

City Council Agenda

Agenda Of 1-22-2020

Documents:

[AGENDA OF 1-22-2020.PDF](#)

Item 3a

Documents:

[ITEM 3A - Z-10-2019 - REZONE UNIVERSITY RIDGE \(COUNTY SQUARE\).PDF](#)

*Questions on an agenda item? Contact Camilla Pitman, city clerk, at cpitman@greenvillesc.gov.
All media inquiries, please contact Leslie Fletcher, city public information officer, at lfletcher@greenvillesc.gov*



AGENDA

SPECIAL FORMAL MEETING OF CITY COUNCIL

CITY HALL, 206 S. MAIN STREET, COUNCIL CHAMBERS

Wednesday, January 22, 2020 - 5:30 p.m.

1. CALL TO ORDER Mayor Knox H. White
2. ROLL CALL
3. CITIZENS WISHING TO ADDRESS COUNCIL
4. NEW BUSINESS -- (Ordinances – First Reading)
 - a. Ordinance to rezone approximately 40 acres of real property located on University Ridge, Thurston Street, Howe Street, South Church Street, President Street, and Wakefield Street by creating the Greenville County Square Sub-District within the existing Haynie-Sirrine Planned Development District (Tax Max Numbers 0091010700100, 0091010700200, 0069000300300, 0069000300303, 0091010100100, 0091010200100, AND 0069000300301) (Z-10-2019)
(Presented by Interim Planning and Development Services Director Jay Graham)
(Roll Call)
5. ADJOURN



REQUEST FOR COUNCIL ACTION

City of Greenville, South Carolina

TO: Honorable Mayor and Members of City Council
FROM: John F. McDonough, City Manager

Agenda Item No.

3b

☒ Ordinance/First Reading ☐ Ordinance/Second & Final Reading ☐ Resolution/First & Final Reading ☐ Information Only

AGENDA DATE REQUESTED: 1/22/2019

ORDINANCE/RESOLUTION CAPTION:

ORDINANCE TO REZONE APPROXIMATELY 40 ACRES OF REAL PROPERTY LOCATED ON UNIVERSITY RIDGE, THURSTON STREET, HOWE STREET, SOUTH CHURCH STREET, PRESIDENT STREET, AND WAKEFIELD STREET FROM PD, PLANNED DEVELOPMENT DISTRICT, TO PD, PLANNED DEVELOPMENT DISTRICT (TAX MAP NUMBERS 0091010700100, 0091010700200, 0069000300300, 0069000300303, 0091010100100, 0091010200100, AND 0069000300301) (Z-10-2019)

SUMMARY BACKGROUND:

This Ordinance would amend the Haynie-Sirrine Planned Development and zoning district to facilitate the proposed redevelopment of the County-owned properties primarily situated along University Ridge, Howe Street, and South Church Street. The Ordinance would establish the new Greenville County Square Sub-District within the existing PD, which includes specific provisions for land use, density, and other dimensional requirements that would apply to the redevelopment of the properties within this sub-district. The Ordinance also includes approval of the proposed traffic mitigation and right-of-way improvements, which will be phased as the site is developed. In addition, the Ordinance approves the conceptual plans for the new Greenville County administrative building, which will be located at the northwest corner of University Ridge and South Church Street.

The applicant presented the proposed PD amendment at neighborhood meetings conducted on May 14, 2019, and again on August 8, 2019. The Planning Commission held a public hearing at its regular meeting on October 17, 2019, and recommended approval of the rezone to City Council with comments and conditions.

The Ordinance includes the PD documents submitted by Greenville County along with the proposed conditions recommended by City Staff and the City Planning Commission.

Planning Staff Recommendation: Approval
 Planning Commission Recommendation: Approval by vote of 5-2

IMPACT IF DENIED:

The PD amendment would not be approved, and all development would be required to comply with the existing Haynie-Sirrine PD zoning regulations.

FINANCIAL IMPACT:

N/A

REQUIRED SIGNATURES

Department Director

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City Attorney

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OMB Director

City Manager

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A N O R D I N A N C E

TO REZONE APPROXIMATELY 40 ACRES OF REAL PROPERTY LOCATED ON UNIVERSITY RIDGE, THURSTON STREET, HOWE STREET, SOUTH CHURCH STREET, PRESIDENT STREET, AND WAKEFIELD STREET BY CREATING THE GREENVILLE COUNTY SQUARE SUB-DISTRICT WITHIN THE EXISTING HAYNIE-SIRRINE PLANNED DEVELOPMENT DISTRICT (TAX MAP NUMBERS 0091010700100, 0091010700200, 0069000300300, 0069000300303, 0091010100100, 0091010200100, AND 0069000300301) (Z-10-2019)

WHEREAS, the County of Greenville, South Carolina (the “County”), as owner of property consisting of approximately 40 acres located on University Ridge, Thurston Street, Howe Street, South Church Street, President Street, and Wakefield Street, and specifically including tax map numbers 0091010700100, 0091010700200, 0069000300300, 0069000300303, 0091010100100, 0091010200100, and 0069000300301 (the “Property”), has applied to the City Planning Commission and City Council to rezone the Property by creating the Greenville County Square Sub-District within the existing Haynie-Sirrine Planned Development District; and

WHEREAS, said Property, which includes the County’s primary administrative offices in addition to buildings that house various state agencies and operations, and which is commonly known as “County Square,” is located in the Haynie-Sirrine Planned Development District (“PD”) and subject to the zoning standards and other regulatory requirements in the Haynie-Sirrine Neighborhood Code; and

WHEREAS, the County desires to demolish its current facilities and construct a new administrative building to house its employees and operations at the northwest corner of University Ridge and South Church Street, and further intends to sell and redevelop the remaining Property into an urban mixed-use center with a mix of commercial, residential, public/institutional, and service/industrial uses; and

WHEREAS, the plan presented by the County and its development partners include building heights, setbacks, and other elements that exceed the maximum zoning allowances currently permitted in the University Ridge Village Center Sub-District of the PD and the Haynie-Sirrine Neighborhood Code; and

WHEREAS, in order to achieve its development goals, the applicant has submitted a zoning amendment that would establish the Greenville County Square Sub-District (“GCS Sub-District”), to which the Property would be rezoned, as well as a new section within the Haynie-Sirrine Neighborhood Code that sets forth dimensional standards, land-use requirements, architectural and design guidelines, and other development parameters applicable to the new GCS Sub-District; and

WHEREAS, the County has also submitted a Traffic Impact Study and Phasing Plan with specific recommendations for road, signal, right-of-way, and intersection improvements to offset and mitigate the projected increases in traffic and congestion associated with the County Square redevelopment project; and

WHEREAS, increased provision of affordable housing being a stated goal of the City of Greenville and Greenville County, the County has committed to contribute a minimum of \$2 million over a five-year period to create or preserve affordable housing in or around the Haynie-Sirrine Community as part of the PD modification; and

WHEREAS, the City Planning Commission, pursuant to public notice, held a public hearing on October 17, 2019, to consider the proposed rezoning, and the Commission recommended, with certain conditions, approval of the proposed PD amendment by a vote of 5 to 2; and

WHEREAS, City Council finds the proposed zoning amendment to be compatible with the City's Comprehensive Development Plan and the Planned Development district criteria set forth in Section 19-3.2.2(N) of the Land Management Ordinance;

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF GREENVILLE, SOUTH CAROLINA, as follows:

SECTION 1. The Property shall be rezoned by creating the GCS Sub-District within the PD, as more fully set forth below. The attached map shown as Exhibit A, prepared by the City of Greenville Zoning Division, is attached hereto and incorporated herein for purposes of identifying the location of Property.

SECTION 2. The amendments to the PD and Haynie-Sirrine Neighborhood Code submitted by the County, attached hereto and incorporated herein as Exhibit B, are hereby adopted, subject to the comments and conditions set forth in the Planning Staff Report to Greenville Planning Commission dated October 11, 2019 (the "Staff Report") attached hereto and incorporated herein as Exhibit C, and further subject to the conditions which were incorporated in the Planning Commission motion to recommend approval, attached hereto and incorporated herein as Exhibit D (the "Commission Conditions"). To the extent of any conflict between the County submittal, the Staff Report, or the Commission Conditions, the following shall establish the order of precedent and control: (a) Commission Conditions, (b) the Staff Report, and (c) County submittal.

SECTION 3. The GCS Sub-District and all redevelopment projects undertaken therein, shall comply fully with the comments and conditions contained in the Staff Report, as well as the Commission Conditions.

SECTION 4. This approval is further subject to the completion of the traffic mitigation and right-of-way improvements as set forth in the University Ridge Traffic Impact Study prepared by Sprague & Sprague Consulting Engineers and dated September 18, 2019, which is incorporated herein by reference, and of which the Executive Summary is attached hereto as Exhibit E. These improvements may be phased as set forth the University Ridge Traffic Mitigation Phasing document dated September 19, 2019, also included in Exhibit E.

SECTION 5. The conceptual elevations of the new Greenville County administrative building are hereby approved as presented in Exhibit F. Permits for site work and construction shall be issued upon approval of a Final Development Plan that is consistent with these conceptual elevations, and upon meeting all development requirements of the City of Greenville and the PD, as amended.

SECTION 6. In order to provide the City with documents that accurately reflect amendments to the PD accomplished herein, and for archival purposes, the County shall, as an additional condition, provide a full, revised PD document which, addresses and incorporates all comments, conditions, and changes as required by this Ordinance for review and approval by the City of Greenville Planning Department, which such approval shall not be unreasonably withheld. The Planning Department shall not accept any applications for Final Development Plans for projects in the GCS Sub-District until said document has been received and verified for consistency with this Ordinance.

SECTION 7. This Ordinance shall be effective upon second and final reading.

DONE, RATIFIED AND PASSED THIS THE _____ DAY OF _____, 2020.

MAYOR

ATTEST:

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY

REVIEWED:

CITY MANAGER

EXHIBIT A

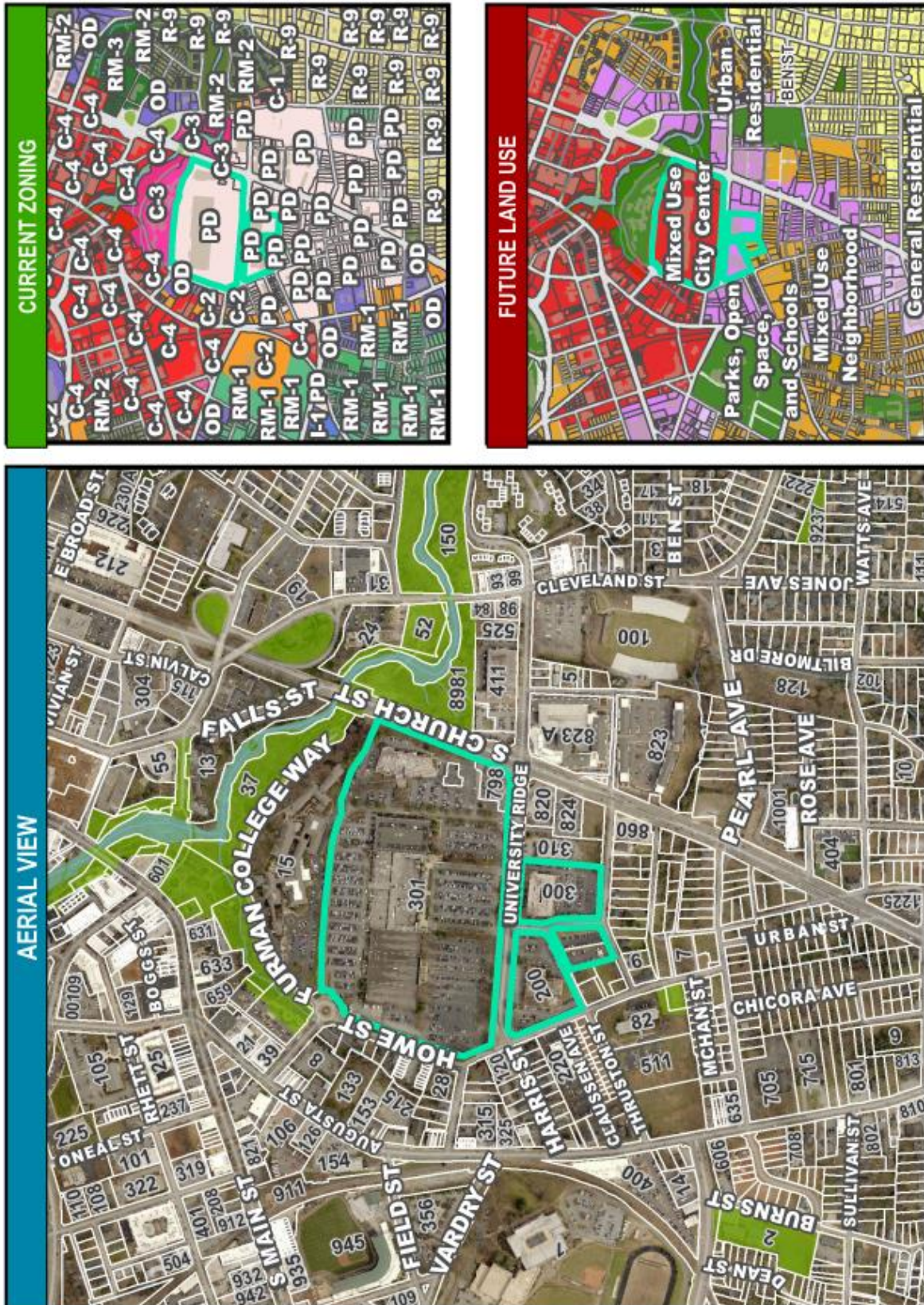


EXHIBIT B

Greenville County Square Sub-District
Haynie-Sirrine Neighborhood Code

VIII. Statement of Intent

STATEMENT OF INTENT

A. PURPOSE AND INTENT

In 2017, Greenville County (County) initiated a process seeking a qualified real estate development team to strategically acquire, demolish, and redevelop the County's University Ridge Campus. This redevelopment consists of replacing the County's existing administrative office facility with a new Class-A facility, commanding the corner of Church Street and University Ridge (Figure 1), and master planning the remainder of the site to provide for a high-quality mixed-use development.



Figure 1: Proposed Greenville County Administrative Office Facility

The overall objectives for the redevelopment of the campus include the provision of aesthetically striking and appealing urban building, hardscape and landscape design; enhanced connectivity to the Swamp Rabbit Trail, Falls Park on the Reedy, the Cancer Survivor Park, Unity Park, Cleveland Park, surrounding communities, and Downtown Greenville; the creation of sense of place through scale of design and walkability; and, the incorporation of multiple uses to allow residents and visitors the ability to work, live, and play.

B. PRIOR CITY MASTER PLANNING AND ZONING EFFORTS

In 1998, the City of Greenville adopted the Southwest Sector Master Plan to redevelop the northern half of the Haynie-Sirrine neighborhood. The key elements of this plan included providing stronger linkages between the Haynie Street sub-sector and surrounding neighborhoods, orienting commercial infill development along University Ridge and Church Street, and providing for mixed-use development with higher-density residential and commercial/office redevelopment.

In 2001, the City of Greenville initiated a public planning process to develop a master plan and neighborhood code specific to the Haynie-Sirrine neighborhood. As a part of this planning effort, the HSN-University Ridge Village Center sub-district was created to guide the development and redevelopment of the County Square property and lands to the east and west (Figure 2).

The HSN-URVC sub-district provided for development up to six stories in height and a mixture of uses, including residential (single-family, duplex, and multi-family apartments), lodging (hotels, inns, and rental cottages), office, retail (restaurants, entertainment, day care centers, convenience stores and drive-through facilities), limited manufacturing, and civic uses.

Greenville County Square Sub-District
Haynie-Sirrine Neighborhood Code

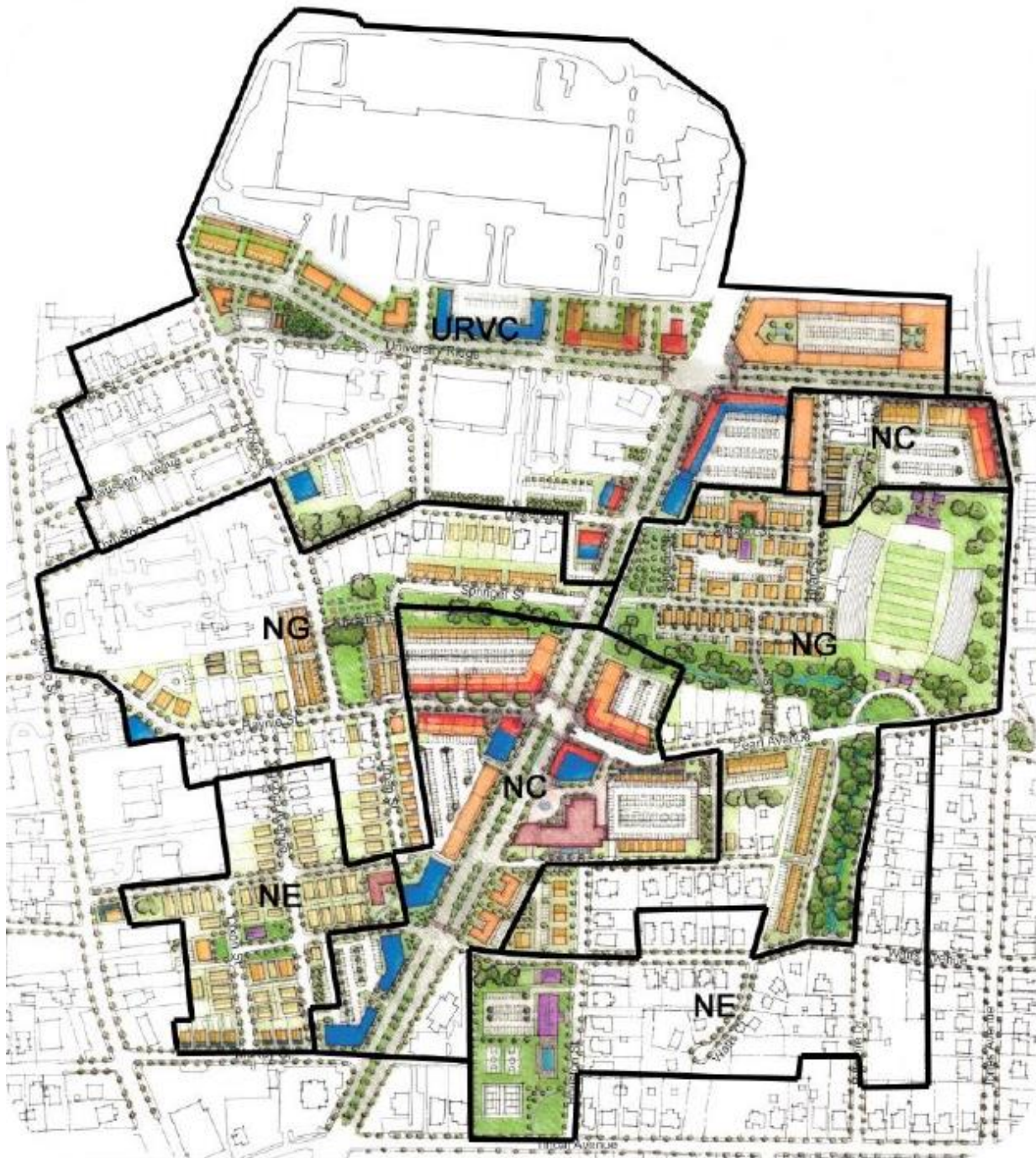


Figure 2: Haynie-Sirrine Neighborhood Code Master Plan

September 2019

Greenville County Square Sub-District
Haynie-Sixine Neighborhood Code

C. PROPOSED ZONING MODIFICATION

As seventeen years has passed since the adoption of the Neighborhood Code, a modification to the zoning is warranted to update the code, and to provide additional parameters for the redevelopment of the County Square property. To that end, the need for a new sub-district within the HSN Code has been identified. This new sub-district, to be called the Greenville County Square (HSN-GCS) sub-district, is necessary to allow for the creative and new urban approach desired for the redevelopment. Additionally, the new sub-district will allow the other sub-Districts within the Neighborhood Code to remain unchanged and in-tact, while allowing the zoning regulations specific to County-owned land to be refined.

Existing development within the HSN-GCS sub-district is generally in keeping with the characteristics of development patterns typical of the 1960's, as the majority of the site consists of the former Bell Tower shopping center (mall) that was re-purposed to County Square in the 1980's and paved for asphalt parking. With the intent of redeveloping the HSN-GCS sub-district to revitalize and modernize its uses and development pattern, the following redevelopment principles have been identified:

- Development of a diverse mix of land uses will always be permitted and encouraged;
- The HSN-GCS sub-district will be home to Greenville County's new administrative office complex;
- The HSN-GCS sub-district shall be promoted as a viable and vital residential area and multi-family residential uses shall be encouraged throughout the sub-district;
- Quality public spaces such as streets, sidewalks, parks, and squares where citizens come to know each other will be provided;
- Re-alignment and reconstruction of roads between Church Street and Howe Street will be completed to maximize the development potential within the sub-district and to improve circulation between the sub-district and Greenville's vibrant downtown;
- The planned network of new roads and smaller blocks will promote walkability and will be pedestrian friendly;
- The highest intensity uses within the sub-district will be located adjacent to and north of a newly created realigned University Street. Development intensities will be reduced as you travel to the southern and western portions of the sub-district to maintain compatibility with the adjacent sub-districts to the south and west; and,
- Appropriate development standards and design review criteria, as specified in the following sub-sections, shall be the principal tools used to ensure compatible, high quality development.

D. PROPOSED PHASING

Due to the size of the project, the proposed development schedule is anticipated to take place over the course of approximately ten years. On and off-site public improvements and impacts on public facilities can be found attached.

E. UTILITIES AND INFRASTRUCTURE

Public water will be provided by Greenville Water, wastewater will be accepted by the City of Greenville, wastewater treatment will be provided by Renewable Water Resources (ReWa), electric will be provided by Duke Energy, video, internet, and voice services will be provided by Spectrum, Cox, Comcast or another provider, and gas will be provided by Piedmont Natural Gas. Utility "will-serve" letters can be found attached. Additionally, consideration will be given to infrastructure to support technology, including fiber – gigabit community, 5G technology, small cell transmitters, and other telecommunications.

Greenville County Square Sub-District
Haynie-Sixrine Neighborhood Code

F. PROPOSED OPEN SPACE AND CONNECTIVITY

The Greenville County Square property is strategically located proximate to several of the City's parks and trails, including the Swamp Rabbit Trail, Falls Park, Cancer Survivors Park, Cleveland Park, and Unity Park (Figures 3-4). Falls Park is approximately 14.5 acres in size and nearly adjoins the County Square property at its northwest corner. The Cancer Survivors Park is located approximately 100 feet east of the site and is approximately 6.8 acres in area. The Sue Simpson Garden is situated less than a 1/10th of a mile from the site and is approximately 1.14 acres in area. Cleveland Park is approximately 1/10th of a mile to the east of the site and is approximately 92 acres in size. Unity Park is slated to consist of 60 acres of park lands and is situated approximately 1.1 miles (or 3,100 linear feet as the crow flies) northwest of the site along the Swamp Rabbit Trail. In total, the County Square property will be within a mile of roughly 175 acres of open space once construction of Unity Park is complete.



Figure 3: Falls Park on the Reedy



Figure 4: Greenville County Square Site Context Map

Greenville County Square Sub-District
Haynie-Sirrine Neighborhood Code

Within the site, open space will be provided along the northern property boundary adjacent to the Governor's School in the form of a 15 foot wide multi-use trail and along the western and eastern boundaries in the form of a 12 foot wide multi-use trail. Together, these multi-purpose trails amount to approximately 30,000 SF in area. In addition to these areas, plazas are anticipated to be located in two main areas including, the area in front of the County Square Administrative Office Facility, and the area along University Ridge (Figure 5). Other types of open space throughout the site may include dog parks, squares, plazas, pocket parks, rooftop gardens, and the like.



Figure 5: Proposed Plaza Adjacent to new County Square Administrative Office Facility

G. STRUCTURED PARKING

Structured parking is anticipated within the HSN-GCS sub-district to meet the parking needs of the uses planned within the sub-district. There are many reasons from an urban design perspective that structured parking should be developed within the HSN-GCS sub-district. Reasons to promote the use of structured parking within the sub-district include the following:

- Structured parking can be provided in a substantially more compact footprint, thereby allowing for more private development/redevelopment. This in turn creates a broadened economic base and the potential for additional complementary land uses.
- Large expanses of surface parking discourage pedestrians from walking. Many urban design studies have shown pedestrians will stop walking and turn around if there are no interesting land uses in a block.
- Structured parking can provide a large volume of covered spaces, thereby providing protection from weather.

Greenville County Square Sub-District
Haynie-Sirriner Neighborhood Code

IX. Revised Haynie Sirrine PD Text

Haynie-Sirrine Neighborhood Code

TABLE OF CONTENTS:	1.0 PURPOSE:	1.2 GENERAL NEIGHBORHOOD PRINCIPLES:
1. Purpose and Applicability 2. District Standards 3. Open Space Overlay District 4. Building Types 5. General Building Design Principles 6. Street Types and Standards 7. Parking Standards 8. Lighting Standards 9. Signs 10. Environmental Protection 11. Landscaping 12. Miscellaneous Definitions 13. Greenville County Square (GCS) Sub-District	This code was specifically designed to implement the Haynie-Sirrine Neighborhood Master Plan. To that end, the City of Greenville has found that it is necessary to enact a new Code that addresses specific urban design issues that are not present in the current development regulations. Properties located in this Area have been assigned a new "Zone" which regulates the form and use of all existing and new development. These regulations have been designed to permit a greater variety of uses in close proximity to one another than was previously permitted. In order to manage this flexibility a specific set of design guidelines has been established to regulate the buildings and their relationship to the public realm of the street and formal open spaces. 1.1 APPLICABILITY: 1. The regulations found herein shall be considered applicable to the area encompassed by the Haynie-Sirrine Neighborhood Master Plan with all appropriate zones indicated on the Plan. 2. Existing uses or approved plans that are non-conforming under the provisions of this Code may continue and expand subject to the design provisions found herein. 3. This Code shall become a new Zoning District with related sub-districts known as the Haynie-Sirrine Neighborhood (HSN) and shall replace the current zoning categories present in this area. The classification of property in this area is as follows: HSN-Neighborhood Edge (NE) HSN-Neighborhood General (NG) HSN-Neighborhood Center (NC) HSN-University Ridge Village Center (URVC) HSN-Greenville County Square (GCS) 4. Due to the scope of the Greenville County Square redevelopment project, a new section has been added to the Haynie-Sirrine Neighborhood Code to regulate the redevelopment process (Section 13). Regulations pertaining to the Greenville County Square property are fully housed and contained within Section 13 of the Haynie-Sirrine Neighborhood Code. Sections 1-12 of the Neighborhood Code do not apply. 5. The Zoning Administrator shall be responsible for the administration of this District and the issuance of all related zoning permits, except: • Where exceptions are noted in these requirements; and • The subdivision or re-subdivision of land which shall be processed in accordance with normal procedures outlined in the Subdivision Ordinance.	The Inner City Task Force of the Congress for the New Urbanism has developed a set of design principles that have proven effective in inner city neighborhoods. These principles have been tested in several HOPE VI projects. They are proposed as a set of working principles to be further tested and refined through use. • Citizen and Community Involvement: Engage residents, neighbors, civic leaders, politicians, bureaucrats, developers, and local institutions throughout the process of designing change for neighborhoods. • Economic Opportunity: The design of neighborhood development should accommodate management techniques and scales of construction that can be contracted to local and minority businesses. • Diversity: Provide a broad range of housing types and price levels to bring people of diverse ages, races, and incomes into daily interaction – strengthening the personal civic bonds essential to an authentic community. • Neighborhoods: Neighborhoods are compact, pedestrian-friendly, and mixed use with many activities of daily life available within walking distance. New development should help repair existing neighborhoods or create new ones and should not take the form of an isolated "project". • Infill Development: Reclaim and repair blighted and abandoned areas within existing neighborhoods by using infill development strategically to conserve economic investment and social fabric. • Mixed Use: Promote the creation of mixed use neighborhoods that support the functions of daily life: employment, recreation, retail, and civic and educational institutions. • City-wide and Regional Connections: Neighborhoods should be connected to regional patterns of transportation and land use, to open space, and to natural systems. • Streets: The primary task of all urban architecture and landscape design is the physical definition of streets and public spaces as places of shared use. Neighborhoods should have an interconnected network of streets and public open space. • Public Open Space: The interconnected network of streets and public open space should provide opportunities for recreation and appropriate settings for civic buildings. • Safety and Civic Engagement: The relationship of buildings and streets should enable neighbors to create a safe and stable neighborhood by providing "eyes on the street" and should encourage interaction and community identity. Provide a clear definition of public and private realm through block and street design that responds to local traditions. • Dwelling as Mirror of Self: Recognize the dwelling as the basic element of a neighborhood and as the key to self-esteem and community pride. This includes the clear definition of outdoor space for each dwelling. • Accessibility: Buildings should be designed to be accessible and visitable while respecting the traditional urban fabric. • Local Architectural Character: The image and character of new development should respond to the best traditions of residential and mixed use architecture in the area. • Design Codes: The economic health and harmonious evolution of neighborhoods can be improved through graphic urban design codes that serve as predictable guides for change.



**No changes proposed to pages 2-22
of the Haynie-Sirrine PD text.**

SECTION 13 – GREENVILLE COUNTY SQUARE (HSN-GCS) SUB-DISTRICT

A. PURPOSE AND INTENT

As seventeen years has passed since the adoption of the Neighborhood Code, a modification to the zoning is warranted to update the code, and to provide additional parameters for the redevelopment of the County Square property. To that end, the need for a new sub-district within the HSN Code has been identified. This new sub-district, to be called the Greenville County Square (HSN-GCS) sub-district, is necessary to allow for a creative and new urban approach for the redevelopment. Additionally, the new sub-district will allow the other sub-Districts within the Neighborhood Code to remain unchanged and intact, while allowing the zoning regulations specific to County-owned land to be refined.

Existing development within the HSN-GCS sub-district is generally in keeping with the characteristics of development patterns typical of the 1960's, as most of the site consists of the former Bell Tower shopping center (mall) that was re-purposed to County Square in the 1980's and paved for asphalt parking. With the intent of redeveloping the HSN-GCS sub-district to revitalize and modernize its uses and development pattern, the following redevelopment principles have been identified:

- Development of a diverse mix of land uses will always be permitted and encouraged;
- The HSN-GCS sub-district will be home to Greenville County's new administrative office complex;
- The HSN-GCS sub-district shall be promoted as a viable and vital residential area, and multi-family residential uses shall be encouraged;
- Quality public spaces such as streets, sidewalks, parks, and squares where citizens come to know each other will be provided;
- Re-alignment and reconstruction of roads between Church Street and Howe Street will be completed to maximize the development potential within the sub-district and to improve circulation between the sub-district and Greenville's vibrant downtown;
- The planned network of new roads and smaller blocks will promote walkability and will be pedestrian friendly (Figure 1);
- The highest intensity uses within the sub-district will be located adjacent to and north of a newly created realigned University Ridge. Development intensities will be reduced as you travel to the southern and western portions of the sub-district to maintain compatibility with the adjacent sub-districts to the south and west; and,
- Appropriate development standards and design review criteria, as specified in the following sub-sections, shall be the principal tools used to ensure compatible, high quality development.

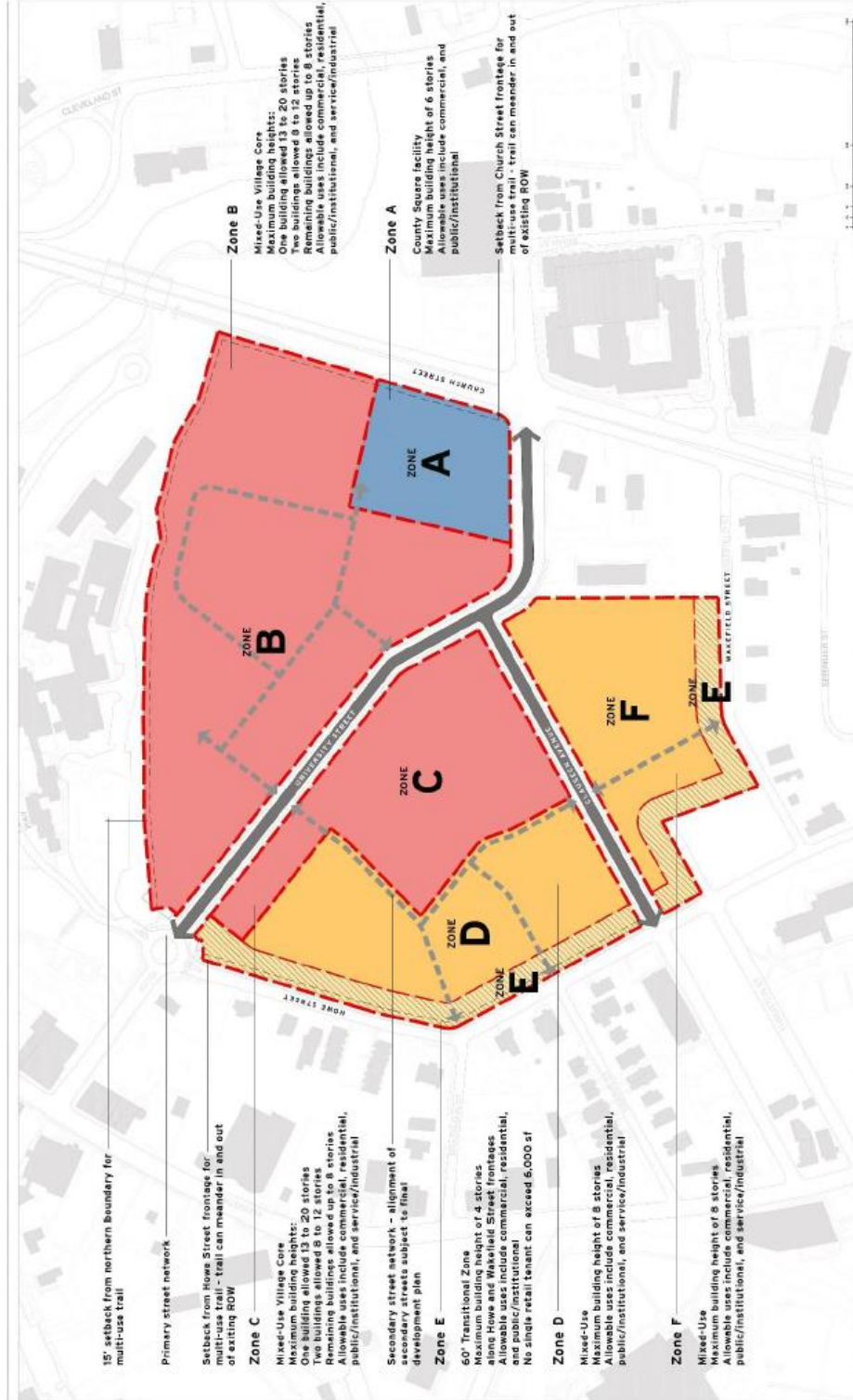


Figure 1: University Ridge Streetscape Rendering

B. PLANNED DEVELOPMENT REGULATING PLAN AND TRANSITION ZONES

Development within the HSN-GCS sub-district shall be guided by the development criteria contained within the following sub-sections. Six intensity/height zones have been defined within the HSN-GCS sub-district (Zones A-F) as described in **Table 1** and illustrated in **Figure 2** below. Zone A is situated at the corner of University Ridge and Church Street and will accommodate the County Square facility. Zones B and C are along the re-aligned University Ridge and will provide for the greatest intensity. Zones D-F are intended to transition intensity and density away from University Ridge.

Table 1: HSN-GCS Sub-District Use and Height Limitations			
Zone	Uses	Maximum # of Stories	Additional Limitations
"A" Country Square Office Facility	Commercial Public and Institutional	6	
"B" Mixed-Use Village Core	Commercial Residential Service and Industrial Public and Institutional	20	One building allowed between 13 to 20 stories; two buildings allowed between 8 to 12 stories; remaining buildings allowed up to eight stories. Buildings taller than 8 stories shall be setback a minimum of 30 feet from the northern property boundary shared with the Governor's School
"C" Mixed-Use Village Core	Commercial Residential Public and Institutional Service and Industrial	20	One building allowed between 13 to 20 stories; two buildings allowed between 8 to 12 stories; remaining buildings allowed up to eight stories
"D" Mixed-Use	Commercial Residential Public and Institutional Service and Industrial	8	
"E" Transitional Zone	Commercial Residential Public and Institutional	4	No single retail tenant can exceed 6,000 square feet in area
"F" Mixed-Use	Commercial Residential Public and Institutional Service and Industrial	8	A minimum of 10% of residential units within Zone F shall consist of affordable housing, defined as 80% AMI, Income Restricted. Affordable housing that may be provided in other Zones will not be counted as part of the 10% requirement



GREENVILLE COUNTY SQUARE
GREENVILLE | SOUTH CAROLINA

Figure 2: Planned Development Regulating Plan

GP-1
31 JULY 2019

C. PERMITTED AND PERMISSIBLE USES

Permitted uses by right, special exceptions, supplemental use standards, accessory uses and prohibited uses are as follows:

1. Uses Permitted by Right:

a) Residential Uses

- i. Cottage subdivision
- ii. Duplex dwelling
- iii. High-rise multiple-family dwelling
- iv. Multiple-family dwelling
- v. Single-family dwelling, attached
- vi. Single-family dwelling, detached
- vii. Upper-story dwelling
- viii. Accessory dwelling units

b) Public and Institutional Uses

- i. Assisted living facility
- ii. Business school
- iii. College or university
- iv. Communication tower, roof-mounted/small cell antennae (subject to LMO, Section 19-4.3.2(G))
- v. Community service (all uses), including but not limited to libraries, museums, senior centers, community centers, youth club facilities, and social service facilities
- vi. Day care center (13+ people)
- vii. Emergency response facility
- viii. Group day care home (7 to 12 people)
- ix. Hospital
- x. Medical facility (other than hospital), including but not limited to medical centers, emergency medical care establishments, medical and dental clinics, and medical and dental labs
- xi. Parks such as squares, plazas, recreational trails, greenways, botanical gardens, neighborhood parks, and community parks
- xii. Police substation
- xiii. Post office
- xiv. Preschool
- xv. Religious institution
- xvi. School, public or private
- xvii. Trade school including vocational, technical, or industrial schools

c) Commercial Uses

- i. Automobile show room no greater than 5,000 SF in area
- ii. Bank, financial institution, or ATM
- iii. Barbershop, beauty shop
- iv. Bed and breakfast inn

- v. Brewpub (subject to standards specified in Section 13.C.3)
- vi. Civic club
- vii. Greenhouse (subject to standards specified in Section 13.C.3)
- viii. Grocery store
- ix. Hotel or motel including suites or extended stays
- x. Indoor entertainment facility, general
- xi. Offices (all other uses), such as medical and dental offices, and business and professional offices.
- xii. Parking lot
- xiii. Parking structure
- xiv. Personal services (all other)
- xv. Radio or TV broadcasting studio
- xvi. Restaurant with no seating
- xvii. Restaurant, with indoor and outdoor seating and/or food service areas
- xviii. Restaurant, with indoor seating only
- xix. Retail sales and services exceeding 25,000 gross square feet
- xx. Retail sales and services, all other uses
- xxi. Retail sales and services uses selling alcoholic beverages (retail sale of wine and beer)
- d) Service and Industrial Uses
 - i. Artisan production establishment
 - ii. Research and development (all uses)
- 2. Special Exceptions: The uses listed below will require Special Exception approval from the Board of Zoning Appeals.
 - a) Communication tower, freestanding
 - b) Convenience store (small boutique station with up to four pumps)
 - c) Convention and exhibition hall
 - d) Dog day care facility (subject to standards specified in Section 13.C.3)
 - e) Drive-through facilities
 - f) Event venue
 - g) Light manufacturing, general
 - h) Microbrewery (subject to standards specified in Section 13.C.3)
 - i) Nightclub or bar
 - j) Outdoor entertainment (all uses)
 - k) Sports and concert arena
 - l) Veterinary clinic (subject to standards specified in Section 13.C.3)
- 3. Supplemental use standards: Uses referenced within this subsection shall comply with the standards listed below. Additionally, definitions have been provided for uses that are not currently defined within the Land Management Ordinance.
 - a) Brewpub: A restaurant that prepares handcrafted beer as an accessory use intended for consumption on the premises.
 - i. Revenue from food sales shall constitute more than 50 percent of the total business revenues.

- b) Dog day care facility: An establishment providing such services as canine day care for all or part of a day, provided that overnight boarding is not permitted.
 - i. Shall be confined to a completely enclosed, soundproofed and air-conditioned building except as provided below;
 - ii. One outdoor pet relief area may be allowed in conjunction with a pet day care facility or veterinary clinic;
 - a. Pet relief area shall be no greater than two-hundred-fifty (250) square feet in area;
 - b. Pet relief area shall be enclosed with a black picket fence ranging between 4-5 feet in height;
 - c. Pet relief areas shall be located to the rear or side of the building or space in which the pet day care facility or veterinary clinic is located;
 - d. Trees, shrubbery and benches are encouraged.
 - e. Waste stations are required.
 - iii. Exterior cages shall not be permitted.
 - iv. Overnight stay of animals is allowed.
 - v. Solid animal waste must be bagged separately from other refuse.
- c) Drive-through facilities
- d) Greenhouse: A structure utilized to grow produce and herbs, and intended to encourage farm-to-table practices.
 - i. Shall be in accordance with LMO, Section 19-6.5.7(G).
 - ii. Shall be designed to blend and be compatible with surrounding urban and/or residential form;
 - iii. Shall not exceed 5,000 square feet in area;
 - iv. Shall not be made of plastic or corrugated metal; and,
 - v. Outdoor sales and display shall not be allowed except in association with permitted farmers market or special events.
- e) Microbrewery: An establishment or facility in which beer, wine, or other alcoholic beverages are produced for on-site consumption and off-site sales.
 - i. Beer production not to exceed 10,000 barrels (310,000 gallons) per year; and
- f) Veterinary clinic:
 - i. Shall be confined to a completely enclosed, soundproofed and air-conditioned building except as provided below;
 - ii. One outdoor pet relief area may be allowed in conjunction with a veterinary clinic;
 - a. Pet relief area shall be no greater than two-hundred-fifty (250) square feet in area;
 - b. Pet relief area shall be enclosed with a black picket fence ranging between 4-5 feet in height;
 - c. Pet relief areas shall be located to the rear or side of the building or space in which the veterinary clinic is located;
 - d. Trees, shrubbery and benches are encouraged.
 - e. Waste stations are required.
 - iii. Exterior cages shall not be permitted.
 - iv. Overnight stay of animals is allowed.
 - v. Solid animal waste must be bagged separately from other refuse.
- 4. Accessory Uses: In addition to the accessory uses identified within the Land Management Ordinance, the following accessory uses are allowed:
 - a) Automobile wash and detailing
 - i. Such use shall be located within a parking garage or located to the rear or side of the structure in which the use is accessory to, in such a manner as to not be visible from public areas.
 - ii. Such use shall be incidental to an office use or parking use, and shall be required to obtain all necessary permits.

- iii. No buildings dedicated to car washing shall be allowed in conjunction with the use, including an automatic car wash.
- iv. Water hoses, spray guns, vacuum stations, and the similar are allowed.
- b) Automobile rental
 - i. The office component of the automobile rental use shall be located within the primary use, and automobiles for rent shall be located within a parking structure or surface parking lot with no more than twenty (20) spaces dedicated toward the use. Such spaces shall not be utilized to meet minimum parking standards.
 - ii. Such use shall be incidental to a hotel, office, or similar use, and shall be required to obtain all necessary permits.
 - iii. Standalone automobile rental establishments shall not be permitted.
- 5. Prohibited Uses: Prohibited uses within the HSN-GCS sub district shall be in accordance with the uses listed in under the City of Greenville's Land Management Ordinance, subsection 19-4.1.1(D)(2), Prohibited Uses. In addition, the following uses are prohibited within the HSN-GCS sub district:
 - a) Automotive, boat and heavy equipment sales and service
 - b) Adult establishments and adult video stores
 - c) Automobile parts store
 - d) Bail bonding
 - e) Bodily fluid collection services
 - f) Fortune tellers
 - g) Laundry and dry-cleaning plant
 - h) Loan broker or small loan company
 - i) Pawn shops, payday lenders, title loan lenders, check cashing establishments, deferred presentment lenders, and establishments that deal primarily in precious metals
 - j) Restaurant, with drive-through
 - k) Self-service storage (all uses)
 - l) Tattoo parlors
 - m) Veterinary clinic (outdoor)
 - n) Wholesale establishment

D. DENSITY AND INTENSITY

Development within the HSN-GCS sub-district shall include a maximum of 3.5 million square feet of heated/cooled and enclosed building area.

E. MINIMUM LOT AND/OR PARCEL REQUIREMENTS

1. Residential requirements (Multi-Family):
 - a) Minimum width and area.
 - i. Width – None
 - ii. Area – None
 - b) Maximum lot coverage by all buildings and structures.
 - i. 100 percent
 - c) Minimum yard requirements
 - i. Front/secondary front 0 feet
 - ii. Side 0 feet
 - iii. Rear 0 feet
2. Residential requirements (Townhomes/Single-Family Attached):
 - a) Minimum width and area.
 - i. Width – None
 - ii. Area – None
 - b) Maximum lot coverage by all buildings and structures.
 - i. 100 percent
 - c) Minimum yard requirements
 - i. Front/secondary front 0 feet
 - ii. Side 0 feet
 - iii. Rear 0 feet
3. Non-Residential (retail, office, hotel, or other) requirements.
 - a) Minimum width and area: None
 - b) Maximum lot coverage by all buildings and structures:
 - i. 100 percent
 - c) Minimum Yard requirements
 - i. Front/secondary front 0 feet
 - ii. Side 0 feet
 - iii. Rear 0 feet

F. ARCHITECTURAL DESIGN ELEMENTS

1. Design Theme

The overall design theme for the HSN-GCS sub-district will be a master planned mixed-use urban center containing, retail, government office, office, residential and hotel uses. The HSN-GCS sub-district is located in an urban setting within the City of Greenville that is surrounded by adjacent urban uses, services and features. The intent of this section is to promote creative solutions that future users may want to incorporate within the sub-district. As such the overall development may be a blend of architectural styles. To ensure quality development and maintain and enhance an attractive physical environment, all development shall comply with the provisions of the Greenville Downtown Design Guidelines (as amended) except that the City Zoning Administrator shall be responsible for reviewing and issuing Certificates of Appropriateness for development permits in lieu of the Design Review Board. Further, the Greenville County Square

Administrative Office Building designed by Foster + Partners are conceptually approved as depicted within this zoning modification (see attached). In addition to the Greenville Downtown Guidelines, the architectural guidelines listed below shall be applicable to development within the HSN-GCS sub-district. Pertinent to an attractive physical environment for the public is the design of the site, use of colors and materials, signage, building orientation, architectural style, and compatibility with the surrounding urban community. These guidelines are intended to promote imagination, innovation and variety by focusing on design principals and encouraging creative solutions which serve the following purposes:

- Create sense of permanence and place by promoting development that emulates enduring character using quality design and building materials;
- Promote variety and diversity in architectural design;
- Inspire creative approaches to the use of land and related physical development;
- Encourage the realization and conservation of a desirable and aesthetic urban environment.

2. Architectural Design Guidelines

For development within the HSN-GCS sub-district, the following design criteria shall be applied and administered by the City Zoning Administrator. These guidelines shall govern the development of the site.

- Street level or "Storefront" to include the ground floor of a multi-story building, will require additional design and construction to provide an increased focus and link to the adjacent public spaces within the rights-of-way.
- Overhangs, awnings, canopies, or other projections from building walls for customer/public entrances shall be required on all ground level retail. To create visual interest, these entrances may also consist of nano walls, garage door openings, and the like.
- Buildings shall be situated in a manner to promote an urban streetscape consistent with the architecture shown in **Figures 3A-3D**.
- Buildings shall be configured in a manner that enhances pedestrian activity through any of the following features: (a) Orientation of the building towards adjacent streets, sidewalks, or open spaces; (b) The inclusion of storefront windows and awnings; (c) Avoidance of un-broken opaque wall planes facing pedestrians; (d) Pedestrian-oriented entrances; (e) Similar features that foster an active public realm; or, (f) the inclusion of canopies, overhangs, recesses, projections, arcades, or arches.
- The heights of buildings shall be varied to avoid the appearance of an elongated building mass
- High quality materials shall be used to create a look of permanence within the project. Variations in the design of each building in terms of color, architecture, and material is encouraged in order to create interest and reduce a monotonous appearance.
- Prohibited materials for non-residential development shall be in accordance with LMO, subsection 19-6.5.7(F)(6).
- Prohibited materials for multi-family residential development shall be in accordance with LMO, subsection 19-6.8.9(H).
- Delivery and loading operations, HVAC equipment, trash locations, backflow preventers and other utility and service functions shall be screened from pedestrian view through being incorporated into the design of the building, through landscaping, or other methods
- Multi-family residential development shall adhere to the generally accepted Principles of Crime Prevention Through Environmental Design (CPTED), to the maximum extent practicable. These principles involve the design of walkways, fences, lighting, signage and landscape to enhance natural site surveillance, control of access, and clear definition of public and private spaces.
- No front yard parking or front loaded garages shall be allowed; however, alley-fed is allowed.
- In instances where a parking structure is visible from a public viewpoint, architectural features are required to minimize the visual impact. Such features include brick façade, screen materials, signage, paintings or murals, graphics, textured concrete, and the like.

Greenville County Square Sub-District
Haynie-Sirrine Neighborhood Code

- Parking structures are encouraged to be constructed in a manner that could later be repurposed to another use.
- Public art shall be encouraged to be incorporated throughout the development in public spaces. The Veterans Memorial shall be located in the plaza adjacent to the new County Square Administrative Office Facility.
- Within Zone B, the three buildings that are eight (8) stories or greater shall not have an office floor plate that, collectively, exceeds 95,000 square feet. Within Zone C, the three buildings that are eight (8) stories or greater shall not have an office floor plate that, collectively, exceeds 95,000 square feet.

3. Architectural Examples: Non-residential and multi-family residential development shall resemble the architecture depicted below in Figures 3A-3D. The non-residential and multi-family design standards listed within the Land Management Ordinance shall not apply.

FIGURE 3A: NON-RESIDENTIAL AND MULTI-FAMILY ARCHITECTURE



FIGURE 3B: NON-RESIDENTIAL AND MULTI-FAMILY ARCHITECTURE



FIGURE 3c: NON-RESIDENTIAL AND MULTI-FAMILY ARCHITECTURE



FIGURE 3D: NON-RESIDENTIAL AND MULTI-FAMILY ARCHITECTURE



G. INGRESS, EGRESS AND TRAFFIC CIRCULATION

The HSN-GCS sub-district will be served by a hierarchy of streets located within the sub-district. Church Street and University Ridge (realignment of University Ridge) will serve as the major collector roadways for the sub-district and will be the highest classified streets (Figure 4). Access to all parcels within the sub-district are planned via public rights-of-way or privately-owned roads. The new segment of University Ridge is planned as a two-lane undivided roadway with parking lanes, planting areas and walkways. Rights-of-way shall be constructed in accordance with the typical sections found within Exhibit B.

Vehicular interconnectivity within the sub-district is planned to promote the internal circulation of project traffic to reduce the dependence upon adjacent collector roadways for access between the uses in the sub-district. Vehicular connection points between parcels will be depicted on the FDP(s) as they are submitted for review and approval. Additionally, bus stops and ride share drop off locations are shown on the Vehicular Connectivity exhibit (Figure 4). Final location of bus stops and drop off locations will be finalized during the FDP review and approval process.

Multi-purpose paths shall be constructed along three of the project boundaries (Figure 5). Specifically, a 15-foot-wide multi-purpose path shall be constructed along the northern project boundary, a 12-foot-wide multi-purpose trail shall be constructed along the east side of the project adjacent to Church Street, and a 12-foot-wide multi-purpose trail shall be constructed along the west side of the project adjacent to Howe Street. Residential sidewalks shall be a minimum of 5 feet in width. Sidewalks serving mixed-use and commercial areas shall be a minimum of 8 feet in width. In commercial and mixed-use areas, wider sidewalks will be encouraged to promote walkability and allow for outdoor seating for cafes and restaurants within the sub-district. In such cases, there shall be a minimum of 4 feet of clearance for adequate passing distance by pedestrians. Variations to minimum sidewalk widths shall be allowed to accommodate existing topography constraints. Notwithstanding the foregoing, sidewalks shall be provided in accordance with minimum ADA requirements.

Greenville County Square Sub-District
Haynie-Sirrine Neighborhood Code



Figure 4: Vehicular Connectivity Diagram

PEDESTRIAN AND BICYCLE CONNECTIVITY DIAGRAM



Figure 5: Pedestrian and Bicycle Connectivity Diagram

H. PARKING

There are three basic types of vehicular parking for the Greenville County Square redevelopment project: parallel parking, structured parking, and, where applicable, surface parking. A parking garage with approximately 1,000 parking spaces is planned to the north of Zone A on the PD Regulating Plan. It is anticipated that another 2-3 shared parking garages will be constructed throughout the remainder of the site. In recognition of the mixed-use nature of the project, potential for shared parking, connectivity with pedestrian facilities, the rise in popularity of shared-side services, and the future possibilities with autonomous vehicles, minimum parking ratios and requirements have been reduced to avoid over-parking. According to the Shared Parking Analysis prepared by Walker Consultants, a minimum of 5,263 structured parking spaces will be provided throughout the site to accommodate the development (Exhibit A). The Shared Parking Analysis may be amended administratively to reflect a variation in the composition of the development. Pursuant to Land Management Ordinance, subsection 19-6.1.2, the maximum off-street parking standards of subsections 19-6.1.2 and 19-6.1.3 shall not apply to developments which incorporate a parking structure. Parking space dimensions shall be in accordance with LMO, Table 19-6.1-4: Standards for Parking Stalls. On-street parking abutting a development parcel's frontage shall not be considered in the parking supply calculations to comply with the parcel's parking space requirements. Bicycle parking shall be provided in accordance with LMO, subsections 19-6.1.3(C) and 19-6.1.6(K).

I. SIGNAGE

Signage within the HSN-GCS sub-district shall comply with LMO, subsection 19-6.6.

J. LANDSCAPING

Landscaping, buffering and screening shall comply with LMO, subsection 19-6.2 and tree protection shall comply with LMO, subsection 19-6.3.

K. EXTERIOR LIGHTING

Exterior lighting shall comply with LMO, subsection 19-6.4

L. SITE DEVELOPMENT AND RELATED INFRASTRUCTURE

All proposed public and private improvements shall meet the requirements of LMO, subsection 19-6.7 Site Development and Related Infrastructure. The design and construction of the public and private infrastructure shall conform to all applicable federal and state regulations and the requirements of the City's design and specifications manual. Additionally, the Owner will provide all maintenance within the sub-district.

M. OPEN SPACE

Within the site, open space will be provided along the northern property boundary adjacent to the Governor's School in the form of a 15 foot wide multi-use trail, along the western boundary adjacent to Howe Street in the form of a 12 foot wide multi-use trail, and along the eastern boundary adjacent to Church Street in the form of a 12 foot wide multi-use trail. The 12-foot-wide trail along Church Street may meander in and out of right-of-way. Signage currently found on the Swamp Rabbit Trail will be incorporated along the multi-purpose trails, where applicable, to provide continuity. Together, these multi-purpose trails amount to approximately 30,000 SF in area. In addition to these areas, plazas are anticipated to be located in two main areas including, the area in front of the County Square Administrative Office Facility, and the area along University Ridge (Figure 5). Further, a minimum of three dog parks will be sited throughout the site proximate to or as a part of multi-family residential uses. In addition to the foregoing, other types of open space throughout the site may include squares, plazas, pocket parks, rooftop gardens, and the like (see "Permitted Types").

1. General Provisions:

- a. Open space consists of all greenways, meadows, parks, sports fields/stadiums, greens, squares, plazas, community gardens, rooftop gardens, playgrounds, dog parks, and private open space amenities. Definitions of these open space types are provided below.
 - b. Open space shall be planned and accessible and usable by persons living nearby.
 - c. Playground equipment, statues, and/or fountains, when installed, should be located in squares and parks.
 - d. Open space shall connect to street frontage, building access points, or a combination of both to encourage use and enhance safety and surveillance of the space. Open space shall adhere to Crime Prevention through Environmental Design (CPTED) principles.
 - e. Open space can be separately deeded to either a property owner's association, a non-profit land trust or conservancy, Greenville County, the City of Greenville, or otherwise permanently protected through deed restriction.
2. Permitted Types:
- a. **Greenway:** A corridor encompassing a trail for bicycles or pedestrians. The trajectory of a greenway should lead through rural as well as urban areas, connecting the countryside to urban parks. The landscaping pattern should be appropriate to the location: naturalistic within the countryside, and formal within the neighborhoods.
 - b. **Meadow:** An area available for unstructured recreation outside of a neighborhood. A meadow is naturalistic, consisting of native plants, growing unchecked, and requiring minimal maintenance.
 - c. **Park:** A large open area available for recreation, usually located at the neighborhood edge, and fronted by buildings. Its landscape comprises paved paths and trails, some open lawn, trees and open shelters, all naturalistically disposed and requiring limited maintenance.
 - d. **Sports field/Stadiums:** An open area or facility and its related ancillary buildings specifically designed and equipped for large-scale structured recreation. Such fields should be confined to the edges of neighborhoods as their size is disruptive to the fine-grained network which is required for pedestrian travel.
 - e. **Green:** A medium-sized public space available for unstructured recreation, circumscribed by building facades, its landscape consisting of grassy areas and trees, naturalistically disposed and requiring only limited maintenance.
 - f. **Square:** A public space, seldom larger than a block, at the intersection of important streets. A square is circumscribed spatially by frontages; its streetscape consists of paved walks, lawns, trees, and civic building all formally disposed and requiring substantial maintenance.
 - g. **Plaza:** A public space at the intersection of important streets set aside for civic purposes and commercial activities. A plaza is circumscribed by frontages; its landscape consists of durable pavement for parking and trees requiring little maintenance. All parking lots on frontages should be designed as plazas with the paving not marked or detailed as parking lots.
 - h. **Community Gardens:** A grouping of garden plots available for small-scale cultivation, generally to residents of apartments or other dwelling types without private gardens. Community gardens should accommodate individual storage sheds. Community gardens are valuable for their recreational and communal role, similar to that of a club.
 - i. **Rooftop Gardens:** Rooftop gardens are man-made green spaces on the topmost levels of building structures. They may be designed to grow produce, provide play space, give shade and shelter, or provide a green area.
 - j. **Playground:** A small open area specifically designed and equipped for the play of small children. A playground is usually fenced and may include an open shelter. Playgrounds should be interspersed within residential areas, a short walking distance from dwellings.
 - k. **Dog Park:** A small open area specifically designed and equipped for the play of dogs. The dog park is usually fenced and must include pet waste disposal stations. Dog parks should be interspersed within residential areas, a short walking distance from multi-family areas.
 - l. **Private Open Space:** Patios, porches, decks, balconies, and yards that are a component of multi-family residential development.

N. FINAL DEVELOPMENT PLAN APPROVAL

Requests for Final Development Plan (FDP) approvals, site plan approvals, multi-family project approvals and all subdivision approvals within the HSN-GCS sub-district shall be submitted to the City for review and final approval by the Zoning Administrator. All such plans submitted to the City will be reviewed by the Zoning Administrator for conformance with the HSN-GCS sub-district development standards adopted in this Section 13 of Code. If the Zoning Administrator determine that such plans are in substantial conformance with the HSN-GCS sub-district requirements, the landowner may proceed with development of the property in accordance with such plans without any further review or approval by the Design Review Board, the Planning Commission or any other City entity formed for the purpose of land use regulations. In the event the Zoning Administrator determine that such plans are not in substantial conformance with the HSN-GCS sub-district requirements, the landowner may appeal such decision directly to City Council whereby City Council shall either approve or disapprove the plans submitted by the landowner.



EXHIBIT A
MEMORANDUM
GREENVILLE COUNTY SQUARE

PROJECT #19-1149.00

DATE: May 10, 2019
TO: GT RP Greenville
ADDRESS: 309 East Paces Ferry Road, Suite 325
CITY/STATE: COPY Atlanta, GA 30305

FROM: Joey D. Rowland, P.E.
PROJECT NAME: Greenville County Square
PROJECT NUMBER: 19-1149.00

Per your request, Walker Consultants has performed a shared use analysis to determine the minimum amount of parking required for the Greenville County Square development. In a large mixed-use development, it is customary to use the concept of shared parking to determine the overall parking demand for the project. Fluctuating patterns of demand allow different land uses to share the parking supply, thereby reducing the total number of parking spaces and impervious area needed to support a development. By ensuring that the development offers an appropriate parking supply for the busiest hour of the year (without an unneeded surplus), owners are also able to maximize open space and undeveloped area.

SHARED PARKING METHODOLOGY

The process of developing a shared use parking model is derived from basic demand ratios developed by the Urban Land Institute, the Institute of Transportation Engineers, and other agencies. Base ratios are developed by observing hourly accumulations of vehicles around standalone land uses during a standard year (365 consecutive days) and identifying design conditions for a weekday and a weekend. At the peak hour of the year, a comparison is made between the total number of cars parked and a key driver specific to the land use (square footage for most land uses, rooms for a hotel, bedrooms for a residential complex, etc). The result of this analysis yields a gross or unadjusted demand.

Several factors are applied to determine the shared demand. The first factor is a "drive ratio." The drive ratio represents the percentage of users arriving at the site by means other than personal vehicle. The second factor is the "non-captive ratio." Non-captive ratios are typically expressed as a percentage of users who create no incremental parking demand when visiting more than one land use on the same trip. For example, an office building employee may walk to a restaurant or retail shop during lunch. Overall, the effects of the captive market can be significant. The use of the non-captive ratio factor ensures that patrons are not counted twice in the overall parking demand estimate for the study area. The final and perhaps the most significant adjustment applied to the shared use analysis is the "presence factor." The presence factor is expressed as a percentage of peak potential demand modified for time of day and month of year. Presence can have a significant effect on parking demand in a mixed-use development.



MEMORANDUM GREENVILLE COUNTY SQUARE

PROJECT #19-1149.00

PROJECT OVERVIEW

The Greenville County Square is a master-planned 40-acre development located south of downtown Greenville, SC. The center piece of the project will include a new County Government Complex with two office buildings and a civic plaza. Other parts of the development will include a mix of land uses including residential, office, restaurant, retail, fitness center, grocery, and a hotel. Figure 1 below shows the planned development and street system.

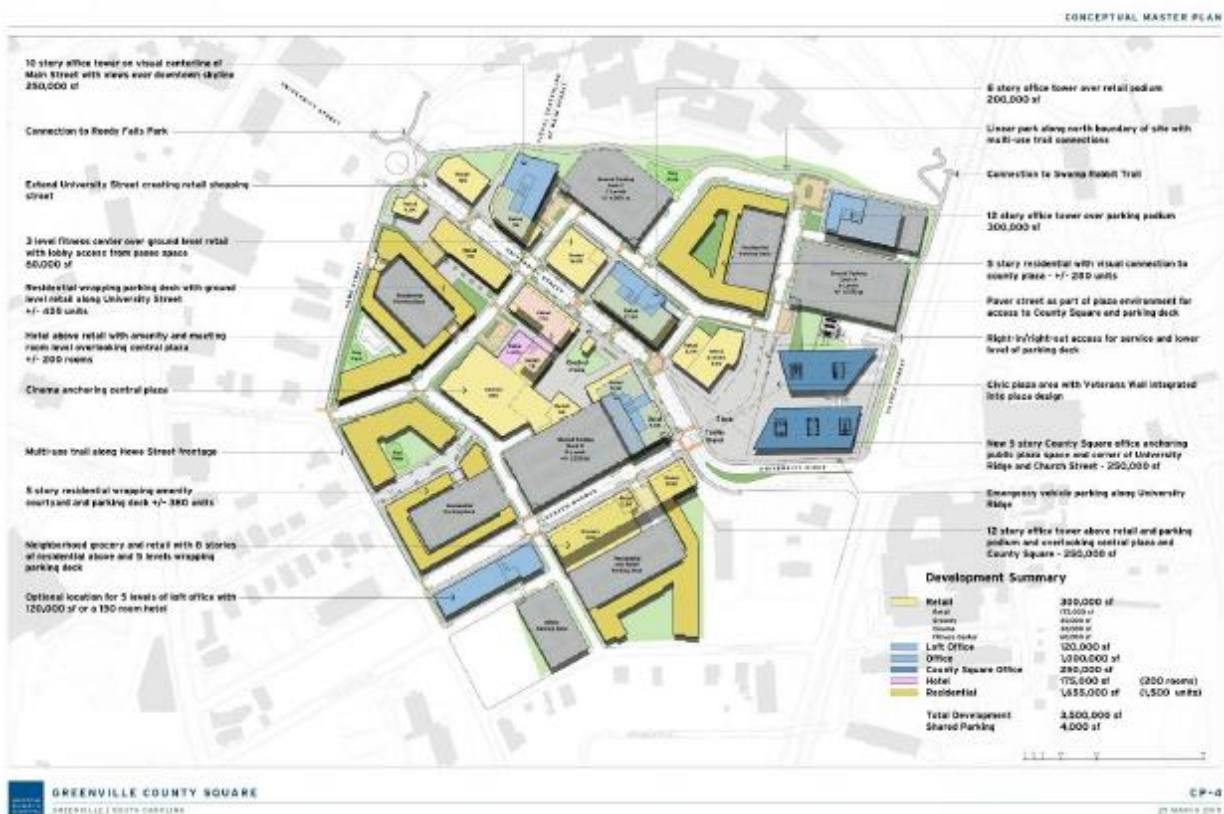


Figure 1: Greenville County Square Master Plan (Image Courtesy of GT RP Greenville)



MEMORANDUM
GREENVILLE COUNTY SQUARE

PROJECT #19-1149.00

GT RP Greenville has indicated that the conceptual master plan will includes the following land uses and densities as shown in Table 1 below.

Table 2: Development Summary

Land Use	Density
County Building:	250,000 SF
Office:	1,120,000 SF
Residential:	1500 Units
Retail (General Use):	123,000 SF
Retail (Restaurant):	41,000 SF
Cinema:	800 Seats
Fitness Center:	60,000 SF
Grocery:	30,000 SF
Hotel:	200 Rooms

PARKING REQUIREMENTS

The off-street parking requirements are outlined in the City of Greenville, SC Code of Ordinances, Section 19-6.1.3. *Table 19-6.1-1: Off-street Parking Requirements Schedule A* gives the minimum spaces required and the maximum spaces allowed for typical land uses. These requirements are given below in Table 2. Note that the County Office Building will be parked at 1 space per 250 square feet by prior Agreement.

Table 2: City of Greenville Off-Street Parking Requirements

Use Category	Use Type	Minimum Spaces Required	Maximum Spaces Allowed
Residential	Multi-Family Dwelling	1.5 per Dwelling Unit	<i>To be determined</i>
Office	Other Offices	1 per 600 square feet	1 per 150 square feet
Retail sales and services	Retail sales and services, all other uses	1 per 500 square feet	1 per 250 square feet
Retail sales and services	Health club or spa	1 per 250 square feet	<i>To be determined</i>
Retail sales and services	Indoor entertainment facility	1 per 3 fixed seats, or 1 per 300 SF, whichever is greater	<i>To be determined</i>
Retail sales and services	Grocery Store	1 per 650 square feet	1 per 250 square feet
Visitor Accommodations	Hotel or motel	.75 per guest room	1.0 per guest room



MEMORANDUM
GREENVILLE COUNTY SQUARE

PROJECT #19-1149.00

SHARED PARKING DEMAND

Walker used the base ratios above to calculate the “unadjusted demand” for the Greenville County Square development. Based on the City parking ratios, the unadjusted demand is calculated to be **6,892** spaces.

As discussed above, the “non-captive” adjustment reflects the percentage of patrons visiting the land use that are not already present. For example, the non-captive adjustment for retail, restaurant, and grocery is 80%. That means that 80% of these patrons are arriving from off site whereas 20% are already there from another land use, such as office workers or residential tenants walking to a restaurant or retail shop.

The “drive ratio” adjustment reflects the percentage of patrons who drive their own car to the development. For office users, it is assumed that 5% of the workers live close enough to walk or bike to work or take public transportation, ride sharing, or car pool with a co-worker. For hotel users, it is assumed that 25% will arrive at the hotel by taxi, Uber/Lyft, or other shared ride service.

The presence factor is derived from ULI tables that list the expected presence of a land use at each hour of the day. For our analysis, it was determined that 2:00 pm is the peak hour for parking demand. For example, at 2:00 pm, it is expected that 100% of office workers will be present, whereas on 65% of the residents are there at that same time.

Each of the adjustments above are applied to unadjusted demand to arrive at a shared parking demand for the development. Taking the development as a whole and assuming that parking supply will be sufficiently distributed throughout the site, the shared use peak hour parking demand is calculated to be **5,263** spaces. This is considered to be the minimum required for the development and reflects a total shared use reduction of 23.6%. Table 3 below is a summary of the shared parking analysis.

Table 3: Shared Parking Demand Summary

Land Use	Density	Ratio	Unadjusted Demand	Adjustments			Shared Demand	Shared Reduction
				Non-Captive	Drive Ratio	Max Presence		
County Office	250,000	4 per 1000 SF	1000	100%	95%	100%	950	
Office	1,120,000	1 per 600 SF	1870	100%	95%	100%	1777	
Retail	123,000	1 per 500 SF	246	80%	100%	100%	197	
Restaurant	41,000	1 per 100 SF	410	80%	95%	90%	280	
Residential	1,500	1.5 per Unit	2250	100%	100%	65%	1463	
Fitness Center	60,000	1 per 250 SF	240	90%	100%	70%	151	
Cinema	800	1 per 3 Seats	264	95%	100%	55%	138	
Hotel	200	.75 per Key	150	100%	75%	60%	68	
Grocery	30,000	1 per 650 SF	462	80%	100%	65%	240	
		TOTALS	6892				5263	23.6%

- NOTES:

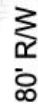
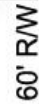
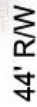
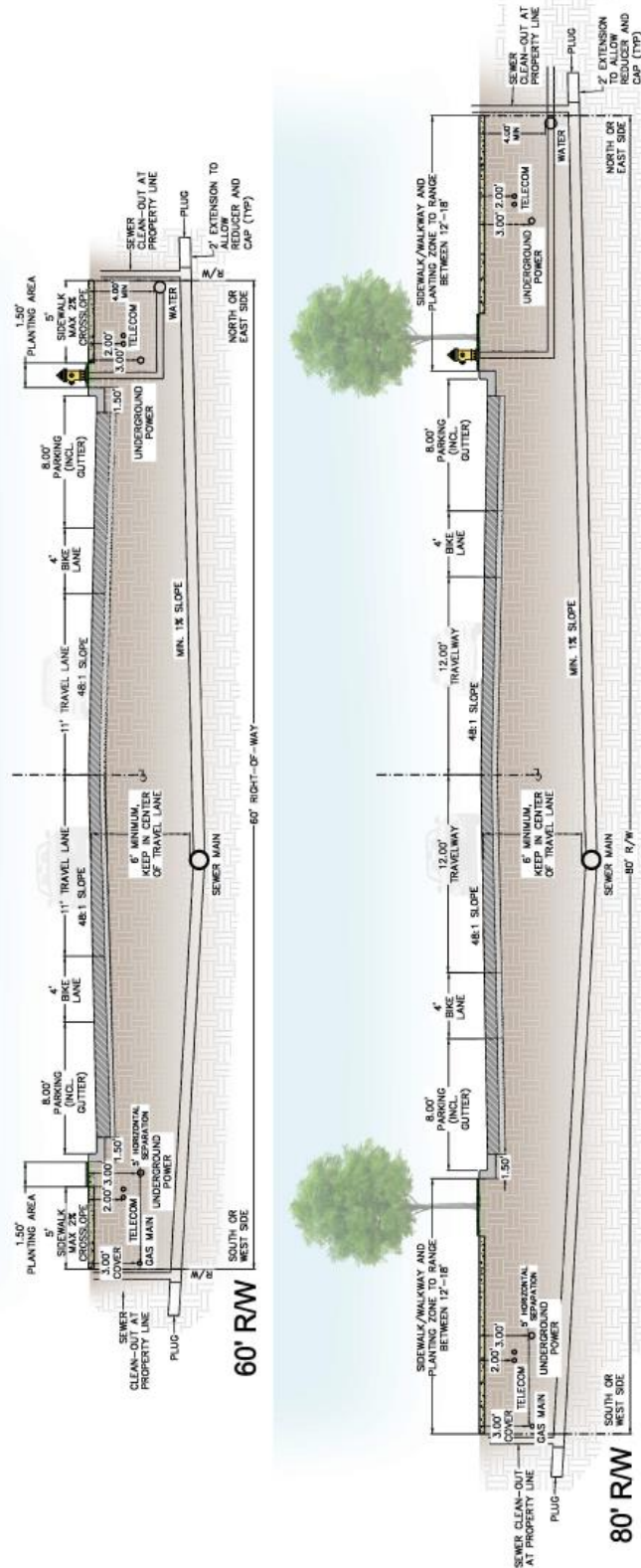


EXHIBIT B-1 TYPICAL R/W SECTIONS

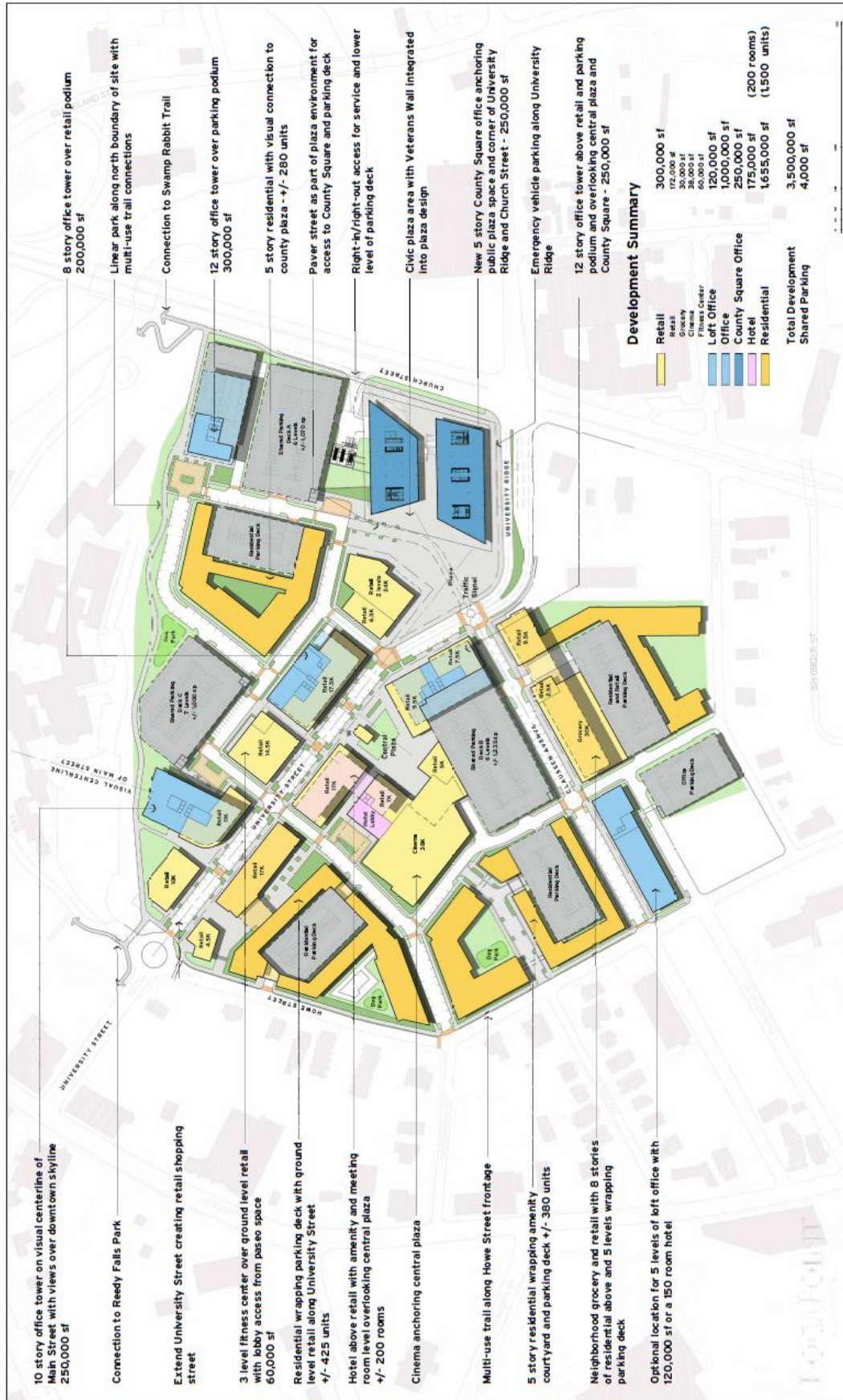
NOTES:

1. At each intersection, provide conduits connecting all corners of the intersection. Each conduit run to include (2) 6" PVC and (4) 4" PVC.
2. Minimum 10' horizontal separation between water and sewer.
3. Sewer manholes to be located in center of travel lane. Avoid wheel path placements.



**EXHIBIT B-2 TYPICAL R/W SECTIONS
ALTERNATIVE WITH BIKE LANES**

CONCEPTUAL MASTER PLAN





Haynie-Sirrine Neighborhood Sub District
Map

EXHIBIT C



**Planning Staff Report to
Greenville Planning Commission
October 11, 2019
for the October 17, 2019 Public Hearing**

Docket Number:	Z-10-2019
Applicant:	County of Greenville
Property Owner:	County of Greenville
Property Location:	University Ridge, Thurston St, Howe St, S Church St, President St, Wakefield St
Tax Map Number(s):	0091010700100, 0091010700200, 0069000300300, 0069000300303, 0091010100100, 0091010200100, 0069000300301
Acreage:	Approximately 40 acres
Zoning:	PD, Planned Development District
Proposal:	MAJOR MODIFICATION TO PD ZONING DISTRICT of approximately 40 acres located at UNIVERSITY RIDGE, THURSTON ST, HOWE ST, S CHURCH ST, PRESIDENT ST, and WAKEFIELD ST from PD, Planned Development District to PD, Planned Development District
Staff Recommendation:	Approve with Staff Comments and Conditions

Applicable Sections of the City of Greenville Code of Ordinances:
Sec. 2-372, Function, Powers, and Duties of the Planning Commission
Sec. 19-1.3, Purpose and Intent
Sec. 19-2.1.2, Planning Commission Powers and Duties
Sec. 19-6.5, Design Standards for Nonresidential Development
Sec. 19-6.8, Design Standards for Multifamily Residential
Sec. 19-2.3.3, Planned Development District

Project Background & Overview

Applicant and Property

The applicant, Greenville County, owns seven parcels totaling approximately 40 acres primarily situated along University Ridge, Howe Street, and South Church Street south of downtown Greenville. The properties include the current county administrative building known as County Square as well as Greenville County Family Court, the Department of Motor Vehicles, the Department of Health and Environmental Control, and Greenville County Health Department. For the purposes of this report, the properties included in the rezoning application are collectively referred to as "County Square."

Adjacent Uses

County Square is bordered to the north by Falls Park and the South Carolina Governor's School. To the west, along Howe Street, existing uses include one- and two-story residential and light commercial uses. Thurston Street, Claussen Avenue, Harris Street, Bradshaw Street, and University Street all provide access from the County Square site to Augusta Street and Greenville's West End. The southern edge includes light commercial along University Ridge and single-family detached homes along Wakefield Street. The

entire eastern edge is bordered by S Church Street, which is a major thoroughfare that connects I-185 to downtown Greenville. On the opposite side of S Church Street are Cancer Survivor's Park, a two-story office building, and five-story mixed use development.

Jurisdiction and Zoning Applicability

Even though the property is owned by a government entity (Greenville County), because it is located inside the Greenville city limits, the land is subject to the City of Greenville's zoning and development regulations. Per Section 19-1.5.2 of the Land Management Ordinance (LMO), the City's zoning ordinance applies to "all land, all land development, and the use of all structures and land owned or held in tenancy by the city or its agencies or departments; by the state, its agencies, departments or political subdivisions; and to the full extent permitted by law, the government of the United States, its agencies, departments or corporate services."

Existing Zoning

The County Square property is part of the Haynie-Sirrine Planned Development (PD) and is governed by the Haynie-Sirrine Neighborhood Code. The Haynie-Sirrine PD is a specific zoning district in the City of Greenville. The original PD designation and code were applied in 2003, following the regular process for a zoning map amendment. Properties within the Haynie-Sirrine PD are located within various sub-districts, each with specific building types, uses, dimensional requirements, and other standards applicable in this zoning district. All seven of the County Square parcels proposed for PD modification are located in the University Ridge Village Center (URVC) sub-district. The URVC sub-district allows for a mix of residential, lodging, office, retail, light manufacturing, and civic uses in buildings up to six stories in height.

As with all PD zoning districts, when a permit or development application is received for a property in the Haynie-Sirrine neighborhood, staff reviews the project for compliance with the applicable standards of the approved zoning district (in this case, the Neighborhood Code). Staff also verifies compliance with the applicable provisions of the Land Management Ordinance, which also apply, except where the PD includes specific deviations or exceptions from the general LMO standards.

Proposed Zoning Amendment

The applicant requests a modification of the Haynie-Sirrine PD zoning district. The proposed changes in density, height, mix of uses, shared parking and other elements are considered a major modification, pursuant to Sec. 19-2.3.3(D)(6), and must be presented as a PD zoning district amendment for review, recommendation and action by the Greenville Planning Commission and City Council. If the zoning amendment is approved by Council, the developer may proceed to apply for Final Development Plans and permits consistent with the approved PD zoning district modification.

Staff Analysis:

Application Content

This application is somewhat different than that for a traditional Planned Development, where an applicant requests zoning approval for a specific, pre-planned development project. With a pre-planned development project, typically, detailed architectural elevations, property use information, and site development plans are submitted with PD applications that have detailed, pre-defined building projects associated with the PD request. The Haynie-Sirrine Planned Development is functionally different from the traditional PDs and is, instead, a version of a form-based code that governs the properties within the PD zoning district. The existing Neighborhood Code is just such a code that does not include information for specific buildings or lots, but rather outlines the building types, open space, dimensions, and other elements for each sub-district. The Planned Development zoning designation is one method, by which the City of Greenville assigns special zoning classifications, such as form-based codes, for certain areas of the city. The submitted application is consistent with the format and content of the existing Haynie-Sirrine Neighborhood Code.

PD Criteria

The stated purpose, technical requirements, and general development parameters for PD - Planned Developments are outlined in Section 19-3.2.2(N) of the Land Management Ordinance. The planned

development district (PD) is intended to encourage innovative land planning and site design concepts that conform to community quality-of-life benchmarks and that achieve a high level of aesthetics, high-quality development, environmental sensitivity, energy efficiency, and other community goals. In return for flexibility in site design and development, Planned Developments (PDs) are expected to include exceptional design that preserves critical environmental resources; provides above-average open space and recreational amenities; incorporates creative design in the layout of buildings, open space, and circulation; ensures compatibility with surrounding land uses and neighborhood character; and, provides greater efficiency in the layout and provision of roads, utilities, and other infrastructure.

Other than the C-4 zoning district, which is referenced as the Central Business District, the PD zoning district is the only classification that will allow the property to be developed with the densities, shared parking arrangements, mix of uses, comprehensive scope, and infrastructure modifications proposed by the applicant. As noted earlier, with respect to the existing Haynie-Sirrine PD zoning district, compliance with the form-based criteria, proposed by the applicant, will be verified through the Final Development Plan review and approval process for each individual development proposed.

New Greenville County Square (GCS) Sub-District

The PD amendment proposes the establishment of the Greenville County Square (GCS) sub-district as a new district modification, with regulatory standards to govern development, to the Haynie-Sirrine PD zoning district. While the regulations, applicable to the other districts within Haynie-Sirrine, are contained throughout the Neighborhood Code document, the applicant proposes a new section that would apply only to the new GCS sub-district. Because of this stand-alone-district format proposal, the applicant notes that future development within the GCS district would, therefore, not be subject to the other sub-district requirements in the existing Neighborhood Code.

PD Regulating Plan

In keeping with the established format of four sub-districts currently identified within the Haynie-Sirrine PD, the applicant proposes six separate zones, labeled A-F, within the new HS-GCS sub-district. Similar in format to the four sub-districts of the existing Haynie-Sirrine PD, these new zones specify the maximum building heights, allowed uses, and other limitations for any development proposed within the proposed GCS sub-district.

Zone A, proposes a mix of commercial and public/institutional uses with building heights limited to six stories. This zone is at the corner of S Church Street and University Ridge and is proposed as the location of the new Greenville County Administrative Building.

Zone B proposes a mix of commercial, residential, public/institutional and service/industrial uses and the allowance of one building, in each zone, that may have an increased height limit of 20 stories and two buildings that may have an increased height limit of 12 stories. All other remaining buildings, in Zone B, are proposed to be limited to a maximum height of eight stories or less. An additional limitation is added that the collective floor plate sum, of the three buildings, with an increased height limit, shall not exceed 95,000/SF and any buildings taller than eight (8) stories shall be setback a minimum of thirty (30) feet from the northern property boundary shared with the Governor's School.

Zone C proposes a mix of commercial, residential, public/institutional and service/industrial uses and the allowance of one building, in each zone, that may have an increased height limit of 20 stories and two buildings that may have an increased height limit of 12 stories. All other remaining buildings, in Zone C, are proposed to be limited to a maximum height of eight stories or less. An additional limitation is added that the collective floor plate sum, of these three buildings, shall not exceed 95,000/SF.

Zone D proposes a mix of commercial, residential, public/institutional and service/industrial uses with maximum building heights up to 8 stories.

Zone F proposes a mix of commercial, residential, public/institutional and service/industrial uses with maximum building heights up to 8 stories.

Zone E, which approximately follows Howe Street and Wakefield Street and the southern edge of Zone F, is intended to act as a transition zone for the surrounding neighborhoods. This zone proposes a mix of commercial, residential, and public/institutional uses with a maximum building height limit of 4 stories, with an additional limitation that no single retail tenant may exceed 6,000/SF.

The proposed GCS sub-district regulating plan concentrates the form of increased building height and density towards the interior of the GCS sub-district, specifically within Zones B and C. In response to concern for the one and two-story residences and structures in the existing neighborhood, expressed by city staff, the applicant added Zone E to act as a transition zone to buffer and mitigate the increased height and density of Zones B and C.

If the GCS PD modification proposal is approved, the proposed regulating plan requirements will become final and effective for all project development within the GCS sub-district. Any future requests to exceed the height maximums or other limitations, contained within the approved regulating plan, shall require a PD amendment and will be subject to public review and input.

Affordable Housing

Greenville County has proposed to provide no less than \$2 million within the Haynie-Sirrine neighborhood, over a 5-year period, to support constructing affordable housing on or off-site of the Greenville County Square sub-district. This funding could be leveraged to create a variety of affordable housing options on the Greenville County Square site or in the adjacent Haynie-Sirrine neighborhood. In the past, the City has invested funding in the Greenville Housing Fund and leveraged other local, state and federal resources to create affordable housing, most notably, the former Scott Towers site. The Greenville Housing Authority and its development partner, Integral, are currently in the process to develop 193 units in a first phase of the site's overall redevelopment. Phase I includes the renovation of the Garden Apartments and the construction of a new building, both providing a total of 193 affordable homes for senior citizens. A second phase will include a new building, to be constructed along Augusta Street, to provide approximately 125 affordable and workforce housing units. This additional funding, proposed by Greenville County, could be invested in similar types of development to provide affordable and workforce housing options.

Proposed Uses

Staff has worked closely with the applicant to refine the proposed list of permitted uses, prohibited uses, uses permitted by special exception, and use-specific standards. Staff believes the final submittal of proposed uses, with specified limitations, are appropriate for the GCS sub-district. However, the language submitted as an accessory use automobile wash and detailing, within parking garages, should be clarified that such use cannot be accessory to the primary use of the parking garage, but should be accessory to another primary use such as, but not limited to, a rental car agency, a hotel, or an apartment complex.

Density and Dimensional Standards

Following the precedent of the C-4 zoning district standards in the city's Central Business District, property line setbacks for all buildings are zero feet, regardless of use category. Likewise, maximum building coverage is 100%. Overall development density, in terms of maximum building square footage, within the GCS sub-district, is capped at 3.5 million square feet of heated/cooled and enclosed building area. As noted earlier in this report, any requests to exceed this proposed square footage maximum, after adoption, shall require a PD amendment subject to public review and input.

Building Orientation and Layout

A conceptual master plan and a variety of conceptual massing plans, provided within Part XII. Supplemental Materials, shows potential locations and layouts of various buildings that could be developed if the proposed PD modification request is approved. Buildings must be oriented to create a defined and activated streetscape and pedestrian zone. The master plan and building massing plans provided are conceptual

only. Actual building layouts and uses, within each building development, could be different from those provided with this proposal application for illustrative purposes.

Non-Residential and Multifamily Developments

The applicant's proposal cites adherence to the Greenville Downtown Design Guidelines and language provided in Section F - Architectural Design Elements, addresses Design Theme, for the proposed sub-district, and provides fifteen (15) bullet points of Architectural Guidelines, to which developments must conform, along with 16 larger thumbnail photographs of Non-Residential and Multi-Family building designs intended to further inform design guidance and direction for future non-residential projects. However, previous submittal language remains in Section F.3 as follows: "The non-residential and multi-family design standards listed within the Land Management Ordinance shall not apply."

Staff has been advised that all multi-family building projects will be required to adhere to the requirements of the Land Management Ordinance.

Sidewalks

The application proposes minimum sidewalk widths and differentiates between residential and commercial environments. It also encourages wider sidewalk widths to allow for outdoor seating for restaurants and cafes. However, staff is concerned that the proposal includes language that mandates that 'variations in sidewalk widths shall be allowed to accommodate existing topography constraints'. Variations to any dimensional standard is available to any applicant as part of the Land Management Ordinance and includes a process and requirement for an applicant to present proper justification and documentation for review and consideration when making such a request. The proposed language has provided no process, by which a claim of topography constraints may be evaluated, measured or verified and instead requires that a sidewalk width be reduced below the established minimum based on an applicant's allegation that topography constraints demand the reduction.

Open Space

The application proposes multi-use trails along the north, west, and eastern project boundaries. Combined, these trails constitute approximately 30,000 square feet (0.64 acre) of open space and amenity area. In addition, the application proposes two urban plazas, which are shown in the second and third photos of 'Figure 3A – Non-residential and Multi-Family Architecture', labelled as green spaces in 'Figure 5 – Pedestrian and Bicycle Connectivity Diagram' and identified as a 'Central Plaza' and a 'Civic Plaza', with a veterans wall, in several maps provided under Part XII. Supplemental Materials. These are depicted as active open spaces, with amenities one might expect in an urban environment. The PD text also indicates that a minimum of three dog parks will be provided. Finally, squares, plazas, pocket parks, rooftop gardens, and other types of defined open space may be incorporated throughout the development as individual projects are proposed.

'Figure 5 – Pedestrian and Bicycle Connectivity Diagram' shows the location of the urban plazas, multi-use trails, and dog parks that the developer has proposed in their application. Additional open space is shown on the conceptual master plan; however, the actual development and open space may differ from the concept shown. The application does not guarantee a minimum acreage or percentage of the site as open space. The applicant notes that the urban nature envisioned for development within the GCS sub-district makes it unfeasible to meet or exceed the open space requirements of the Land Management Ordinance. Figure 4, in Part VIII. Statement of Intent is a Site Context Map that shows the existing parks and recreation areas within close proximity to the development. The applicant proposes that the provision of increased connectivity to these existing parks and amenities reduces the need to provide additional open space within the GCS sub-district beyond what is shown.

This proposal is consistent with Section 19-6.8.9(l)(1), of the Land Management Ordinance, which allows the decision-making body—in this instance, city council—to waive the provision of "common open space" or apply an alternative condition to the standard, provided the property is within a quarter-mile of public open space or contains 50 or fewer dwellings. The applicant has proposed that the new GCS sub-district will follow the requirements of the Greenville Downtown Design Guidelines, which contain language to address publicly accessible parks and plazas. These guidelines were developed, by the City, specifically

to address public open spaces in dense, urban environments, and are appropriate for the open space and plazas proposed.

Final Development Plans

Under Section 13.N – Final Development Plan Approval, of the PD amendment, the applicant proposes to have all Final Development Plans (FDPs), for any development proposals within the GCS sub-district, to be approved by the administrator or his or her designee. In the event the Zoning Administrator determines that such plans are not in substantial conformance with the HSN-GCS sub-district requirements, the landowner may appeal such decision directly to the City Council whereby City Council shall either approve or disapprove the plans submitted by the landowner.

City Council has indicated that the proper venue for an appeal should be the Planning Commission. In so doing, they noted that the Planning Commission has been created and appointed by the City Council, for all such matters and because the Planning Commission possesses the proper skills and qualifications necessary to fairly evaluate and judge such matters.

Neighborhood Meeting Comments

May 14, 2019 Neighborhood Meeting – held at Greenville County Square

The County Staff and RocaPoint Partners gave a presentation and overview of the project. Afterwards, discussion and questions on the following points took place:

- President of local condominium association expressed support for project
- The project will incorporate electric vehicle charging stations and rideshare drop zones
- Concern about lack of response from county officials on meeting requests
- The project will have a positive economic impact.
- Concern about the limited public input; this neighborhood meeting was the first invitation for public comments on the project. It seems like the project is essentially finalized; asked what the meeting coordinators were requesting from the attendees.
- Asked about opportunity to revisit the entire Haynie-Sirrine PD. It would be up to the City to initiate that process. City of Greenville staff explained that the Downtown Master Plan currently is currently being prepared and will consider large areas of the Haynie-Sirrine neighborhood.
- Concerns about drainage, parking, and traffic along Church Street and University Ridge.
- Questioned if the project was already a done deal. The County Council approved the project unanimously.
- Discussion about next steps—PC and City Council approval process.
- Concern about ricochet effects and impacts of development on the community.
- The project does not include affordable housing. The County is contributing \$1 million per year to affordable housing. There was concern about the lack of affordable housing within the plan. The County is in discussion with GRCA.
- Discussion of the changes in heights in the current vs. proposed zoning.
- Will public art be incorporated? Mr. Kernell stated the Veterans Memorial Wall is one example.
- Applicant stated they are in discussion with the Governor's School.
- Discussion of some of the proposed traffic impacts and mitigation.
- Discussion of the relocation of state offices away from County Square.
- Discussion of the shared parking arrangement, and different users being on-site at different times during the day.
- Citizens will not have to pay for parking when visiting the County administrative building.

August 8, 2019 Neighborhood Meeting – held at Greenville County Square

The County Staff and RocaPoint Partners gave a presentation and status update for the project. Afterwards, discussion and questions on the following points took place:

- County Administrator Joe Kernell explained that the land sales with the new zoning permissions will be used to pay for the new county administrative building, without the need to tax increases.
- County Council Chairman Butch Kirven stated that the school district and city are partners and beneficiaries of the project.
- Representatives from RocaPoint Partners stated that they are complying with the "North Main" design guidelines. The zoning administrator will review project submittals, with appeals decided by City Council. The revised submittal still includes two 20-story buildings.
- Discussion of anticipated traffic patterns. Engineers are working to provide a connection to a lighted intersection on Augusta. Streetscape guidelines have also been added.
- Concern about traffic and construction vehicles coming into Alta Vista neighborhood. Attendees want to see a construction traffic plan.
- Question if the project includes a plan for subways. The answer was no.
- The applicant stated they could achieve the same square footage under the existing zoning.
- Discussion about affordable housing. Mr. Kernell stated the county has committed quite a bit to affordable housing throughout the county. County Square may not be the best place for affordable housing. They have met with John Castille.
- Mayor White explained the process of going through Planning Commission and modifying the PD. The applicant has agreed to follow the downtown design guidelines. Affordable housing is "non-

negotiable.” There needs to be appropriate transitions between the high-development areas and the neighborhoods. Sections D and E should be transition zones and are an ideal place for affordable housing.

- Concern that the proposed PD modification does not consider the impacts or transition to the other neighborhoods within the PD. Instead, County Square becomes an extension of downtown.
- Concern about the lack of opportunity to provide comments and public input. Once the County has their blanket approval, they can move forward with development.
- We don't want to be downtown Atlanta or New York City.
- Concern about the lack of public input in project so far. No one has approached the West End. Phil Mays with RocaPoint Partners said they have been working with city staff for 14 months and have accepted many of their comments. They want to continue to receive community input.
- Question about opportunity for public input moving forward? Mr. Mays explained there will be a public hearing in front of the Planning Commission. Mr. Kernell said the public can call the County Administrator's Office and County Council members. However, there are no other meetings planned; they intend on submitting the revised application and moving forward to Planning Commission.
- Horace Butler said he wants to see additional engagement and meetings with the neighborhoods. When you exclude people, you will not get their support. Mr. Kernell and Mr. Kirven said they are willing to schedule additional meetings with the neighborhoods.
- Discussion of how the property could be developed under the current zoning.
- Discussion of the timeframe for the relocation of the state and county offices.
- Discussion of the project phasing and infrastructure improvements.
- Asked for clarification on DRB and Planning Commission approval process. If you want to be successful like downtown, projects should go through DRB. RocaPoint Partners staff explained that the County will have control over major material decisions. City staff will review projects for design compliance.
- County staff explained the public facilities corporation that will be established in order to facilitate the property sales. There will also be a development and management agreement between the County and RocaPoint Partners.
- Comment that the city had many public charrettes for the Haynie-Sirrine plan. However, many of the subsequent projects do not match the renderings within the plan. Therefore, there is concern about what is actually constructed on the County property versus what is being shown to the public today.
- Concern about density, impacts on neighborhoods, and home prices.
- Discussion about building heights and likelihood of there actually being a 20 story building.
- Appreciation for the level and quality of the proposed development in Greenville.
- Concern about quality of life impacts in surrounding neighborhood. Existing infrastructure already can't support current traffic.
- Want to see improvements to the tunnel.
- Comment that they are creating something beautiful within the county boundaries; wants to see greater integration and connection with neighborhoods.
- Felsie Harris said she wants the developers to be straightforward and up front with the community. Let the community help them get the project right.
- Concern about relocating state and county services away from transit access.

Based on the submitted application, Planning staff submits the following comments:

Recommend: Approve with Comments and Conditions

Comments and Conditions:

Comments:

The modification of the existing PD zoning designation is requested by the applicant in order to allow for creative design techniques that incorporate multiple products; flexibility in setbacks, parking requirements, increased building height; and open space incorporation.

As stated in Section 19-3.2 (N), *Planned Development* of the Land Management Ordinance, a PD is intended to encourage innovative land planning and site design concepts that conform to community quality-of-life benchmarks and that achieve a high level of aesthetics, high-quality development, environmental sensitivity, energy efficiency, and other community goals by:

- (a) Reducing or eliminating the inflexibility that sometimes results from strict application of zoning and development standards that were designed primarily for individual lots;

Staff Comment: The Haynie-Sirrine Master Plan report notes in Section 2.4.8 that, while "...there exists significant redevelopment potential of underutilized sites along University Ridge", it was only anticipated that any "...development would most likely consume only half of the current front yard parking lot." The master plan and resultant Neighborhood Code did not address the redevelopment of the County Square building that was in use by the County. Instead, the master plan "...recommends that the County complete a feasibility study to evaluate the current building and future office needs as compared to the potential public and private redevelopment of the site." The applicant submits that this PD modification proposal complies with the master plan and the provision of the proposed GCS sub-district standards are needed to properly guide public and private redevelopment of the site.

- (b) Allowing greater freedom in selecting the means to provide access, light, open space, and design amenities;

Staff Comment: The applicant's decision to continue in the current Haynie-Sirrine Neighborhood Code format, of a form-based code standard, provides the necessary information to guide and direct development while allowing greater freedom.

- (c) Allowing greater freedom in providing a mix of land uses in the same development, including a mix of housing types, lot sizes, and densities;

Staff Comment: The proposal states that "the overall objectives for the redevelopment of the [GCS sub-district] include the provision of aesthetically striking and appealing urban building, hardscape and landscape design; enhanced connectivity to the Swamp Rabbit Trail, Falls Park on the Reedy, the Cancer Survivor Park, Cleveland Park, surrounding communities, and Downtown Greenville; the creation of sense of place through scale of design and walkability, and, the incorporation of multiple uses to allow residents and visitors the ability to work, live, and play."

The intent of the applicant's proposal appears to be to provide a mix of land uses, housing types, lot sizes, and densities to enhance and create a compatible development to the adjacent existing residential and commercial/institutional/office uses. The primary residential component, of this PD proposal, consists of multifamily units, although a variety of residential uses are also allowed. The applicant has also proposed a balanced mix of other commercial, public/institutional and service/industrial use allowances to complement the adjacent development and proposes to protect adjacent development, outside of the GCS sub-district, with the specific prohibition of undesirable uses not currently prohibited within the Neighborhood Code. Staff would, however, note that the applicant's proposal to increase height in Zone F from six stories to eight stories does not enhance and create development opportunities compatible to the adjacent existing residential and commercial/institutional/office uses to the south.

- (d) Promoting quality urban and traditional neighborhood design and environmentally sensitive development by allowing development to take advantage of special site characteristics, locations, and land uses;

Staff Comment: Positioned at the southern edge of the Central Business District and the northern edge of a neighborhood, whose master plan notes, as a central component, the preservation of affordable housing in the area, this site is a unique location. The proposed uses are consistent with

the existing Neighborhood Code and seem appropriate for this sub-district proposal and conform to the current language of the Neighborhood Code that describes this district as "...the most dense business, service and institutional center shared by many neighborhoods in the southwest sector of the Downtown area." This URVC sub-district and, subsequently, the proposed GCS sub-district are intended to serve "...as a primary employment center accommodating larger floorplate office buildings in close proximity to surrounding thoroughfares and the County Square Government Center." The PD modification proposes an improved street layout, pedestrian circulation pattern, and improved open space connectivity that is more in keeping with an integrated area design than the existing County Square complex.

- (e) Encouraging quality urban and traditional neighborhood design and environmentally sensitive development by allowing increases in base densities or floor area ratios when such increases can be justified by superior design or the provision of additional amenities such as public open space.

Staff Comment: The fundamental difference between the existing limitations of the URVC sub-district and the proposed GCS sub-district may be summed as follows:

- *Increased building height*
- *Increased lot coverage allowance*
- *Decreased setback requirements*
- *Increased variety in allowed building forms*

These differences are permissible, when included as part of the PD. In return, the design should be superior design and include above average open space and additional recreational amenities. The proposed form-based code language mirrors the existing form-based code format of the Haynie-Sirrine Neighborhood Code and incorporates superior design guidance through the incorporation of the Downtown Design Guidelines and the identification of a variety of architectural styles, depicted in the photos of 'Figure 3 – Non-Residential and Multi-Family Architecture'. The applicant also proposes a denser, urban environment with public plazas and increased pedestrian and bike trail connectivity to adjacent public park space.

Should the Planning Commission recommend approval of this request to the City Council, staff suggests the following conditions for consideration:

Planning Conditions:

1. All development proposals must comply with all comments and conditions of the PD approval. Staff will verify compliance at development proposal permitting stage.
2. In order to enhance and create development opportunities that are compatible to the adjacent existing residential and commercial/institutional/office uses to the south, Zone F shall retain a maximum building height allowance of six stories.
3. The letter of commitment, presented by the County and dated October 9, 2019, to contribute the sum of two (2) million dollars, over a five year period, for the construction of affordable housing, either within the GCS sub-district or elsewhere within the Haynie-Sirrine neighborhood, shall be incorporated as a requirement for continued development that shall be fulfilled within five years of the issuance of the first private (non-county owned) development permit.
4. Accessory use automobile wash and detailing, within parking garages, cannot be accessory to the primary use of the parking garage, but shall be accessory to another primary use such as, but not limited to, a rental car agency, a hotel, or an apartment complex.
5. All multi-family building projects shall comply with the multi-family requirements found in the Land Management Ordinance.
6. All dimensional variance requests shall conform to Section 19-2.3.7 of the Land Management Ordinance.
7. 'For profit sports field/stadiums' shall not qualify as public open space due to limited, for pay access.
8. Each development shall calculate trip generation per the ITE trip generation manual to determine when the appropriate mitigation is constructed. If development exceeds the total trip generation

included in the Traffic Impact Study, a new Traffic Impact Study shall be performed to determine additional mitigation.

9. Each development proposal, within the GCS sub-district, shall submit a construction traffic regulating plan, for approval to the City Engineering Department, that clearly delineates traffic flow, expected interruptions to traffic flow, staging area locations, staging area ingress and egress points and designated construction worker parking areas. When interruptions to traffic flow are anticipated, then a Traffic Control Plan must be submitted with the regulating plan.
10. Staff review denials of Final Development Plan submittals shall be appealed to the Planning Commission.

City Engineer Comments

Recommend: Approve w/ Conditions

Comments:

See all comments by Engineering staff.

Traffic mitigation shall be constructed as described in the Traffic Impact Study dated September 19, 2019. The phasing shall be as described in the phasing plan dated September 19, 2019 which includes the trip generation as the measure for implementation. Each development shall calculate trip generation per the ITE trip generation manual for each development to determine when the appropriate mitigation is constructed. If development exceeds the total trip generation included in the Traffic Impact Study, a new Traffic Impact Study will have to be performed to determine additional mitigation.

It is recommended as a condition of approval that the "Infrastructure Agreement for Greenville County Square Redevelopment Project" be removed from the submission.

All development shall adhere to all the requirements of the stormwater ordinances. Existing impervious area is taken into account when calculating stormwater runoff.

The flow acceptance letter for sewer service and the included Public Main Extension Preliminary Capacity Request Form is based upon a connection to the REWA main at Manhole 400C-194. The sewer map showing connections to existing City mains adjacent to the project on the west and south, not flowing to the REWA manhole 400C-194 do not have flow acceptance or any preliminary approvals and are subject to capacity determinations. Improvements to this system to provide any additional capacity necessary will have to be made by the developer.

Civil Engineer Comments

Recommend: Approve w/ Conditions

Comments:

- 1) All proposed public and private improvements shall meet the requirements of Section 19-6.7 Site Development and Related Infrastructure of the City's Land Management Ordinance. The design and construction of the public and private infrastructure shall conform to all applicable federal and state regulations and the requirements of the City's design and specifications manual.
- 2) All commercial and multi-family developments shall comply with Chapter 11 of the International Building Code for site accessibility. Per Section 1104, a minimum of one accessible route shall be provided from each site arrival point (public transportation stops, accessible parking, accessible passenger loading zones and public streets or sidewalks) to the accessible building entrance served. Additionally, an accessible route shall be provided within the site to connect accessible buildings, facilities, elements and spaces on the site.
- 3) Traffic Mitigation – The revised traffic impact study and recommended mitigation plan are acceptable. The phasing of the traffic mitigation plan shall be implemented based on trip generation and not building square footages.
- 4) Ingress, Egress & Traffic Circulation – The Vehicular Connectivity Diagram in Figure 4 does not specify what typical section the Secondary Streets will be constructed to. Either the 44' R/W or

60' R/W typical sections will be utilized for these streets based upon the need for on-street parking.

- 5) Roadway Typical Sections – The roadway typical sections will be evaluated in more detail with the final development plan for each specific development. The 80' R/W typical section for the Primary Roads shall be modified to provide protected bike lanes. Standard bike lanes shall be provided on the secondary streets as determined by the City while not eliminating a minimum 4.0' curb lawn.
- 6) As stated, sidewalks serving commercial and mixed-use developments shall be a minimum of 8.0' in width. In areas of topographic constraints, the sidewalk widths may reduce to a minimum of 5.0'.
- 7) The Infrastructure Agreement For Greenville County Square Project shall not be included in the zoning approval. The HSN-GCS shall be subject to the City's adopted stormwater ordinance at the time of each project development. Sewer flows shall be approved for each development with each Final Development Plan and any sewer upgrades needed to ensure capacity shall be the responsibility of the developer.

Environmental Engineer Comments

Recommend: Approve w/ Conditions

Comments:

The "Infrastructure Agreement for Greenville County Square Project" that is included in this submittal package is not acceptable for approval. Item number one for Sanitary Sewer Infrastructure and item number three for stormwater management system(s) must be revised and reviewed by the Environmental Engineering Division before it is recommended for approval.

Parks and Recreation Comments

Recommend: Approve w/ Comments

Comments:

- Map on Pg. 39 – terminology of "Bike Routes" leaves much room for interpretation. This should be referred to as either "Protected Bike Lanes" or "Bike Lanes" depending on available right-of-way width.
- Alternative typical sections (B-2) – Protected bike lanes of a recommended total width of nine feet, including a three foot protection zone, should be installed on transitional, connector and primary routes through the development. Standard bike lanes six feet in width should be installed on all secondary streets through the development. Alternative cross sections showing appropriate dimensions and placement have been provided to Engineering.

Traffic Engineer Comments

Recommend: Approve w/ Comments

Comments:

No major issues are found with the traffic impact study. It is understood that Phase I will likely result in a net loss of trips with the construction of new county offices and the removal of state offices. It is also understood that future uses will be subject to change, making future proposed trip generations difficult to predict now. Any significant deviation from the approved Master Plan will require an update to the traffic impact study to determine any additional or different mitigation than what is currently proposed in the study. A significant deviation is defined as more or different intensities of development that increase the predicted trips to or from the site.

Fire Department Comments

Recommend: Approve w/ Comments

Comments: I will fully enforce all Fire Code requirements presented in the edition of the International Fire Code that is adopted upon submission of a set of plans for review.

Fire and Aerial access road requirements will be strictly enforced as clearly stated in Chapter 5 and Appendix D. No overhead utilities or other obstructions will be permitted in aerial access designated areas and roadways.

All road width and construction standards will be strictly adhered to throughout the development without compromise as established in cooperation with our Engineering, Fire, Planning and Zoning Departments. Fire access must be provided on the property of the structure requiring the access or by the roadways surrounding the structure if they comply with the code requirements but the developer must not consider access to be provided by property that they do not control.

Fire access roads must provide access to within 150' of the most remote portion of every structure and comply with all turn around standards. Templates are provided in Appendix D of the 2015 Edition of the IFC for consideration. You must have fire hydrants within 500' of all structures and all weather fire access roads in place and useable prior to any combustible construction being permitted on this site.

Your proposal includes structures that could possibly be built at a future time and for me to review a project I must have site details and elevations that have not been provided.

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations	Current Submittal	Additional Limitations
General Use Listing	University Ridge Village Center (URVC) - Mixed Use		Haynie-Sirrine Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use	
RESIDENTIAL USES				
Residential		The number of dwellings is limited by the requirement of 1.5 parking spaces for each dwelling, a ratio that may be reduced according to the shared parking standard (Section 7.4)		
	n/a	n/a	Accessory Dwelling Units	none
	n/a	n/a	Cottage Subdivision	none
	n/a	n/a	Highrise Multi-Family	none
	n/a	n/a	Upper Story Dwelling	none
	Single-Family Detached	See general note above	Single-Family Detached	none
PUBLIC AND INSTITUTIONAL USES	Single-Family Attached	See general note above	Single-Family Attached	none
	Duplex Dwelling	See general note above	Duplex Dwelling	none
	Multi-Family Dwelling	See general note above	Multi-Family Dwelling	none
Civic		Civic permits available for not-for-profit organizations dedicated to religion, arts and culture, education, government, social service, transit and other similar functions. Civic uses shall be permitted, except those uses that exceed 25,000/SF shall be subject to the issuance of Final Development Plan approval by the Planning Commission		
	n/a	n/a	Assisted Living Facility	none
	n/a	n/a	Business School	none
	n/a	n/a	College or University	none

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations	Current Submittal	Additional Limitations
	University Ridge Village Center (URVC) - Mixed Use		Haynie-Sirrine Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use	
General Use Listing		Residential, Office, Retail	Commercial, Public, Institutional	
	n/a	n/a	Communication Tower, Roof Mounted/Small Cell Antennae	Communication Tower, freestanding requires a special exception permit
	n/a	n/a	Community Service (All Uses)	Including but not limited to libraries, museums, senior centers, community centers, youth club facilities and social service facilities
	Day Care Center (13+ People)	See general note above	Day Care Center (13+ People)	none
	n/a	n/a	Emergency Response Facility	none
	n/a	n/a	Group Day Care Home (7 to 12 People)	none
	n/a	n/a	Hospital	none
	n/a	n/a	Medical Facility, other than Hospital	Including but not limited to medical centers, emergency medical care establishments, medical and dental clinics and medical and dental labs
	n/a	n/a	Parks	Including but not limited to squares, plazas, recreational trails, greenways, botanical gardens, neighborhood parks and community parks
	n/a	n/a	Police Substation	none
	n/a	n/a	Post Office	none
	n/a	n/a	Preschool	none
	n/a	n/a	Religious Institution	none
	n/a	n/a	School, public or private	none
	n/a	n/a	Trade School	Includes vocational, technical or industrial schools

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations	Current Submittal	Additional Limitations
General Use Listing	University Ridge Village Center (URVC) - Mixed Use	Residential, Office, Retail	Commercial, Public, Institutional	Haynie-Sirrione Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use
Lodging (Visitor Accommodations)		The number of bedrooms available for lodging is limited by the requirement of one assigned parking space for each bedroom, in addition to the parking requirement for each dwelling. Food service may be provided at all times.		
	Hotels	See general note above	Hotel or Motel	Suites or Extended Stay
	Inns	See general note above	Bed and Breakfast Inn	none
	Rental Cottages	See general note above	n/a	n/a
COMMERCIAL USES				
Eating Establishments				
	Drive-In Restaurant	none	n/a	n/a
	Restaurant, with Drive-through outdoor seating and/or food service areas	Subject to the issuance of a Conditional Use Permit	Restaurant, with Drive-through outdoor seating and/or food service areas	Requires a special exception permit
	Restaurant, with indoor seating only	none	Restaurant, with indoor seating only	none
	Restaurant with no seating	none	Restaurant with no seating	none
Outdoor Entertainment				
	All Uses	none	All Uses	none
Office		The area available for office use is limited by the requirement of 3 assigned parking spaces for each 1000/SF, a ratio that may be reduced according to the shared parking standard (Section 7.4)		

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations	Current Submittal	Additional Limitations
General Use Listing	University Ridge Village Center (URVC) - Mixed Use			Haynie-Sirrine Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use
	Residential, Office, Retail			Commercial, Public, Institutional
	Bail Bonding	none	n/a	n/a
	Radio or TV Broadcasting Studio	none	n/a	n/a
Parking Commercial	All Other Uses	none	All Other Uses	none
	n/a	n/a	Parking Lot	none
	n/a	n/a	Parking Structure	none
Retail		The area available for retail use is limited by the requirement of 1 assigned parking space for each 250/SF of gross retail space, a ratio that may be reduced according to the shared parking standard (Section 7.4)		
	Automobile Parts Store	See general note above	n/a	n/a
	Bank, Financial Institution of ATM	See general note above	Bank, Financial Institution of ATM	none
	Barbershop, Beauty Shop	See general note above	Barbershop, Beauty Shop	none
	Bodily Fluid Collection Establishment	See general note above	n/a	n/a
	Body Piercing/Tattoo Establishment	See general note above	n/a	n/a
	n/a	n/a	Brewpub	Subject to supplementary requirements in Section C, 3
	Casino or Gambling Establishment	See general note above	n/a	n/a
	Check Cashing Establishment, Title Loan Lenders, Deferred Presentment Lenders	See general note above	n/a	n/a
	Civic Club	See general note above	Civic Club	none
	Convenience Store	See general note above	Convenience Store	Requires a special exception permit

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations		Current Submittal		Additional Limitations	
		University Ridge Village Center (URVC) - Mixed Use		Haynie-Sirrine Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use			
General Use Listing		Residential, Office, Retail		Commercial, Public, Institutional			
		n/a		n/a		n/a	
	Convention and Exhibition Hall	See general note above		Convention and Exhibition Hall		Requires a special exception permit	
	Day Labor Service Agency	See general note above		n/a		n/a	
	Dealers in Precious Metals	See general note above		n/a		n/a	
	n/a	n/a		Dog DayCare Facility		Requires a special exception permit	
	Event Venue	See general note above		Event Venue		Requires a special exception permit	
	Fortune Telling	See general note above		n/a		n/a	
	Funeral Home, Mortuary	See general note above		n/a		n/a	
	n/a	n/a		Greenhouse		Subject to supplementary requirements in Section C, 3	
	Grocery Store	See general note above		Grocery Store		none	
	Health Club or Spa	See general note above		Health Club or Spa		none	
	Indoor Entertainment Facility, General	See general note above		Indoor Entertainment Facility, General		none	
	Kennel or Veterinary Clinic, Indoor and Outdoor	See general note above		Veterinary Clinic, Indoor and Outdoor		Requires a special exception permit	
	Kennel, Veterinary Clinic, Indoor Only	See general note above		n/a		n/a	
	Landscape Nursery	See general note above		n/a		n/a	
	Loan Broker and Small Loan Company	See general note above		n/a		n/a	
	Liquor Store	See general note above		n/a		n/a	
	Nightclub or Bar	See general note above		Nightclub or Bar		Requires a special exception permit	
	Pawnshop	See general note above		n/a		n/a	
	Personal Services, All Other	See general note above		Personal Services, All Other		none	
	Photography, Art, Dance Studio or Gallery	See general note above		Photography, Art, Dance Studio or Gallery		none	
		See general note above					

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations	Current Submittal	Additional Limitations
General Use Listing	University Ridge Village Center (URVC) - Mixed Use		Haynie-Sirrine Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use	
	Residential, Office, Retail		Commercial, Public, Institutional	
	Prefabricated Building Display and Sales	See general note above	n/a	n/a
	Retail Sales and Services, All Other Uses	See general note above	Retail Sales and Services, All Other Uses	none
	n/a	n/a	Retail Sales and Services Uses Selling Alcoholic Beverages	none
	Retail Sales and Services Exceeding 25,000 Gross Square Feet	See general note above	Retail Sales and Services Exceeding 25,000 Gross Square Feet	none
	Sexually Oriented Business	Adult Establishments and Adult Video Stores are Excluded	n/a	n/a
	Sports and Concert Arena	See general note above	Sports and Concert Arena	Requires a special exception permit
	n/a	Automotive, Boat & Heavy Equipment Sales and Service is Excluded	Automobile Showroom	Limited in size to 5,000/SF

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations	Current Submittal	Additional Limitations
General Use Listing	University Ridge Village Center (URVC) - Mixed Use	Residential, Office, Retail	Haynie-Sirrine Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use	
SERVICE AND INDUSTRIAL USES				
Manufacturing and Production		The area available for manufacturing use is limited to the building. No outdoor manufacturing activity or storage is permitted. The parking requirement shall be .25 spaces 1000/SF		
	Artisan Production Establishment	See general note above	Artisan Production Establishment	none
	Light Manufacturing, General	See general note above	Light Manufacturing, General	Requires a special exception permit
	n/a	n/a	Microbrewery	Requires a special exception permit, subject to supplementary requirements in Section C, 3
	n/a	n/a	Research and Development (all uses)	none
	n/a	n/a	Wholesale establishment	none

County Square PD Modification Proposal

Zoning Use Comparison Chart

Use Category	Existing H/S PD	Additional Limitations	Current Submittal	Additional Limitations
General Use Listing	University Ridge Village Center (URVC) - Mixed Use	Residential, Office, Retail	Haynie-Sirrine Neighborhood - Greenville County Square (HSN-GCS) - Mixed Use	
PROHIBITED USES	Automotive, Boat and Heavy Equipment Sales and Service		Automotive, Boat and Heavy Equipment Sales and Service	
	Adult Establishments		Adult Establishments	
	Adult Video Stores		Adult Video Stores	
	n/a	n/a	Automobile Part Store	n/a
	n/a	n/a	Bail Bonding	n/a
	n/a	n/a	Fortune Tellers	n/a
	n/a	n/a	Laundry and Dry-cleaning Plant	n/a
	n/a	n/a	Loan Broker and Small Loan Company	n/a
	n/a	n/a	Pawnshops	n/a
	n/a	n/a	Payday Lenders	n/a
	n/a	n/a	Title Loan Lenders	n/a
	n/a	n/a	Check Cashing Establishments	n/a
	n/a	n/a	Deferred Presentment Lenders	n/a
	n/a	n/a	Dealers in Precious Metals	n/a
	n/a	n/a	Restaurant, with drive-through	n/a
	n/a	n/a	Self-service storage (all uses)	n/a
	n/a	n/a	Tattoo Parlors	n/a
	n/a	n/a	Veterinary Clinic (outdoor)	n/a
	n/a	n/a	Wholesale Establishment	n/a

n/a Indicates that the subject matter is not applicable to the column/row/cell

Indicates information that remains the same in both the existing H/S PD and the proposed GCS sub-district

Indicates requirement of the original H-S PD either not proposed or changed in the new GCS sub-district proposal

Indicates new information or proposal language that differs from the original H-S PD



The County of Greenville

South Carolina

H. G. (Butch) Kirven, Jr., District 27

County Council Chairman

bkirven@greenvillecountytv.org

October 9, 2019

The Honorable Knox White
Mayor of the City of Greenville
Greenville, SC 29601

Dear Mayor White:

Reflecting the general sense of County Council's desire to overcome the contentious matter of forcing certain forms of development on the University Ridge Development property, and having engaged in positive discussions with you over the past few days, the following solution is offered, which we believe answers the objective interests of the City, the Haynie-Sirrine neighborhood, the County and its development partners:

1. Greenville County and its development partners acknowledge the importance of preserving the unique character and charm of the Haynie-Sirrine neighborhood, and supporting the City of Greenville's desire to encourage the construction of additional, quality affordable housing units throughout the community. Greenville County is committed to working closely with the City of Greenville in preserving the integrity and diverse character of the proximate neighborhoods through effective planning, appropriate amenities, and respect for citizens' preferences.
2. In 2019, Greenville County, in its biennium budget, committed \$1 Million annually for the next 5 consecutive years towards affordable housing projects around the County. As part of implementing the University Ridge Development, the project will provide no less than an additional \$2 Million over the next 5 years, to support constructing affordable housing units on or off-site within the Haynie-Sirrine neighborhood and areas in the vicinity of the Greenville County Square District.

Respectfully,

H. G. (Butch) Kirven, Jr.

301 University Ridge, Suite 2400, Greenville, SC 29601
Regina McCaskill, Clerk-to-Council (864) 467-7118
www.greenvillecounty.org

EXHIBIT D

Planning Commission Conditions

1. All staff comments and conditions.
2. Building heights shall be limited as follows:
 - a. Zone A is limited to 6 stories (no change).
 - b. Zone B is limited to 8 stories, with two buildings up to 12 stories.
 - c. Zone C is limited to 8 stories, with two buildings up to 12 stories.
 - d. Zone D is limited to 8 stories (no change).
 - e. Zone E is limited to 4 stories (no change).
 - f. Zone F shall be limited to 6 stories.
3. In Section 13, all “should” and “may” phrases are to be changed to “shall.”
4. Section 13(C)(1)(b) Uses Permitted by Right, is amended by deleting item ix, “Hospitals,” and adding it to Section 13(C)(2) Special Exceptions.
5. Section 13(C)(3)(b) Dog day care facility, is amended by deleting item iv, “Overnight stay of animals is allowed.”
6. Section 13(F)(1) is amended as follows:
 - a. “... The intent of this section is to promote creative solutions that ~~future~~ all users may want to incorporate within the sub-district.”
 - b. “... Pertinent to an attractive physical environment for the public is the design of the site, use of colors and materials, signage, building orientation, architectural style, and compatibility with the surrounding urban and Haynie-Sirrine ~~community~~ communities.”
7. Section 13(F)(2) bullet-point #6 is amended as follows: “... Variations in the design of each building in terms of color, architecture, and material is ~~encouraged~~ required in order to create interest and ~~reduce~~ avoid a monotonous appearance.”
8. Removal of the following images from Section 13(F)(3):
 - a. The top-left image in Figure 3A on page 33.
 - b. The top-left image in Figure 3C on page 35.
 - c. The top-right image in Figure 3D on page 36.
9. The traffic and parking plan shall be reviewed within 5 years of issuance of the first building permit, regardless of whether the triggers within the plan have been reached.
10. Final development plans shall be presented for review and approval by Planning Commission.

EXHIBIT E

**UNIVERSITY RIDGE
TRAFFIC IMPACT STUDY
Greenville, South Carolina**

**Prepared for
GTRP Greenville, LLC**

Prepared by
 **Sprague & Sprague**
Consulting Engineers

September 18, 2019

UNIVERSITY RIDGE TRAFFIC IMPACT STUDY
Greenville, South Carolina
September 18, 2019

Executive Summary

University Ridge is a mixed-use development located between Church Street and Howe Street in downtown Greenville as shown in the master plan and site location aerial in Appendix A. There have been several iterations of the master plan, and there may be more. The site trips and analyses in this report are based on the January 2019 plan. The plan shown in Appendix A is the February 2019 plan. While the general layout of the plan remains consistent, as shown below, there have been minor changes between the plans. However, it would not be productive to revise all site trips and analyses for these small changes. The uses planned on the site are:

- County office - 250,000 square feet – same in January and February master plans
- Other office – 1,000,000 square feet – same in January and February master plans
- Hotel – 350 rooms – changed to 150 rooms with 120 loft offices
- Residential – 1500 units – generally five to eight stories – same in January and February plans
- Retail – 296,000 square feet – changed to 300,000 square feet in February plan

This study is based on the County office occupied about 2020 with full build out expected in another five years – 2025. These dates may also change slightly as the project proceeds. The findings of this study are:

- *Augusta Street/River Street/Main Street* – With the addition of new site trips, the intersection will go to LOS E/F. **With a change from pretimed to actuated operation (with ped recall so that all peds are served every cycle) as mitigation, the intersection can operate acceptably with 2026 build volumes. SCDOT is requiring adaptive operation at this intersection, but that upgrade is not included in the mitigation analysis because it is not required to achieve acceptable operation.**
- *Augusta Street/University Street/Driveway* – The westbound left/though already operates at LOS E but goes to F with build volumes. **Making the westbound movement right out only will eliminate LOS F at this intersection.**
- *Augusta Street/Field Street* - This intersection operates acceptably overall and can continue to do so with 2026 no build and build volumes. **SCDOT is requiring adaptive operation at this intersection, but that upgrade is not included in the mitigation analysis because it is not required to achieve acceptable operation.**
- *Augusta Street/Bradshaw Street* - This intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side street goes to LOS F in the afternoon. Although the delay is reasonable for a side street at an unsignalized intersection during a peak hour, mitigation was considered. **Adding an extension of Dunbar Street to Howe will provide a signalized left turn onto Augusta from the site and remove the LOS F from this intersection.**
- *Augusta Street/Vardry Street* - This intersection currently operates acceptably overall and can continue to do so with 2026 no build volumes and 2026 build volumes with or without the Dunbar Extension. **SCDOT is requiring adaptive operation at this intersection, but that upgrade is not included in the mitigation analysis because it is not required to achieve acceptable operation.**
- *Augusta Street/Harris Street* - This intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side street goes to LOS E in the afternoon. Although the delay is reasonable for a side street at an unsignalized intersection during a peak hour, **a right turn lane of 150 feet on Harris was considered, and provision of that lane will eliminate LOS E at the intersection with 2026 build volumes.**

- *Augusta Street/Claussen Avenue* - This intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side street goes to LOS E in the afternoon. Although the delay is reasonable for a side street at an unsignalized intersection during a peak hour, mitigation was considered. **Adding an extension of Dunbar Street to Howe which will provide a signalized left turn onto Augusta from the site and remove the LOS E from this intersection.**
- *Augusta Street/Thruston Avenue/Driveway* - This intersection currently operates with LOS D and E on the side streets. With 2026 no build volumes the LOS for westbound in the afternoon will go to F, but the delay is still reasonable for a side street during a peak hour. With the addition of site traffic both side streets will operate at LOS F in the afternoon, and the delay for westbound will be higher than could be considered reasonable. As discussed previously, **mitigation includes the extension of Dunbar to Howe Street. To assess this impact in case it happens, it is assumed that the connection of Thruston to Augusta will be closed as part of the extension. With that closure, this intersection will operate with lower delay with 2026 build volumes than with 2026 no build.**
- *Augusta Street/Dunbar Street* - This intersection currently operates acceptably overall and can continue to do so with 2026 no build and 2026 build volumes. **To provide a signalized left turn from the site onto Augusta, an extension of Dunbar to Howe was considered as mitigation for other intersections. It was assumed that the median on the western leg of the intersection would be removed to provide left, through, and right lanes and that left (200 feet) and through/right lanes would be provided on the eastern leg (westbound). The intersection can operate acceptably with this mitigation. SCDOT is requiring adaptive operation at this intersection, but that upgrade is not included in the mitigation analysis because it is not required to achieve acceptable operation.**
- *Augusta Street/Haynie Street/Augusta Walk Way* - This intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side goes to LOS E in the afternoon. Although the delay is reasonable for a side street at an unsignalized intersection during a peak hour, mitigation was considered. **Adding an extension of Dunbar Street to Howe will provide a signalized route for trips crossing Augusta to Dunbar. With the Dunbar Extension, the LOS E is removed from this intersection.**
- *Church Street/Mills Avenue/Augusta Street* - This intersection currently operates at LOS D overall, and with 2026 no build volumes, the overall LOS will be E. With the addition of new site trips, the overall LOS will go to F. SCDOT is requiring adaptive operation at this intersection. **With that operation, the LOS E with 2026 build volumes will be the same as for 2026 no build. Therefore, no further mitigation besides adaptive signal operation is required. With adaptive operation, additional southbound left turn storage may be needed and can be provided by revising the raised median currently in place.**
- *Church Street/Haynie Street/Pearl Avenue* - This intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With 2026 build volumes, the intersection can still operate at LOS D in the afternoon, but with existing signal operations, the northbound left will operate with high delay. **This operation indicates a northbound left turn phase (and increasing storage from 150 to 250 feet) will be needed. In addition, to give more capacity for eastbound to northbound lefts out of the site, dual lefts (250 feet) are being provided as mitigation for University Ridge/Church. With that mitigation and the adaptive operation being required by SCDOT, this intersection can operate acceptably with 2026 build volumes.**

- *Church Street/University Ridge* - This intersection currently operates acceptably in the morning and at LOS D overall in the afternoon peak hour. This operation can continue with 2026 no build volumes. With 2026 build volumes, the afternoon peak hour LOS will go to E. **Adding more capacity for the eastbound to northbound left at Haynie/Church and installing the adaptive operation required by SCDOT will allow this intersection to operate at LOS D with 2026 build volumes. Storage of at least 300 feet should be provided for eastbound lefts and rights.**
- *University Ridge/Cleveland Street* - This intersection currently operates acceptably and can continue to do so with 2026 no build or build volumes. Therefore, **no mitigation is recommended at this intersection.**
- *Church Street/Washington Street* - This intersection currently operates acceptably overall and can continue to do so with 2026 no build volumes. With the addition of site trips, the afternoon peak hour will go to LOS D. **Because the intersection can operate at LOS D overall with 2026 build volumes, no mitigation is recommended at this intersection.**
- *Church Street/East North Street* - This intersection currently operates acceptably. With 2026 volumes, the LOS will go from C to D in the morning. No mitigation would be suggested at this intersection, but mitigation is required at Beattie. **Because the southbound lefts are low at this intersection, prohibiting that left was considered to allow a northbound dual left onto Beattie. Operation of this intersection at LOS D/C can continue with that change.**
- *Church Street/Beattie Place* - This intersection currently operates at LOS D during the morning peak hour and will continue to do so with 2026 no build volumes. With the addition of new site trips, the morning peak hour LOS will go to E. Given the proximity of buildings and retaining walls, there are no practical lane additions at this intersection. **If the southbound left is prohibited at East North, the northbound left on Church at Beattie can be converted to a dual left, and the intersection can operate at LOS D overall during both peak hours with 2026 build volumes.**
- *Haynie Street/Howe Street* - This intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side street will go to F with delay beyond what would be considered acceptable. **Addition of a southbound left turn lane (250 feet) and westbound right turn lane (100 feet) along with the Dunbar Extension will result in LOS E with delay for the southbound left which will be reasonable for a side street during a peak hour. To remove the LOS E from this intersection, a realignment with Haynie/Howe as the through movement was considered. This realignment shifts the higher traffic volumes away from the existing single-family homes to the west but requires more right of way. The resulting intersection can operate acceptably. The geometry assumed includes a westbound left turn lane (100 feet) and a two-lane approach on the side street (150-foot right turn lane).**
- *Dunbar Extension/Howe Street* - The extension of Dunbar will result in a new intersection with Howe. **The geometry assumed for the intersection included a southbound right turn lane (150 feet), a northbound left turn lane (100 feet), and a two-lane side street approach (100 foot eastbound right turn lane), and this intersection can operate acceptably with side street stop control and 2026 build volumes.**
- *Church Street/County Garage* - This intersection can operate acceptably as right in/right out with 2026 build volumes. **A right turn lane (200 feet) should be provided on Church.**
- *Internal Intersections* - Initially, the first intersection off of University Ridge was planned as a four-way signalized intersection, and SCDOT required that that intersection be located at least 750 feet from Church to reduce the potential for queuing from that intersection onto Church. After further review of the master plan, it appears that a set of T intersections with the first located about 600 feet from Church will require less side street green time at the first intersection, thereby reducing the westbound queue at this intersection. The developer would like to have as few lanes inside the development as possible. This geometry meters the traffic leaving the site, but two westbound

lanes will be maintained entering the site to reduce the potential for queueing onto Church. With a signalized T intersection as the first intersection, the 95th percentile morning peak hour queue is estimated to be 253 feet which is less than the approximately 550 feet that will be available for queueing. Queues within the site will be longer. **The intersections can operate acceptably with the assumed geometry:**

- **University Ridge/Claussen**
 - o Eastbound – through, right (250 feet)
 - o Westbound – left (200 feet), through, through
 - o Northbound – left, right (350 feet)
- **University Ridge/Garage access**
 - o Eastbound – left/through
 - o Westbound – through, right (full block)
 - o Southbound – left (full block), right

End of Executive Summary. Full traffic report on file in Planning Office.

Introduction

University Ridge is a mixed-use development located between Church Street and Howe Street in downtown Greenville as shown in the master plan and site location aerial in Appendix A. There have been several iterations of the master plan, and there may be more. The site trips and analyses in this report are based on the January 2019 plan. The plan shown in Appendix A is the February 2019 plan. While the general layout of the plan remains consistent, as shown below, there have been minor changes between the plans. However, it would not be productive to revise all site trips and analyses for these small changes. The uses planned on the site are:

- County office - 250,000 square feet – same in January and February master plans
- Other office – 1,000,000 square feet – same in January and February master plans
- Hotel – 350 rooms – changed to 150 rooms with 120 loft offices
- Residential – 1500 units – generally five to eight stories – same in January and February plans
- Retail – 296,000 square feet – changed to 300,000 square feet in February plan

This study is based on the County office occupied about 2020 with full build out expected in another five years – 2025. These dates may also change slightly as the project proceeds.

Purpose of Study

The purpose of this study is to meet the requirements of the City of Greenville in the development approval process and the South Carolina Department of Transportation (SCDOT) in the encroachment permit process.

The study intersections are listed below:

- Augusta Street (SC 20)/River Street (S-664)/Main Street
- Augusta Street/University Street/driveway
- Augusta Street/Field Street
- Augusta Street/Bradshaw Street
- Augusta Street/Vardry Street
- Augusta Street/Harris Street
- Augusta Street/Claussen Street
- Augusta Street/Thruston Street/driveway
- Augusta Street/Dunbar Street (S-490)
- Augusta Street/Haynie Street (S-494)/Augusta Walk
- Haynie Street/Howe Street
- Church Street/Mills Avenue (US 29)/Augusta Street
- Church Street/Pearl Avenue/Haynie Street
- Church Street/University Ridge (S-438)
- University Ridge/Cleveland Street (S-76)

UNIVERSITY RIDGE TRAFFIC MITIGATION PHASING
Greenville, South Carolina
September 19, 2019

A traffic impact study has been conducted for the University Ridge mixed-use development and has identified the mitigation required to accommodate build out of the site. The development will be completed over time. Therefore, the mitigation will not all be needed at the beginning of the project. The City of Greenville and the South Carolina Department of Transportation have requested documentation for the proposed traffic mitigation phasing plan. They also requested that the phasing be based on trip generation rather than square footage.

One way to analyze the impact of various levels of development would be to conduct trip generation, assignment, and analysis for each level. However, the timing, types, and locations of specific development within the site is not known. Therefore, the impacts of various levels of development is difficult to assess in this manner.

A simplified method of determining when each mitigation element is required is proposed. Although the change in Level of Service at an impacted intersection will not be exactly linear throughout the development, looking at that change linearly provides a reasonable way of identifying when each mitigation element is needed. To determine the percentage of development that will trigger each mitigation, these calculations were conducted:

- If no build is LOS D or better – $\frac{\text{top LOS D delay} - \text{delay at no build}}{\text{delay at build} - \text{delay at no build}}$
- If no build is LOS E – $\frac{\text{top LOS E delay} - \text{delay at no build}}{\text{delay at build} - \text{delay at no build}}$
- If no build is LOS F – $\frac{120 - \text{delay at no build}}{\text{delay at build} - \text{delay at no build}}$

(120 seconds was chosen because that is a delay a side street might experience in a signal system with a cycle length of 150 seconds.)

For the Dunbar Extension, the percentages for Bradshaw (40%), Claussen (75%), Thruston (46%), and Haynie (60%) were averaged to obtain 55% or 1515 afternoon peak hour trips.

Attached are

- Intersection Level of Service Criteria excerpted from September 18, 2019 report
- Worksheets with calculations based on the September 18, 2019 report
- Trip generation table from September 2018 report showing total afternoon peak hour trip generation. The total trip generation is being used so that trip estimates for each phase can be taken directly for ITE Trip Generation, latest edition.
- Mitigation phasing matrix

GGS

Traffic Operations

Synchro 9.1 is the software used for the traffic operations analyses in this study. The methodology used for assessing the quality of traffic flow is the methodology described in the 2010 Highway Capacity Manual (HCM), Transportation Research Board. In general, the HCM expresses quality of flow in terms of Level of Service (LOS). The types of transportation facilities which were examined in this study are the signalized and unsignalized intersections. The criteria for unsignalized and signalized intersection LOS are shown in Table 3. The variable used is control delay. This is the delay attributed to traffic control measures and includes deceleration delay, queue move-up time, stopped delay, and final acceleration delay. SCDOT uses a guideline of roadway LOS C or no change in LOS if the baseline LOS is below C as not requiring mitigation. Mitigation must be considered for the City of Greenville if an intersection currently operating at LOS D or better goes to LOS E or F. It is not unusual for an individual movement, especially on a side street at an unsignalized intersection, to experience LOS E or F during the peak hour.

Table 3
INTERSECTION LEVEL OF SERVICE CRITERIA
University Ridge Traffic Impact Study
Greenville, South Carolina

Level of Service	Control Delay Range (seconds/vehicle)	
	Unsignalized Intersection	Signalized Intersection
A	<10	<10
B	>10 and <15	>10 and <20
C	>15 and <25	>20 and <35
D	>25 and <35	>35 and <55
E	>35 and <50	>55 and <80
F	>50	>80

The study intersections were analyzed for morning and afternoon peak hours with existing traffic volumes. The City of Greenville supplied the base signalized intersection Synchro files so that existing timings could be correctly reflected and so that the influence of signalized intersections outside the study area would be considered. Volumes, percentages of heavy vehicles, peak hour factors, bicycles, and pedestrians were taken from existing counts. It is recognized that signal timings in the Augusta and Church corridors have been worked on over many years and in place to address traffic volumes as well as queueing between closely spaced intersections. Therefore, signal timings were not changed from those in the City Synchro unless specifically noted. Capacity analysis printouts are included in Appendix D.

Adaptive signal operation was modelled by optimizing the cycle and splits at the intersection.

Main Street/River Street/Augusta Street - As shown in Table 4, this intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of new site trips, the intersection will go to LOS E/F. The Synchro from the City indicates that this intersection operates pretimed. If it is changed to actuated operation (with ped recall so that all peds are served every cycle) as mitigation, the intersection can operate acceptably with 2026 build volumes. SCDOT is requiring adaptive operation at this intersection, but that upgrade is not included in the mitigation analysis because it is not required to achieve acceptable operation.

Table 4
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
MAIN STREET/RIVER STREET/AUGUSTA STREET
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build Existing Operation	Mit 1 Actuated with Min Recall
Morning Peak Hour				
Eastbound - Left	C/25	C/25	C/25	D/47
Through/right	C/26	C/26	C/26	D/49
Westbound - Left	C/25	C/25	C/25	E/57
Through/right	C/25	C/25	C/25	E/58
Northbound - Through	C/29	C/31	D/46	A/9
Right	C/20	C/21	C/21	A/7
Southbound - Through	D/38	D/45	F/132	B/11
Right	B/20	C/20	C/20	A/6
Overall	C/31	C/34	E/75	B/18
Afternoon Peak Hour				
Eastbound - Left	C/24	C/24	C/24	D/47
Through/right	C/27	C/27	C/27	D/51
Westbound - Left	C/26	C/26	C/26	D/49
Through/right	C/30	C/31	C/31	E/71
Northbound - Through	D/38	D/46	F/207	C/26
Right	C/22	C/22	C/22	B/13
Southbound - Through	C/32	D/36	F/71	B/19
Right	C/21	C/21	C/21	B/13
Overall	C/31	C/35	F/106	C/30

Notes:

- Main is east-west. River/Augusta is north-south.

$$\frac{55-34}{75-34} = \frac{21}{41} = 51\%$$

$$\frac{55-35}{106-35} = \frac{20}{71} = 28\%$$

$$28\% = 771 \text{ afternoon peak hour trips}$$

25

Augusta Street/University Street/Driveway - As shown in Table 5, the westbound left/through movement already operates at LOS E, but this volume is low. With the addition of new site trips the westbound left goes to LOS F. Although the delays are reasonable for a side street at an unsignalized intersection during a peak hour, mitigation of right turn only from westbound University will eliminate LOS F at this intersection.

Table 5
CAPACITY ANALYSES RESULTS – UNSIGNALIZED INTERSECTION – EXISTING GEOMETRY
AUGUSTA STREET/UNIVERSITY STREET/DRIVEWAY
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing Operation	Mit 1 WB Right Out Only
<i>Morning Peak Hour</i>				
Eastbound-Left/thru/right	C/18	C/19	D/27	D/27
Westbound - Left/through	D/33	E/39	F/62	-
Right	B/12	B/12	B/13	B/13
Northbound - Left	A/8	A/8	A/9	A/9
Southbound - Left	A/9	A/9	A/9	A/9
<i>Afternoon Peak Hour</i>				
Eastbound-Left/thru/right	C/21	C/23	E/40	E/40
Westbound - Left/through	E/36	E/44	F/86	-
Right	B/14	B/15	C/21	C/21
Northbound - Left	A/8	A/8	A/9	A/9
Southbound - Left	A/9	A/9	B/10	A/10

Notes:

- University is east-west. Augusta is north-south.

$$\frac{50 - 44}{86 - 44} = \frac{6}{42} = 14\%$$

$$14\% = 386$$

26

Augusta Street/Field Street - As shown in Table 6, this intersection operates acceptably overall and can continue to do so with 2026 no build and build volumes. SCDOT is requiring adaptive operation at this intersection, but that upgrade is not included in the mitigation analysis because it is not required to achieve acceptable operation.

Table 6
CAPACITY ANALYSES RESULTS – SIGNALIZED AND UNSIGNALIZED INTERSECTION – EXISTING GEOMETRY
AUGUSTA STREET/FIELD STREET
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)		
	Existing	2026 No Build	2026 Build
<i>Morning Peak Hour</i>			
Eastbound - Left/right	E/68	E/67	E/67
Northbound - Left	A/4	A/4	A/6
Through/right	A/3	A/3	A/3
Southbound-Through/right	A/3	A/3	A/4
Overall	A/7	A/7	A/7
<i>Afternoon Peak Hour</i>			
Eastbound - Left/right	F/115	F/110	F/110
Northbound - Left	A/2	A/3	A/3
Through/right	A/2	A/2	A/2
Southbound-Through/right	A/2	A/2	A/3
Overall	A/5	A/5	A/5

No
Change

Notes:

- University is east-west. Augusta is north-south.

30

Augusta Street/Claussen Avenue - As shown in Table 10, this intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side street goes to LOS E in the afternoon. Although the delay is reasonable for a side street at an unsignalized intersection during a peak hour, mitigation was considered. Mitigation 1 is adding an extension of Dunbar Street to Howe which will provide a signalized left turn onto Augusta from the site. With the Dunbar Extension, the LOS E is removed from this intersection.

Table 10
CAPACITY ANALYSES RESULTS – UNSIGNALIZED INTERSECTION – EXISTING GEOMETRY
AUGUSTA STREET/CLAUSSEN AVENUE
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)				
	Existing	2026 No Build	2026 Build		
			Existing	Mit 1 Add Dunbar Extension	
Morning Peak Hour					
Westbound - Left/right	C/16	C/17	D/26	D/34	
Southbound - Left	A/9	A/10	B/11	B/11	
Afternoon Peak Hour					
Westbound - Left/right	C/16	C/17	E/41	D/32	
Southbound - Left	A/9	A/10	B/10	B/10	

Notes:

- Claussen is east-west. Augusta is north-south.

$$\frac{35 - 17}{41 - 17} =$$

$$\frac{18}{24} =$$

$$75\%$$

$$75\% = 2066$$

31

Augusta Street/Thruston Avenue/Driveway - As shown in Table 11, this intersection currently operates with LOS D and E on the side streets. With 2026 no build volumes the LOS for westbound in the afternoon will go to F, but the delay is still reasonable for a side street during a peak hour. With the addition of site traffic both side streets will operate at LOS F in the afternoon, and the delay for westbound will be higher than could be considered reasonable. As discussed previously, **Mitigation 1 includes the extension of Dunbar to Howe Street**. For the purposes of this report, it is assumed that the connection of Thruston to Augusta will be closed as part of the Dunbar Extension. With that closure, this intersection will operate with lower delay with 2026 build volumes than with 2026 no build.

Table 11
CAPACITY ANALYSES RESULTS – UNSIGNALIZED INTERSECTION – EXISTING GEOMETRY
AUGUSTA STREET/THRUSTON AVENUE/DRIVEWAY
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing	Mit 1 – Close at Augusta
<i>Morning Peak Hour</i>				
Eastbound-Left/thru/right	B/13	B/13	B/14	B/14
Westbound-Left/thru/right	E/39	E/49	F/81	-
Northbound - Left	A/9	A/9	A/9	A/9
Southbound - Left	A/10	A/10	B/11	-
<i>Afternoon Peak Hour</i>				
Eastbound-Left/thru/right	D/34	E/42	F/74	E/44
Westbound-Left/thru/right	E/43	F/57	F/194	-
Northbound - Left	A/9	A/9	B/10	A/9
Southbound - Left	A/9	A/9	A/10	-

Notes:

- Thruston/driveway is east-west. Augusta is north-south.

THIS IS
almost F
now - use
PM
 $50-49 = 1$
 $81-49 = 32$
 $= 3.1$
 $120-57$
 $194-57$
 $= \frac{63}{137}$
 $= 46.1$

$$46.1 = 1267$$

Augusta Street/Dunbar Street - As shown in Table 12, this intersection currently operates acceptably overall and can continue to do so with 2026 no build and 2026 build volumes. To provide a signalized left turn from the site onto Augusta, an extension of Dunbar to Howe was considered as mitigation for other intersections. It was assumed that the median on the western leg of the intersection would be removed to provide left, through, and right lanes and that left and through/right lanes would be provided on the eastern leg (westbound). The intersection can operate acceptably with this mitigation. SCDOT is requiring adaptive operation at this intersection, but that upgrade is not included in the mitigation analysis because it is not required to achieve acceptable operation.

Table 12
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
AUGUSTA STREET/DUNBAR STREET
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing	Mit 1 – Extend to Howe
Morning Peak Hour				
Eastbound - Left	E/61	E/64	D/49	D/61
Through/(right)	D/37	D/36	D/34	D/37
Right	-	-	-	C/30
Westbound - Left	-	-	-	D/39
Through/right	-	-	-	D/36
Northbound - Left	A/6	A/6	A/9	A/8
Through/(right)	A/6	A/6	A/9	B/10
Southbound- Left	A/2	A/3	A/8	A/0
Through/right	A/2	A/3	A/8	A/6
Overall	B/13	B/14	B/15	B/17
Afternoon Peak Hour				
Eastbound - Left	D/48	D/47	D/45	E/56
Through/(right)	D/48	D/47	D/48	D/40
Right	-	-	-	D/39
Westbound - Left	-	-	-	E/76
Through/right	-	-	-	D/42
Northbound - Left	A/5	A/6	A/9	A/7
Through/(right)	A/5	A/6	A/7	A/9
Southbound - Left	-	-	-	A/0
Through/right	A/3	A/4	B/13	A/5
Overall	B/12	B/13	B/17	C/21

No
Change

Notes:

- Dunbar is east-west. Augusta is north-south.

33

Augusta Street/Haynie Street/Augusta Walk Way - As shown in Table 13, this intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side goes to LOS E in the afternoon. Although the delay is reasonable for a side street at an unsignalized intersection during a peak hour, mitigation was considered. Mitigation 1 is adding an extension of Dunbar Street to Haynie which will provide a signalized route for trips crossing Augusta to Dunbar. With the Dunbar Extension, the LOS E is removed from this intersection.

Table 13
CAPACITY ANALYSES RESULTS – UNSIGNALIZED INTERSECTION – EXISTING GEOMETRY
AUGUSTA STREET/HAYNIE STREET/AUGUSTA WALK WAY
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing	Mit 1 Add Dunbar Extension
Morning Peak Hour				
Eastbound-Left/thru/right	A/0	A/0	A/0	A/0
Westbound-Left/thru/right	B/15	C/16	C/22	C/17
Northbound - Left	A/9	A/9	A/10	A/10
Southbound - Left	B/11	B/11	B/13	B/12
Afternoon Peak Hour				
Eastbound-Left/thru/right	B/14	B/15	C/17	C/17
Westbound-Left/thru/right	C/18	C/20	E/45	D/25
Northbound - Left	A/9	A/9	B/10	B/10
Southbound - Left	A/10	B/10	B/11	B/11

Notes:

- Haynie/Augusta Walk Way is east-west. Augusta is north-south.

$$\frac{35-20}{45-20} = \frac{15}{25}$$

$$= 60\%$$

$$60\% = 1453$$

34

Church Street/Mills Avenue/Augusta Street - As shown in Table 14, this intersection currently operates at LOS D overall, and with 2026 no build volumes, the overall LOS will be E. With the addition of new site trips, the overall LOS will go to F. SCDOT is requiring adaptive operation at this intersection. With that operation, the LOS E with 2026 build volumes will be the same as for 2026 no build. Therefore, no further mitigation is required.

ADDITIONAL STORAGE SB

Table 14
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
CHURCH STREET/MILLS AVENUE/AUGUSTA STREET
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing	Mit 1 Install Adaptive
Morning Peak Hour				
Eastbound - Left	C/29	C/31	C/32	D/43
Through/right	D/38	D/42	D/48	D/55
Westbound - Left	C/26	C/27	C/29	D/37
Through/right	D/48	E/62	F/108	F/96
Northbound - Left	E/64	E/66	E/74	F/89
Through/right	E/72	F/96	F/138	F/91
Southbound - Left	E/57	E/59	E/63	F/108
Through/right	C/34	D/36	D/45	D/49
Overall	D/51	E/62	F/87	E/79
Afternoon Peak Hour				
Eastbound - Left	C/27	C/30	C/34	C/35
Through/right	D/40	D/49	E/77	F/87
Westbound - Left	C/26	C/31	D/43	E/65
Through/right	D/39	D/48	E/73	F/95
Northbound - Left	E/66	E/68	E/71	F/106
Through/right	E/63	E/70	F/99	E/66
Southbound - Left	E/59	E/60	E/56	E/64
Through/right	E/58	E/62	F/104	E/60
Overall	D/51	E/57	F/84	E/75

Notes:

- Augusta is east-west. Church/Mills is north-south.

$$\frac{80-62}{81-62} = \frac{18}{25}$$

$$= 72\%$$

$$\frac{80-57}{84-57} = \frac{23}{27}$$

$$= 85\%$$

$$72\% = 1984$$

35

Church Street/Haynie Street/Pearl Avenue - As shown in Table 15, this intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With 2026 build volumes, the intersection can still operate at LOS D in the afternoon, but with existing signal operations, the northbound left will operate with high delay. This operation indicates a northbound left turn phase will be needed. In addition, to give more capacity for eastbound to northbound lefts out of the site, dual lefts are being provided as mitigation for University Ridge/Church. With that mitigation and the adaptive operation being required by SCDOT, this intersection can operate acceptably with 2026 build volumes.

Table 15
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
CHURCH STREET/HAYNIE STREET/PEARL AVENUE
University Ridge Traffic Impact Study Existing Conditions
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing Operation	Mit 1 NB Left Phase + EBDL Install Adaptive
Morning Peak Hour				
Eastbound - Left	C/28	C/28	C/27	D/55
Through/right	C/25	C/25	C/26	E/70
Westbound - Left	C/27	C/27	C/30	E/66
Through/right	C/27	C/27	C/24	D/48
Northbound - Left	A/8	A/9	E/64	B/19
Through/right	A/8	A/9	B/13	A/9
Southbound - Left	A/10	B/12	B/18	B/13
Through/right	A/6	A/7	B/11	B/13
Overall	A/9	A/10	B/17	B/18
Afternoon Peak Hour				
Eastbound - Left	C/27	C/27	C/32	E/75
Through/right	C/26	C/26	C/23	D/45
Westbound - Left	C/28	C/28	C/28	D/55
Through/right	C/26	C/26	C/21	E/58
Northbound - Left	B/12	B/14	F/446	E/62
Through/right	A/8	A/8	B/19	B/13
Southbound - Left	B/11	B/13	C/29	C/22
Through/right	A/8	A/10	C/33	D/37
Overall	A/10	B/11	D/47	C/34

Notes:

- Haynie/Pearl is east-west. Church is north-south.

This is mitigation for University/Church.

36

Church Street/University Ridge - As shown in Table 16, this intersection currently operates acceptably in the morning and at LOS D overall in the afternoon peak hour. This operation can continue with 2026 no build volumes. With 2026 build volumes, the afternoon peak hour LOS will go to E. The mitigation considered for this intersection is to add more capacity for the eastbound to northbound left at Haynie/Church. With that mitigation and the adaptive operation required by SCDOT, this intersection can operate at LOS D with 2026 build volumes.

Table 16
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
CHURCH STREET/UNIVERSITY RIDGE
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing Operations	Mit 1 Install Adaptive Dual Lefts at Pearl
<i>Morning Peak Hour</i>				
Eastbound - Left	D/45	D/46	D/48	F/93
Through	C/27	C/27	C/25	C/25
Right	C/23	C/22	C/20	C/21
Westbound - Left	D/39	D/39	D/42	D/38
Through/right	D/43	D/43	D/49	D/44
Right	-	-	D/43	D/39
Northbound - Left	B/16	B/19	C/25	C/20
Through/right	C/24	C/29	D/44	D/40
Southbound - Left	E/62	E/62	E/67	E/74
Through	C/21	C/23	C/32	C/26
Right	B/12	B/12	B/14	B/14
Overall	C/25	C/28	D/37	D/37
<i>Afternoon Peak Hour</i>				
Eastbound - Left	E/58	E/64	F/188	E/61
Through	C/28	C/28	C/27	C/33
Right	C/23	C/23	C/24	C/30
Westbound - Left	D/49	D/51	D/51	E/75
Through/right	D/49	D/50	D/50	F/121
Right	-	-	D/49	E/56
Northbound - Left	C/26	C/31	C/34	D/46
Through/right	D/39	D/51	F/90	F/75
Southbound - Left	E/63	E/65	E/65	F/131
Through	C/34	E/44	D/52	D/39
Right	A/10	B/10	B/13	A/9
Overall	D/38	D/45	E/80	D/55

Notes:

- University Ridge is east-west. Church is north-south.

$$29.1 = 799$$

$$\frac{55-45}{80-45} =$$

$$\frac{10}{35} = 29.1$$

37

University Ridge/Cleveland Street - As shown in Table 17, this intersection currently operates acceptably and can continue to do so with 2026 no build or build volumes. Therefore, no mitigation is recommended at this intersection.

Table 17
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
UNIVERSITY RIDGE/CLEVELAND STREET
University Ridge Traffic Impact Study Existing Conditions
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)		
	Existing	2026 No Build	2026 Build
<i>Morning Peak Hour</i>			
Eastbound-Left/thru/right	C/21	C/21	C/21
Westbound-Left/thru/right	B/19	B/19	B/19
Northbound-Left/thru/right	A/6	A/6	A/7
Southbound-Left/thru/right	A/5	A/5	A/5
Overall	B/10	B/10	B/11
<i>Afternoon Peak Hour</i>			
Eastbound-Left/thru/right	C/21	C/21	C/22
Westbound-Left/thru/right	B/16	B/16	B/16
Northbound-Left/thru/right	A/9	A/10	B/10
Southbound-Left/thru/right	A/9	B/10	B/11
Overall	B/14	B/14	B/15

No
Change

Notes:

- University Ridge is east-west. Cleveland is north-south.

38

Church Street/Washington Street - As shown in Table 18, this intersection currently operates acceptably overall and can continue to do so with 2026 no build volumes. With the addition of site trips, the afternoon peak hour will go to LOS D. Although SCDOT requires that mitigation be considered if LOS C is not maintained, the City accepts LOS D. Mitigation was considered at this intersection. However, right turn lanes already exist on all approaches. **Because the intersection can operate at LOS D overall with 2026 build volumes, no mitigation is recommended at this intersection.**

Table 18
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
CHURCH STREET/WASHINGTON STREET
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)		
	Existing	2026 No Build	2026 Build
<i>Morning Peak Hour</i>			
Eastbound - Left	E/62	E/69	E/69
Through	E/63	E/63	E/63
Right	D/53	D/53	D/53
Westbound - Left	F/133	F/160	F/236
Through	E/64	E/63	E/63
Right	D/55	D/54	D/54
Northbound - Through	B/14	B/16	B/18
Right	A/10	B/10	B/11
Southbound - Left	B/11	B/12	B/15
Through	A/1	A/1	A/2
Right	A/0	A/0	A/0
Overall	C/21	C/23	C/28
<i>Afternoon Peak Hour</i>			
Eastbound - Left	D/46	D/48	D/48
Through	D/50	D/50	D/50
Right	D/46	D/45	D/45
Westbound - Left	E/65	E/71	F/102
Through	E/68	E/71	E/71
Right	D/52	D/51	D/51
Northbound - Through	C/24	C/29	F/79
Right	B/14	B/15	B/15
Southbound - Left	B/19	C/25	C/33
Through	A/1	A/1	A/2
Right	A/0	A/0	A/0
Overall	C/23	C/26	D/47

No
Change

Notes:

- Washington is east-west. Church is north-south.

39

Church Street/East North Street - As shown in Table 19, this intersection currently operates acceptably. With 2026 volumes, the LOS will go to from C to D in the morning. No mitigation would be suggested at this intersection, but mitigation is required at Beattie. **Because the southbound lefts are low at this intersection, prohibiting that left was considered as Mitigation 1 to allow a northbound dual left onto Beattie.** Operation of this intersection at LOS D/C can continue with that change.

Table 19
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
CHURCH STREET/EAST NORTH STREET
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing	Mit 1 No SB Lefts
Morning Peak Hour				
Eastbound - Left	D/37	D/35	D/35	D/35
Through	E/58	E/61	E/61	E/61
Northbound - Through	A/1	A/1	A/1	A/1
Right	A/3	A/3	A/6	A/4
Southbound - Left	B/10	B/11	B/11	-
Through	A/7	A/10	D/44	D/44
Overall	C/21	C/23	D/35	D/35
Afternoon Peak Hour				
Eastbound - Left	D/37	D/36	D/36	D/36
Through	D/54	E/56	E/56	E/56
Northbound - Through	A/1	A/1	A/1	A/1
Right	A/6	B/15	F/83	C/22
Southbound - Left	B/10	B/11	B/12	-
Through	A/1	A/1	A/8	A/8
Overall	B/18	B/20	C/32	C/22

OK

Notes:

- E North is east-west. Church is north-south.

Sec Beattie

40

Church Street/Beattie Place - As shown in Table 20, this intersection currently operates at LOS D during the morning peak hour and will continue to do so with 2026 no build volumes. With the addition of new site trips, the morning peak hour LOS will go to E. Given the proximity of buildings and retaining walls, there are no practical lane additions at this intersection. If the southbound left is prohibited at East North, the northbound left on Church at Beattie can be converted to a dual left, and the intersection can operate at LOS D overall during both peak hours with 2026 build volumes.

Table 20
CAPACITY ANALYSES RESULTS – SIGNALIZED INTERSECTION – EXISTING GEOMETRY
CHURCH STREET/BEATTIE PLACE
University Ridge Traffic Impact Study Existing Conditions
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing	Mit 1 NB Dual Left
Morning Peak Hour				
Westbound - Left	D/48	D/48	D/48	D/48
Through	D/46	D/46	D/46	D/46
Northbound - Left	E/63	E/75	E/75	E/58
Through/right	C/32	C/33	C/34	C/34
Southbound- Through/right	C/32	F/49	F/103	F/67
Overall	D/42	D/47	E/66	D/53
Afternoon Peak Hour				
Westbound - Left	D/44	D/45	D/45	D/46
Through	D/43	D/42	D/42	D/42
Northbound - Left	D/44	D/45	D/51	D/47
Through/right	C/29	B/20	C/23	C/23
Southbound- Through/right	B/19	C/22	C/35	C/35
Overall	C/34	C/32	D/36	D/36

Notes:

- Beattie Place is east-west. Church is north-south.

$$\frac{55-47}{64-47} = \frac{8}{19}$$

$$= 42\%$$

$$42\% \text{ of } 2755 = 1160$$

41

Haynie Street/Howe Street - As shown in Table 21, this intersection currently operates acceptably and can continue to do so with 2026 no build volumes. With the addition of site trips, the side street will go to F with delay beyond what would be considered acceptable. As Mitigation 1, addition of a southbound left turn lane and westbound right turn lane along with the Dunbar Extension were considered. The delay for the southbound left will be reasonable for a side street during a peak hour, but to remove the LOS E from this intersection, a realignment with Haynie/Howe as the through movement was considered as Mitigation 2. This realignment shifts the higher traffic volumes away from the existing single-family homes to the west but requires more right of way. As shown in Table 22, the resulting intersection can operate acceptably. The geometry assumed includes a westbound left turn lane and a two-lane approach on the side street.

Table 21
CAPACITY ANALYSES RESULTS – UNSIGNALIZED INTERSECTION
HAYNIE STREET/HOWE STREET
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)			
	Existing	2026 No Build	2026 Build	
			Existing	Mit 1 WBR + SBL +Dunbar Ext
<i>Morning Peak Hour</i>				
Eastbound – Left	A/8	A/8	A/9	A/8
Southbound-Left/thru/right	B/10	B/10	D/26	-
Left	-	-	-	B/14
Right	-	-	-	A/9
<i>Afternoon Peak Hour</i>				
Eastbound – Left	A/8	A/8	A/8	A/8
Southbound-Left/thru/right	B/11	B/11	F/227	-
Left	-	-	-	E/43
Right	-	-	-	A/9

Notes:

- Haynie is east-west. Howe is north-south.

$$11.1 = 303$$

$$\frac{35-11}{227-11} = \frac{24}{216} = 11.1\%$$

Table 22
CAPACITY ANALYSES RESULTS – UNSIGNALIZED INTERSECTION – 2026 BUILD VOLUMES
HAYNIE STREET/REALIGNED HOWE STREET – MITIGATION 2
University Ridge Traffic Impact Study
Greenville, South Carolina

Movement	Level of Service/Delay (seconds/vehicle)	
	Morning Peak Hour	Afternoon Peak Hour
Westbound – Left	A/8	A/9
Northbound – Left	B/15	C/19
Right	B/10	B/14

Notes:

- Haynie/Howe realigned is east-west. Haynie is north-south.

$$\text{Realignment } \frac{35-11}{43-11} = \frac{24}{32} = 75\%$$

$$75\% = 2064$$

The land uses in Trip Generation relating to residential and office are relatively straight forward, and information regarding varying densities of multi-family is now available. The land use in University Ridge which is not reflected very well in Trip Generation is retail. The only general retail land use is Shopping Center in a suburban location. Given the vision for the site, the location of the site, and the review level by the City of Greenville that will be in place for this site, it is obvious that this trip generation information for a suburban shopping center will overstate the trip generation of the retail on this site. However, there is no other relevant land use in Trip Generation. Therefore, the Trip Generation information will be used, but several extra steps will be undertaken to attempt to better reflect the actual trip generation on this site.

First, an estimate of the new development on the site was made:

- Office
 - Current uses – 290,000 square feet for County office and 114,000 square feet for other office at the time of the counts conducted for this study.
 - Multiplied by one percent per year for eight years to reflect that the traffic volume growth rate was applied to the trips to and from these existing uses = 437,000 square feet
 - Office square footage over the new County office = 437,000-250,000 = 187,000 square feet
 - New office = 1,000,000 - 813,000 square feet
- Hotel = 350 rooms
- Residential – mostly five story – defined as mid rise = 1500 mid-rise multifamily units
- Retail – 296,000 square feet

Second, using information from Trip Generation, the trip generation for the site was calculated as shown below.

- Office (General office – Land Use Code 710) – independent variable is 1000 square feet
 - Morning Peak Hour of Adjacent Street Traffic: $T=0.94X+26.49 = 791$ – 86% enter = 680, 14% exit = 111
 - Afternoon Peak Hour of Adjacent Street Traffic: $\ln(T)=0.95\ln X+0.36 = 834$ – 16% enter = 133, 84% exit = 701
- Hotel (Business hotel- Land use Code 312) – independent variable is rooms
 - Morning Peak Hour of Adjacent Street Traffic: $T=0.35X+4.40 = 127$, 42% enter = 53, 58% exit = 74
 - Afternoon Peak Hour of Adjacent Street Traffic: $0.32X = 112$, 55% enter = 62, 45% exit = 50
- Residential (Multifamily Housing (Mid-Rise)-Land Use Code 221)–independent variable is dwelling units
 - Morning Peak Hour of Adjacent Street Traffic: $\ln T=0.98\ln X-0.98 = 483$ - 26% enter = 126, 74% exit = 360
 - Afternoon Peak Hour of Adjacent Street Traffic: $\ln T=0.96\ln X-0.63 = 596$ – 61% enter = 363, 39% exit = 233
- Retail (Shopping Center – Land Use Code 820) – independent variable is 1000 square feet
 - Morning Peak Hour of Adjacent Street Traffic: $T=0.5X + 151.78 = 300$ - 62% enter = 186, 38% exit = 114
 - Afternoon Peak Hour of Adjacent Street Traffic: $T=0.74\ln X + 2.89 = 1213$ - 48% enter = 582, 52% exit = 631

12

Third, internal trips were accounted for. The 3rd Edition of the Trip Generation Handbook includes a methodology for estimating internal trips. However, it includes an estimate of vehicle occupancy which would just be a guess at this point in this development. Therefore, the methodology from the 2nd Edition was used, and the worksheet is included in Appendix C. The external trips from that worksheet are shown in Table 2. It is obvious that there will be internal trips during the morning peak hour, but no data regarding those trips is available with this methodology. Therefore, it is likely that morning peak hour external trips are overstated.

Fourth, some of the retail trips will go into and out of the site while "passing by". The 3rd Edition of the Trip Generation Handbook contains data that indicates that the afternoon peak hour pass-by percentage is 34 percent. Using that percentage, the pass by trips in Table 2 were calculated.

Table 2
NEW EXTERNAL TRIP GENERATION
University Ridge Traffic Impact Study
Greenville, South Carolina

Use - Size	Morning Peak Hour			Afternoon Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
	Primary/Pass-by					
Office - 813,000 square feet	680	111	791	114	682	796
Hotel - 350 rooms	53	74	127	62	50	112
Residential - 1500 units	126	360	486	280	181	461
Retail - 296,000 square feet	186	114	300	342/176	354/182	696/358
Total	1045	659	1704	798/176	1267/182	2065/358

TOTAL NEW TRIPS

834
112
596
1213
2755

Finally, it was assumed that at least a right in/right access to the County garage would be allowed on Church Street, and some of the existing trips were reassigned to that access as shown in Figures 5 and 6 for morning and afternoon peak hour, respectively. Also, some recognition that some of the trips already coming into and out of the site will be internal trips is required. Because the internal trip percentage in Appendix C is 13 percent, it was assumed that the existing trips into and out of the site will be reduced by 10 percent, and that reduction is also shown in Figures 5 and 6.

Despite all of these steps, it is likely that the trip generation in Table 2 is high.

Trip Distribution - Using the distribution of trips currently entering and exiting the site, this primary trip distribution was estimated:

- 15 percent to/from the northwest on River/Main
- 18 percent to/from the west on Vardry and Dunbar
- 30 percent to/from the south on Augusta and Church
- 35 percent to/from the northeast on Church
- Two percent to/from the east on University Ridge and Pearl

Pass-by trips were distributed in the same manner as traffic on the streets to which it was assigned.

The trips produced by the County building and the first 187,000 square feet of other development are included in no build.

Table 1a - Traffic Improvements

Phasing (Total SF)	Phasing PM Trips*	(Total PM Trips)*	Roadway Improvements	Signal Adjustments
-	437,000	-	None	None
437,000	773,900	303	Augusta /River RIRO Haynie/Howe turn lane	-
773,900	1,294,000	303	Haynie /Pearl/ Church (EB dual left; NB storage)	Church /University Ridge adaptive Church/ Haynie-Pearl adaptive Augusta /River/ Main St actuated
1,294,000	1,662,000	771	Harris /Augusta turn lane Church/ Beattie dual lefts	-
1,662,000	2,121,000	1,102	Augusta connection to existing signal	-
2,121,000	2,643,000	1,515	Augusta /Church SB storage	Augusta /Church St adaptive
2,643,000	2,734,000	1,984	Haynie /Howe realignment	
2,734,000	3,500,000	2,066		Augusta /Fields /Vardry /Dunbar adaptive

**Total PM Trips = Weekday Peak Hour of Adjacent Street Traffic, one hour between 4 and 6pm, per latest edition of ITE Trip Generation.*

Exhibit F

1 South Elevation

2 North Elevation

Greenville County Administration Building
GREENVILLE, SOUTH CAROLINA

Architect: Foster + Partners
Architect of Record: Nelson\Akkerman
Project: Greenville County Administration Building
Location: Greenville, South Carolina
Client: Greenville County
Phase: Preliminary Design
Scale: 1/8" = 1'-0"

Sheet No.: A3.1.1
North - South Elevation



Preliminary Design Documents, subject to change

A3.1.2

