opening car doors. Motor vehicle speeds should be less than 35 MPH. Locations may include:
 - » Crowson Street, if space does not allow bike lanes
 - » Blossom Street

3.10 With the incorporation of bicycle facilities, clearly indicate the corridor as a bike boulevard with bicycle route signage or pavement markings to designate route, restricted vehicle movement, limited bicycle stop signs and one-way vehicle movements.

Responsibility: City of Columbia, SCDOT

Timeframe: Mid-term

3.11 Provide bicycle parking/bike corrals.

Responsibility: City of Columbia Partners

Timeframe: Short-term

Bicycle parking should be provided and should be as close as possible to the primary customer entrance or front door of the destination it serves.

3.12 Update off-street parking requirements for multi-family and nonresidential development to include bicycle parking requirements.

Responsibility: City of Columbia

Timeframe: Short-term

The requirements for bicycle parking should address the following:

- Location, relative to:
 - » primary customer entrance or front door
 - » visibility (for safety)
 - » visibility (for accessibility)
 - » protection for inclement weather
 - » separation from automobile traffic
- Number of spaces, which can be a percentage of the total off-street parking required for that use.
- Lighting.
- Identification with signs.

3.13 Encourage connections (i.e., streets, sidewalks, greenways, etc.) to adjacent neighborhoods to bring traffic—and potential customers—to the node.

Responsibility: City of Columbia Planning Department, SCDOT

Timeframe: Short-term

Proposed
Pedestrian
Mobility
Map

- Study Area Boundary
- Proposed Gills Creek Greenway
- Palmetto Trail
- Major Pedestrian Path
- Minor Pedestrian Path
- Enhanced Pedestrian Crossing
- Improved Pedestrian Crossing



3.14 Provide safe crosswalks at all intersections and mid-block crossing areas.

Responsibility: City of Columbia, SCDOT

Timeframe: Short-term

3.14.1 Provide well-marked and lit crosswalks.

3.14.1.1 To ensure high visibility among all roadway users, utilize the Continental style, also known as Longitudinal or Zebra Stripe, for marked crosswalks. All crosswalk areas should be lit so that pedestrians are visible to drivers.

3.14.1.2 Other styles of crosswalks such as brick or other decorative styles can be provided in areas with a speed limit of 25 MPH or less and in areas with low traffic flow.

3.14.2 With crosswalks, particularly unsignalized or mid-block locations, consider installing additional pedestrian safety tools.

3.14.2.1 Install signs, particularly in-road “State Law Stop for Pedestrians” signs.

State law requires that vehicles must stop for pedestrians who are in a crosswalk. In-road “State Law Stop for Pedestrians” signs are a supplemental feature to remind drivers of this law. In-road “State Law Stop for Pedestrians” should be installed at the crosswalk location in the centerline, median, refuge island, or lane line.

3.14.2.2 Install pedestrian refuge islands where sufficient dimension is available.

A pedestrian refuge island is a protected area that allows pedestrians to cross one direction of traffic at a time. This makes finding gaps in traffic easier on

two-way streets. Refuge islands differ from medians in that they are not necessarily continuous; they may be provided only at the crossing location.

Pedestrian refuge islands should be at least six feet wide to provide proper protection for pedestrians. Crosswalks and accessible ramps or cut-through areas must be provided at the refuge islands. Truncated domes detectable warning surface areas must also be installed to allow pedestrians who are visually impaired to detect the edges of the refuge island. Pedestrian refuge islands can be designed with an angled path through the island so pedestrians are able to see oncoming traffic prior to crossing.

3.14.2.3 Install bump-outs.

Bump-outs (also known as curb extensions or bulb-outs) extend the sidewalk into an on-street parking area. Bump-outs can reduce the distance that pedestrians must walk in the street when crossing, and improve visibility between motorists and pedestrians. Refer to recommendation 2.1.3 for more detailed information about bump-outs.

3.14.3 Install ADA-compliant ramps and truncated dome detectable warning surface areas to allow pedestrians who are visually impaired to detect the crosswalk.

8.2.4 Crosswalks should be well lit, preferably with pedestrian level lighting.

3.15 Improve pedestrian and bicycle mobility and safety at the I-77/Fort Jackson Boulevard interchange.

Responsibility: City of Columbia, SCDOT

Timeframe: Short-term

I-77 separates Fort Jackson from the east side of the city. Many pedestrians and bicyclists must cross the on-ramps and off-ramps of I-77 on a daily basis to reach their destinations. Designed with only vehicular traffic in mind, these entrances and exits are often very difficult for cyclists and pedestrians to access the military base and commercial destinations of the Devine Street area.

3.15.1 Consider crosswalks, signage and refuge islands to facilitate safer pedestrian and bicycle mobility through the interchange area.

3.16 Install pedestrian crossing signals at all intersections and major midblock crossings.

There are a variety of signal treatments to consider including the following:

Responsibility: City of Columbia, SCDOT

Timeframe: Short-term

- **Traffic signals with pedestrian signal heads.** All new pedestrian signal heads should be of the countdown timer variety, which allows the pedestrian to see how much time remains to cross the street at the crosswalk. The installation of these signal heads should be prioritized for intersections meeting pedestrian signal warrants in the SCDOT Traffic Signal Guidelines.

To encourage pedestrian crossings during business hours, it may be more feasible to operate the signal cycle in a pre-timed or recalled mode, providing sufficient time for pedestrian crossings during each cycle. Pedestrian signal heads may be installed under these conditions, without pushbuttons, for the phase that is always on recall or for pre-timed operation. If regular pedestrian crossings are not

anticipated, push buttons should be included. If pedestrian push buttons are used, there should be both an audible and visual indication to inform the pedestrian that the signal has been activated. If push buttons are used, they should be post mounted to the right of the ramp at the height of wheelchair users.

- **A Pedestrian Hybrid Beacon (PHB).** This type of signal differs from a traditional traffic signal in that it remains dark unless a pedestrian activates it. It stops traffic with a unique configuration – two red lights over a single yellow light. Much like a signalized intersection, when the indication is solid red, vehicles must stop so that pedestrians can safely cross the roadway.

When a pedestrian pushes the button, approaching drivers will see a flashing yellow light for a few seconds, followed by a solid yellow light, indicating that motorists should reduce speed and be prepared to stop. This is followed by double solid red lights, requiring drivers to stop followed by double flashing red lights. Following the flashing red, the beacon will then go dark, allowing vehicles to proceed until the beacon is activated again by a pedestrian. This device can be used at unsignalized or midblock crossings not meeting full signal warrants.

- **Rectangular Rapid Flash Beacons (RRFB).** These type of signals can be used as a warning device at unsignalized or midblock crossings. Pedestrians push a button to activate rapid flashing yellow LED lights to alert drivers to stop. RRFBs are a potential solution in locations where a traffic signal or a PHB is not warranted.

RRFBs can be installed for a pedestrian crossing if there are high pedestrian volumes, a history of pedestrian crashes, not enough gaps in traffic to cross the street, or the roadway width makes it difficult for pedestrians to safely cross. They are usually solar powered signs and have push buttons. The flashing beacons should be activated for the duration of the pedestrians crossing time.

- **Accessible Pedestrian Signal (APS).** An APS is a traffic signal that provides auditory and/or vibrotactile information to pedestrians who are blind or have low vision. An APS should be installed where there is a need to provide additional crossing information. An APS should be considered at signalized crossings when requested by one or more individuals or where the geometry or signal phasing makes pedestrian crossing locations difficult to identify for pedestrians who are blind or have low vision.

An APS requires push buttons and speakers to provide auditory feedback. The Manual on Uniform Traffic Control Devices (MUTCD) provides guidance on the appropriate location of the devices. These are installed with the traffic signal infrastructure. South Carolina DOT will study requests for these special signals and install them if practical.

- **Leading Pedestrian Intervals (LPI).** A LPI gives pedestrians a head start into an intersection before vehicles. The WALK signal is turned on approximately three seconds before vehicles are given a green signal. Pedestrians can begin to cross the intersection but vehicles are still stopped.

LPIs are installed by re-timing a traffic signal. Right turns on red should be prohibited wherever leading pedestrian intervals are installed, with exceptions only in cases when there would be adverse pedestrian safety or traffic impacts. Accessible pedestrian signals should be considered at locations with LPIs to provide information to pedestrians who are blind or have low vision.

- **Lagging Left Turn.** A Lagging Left Turn is a signal timing in which the left-turn arrow is given after vehicles traveling straight have passed through the intersection. By allowing pedestrians to cross the intersection at the beginning of a signal cycle, conflicts between pedestrians and vehicles turning left are reduced and delays to vehicular operations can be reduced.

Lagging left turns should be considered at intersections with protected left-turn phases with high pedestrian volumes, pedestrians crossing during the left-turn phase or intersections with leading pedestrian intervals.

A traffic signal will need to be re-timed so that the protected left-turn phase occurs after the permitted phase for through traffic. An analysis must be conducted to ensure that changing a left-turn phase to lagging will not negatively affect the operations of the intersection.

3.17 Initiate a study to collect and document existing transit service data to understand existing and potential gaps in the system and define future needs.

Responsibility: Central Midlands Regional Transit (CMRT)
Timeframe: Short-term

3.17.1 As part of the study, create a GIS data set of existing and proposed transit service routes and bus stop locations.

3.18 Improve pedestrian/bicycle connectivity to transit.

Responsibility: City of Columbia Planning Department, CMRT
Timeframe: Mid-term

3.18.1 Serve all transit stops with sidewalks that connect to surrounding neighborhoods and commercial development.

3.18.2 Provide bus shelters where possible.

3.18.2.1 At existing bus stops, work with adjacent property owners to define areas suitable for installation of bus shelters and modify sidewalks, parking areas, landscaping and other features to accommodate each shelter.

3.18.2.2 As development and redevelopment occurs, ensure site plans take into consideration existing and planned bus stops and provide adequate space for the installation of shelters and access to them.

3.18.3 Where stops are located mid-block on roads with four or more lanes, consider providing mid-block crosswalks and pedestrian refuge islands.

3.19 Conduct a parking study, or studies, as needed.

Responsibility: City of Columbia Planning Department,
Timeframe: Short-term

A parking study may be needed to determine the net effect of any roadway improvements (including streetscape) on parking availability and define options for mitigating impacts to existing parking supply.

3.19.1 Prepare an inventory of existing on- and off-street parking in the study area.

3.19.2 In conjunction with planned roadway and/or streetscape improvements, determine the potential displacement of existing parking supply and, working with affected property owners, determine options for replacing lost parking within a reasonable distance of the uses the parking serves.

3.20 Promote the use of on-street parking in appropriate areas, and allow on-street parking to be counted toward meeting parking requirements.

Responsibility: City of Columbia Planning Department,
Timeframe: Short-term

3.21 Consider modifying parking requirements for development in the node to take into account use of alternative modes (i.e., transit, pedestrian, and bicycle).

Responsibility: City of Columbia Planning Department,
Timeframe: Short-term

3.22 Promote the use of shared parking between commercial uses to reduce the amount of land devoted to surface parking in the node.

Responsibility: City of Columbia Planning Department,
Timeframe: Short-term

3.22.1 Ensure that any shared parking agreement or cross-access easement is recorded with the City to avoid tenant disputes.

3.23 Set standards for bicycle parking within parking lots.

Responsibility: City of Columbia Planning Department,
Timeframe: Short-term

Bicycle parking should be provided and should be as close as possible to the primary customer entrance or front door of the destination it serves. See recommendation 3.11 for more detailed information about bicycle parking requirements.

3.24 Set standards to ensure safe pedestrian circulation in parking lots.

Responsibility: City of Columbia Planning Department,
Timeframe: Short-term

Minimizing conflicts between drivers and pedestrians shall be a guiding principle of parking lot design. Standards should be set governing pedestrian movement in large parking lots. Encourage the use of sidewalks or walkways separated from vehicular traffic that funnel pedestrians safely to building entrances.

Parking spaces should be oriented at 90 degrees to the traffic aisle to allow two-way movements, thereby reducing the need for vehicles to drive between building entrances and the parking aisles.

4 General Urban Design & Placemaking Recommendations

4.1 Create a center of activity that functions as a gathering place for the community.

Responsibility: City of Columbia, Other Partners

Timeframe: Long-term

4.2 In keeping with the character of the node as envisioned in the plan, consider design standards in the zoning ordinance that achieve the following:

- Buildings close to the street (ideally 15 to 25 feet from right-of-way) to create a strong physical presence and better define the public realm and streetscape.
- Compact, pedestrian-friendly, mixed-use development that enables daily activities to be conducted without need for an automobile.
- Outdoor seating and dining areas in conjunction with retail uses and restaurants.
- Connectivity between commercial development and adjacent neighborhoods, present and future.
- Public spaces, such as plazas, parks, and courtyards appropriate in type, proximity, and scale, to complement residential and commercial development.
- New buildings appropriately proportioned and seamlessly linked to their surroundings, including streets and neighboring properties.
- Encourage four-sided architectural design for building facades that are compatible with neighboring development.
- Flexibility in street furnishings, displays, and plantings to add variety to the streetscape, encourage artistic expres-



sion, particularly that which reinforces to the unique character.

4.3 Improve the visual quality of all the major corridors into the node.

Responsibility: City of Columbia

Timeframe: Short-term

4.3.1 Improve the streetscape.

4.3.1.1 Initiate a streetscape study to improve the scale and aesthetic quality of the area.

The study should focus on Devine Street, Fort Jackson Boulevard, Cross Hill Road, and Beltline Boulevard to define a planting and lighting scheme that will make the area more attractive and more cohesive. Streetscape improvements should be considered in conjunction with possible roadway

improvements, particularly road diets that create opportunities for additional sidewalk width.

4.3.1.2 With streetscape and/or utility upgrade projects encourage efforts to place all public utility services underground or behind buildings.

4.3.1.3 Work with SCDOT to extend landscaped medians along Fort Jackson Boulevard, Cross Hill Road, Devine Street, Rosewood and Beltline Boulevard.

Engage local groups, such as Columbia Green, to maintain landscaped medians along these corridors.

4.3.2 Encourage better architectural quality.

4.3.2.1 In new construction, encourage architectural design that enhances the pedestrian environment with articulation (façade treatments and transparent windows) that adds to the interest of the streetscape.

4.3.2.2 Promote the rehabilitation of the front facades of businesses (including updated signage and window treatments).

Refer to recommendation 3.4.1 for more information about facilitating such improvements.

4.4 Create a sense of arrival into the City with a gateway that is uniquely Columbia.

Responsibility: City of Columbia

Timeframe: Short-term

4.4.1 Transform the intersection of Devine Street and Beltline Boulevard.

Develop and implement a plan that through appropriate combination of signage, art and landscape within the reserved right-of-way at the intersection of Devine Street and Beltline Boulevard to create a gateway that is unique to the area.

4.5 Seek opportunities to enhance the character of the node.

Responsibility: City of Columbia, Other Partners

Timeframe: Mid-term

4.5.1 Encourage public art throughout the node to help activate and provide interest for the pedestrian.

Murals, sidewalk enhancements, sculptures are all examples of art that should be used to celebrate the character and diversity of Columbia. Art that is approachable and interactive helps to activate the streetscape and public spaces.

4.5.1.1 Develop and implement a plan for public art.

The plan should define a range of opportunities for public art in terms of appropriate locations guide the placement and themes that emphasize the area's unique character and history. The plan should also address strategies for implementation as well as funding.

4.5.2 Design bus shelters to reinforce the character of the area.

11.5.2.1 As new shelters are needed, partner with local artists to design (and build) bus shelters.

This could include sponsoring a competition for bus shelter design. Like public art, the designs can be influenced by themes that emphasize the area's unique character and history.

4.6 Help the area become a more vibrant, "24/7" environment where businesses can thrive.

Responsibility: City of Columbia, Other Partners

Timeframe: Long-term

4.6.1 Sponsor programs and events that bring residents and visitors alike into the node.

11.6.2 Allow for outdoor entertainment with limits on locations and hours.

11.6.3 Modify any regulations that would prohibit vendor carts or pop-up retail in appropriate destinations on these streets.

4.7 Recognize that Midlands Technical College (MTC) is an important institution of higher learning within the node and that the students, staff and faculty provide a customer base to area establishments which is currently not fully realized.

Responsibility: City of Columbia, Midland Tech

Timeframe: Mid-term

4.7.1 Encourage design on and off campus that allows adjacent development to function as a seamless extension of the campus.

The opportunity to improve the interface between the campus and its surroundings may surface with redevelopment and other investments—public or private—in adjacent properties.

4.7.1.1 Convene a working group with MTC representatives to discuss items for continued collaboration, which may include a long range plan for coordinated improvements to the campus and the surrounding area.

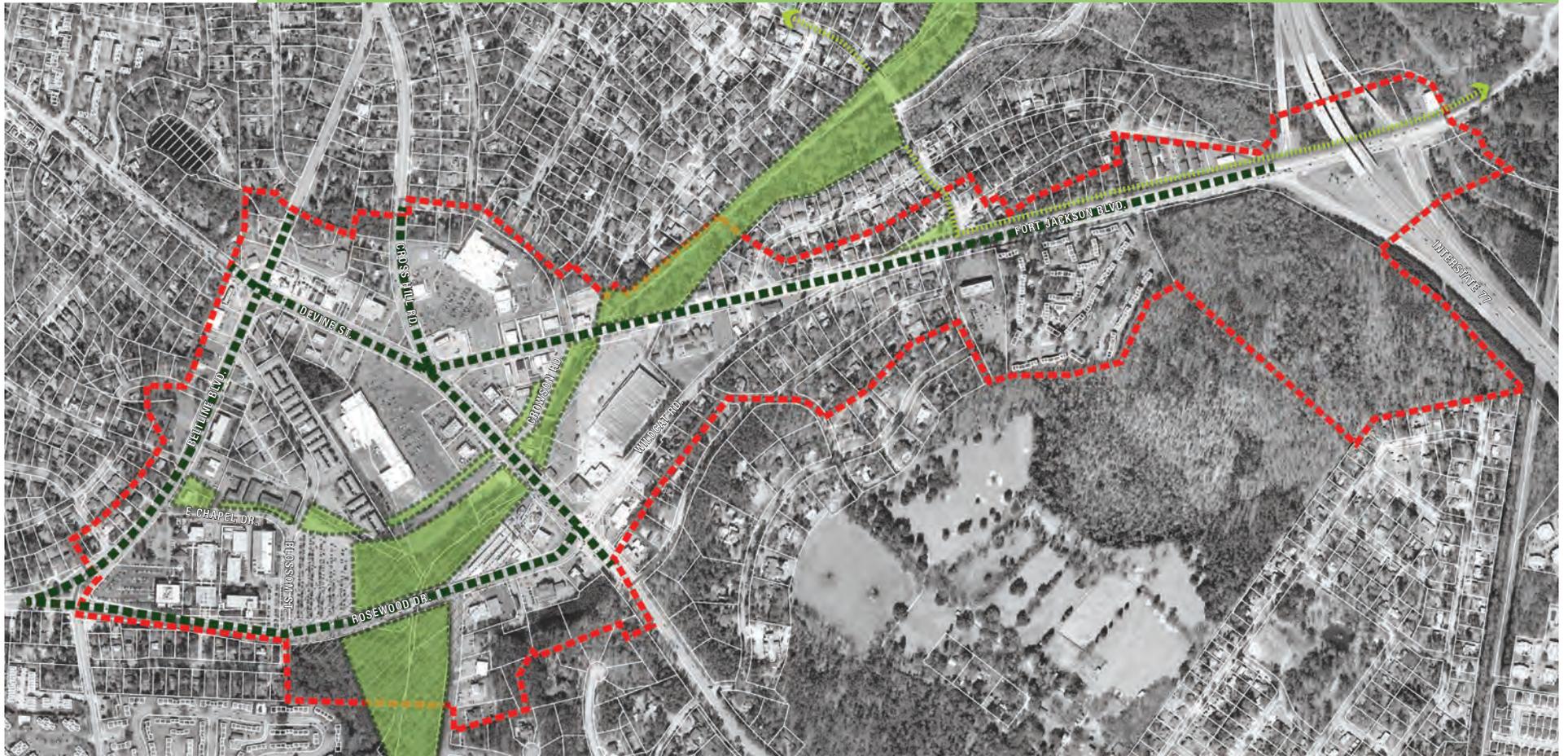
4.7.2 Coordinate MTC expansion and parking needs with the City of Columbia and neighboring retail centers.

4.7.3 Collaborate with MTC to create and improve safe pedestrian connections through the campus to create connections between existing neighborhoods and commercial destinations.

4.7.4 Work with MTC to program outdoor events along the Gills Creek corridor, once a greenway is in place, where it borders the campus.

Proposed
**Open
Spaces**
Map

- ■ ■ ■ ■ Study Area Boundary
- ■ ■ ■ ■ Green Space
- ■ ■ ■ ■ Palmetto Trail
- ■ ■ ■ ■ Enhanced Streetscape



5 Open Spaces Recommendations

5.1 Build awareness of the larger opportunity of Gills Creek in the system of greenways and blueways in the greater Columbia region.

*Responsibility: Gills Creek Watershed Association,
Richland County Conservation Commission,
City of Columbia Planning Department*

Timeframe: Short-term

Gills Creek is one portion of a much larger system of greenways and blueways in the Columbia region. Working with partners, such as the Gills Creek Watershed Association, the City should work to build awareness of the region's natural assets and ensure that existing features are well-connected and accessible.

5.1.1 Work with County Departments (Conservation Commission, Parks and Recreation Commission, Planning Commission) to initiate a city/county greenway master plan.

5.1.2 Through marketing, build support for a linked system of trails with destinations, including the Devine Street/Fort Jackson Boulevard Node.

5.2 Promote environmental benefits of improving the Gills Creek corridor.

*Responsibility: Gills Creek Watershed Association,
Richland County Conservation Commission,
City of Columbia Planning Department*

Timeframe: Short-term

5.2.1 Facilitate environmental education and encourage stewardship.

5.2.1.1 Work with the Watershed Association to implement an educational signage program through the corridor.

Working with the Gills Creek Watershed Association, the City should raise awareness of the unique ecological benefits of the creek in order to increase environmental stewardship. With a well-placed series of signs and interactive displays, visitors can explore the corridor learning about the native flora and fauna and stormwater management.

5.3 Embrace the Gills Creek corridor as a focal point, community amenity and economic development asset in the node.

*Responsibility: Gills Creek Watershed Association,
Richland County Conservation Commission,
City of Columbia Planning Department*

Timeframe: Short-term

5.3.1 Leverage the amenity to attract additional investment to the area, particularly along and fronting on the corridor.

5.3.1.1 Work with the owners of commercial properties along the corridor to develop the edges with in a manner that activates the public spaces of the corridor.

The BiLo site, for example, has ample room for infill development. By fronting the greenway with restaurant and retail spaces, a physical and visual connection to the greenway amenity can be strengthened, making the greenway more accessible and safer.

5.3.1.2 Identify the Crowson Road corridor as the centerpiece of the Gills Creek system.

The Crowson Road corridor provides a unique opportunity to redevelop as a centerpiece of the Gills Creek system. The streetscape along this section should be redesigned to make the most out the



public-private interface with wide walkways, parking, outdoor plazas, landscaping to frame views, access and private development facing the greenway. Such public investment should serve as a catalyst for redevelopment along that edge.

5.3.2 Work with MTC to front planned campus expansion along Gills Creek.

Tap into the opportunity to bring the greenway and creek to the college campus visually, aesthetically and as a means of transportation and geographical destination.

5.3.3 Consider alternative means of compliance with stream buffer requirements in the urban sections of the Gills Creek Greenway.

The City's Stormwater Quantity and Quality Control ordinance (Article II of Ordinance 2011-095) requires stream buffers for water quality protection. In accordance with the South Carolina DHEC Storm Water Management BMP Handbook incorporated into the ordinance by reference, such buffer zones, which are undisturbed areas of natural vegetation, are required to be at least 45 feet in width. To create edges along Gills Creek that maintain visual and physical access to Gills creek and allow for the incorporation of walkways and other features that enhance the enjoyment of this amenity, consider alternative means of compliance with the ordinance. The edges of the creek in the urban section (the segment of the creek between Fort Jackson Boulevard and Rosewood Extension) are currently developed. Lacking a vegetated buffer that meets the Stormwater Quantity and Quality Control ordinance standards and having impervious surfaces in close proximity to

the edges, these sites that adjoin the creek corridor direct some stormwater runoff into the creek with little vegetation to reduce the impacts of such runoff (i.e., filter pollutants and minimize soil erosion). They could be improved through redevelopment in a manner that meets the intent of the ordinance without compromising the reasonable use of sites for future redevelopment or interfering with the incorporation of a greenway and associated features. For example, grant a variance per Section 21-60 of the ordinance based on the following findings:

Where improvements to the edges:

- Are in the public interest, including advancing economic development objectives by stimulating private investment with the creation of an accessible amenity;
- Employ best management practices (i.e., enhanced vegetation on creek banks, use of rain gardens and level spreaders for infiltration of runoff and to slow the flow rate of runoff, or a reduction in existing impervious area); and
- Result in an improved condition relative to existing.
- A similar alternative means of compliance is being utilized successfully by Charlotte-Mecklenburg Stormwater Services to facilitate redevelopment in urbanized areas within Mecklenburg County, NC. On a case-by-case basis, the buffer requirement can be significantly reduced or waived. (<ftp://ftp1.co.mecklenburg.nc.us/WaterQuality/WQ%20Buffers/ApplicationforaWaterQualityBufferDisturbance.docx>)

12.3.4 Provide support for pop-up retail in existing commercial center parking lots until the adjacent sites redevelop.

5.4 Enhance the Gills Creek corridor for recreational activities.

Responsibility: Gills Creek Watershed Association, Richland County Conservation Commission, City of Columbia Planning Department

Timeframe: Short-term

5.4.1 Coordinate with state and federal agencies for the construction of a continuous greenway trail along the creek.

The implementation of a planned greenway trail will be subject to agency coordination and permitting, particularly where such trails require an underpass at road crossings. The separation of the trail from vehicular traffic will enhance this trail for walking, running, and biking.

5.4.2 Continue to work with Gills Creek Watershed Association to promote the use of the creek as a "blueway."

Though the creek is narrow and shallow, it is navigable and should be utilized for kayaking and canoeing. By providing put-in and take-out points, the creek can be more accessible for such activities.

5.4.3 Work with the property owners that adjoin the corridor to define public access areas.

The use of the corridor for a wide variety of activities is dependent upon the cooperation of adjacent property owners in improving accessibility. Public parking, sidewalks, and publicly accessible plazas and parks are among the improvements that can be provided in partnership with the adjacent property owners to create a welcoming environment along the corridor.

FOR MORE INFORMATION, PLEASE CONTACT:

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