

Planning Commission Meeting AGENDA

Wednesday, March 13, 2024, 7:00 PM

Work Session 6:00PM, Regular Session 7:00PM Community Room, Salem Civic Center, 1001 Roanoke Boulevard:

WORK SESSION

- 1. Call to Order
- 2. Old Business
 - A. Discussion of items on the March agenda
 - 1. 860 Mount Vernon Lane rezoning from RSF to PUD
- 3. New Business
 - A. Discussion of items on the March agenda
 - 1. 744 Electric Rd rezoning from HBD to HM
 - 2. 1200 block Thompson Memorial Dr rezoning from RSF to HBD
 - 3. Code Change Storage Containers
 - B. Discussion of items on the April agenda
 - 1. Home Occupation Amendment Oak & Bloom 275 Fort Lewis Blvd
 - 2. Use Not Provided For Amendment 125 Knotbreak Rd
- 4. Adjournment

REGULAR SESSION

- 1. Call to Order
 - A. Pledge of Allegiance
- 2. Consent Agenda
 - A. Minutes

Consider acceptance of the minutes from the February 14, 2024, regular meeting, and February 21, 2024, joint work session.

3. Old Business

A. Amendment to the Zoning Ordinance

Consider the request of Virginia Baptist Children's Home (dba HopeTree Family Services), property owner, for rezoning the properties located at 1000 block Red Ln and a portion of 860 Mount Vernon Lane (Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, and a portion of 44-3-10) from RSF Residential Single Family to PUD Planned Unit District. (Continued from the February 14, 2024, meeting.)

B. Amendment to the City Code - Chapter 106 Zoning

Hold public hearing to consider amending Chapter 106, Zoning, Article IV Development Standards, section 106-406 miscellaneous provisions of the CODE OF THE CITY OF SALEM, VIRGINIA pertaining to storage containers. (Continued from the November 15, 2023, meeting.) (Staff has requested to continue item)

4. New Business

A. Amendment to the Zoning Ordinance

Hold public hearing and consider the request of E3MAG LLC, property owner, for rezoning the property located at 744 Electric Road (Tax Map # 155 - 2 - 2.2) from HBD Highway Business District to HM Heavy Manufacturing District.

B. Amendment to the Zoning Ordinance

Hold public hearing and consider the request of Pinkesh R. Patel and Sonal P. Patel, property owners, for rezoning the property located at 1200 block Thompson Memorial Drive (Tax Map # 20 - 2 - 4) from RSF Residential Single-Family District to HBD Highway Business District.

5. Adjournment

City Council meeting, March 25, 2024, 6:30 p.m. Council Chambers, City Hall, 114 North Broad Street

Planning Commission Meeting MINUTES Wednesday, February 14, 2024, 7:00 PM

Regular Session 7:00PM Community Room, Salem Civic Center, 1001 Roanoke Boulevard:

REGULAR SESSION

1. Call to Order

A regular meeting of the Planning Commission of the City of Salem, Virginia, was held after due and proper notice in the Community Room, Salem Civic Center, 1001 Roanoke Boulevard, Salem, Virginia, at 7:00 p.m., on February 14, 2024. The item to be heard was continued from the January 10, 2024, meeting.

There being the members of said Commission, to wit: Vicki G. Daulton, Chair; Denise P. King, Vice Chair, Reid Garst, Neil L. Conner, and Jackson Beamer, constituting a legal quorum, presided together with H. Robert Light, Assistant City Manager; Jim Guynn, City Attorney; Mary Ellen Wines, Planning & Zoning Administrator; Maxwell S. Dillon, City Planner; and Charles E. Van Allman, Jr., Director of Community Development, and the following business was transacted:

A. Pledge of Allegiance

2. Consent Agenda

A. Minutes of the December meeting

Consider acceptance of the minutes from the December 13, 2023, work session and regular meeting. (Continued from the January 10, 2024, meeting.)

Jackson Beamer motioned to approve minutes of the December 11, 2023, work session and regular meeting. Denise King seconded the motion.

Ayes: Beamer, Conner, Daulton, Garst, King

B. Minutes of the January meeting

Consider acceptance of the minutes from the January 10, 2024, work session and regular meeting.

Jackson Beamer motioned to approve minutes of the January 10, 2024, work session and regular meeting. Denise King seconded the motion.

Ayes: Beamer, Conner, Daulton, Garst, King

C. Minutes of the January meeting

Consider acceptance of the minutes from the January 29, 2024, special work session.

Jackson Beamer motioned to approve minutes of the January 29, 2024, special work session. Denise King seconded the motion.

Ayes: Beamer, Conner, Daulton, Garst, King

3. New Business

A. Amendment to the Zoning Ordinance

Hold public hearing to consider the request of Virginia Baptist Children's Home (dba Hope Tree Family Services), property owner, for rezoning the properties located at 1000 block Red Ln and a portion of 860 Mount Vernon Lane (Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, and a portion of 44-3-10) from RSF Residential Single Family to PUD Planned Unit District. (Continued from the January 10, 2024, meeting.)

Staff noted the following:

The subject property is commonly known as "HopeTree", formerly as the "Baptist Home" and consists of seven parcels land of approximately 62.318 acres. It is bounded by the Stonegate & Emerald Hills subdivisions and North Broad Street on the west, East Carrollton Avenue on the south, Red Lane on the east, and Interstate 81 to the north. The property is currently, and will continue, to be the home of HopeTree Family Services. These services include clinical services such as equine assisted psychotherapy, therapeutic foster care, the HopeTree Academy, therapeutic group homes, and developmental disability homes.

This request is to rezone the property in order for it to be developed as a planned unit district that will contain the existing HopeTree services, a significant number of residential building types (not to exceed 340 units), and mixed use structures that will contain commercial uses. Approximately 40% of the site will be preserved or used as public or private open space areas including a proposed lawn area near the center of the site. As a planned unit district is extremely flexible by design, the exact building types and locations have not been determined.

The applicant is proposing access adjustments to the property. According to the proposal, the existing main entrance from Mount Vernon Lane and East Carrolton will remain. The northern entrance on Red Lane will be moved in line with the intersection to the North Oaks Subdivision. The second existing entrance from Red Lane will remain and four additional entrances from Red Lane will be added. Two additional entrances will be constructed on East Carrollton Avenue along with the

opening and extension of North Broad Street. All roads within the PUD will be privately owned.

Several potential areas for stormwater management are identified throughout the plan. As a PUD is designed to be flexible in nature, the exact size and location of the SWM areas have not been determined. As a light imprint development, stormwater facilities are often small in nature and dispersed throughout the development. The actual number of facilities and their design will depend on engineering and regulatory requirements and will be reviewed and approved through the site plan review process.

PROFFERED CONDITIONS:

The Planned Unit District master plan (labeled PUD Rezoning Application in attached documentation) will constitute the required conditional zoning proffers. All other documentation included throughout the application process is supportive in nature.

INDEPENDENT ANALYSIS OF TRAFFIC DATA SUBMITTED BY THE APPLICANT:

The City hired Mattern & Craig, an independent, licensed professional engineer to review the traffic data that was submitted with the request for accuracy and to obtain a third party opinion.

In summary, Mattern & Craig found the need for an expansion of the study area in regard to the intersections examined (not just Red Lane/East Carrolton Ave and East Carrolton Ave/North Broad St) and data points collected. Additionally, there needs to be justification for the trip generation reduction (currently as assumption of 25%); otherwise, standardized metrics (provided by the Institute of Transportation Engineers or VDOT) should be utilized.

Mattern & Craig's analysis can be found in the supporting documents of this staff report. Balzer and Associates has responded to Mattern & Craig's independent analysis, and correspondingly updated its Traffic Impact Study. Those materials can be found in the supporting documents of this staff report.

COMMENTS RECEIVED FROM CITY DEPARTMENTS:

The proposed development was submitted to all city departments for comment and review. Below is the response of each department:

COMMUNITY DEVELOPMENT, Engineering Division

If approved, the project will have to comply with all applicable local and state stormwater regulations and requirements, including over-detention.

An independent analysis of the submitted traffic data was performed by Mattern & Craig, Professional Engineers. For more details, please see the Traffic Section above.

COMMUNITY DEVELOPMENT, Planning & Zoning Division

The intent of the Planned Unit District (PUD) is to encourage maximum flexibility in the design and development of land. PUD developments facilitate the adequate and economical provision of streets, utilities, and other improvements, and allow for

the management of the natural and scenic qualities of vacant land that is proposed for development. The PUD district allows a variety of housing options, as well

as commercial, civic and office use types of a number and scale sufficient to serve the needs of the PUD residents.

Although the proposal offers a delightful light imprint development focused on walkability, open space, amenities, and a sense of community, the submitted documents do not ensure that type of development. There are no guarantees for single-family detached homes nor are there guarantees for small scale commercial that is mainly supported by the residents of the PUD. City Council is to approve the maximum gross density of the development in addition to the maximum area devoted to non-residential uses. Although these areas are located in the plan, these maximum numbers have not been determined.

The proposed allowable use list needs to be reduced to uses more appropriate to the location and the proximity to downtown. The City has spent a tremendous amount of time and money to create a unique downtown district that we need to protect and promote.

Finally, conflicting information exists throughout the document(s) that need clarification.

Economic Development

Hope Tree's proposed development appears to be a very creative "outside the box" development, unique to the Roanoke Region. The overall development has the potential for becoming a well-known planned development well outside the Roanoke Valley.

Historically, economic development only engages in commercial and industrial land use development. The proposed HopeTree development is a unique master planned community largely consisting of residential development. However, in the interest of economic development, the plan incorporates several initiatives related to Economic Development's strategic plan and incorporates a small portion of proposed

commercial uses. Proposed commercial uses are predominantly associated with the adaptive reuse of older HopeTree buildings.

Related to Economic Development's strategic plan, the HopeTree development supports several objectives, including:

- 1. Opportunities to diversify the housing options in the City of Salem a. Support existing efforts in retention and attraction of talent
- 2. Opportunities to expand quality of life amenities to local residents
 - a. Pedestrian walking paths, preserving open green space and recreation for the public
 - b. Increase beatification efforts in building design and city corridors i. Reference of Wiley Court & pocket parks are positive
- 3. Business attraction & entrepreneurial support
 - a. Enhanced adaptive reuse of older buildings can boost efforts to attract eclectic businesses with potential to be retail/hospitality destinations

Further time for review of proposed uses/zoning and what is a good fit for such a unique development and the larger neighborhood will be needed. For example, "automobile repair services, minor" would not be a good use for the neighborhood as well as "personal storage", "warehousing & distribution". In addition, further time for review of the traffic study and evaluation of other off-site improvements to mediate traffic flow will be needed.

ELECTRIC

Electric loading - The proposed development would not adversely affect the power in that area. We have adequate feeds available for the new load.

Easement/Pre-Construction — This development will require extensive easements and phase planning prior to construction. The existing power on site will need to be replaced/intercepted as Salem Electric will be bringing the existing power up to its code. Well in advance to construction, materials and equipment will need to be decided upon in coordination with the developer and ordered to ensure that they will be available at the time of construction.

Construction – The proposed development will require all new power feeds into the site. Coordinating the existing power with the new facilities will require extensive electrical work and planning to ensure that outages will be manageable and new electric services will be available to the proposed phases of construction.

POLICE

Along the same lines of the Police Department's response to the Simms Farm development, we would anticipate a slight increase in Calls for Police Services which is expected from any development of this nature. We are not in a position to dispute the facts presented in the Traffic Study which details the increase of vehicular traffic in the adjacent neighborhoods. At this time, there is no immediate concern regarding quality of life issues such as homelessness.

SCHOOLS

Thank you for the opportunity to provide input on this matter. Ultimately, please know that the School Board and School Administration trust the City Council and City Administrators to make good decisions that benefit all Salem residents.

From the perspective of the Salem City School Division, new development is likely to increase enrollment. Since 2017, the Salem City School Division has experienced a significant decline in enrollment, negatively affecting state funding (approximately 300 students in grades K-12). Increased enrollment will provide additional revenue from the state on a per-pupil basis for annual instructional costs.

Additionally, enrollment increases generally happen over time, which permits staffing and program delivery to adapt and adjust incrementally.

Outside of annual instructional programming, the other consideration is the capacity of school facilities. The proposed development is in what is currently the West Salem Elementary Attendance Zone. West Salem Elementary School has a facility capacity of approximately 450 students and is currently operating below capacity with approximately 400 students, some of whom are nonresident students or in-division transfer students. So, there is capacity for increased enrollment at West Salem. ALMS and SHS also have ample space to address increases in enrollment in grades 6-12.

If additional enrollment results in the need to adjust attendance zones, changes will be phased in over time by permitting current students in affected neighborhoods to continue attending the neighborhood's traditional school while new students are transported to the newly assigned school. In large or rural districts, the redundant transportation required to phase in changes would be a more significant challenge than it will be here in Salem. While there would be a modest increase in transportation costs during implementation, it would be a small price to pay to mitigate the impact of changing attendance zones on families.

STREET DEPARTMENT

All roads in this PUD will be privately owned; therefore, the City will not have any maintenance cost. All maintenance, snow removal, asphalt patching, and etc. would be the responsibility of the owner.

When it comes to trash, we feel we can service those new residential units initially with current staffing levels and keep the collection day the same as it currently is, until the PUD is fully built out. There will be a slight increase in fuel and maintenance. Once it is completed, we would need to re-evaluate to see if we need to increase staff to handle the total number of residential units there. There is the possibility of increased staff and salary along with fuel and maintenance costs once the PUD is completed.

We will provide a garbage tote to each new residential unit; I'm only counting one tote for each of the units. The traffic study mentions 340 residential units (115 single family detached, 140 single family attached, 85 multi-family units). The current cost of a new tote is about \$75 each including shipping, which is going to cost \$25,500.00. Garbage totes last approximately ten years. I'm estimating the residential units might dispose of 150lbs of garbage per week, which equals 26 tons a week. We currently pay \$55.00 a ton, equals \$1,430.00 a week or \$5,700.00 a month or \$74,400.00 a year for disposal. We would also provide curbside bulk collection. Being they will be new residential units this is a difficult one to estimate; I would estimate \$6,000.00 in tipping fees for bulk. In round numbers, the impact to garbage collection will be approximately \$80K annually.

WATER DEPARTMENT

We still have a concern about how the water metering will be handled since the complex is currently served by a master meter. Likely, some of the existing HopeTree buildings will have to be separately metered.

John Morris, President, and Chief Executive Officer of Hope Tree Family Services appeared before the Commission and stated that for more than 130 years Hope Tree has evolved and changed to remain relevant. He then gave the history of the property. He stated that today HopeTree employees more than 250 professionals serving more than a thousand individuals and family members every year. Our programs include foster care, developmental disabilities, ministry where we provide group homes for more than 80 individuals with intellectual and developmental disabilities, therapeutic group home for youth, ranging from ages 13 to 18, hope tree academy which is a private day school for middle and high school students across our region, and community based services like equine assisted psychotherapy and family center treatment. We are licensed by three different governments. bodies and accredited by two different organizations. In essence, we are a highly regulated, highly qualified organization providing desperately needed services to adults, youth, and families. The question has been asked, why is Hope Tree considering this right now? Well, the reality is we are amid another season of change. Hope Tree is drastically different today than we were 10 and 20 years ago. The work we do today is much more challenging and much more specialized than at any point in our history. Residential care in a congregate campus -style setting is no longer the preferred method to serve our youth and adults. In fact, funding sources have mandated that our group homes be integrated into the communities where we operate. While there will always be and continue to be a need for short-term

residential care, we will never have hundreds of children living on our campus again. The most we will be able to serve on our campus at any one time is 16 residents. Previously when children came to the Baptist home, they stayed until they turned 18. Today the youth that come to come to Hope Tree on average stay only six months. Most other buildings on our campus were constructed between 1900 and 1966 and are not equipped to provide the quality residential, mental, and behavioral health care services for today. Furthermore, we have six buildings that are vacant and will never be used by HopeTree for services again. Since 2007, our Board of Trustees has been engaged in discussions about what to do with the Salem campus. Several options have been considered over the years. Number one, selling the entire 60 acres and moving our homes and operations elsewhere. Number two, to tear down the vacant buildings that we no longer use, and the third option was to sell the land around our campus center to build single family housing, which we could do by right. In fact, we had an offer from a developer in 2021 to build single -family housing. -family housing all along Red Lane, but that did not align with our goals for campus redesign. Our three goals are, number one, to honor our history by staying on the property where we were founded in 1890, by not tearing down any of the beautiful and historic buildings on our campus, and by continuing to tell the story of our rich and meaningful history. We plan to invest in a new museum and place placards on all the old buildings to tell the story of what they once were.

Our second goal is to position Hope Tree for the future by investing millions of dollars to create new modern homes for our residents and spaces for our team members to serve our community. We also plan to invest in new non-traditional methods of therapy to better serve the youth and families who need our services. And our third goal is we want to do something to make our community proud by partnering with our community city leaders, our team members, and our development team to bring something unique and meaningful to the city of Salem. Immediately after we received the offer to build houses along Red Lane, our board wanted to hear from other developers to help us dream about what could be done with our property. After engaging with six different developers, the Board of Trustees selected the team of states and homes, Snyder and Associates, and Tom Lowe with Civic by Design. The reason that they were selected is that their approach and care for our campus project aligned perfectly with our three goals. He presented their development team--Todd Robertson from States and Homes; Mike Snyder with Snyder & Associates; Chris Burns with Balzer and Associates are here with us this evening. He further stated that Tom Lowe with Civic by Design could not be here tonight. Tom came down with COVID, but he sent a presentation that will be shared this evening.

Mike Snyder, President of Snyder & Associates, appeared before the Commission and stated that they are a general contractor up in Blacksburg. We specialize in historic renovations, commercial construction, and development, and have been in business since 1985, going on 39 years now. He then highlighted some of the projects that have been done over the years. The Alexander Black House in Blacksburg was a historic renovation that was done several years ago, that is now a

museum, and a centerpiece of Blacksburg. The Marymount Center renovation at Virginia Tech, the University Club. Club and President Suites at Virginia Tech. In Salem, they have done some projects for Graham White, and the Roanoke County Salem jail, as well as other projects in the Roanoke Valley for the Berglund Center and the Hotel Roanoke. He stated that Snyder and Associates and States and Homes, have teamed up on several different residential projects in the New River Valley that were very successful. He is confident that if approved this Hope Tree project will be the same. He is really excited for the opportunity to repurpose many of the older buildings and give them new life as well as to create something that Salem will be proud of. He thanked the Commission for the opportunity to speak.

Todd Robertson with States and Homes appeared before the Commission and stated that he moved back to the community 12 years ago to start States and Homes and have built almost 700 homes between the Roanoke Valley and the New River Valley. He stated that they don't just build homes, they build communities. Recently they have built basketball courts and pickleball courts for local recreational departments. He further stated that they have been the building in Daleville Town Center for approximately three years. He spoke about two communities in the Christiansburg/Blacksburg area--Clifton Community in Christiansburg and a 416home community in Westhill off Prices Fork Road in Blacksburg--both offer affordable housing and a variety of homes for all stages of life. He and Mike Snyder met with John Morris and came up with a vision to develop a pedestrian-friendly community that would preserve open space, offer natural amenities, as well as, a boutique hotel, one or two restaurants, a coffee shop and small deli/grocery, hiking trails, preserve the historic buildings and campus feel, and create a diverse neighborhood. Proposed development will offer a diverse mix of home types and price points and includes recreation amenities and public spaces for everyone to enjoy. They will keep the existing baseball fields, equestrian facilities, and pastor areas. Showed examples of existing communities that he has developed. Showed an example of the proposed hotel –use an existing building and convert to hotel with a restaurant on the lower level with meeting rooms to be used for various events. Showed example of the retail being proposed.

John Morris, reappeared before the Commission and reviewed the charrette process that was used to gather input from community, meet with other stakeholders, and hosted campus tours to evaluate each building and the grounds. As a result of that, the baseball fields will be preserved. The development will allow HopeTree to invest in future operations by creating a new human services building that will house more than 60 team members, create a single-point of entry for those who utilize our services, create a new space for HopeTree Academy, build four new homes for adult residents, and move youth residents into newer, more comfortable and spacious homes. A former cottage will be renovated to house a new museum and art therapy studio; and plan to install a cover over the horse rink and add an expansion of the bard for the equine therapy program. He further stated that HopeTree wanted the input from citizens and he feels that the charrette process gave them a great opportunity to hear from the citizens and to integrate their ideas into the proposed campus design.

Chris Burns, civil engineer, and traffic engineer with Balzer & Associates, appeared before the Commission to give an overview of some of the more technical aspects of the project. He stated that the site is 62 acres and is one of the few large parcels remaining for development. The existing zoning of the property is residential single family and approximately 230 homes could be built by-right. Currently there are 20 buildings that are either underutilized or not utilized at all. The parcel has rolling topography with the center of campus being the high point visually. There is an existing pond with a creek flowing from the lower portion of the pond as well as another small creek on the property. The reason for proposing a PUD for the property is to preserve as many of the existing structures as possible; will also allow the existing environmental features to be preserved; and the overall development pattern of the block street network will allow the development to branch out from the center core and be sensitive to the surrounding developments, more pedestrian friendly. The vision internally will be narrow streets with on-street parking where possible. Pedestrian friendly is the focus of the development. He stated that 40 percent of 62 acres are not planned to be developed—approximately 24 acres will be utilized as open space. Stormwater management is very important—will be two drainage areas with natural drainage features being preserved. Project will be required to meet state and local requirements. City of Salem requirements are more stringent than state standards. There are existing utilities surrounding the site with most of the internal utilities on the property being private. The proposed development will bring public utilities onto the site. City officials do not have any concerns with the additional utilities. He stated that the site does not have access to a major roadway and with the site being surrounded by two lane local roads it is very important to be sure that the roads are adequate to handle the development. The traffic evaluation is centered around studying the intersections. If the intersections can support the traffic volumes where people are having to stop and go and wait for each other--if the intersections can function appropriately, then the roadways themselves would be adequate. Traffic counts were performed, and background growth factor applied. Peak morning and evening hours were analyzed and real data was used in the study instead of projected data. Conservative counts were used to project traffic flow from the level of development that is expected on the site. Results of the study showed that the level of service were basically unchanged from current traffic—largest increase was less than 3 seconds. No turn lanes are required based on the study. He stated that based on the study, the current streets can handle the development traffic. He then played the video provided by Tom Low.

Tom Low appeared via video to discuss the proposal. He discussed design principle, work he has done, application pages. He stated that the planning he has been doing for last three decades is different than typical suburban development. He specializes in creating new cities and towns made of neighborhoods. He stated that cities and towns made of neighborhoods balance resource needs. Discussed how developments were created in the past and how they have changed over the years; traditional towns and conventional suburbia; and different types of housing developments. He presented a slide of the goals of the development. He stated that the Wiley Court neighborhood in Salem is what the proposed development is based

on. He then gave a background of his experience and various projects he has worked on that could be like what is developed on the property. He also presented examples of other developments in different states that could be like the proposed development. He noted that by-right the current zoning of the property "cookie cutter" type houses could be built, and again showed a slide of the proposed PUD on the property. He encouraged residents to go to the website to view the different public meetings that were held and how the plan evolved from the meetings, and to view the PUD application submitted to the city. He then displayed several pages of the application and briefly discussed the information in the pages.

John Morris reappeared before the Commission and asked them to recommend approval of the proposal. He stated that HopeTree cannot continue as it currently stands.

Chair Daulton adjourned the meeting at 8:28 p.m. for a brief break.

Chair Daulton re-convened the meeting at 8:35 p.m.

Chair Daulton noted that the Commission would not be voting on the request at this meeting as there is a joint work session with City Council on February 21, 2024. She opened the public hearing portion of the meeting and stated that each speaker will have three minutes to speak. She further stated that if anyone wants to yield their time to someone else, they will have to come to the podium and give their name, address, and state who they are yielding their time to.

Patrick Shaffner, 6563 Fairway States Drive, Roanoke, appeared before the Commission and asked that the proposed plan be approved. He has served on the HopeTree Board for over 25 years and he has witnessed the impact HopeTree has had on the community. The campus cannot remain vital as it stands—the needs have changed from the early days when it was an orphanage with 700 people on campus. The buildings are deteriorating and are a financial burden on the facility. While HopeTree's mission has remained unchanged, state, and federal requirements have changed and HopeTree needs to change in order to adhere to the requirements. He believes that what is proposed will best suit the needs of the facility.

Thomas Harvey, 307 Academy Street, appeared before the Commission and stated that he is a sixth generation resident of Salem and has a lot of investment in the community. He believes in the mission of HopeTree and what they have done in the community. He is worn out from the presentation and is concerned about the examples given of the proposed development—Middleburg, Albemarle, some places in Arkansas; Reston, Virginia and it is not Salem. He asked that the proposal not be allowed and to go back and look at the plans again. He then asked for a show of hands of people opposed to the request being approved.

Elizabeth Freund, 381 Walnut Road, appeared before the Commission and stated that she is very sympathetic and supportive of the mission of HopeTree and the

preservation of their historic buildings; however, she feels that only residential development should be allowed. She is against commercial development in a residential area and the types of people it would attract—transients and vagrants. She asked that the commission preserve the neighborhoods and historic areas as she feels it is a quality of life issue.

Jim Cochran, 417 Academy Street, appeared before the Commission and stated that he is a long-time Salem resident—his home has been on academy street for two generations. While he appreciates being able to walk to businesses on Broad Street from his residence, many of the businesses have closed due to lack of customer support necessary for profit. He stated that remodeling of the existing buildings can be done with existing zoning and new homes should be sold as single-family residents; and he feels the open space around the pasture and pond should be preserved as such.

Curt Steele,706 Red Lane, appeared before the Commission and stated that he opposes proposed development. He feels residential development is the highest and best use of the property, and asked that the commission keep the public hearing open and hold off on a decision until after the City adopts a new comprehensive plan.

Anne Lee Stevens, 831 Honeysuckle Road, appeared before the Commission and stated that she agrees with the negative speakers thus far and is concerned that this is a city-wide issue as it will negatively impact current businesses on Main Street. She does not feel that it has been taken into consideration that at the end of Red Lane there will be 80 townhomes and a four-story hotel built, and traffic from that development will be coming down Red Lane as well.

Russell Deyerly, 620 Red Lane, appeared before the Commission and stated that he has heard zero about the proposed development community meetings. He stated that the proposed development goes against the comprehensive plan. He stated that the traffic study did not give an accurate description of the amount of traffic that comes down Red Lane. On-street parking is an issue on Market Street, Hawthorn Road, Broad Street, and Academy Street. He feels the proposed development is a comprehensive disaster getting ready to happen. He agrees that HopeTree needs to do something but more planning needs to go into this before a decision is made without having a comprehensive plan, and not enough information about the proposal has been given and feels as though it is intentional that the information has been withheld.

Brian Boggs, 731 Treywood Road, appeared before the Commission and stated that he is a former real estate appraiser in Florida. He opposes the proposed development and how it would negatively impact the neighborhood.

Donna Crotts, 307 North Broad Street, appeared before the Commission and stated that she has lived there for over 40 years. She stated that this is not a Broad Street problem and hopes that the Commission realizes that this project impacts more than

Broad Street neighbors. Many residents are just now learning about the development and the failure to adequately notify surrounding neighbors has created a lack of awareness. She stated that she feels there is a need for more public hearings and a public comment period. She feels more time is needed. The proposal may alter the look of downtown Salem forever the proposed development will result in direct competition with the businesses downtown. She asked that the Commission delay a decision until after the comprehensive plan has been adopted.

Van Lane, 422 Academy Street, he doesn't feel the traffic count is accurate. He calculated the number of car trips per day times 340 houses that are being proposed and came up with 4,658 additional trips per day which indicates a level of uncertainty and a lack of truthfulness in the traffic study. He opposes the request and agrees with all the previous negative comments.

Marissa Yi, 2517 Briscola Avenue, Roanoke, appeared before the Commission and stated that as a local entrepreneur, she opposes commercial usage in the development as it will negatively impact the businesses in downtown Salem and surrounding areas.

Mike Lane, 422 Academy Street, appeared before the Commission and stated that no one has considered honoring the children buried on the property other than to build houses on top of them.

Jonathan Branson, 844 Red Lane, yielded his time to Mr. Hunt.

Ron Hunt, 922 Red Lane, appeared before the Commission and stated that he was raised at the Virginia Baptist Children's Home from 1960 to 1971. He stated that he is representing most of the residents of Red Lane, some North Oaks residents, Mount Vernon, and most North Broad Street residents. He stated that Salem Racquet, Hanging Rock Golf Club, & Fellowship Community Church are all located on Red Lane and Red Lane is one of the most heavily traveled roads in the city. Fellowship Community Church typically has 250 attendees for its early service, 250 plus attendants for the next service; plus 33 to 46 vehicles from Hanging Rock Golf Club—total 342 vehicles on Sunday. Hanging Rock plans to have 25,000 to 30,000 rounds of golf this year. Salem Racquet has 180 members with 90 to 100 people going there on Saturdays and Sundays plus 40 to 60 during the week. With no entrance at the upper end of HopeTree from Red Lane due to having concrete barriers at the State's request. Average trips per day is 10 per day for non-seniors and 3 per day for seniors. Red Lane is the only proposed egress of the development. Thousands of vehicles are currently using Red Lane and he requests that the proposal be denied. He also has a petition signed by residents of Salem.

Marilyn Lurch, 1806 Westover Avenue, Roanoke, appeared before the Commission and stated that she used to come visit the children at the Baptist Home when she was a student at Virginia Tech. She now has an autistic daughter living in one of the cottages located on the HopeTree property. She has concerns about the businesses

proposed on the development. She is also concerned about how safe her daughter will be during and after construction.

Jay Huff, Raleigh Court, appeared before the Commission and stated that he grew up at the Baptist Home. He has spoken with Mr. Morris about the proposed development. He stated that after seeing the proposal, the examples given were of flat lots, not hilly developments. He understands what HopeTree is trying to accomplish in order to continue to provide services. He feels the proposal is "sketchy" and needs more time to be considered and "flushed out" more carefully before it is voted on.

Jennifer Thomas, 916 Red Lane, appeared before the Commission and stated that she attended several public meetings in the Fall of 2022 regarding the proposal. She is glad Tom Low is involved in the development. She actively participated in the meetings and feels that her concerns were heard and addressed. She stated that no matter what happens, she's losing her view but she is okay with that with an expertly thought out plan on the program.

Mike Kummer, 916 Red Lane, appeared before the Commission and stated that his family has lived in the middle of Red Lane for almost 70 years. He has played all over the HopeTree property. He received notification about the proposed development on the property. His fear of the development of the property became excitement after attending the meetings. He would like to know more details about the development. He likes that the proposed development is walkable and some of his ideas were used in the proposal. He is concerned about the traffic increase, but feels that the team developing the property is an "A-team" of professionals. He does still have concerns about the traffic. He is in favor of the request.

Jane Johnson, 2940 Phillips Brook Lane, but plans to move back to Academy Street this spring appeared before the Commission and stated that she is in constant communication with citizens through her business, civic activities, etc. She stated she represents a number of people who are not only in favor of the development, but who are also interested in ultimately residing there. The proposed variety of residence types would allow more people in her age group to downsize and stay in Salem. She supports the rezoning as it will address housing needs for a variety of residents, keep green spaces, and offer more amenities. She stated that change is going to happen regardless of what the Planning Commission and ultimately our City Council decides. This property will be developed, and failure to give a stamp of approval to this request will basically guarantee more of what Salem already has--a long row of "cookie cutter," two-story housing that Salem already has.

Nancy Reynolds, 925 Saddle Drive, appeared before the Commission and stated that her property abuts the HopeTree property. She stated that this is not about HopeTree, it is about changing the landscape of the City of Salem. She stated that you can have a sustainable walkable area in a residential area. The proposed development is for areas where the traffic is so heavy that you do not want to go out of the area or when you do not have access to walkable businesses, but that is

not Salem. She stated that maybe the change should not be to construct residential area around buildings that are not viable.

Doug McCart, 316 N. Broad Street, yielded his time to Chris McCart.

Chris McCart, 316 N. Broad Street, appeared before the Commission and stated that she is concerned about the traffic. She does not feel that the traffic study done by Balzer is accurate. She had a map of the area and discussed the length of time it takes to get to Interstate 81, Main Street, and surrounding areas. The roads between Hope Tree and major thorough fares are not adequate to handle truck traffic and traffic associated with the proposed development. The study performed was only for four hours, not multiple 24-hour periods and is not sufficient. She quoted various items in the traffic study. She asked that the rezoning not be recommended to Council.

Whitney Leeson, 212 Broad Street, she is sympathetic to HopeTree and knows development will happen. She also feels that there are good developers on the project. She does not want to see "cookie cutter" houses and loves the Wiley Court area development. She likes the proposed rear entrance to the homes, but the details of the development need to be looked at. She feels that more details need to be given on the development.

Barbara Bell 523 E. Burwell Street, yielded her time to Rev Susan Bentley.

Susan Bentley, 312 N. Broad Street, appeared before the Commission and stated that she is disappointed to hear that there were community open houses and she was not invited as she would have liked to have been able to speak. She opposes the rezoning. She would like for the decision to wait until after the new comprehensive plan has been approved. She is concerned about the green space in Salem. Once green space is developed, it is gone. She does not consider HopeTree to have excess greenspace to sell. The benefit of nature for mental health is immeasurable. She believes the empty buildings at HopeTree could be used for "outside the box" programs instead of commercial development. She believes HopeTree could provide a significant impact for at-risk girls. She is concerned about additional traffic, safety, water runoff, etc. from the proposed development. Salem is not a suburban neighborhood. Rezoning to add commercial property to a walkable community is detrimental to the existing businesses along Main Street. She asked that the Commission vote no to the rezoning.

Michael Bentley, 312 N. Broad Street, appeared before the Commission and emphasized that he is connected to the former Baptist Children's Home as his mother used to work there and his niece currently works there. He is opposed to the rezoning with commercial properties. The HopeTree presentation stated that a typical household has 13.7 car trips per day so if you add 340 households with 13.7 car trips per day to the trips of a 60-room hotel facility, and boutique commercial places, that is going to be a lot of traffic on North Broad Street and Red Lane. He does not feel the traffic study presented stated there would be minimal impact.

Will Long, 984 Red Lane, appeared before the Commission and stated that he lives directly across the road from the HopeTree campus. He stated that his family has owned the property for 100 years and he relocated to Salem to be closer to his mother after she retired. He feels that his communication with HopeTree regarding the proposal has been positive in his experience, and each time he reached out to Mr. Morris he was more than accessible and accommodating in getting back with him and explaining exactly is going on. He stated that there is going to be additional traffic with the development. He is that person that gets home at the end of Red Lane and forgets something and must go back out. He stated that where he lives is not currently walkable, and he is in favor of the rezoning request.

William Reynolds, 605 N Broad Street, appeared before the Commission and stated there has been a Reynolds living on Broad Street for 76 years. He does not understand what is going to happen with the increased traffic from the proposed development. He understands why HopeTree needs to move forward, but there will be runoff issues and utility upgrades that will be passed along to the citizens. He does not understand how the traffic is not an issue. He feels the increased traffic is going to be catastrophic.

Mike Elmore, 622 Chamberlain Lane, appeared before the Commission and stated that he supports the PUD proposal. He is on the HopeTree Board, he is a social worker. He lived on the property from 1976 to 1984. He charged the Commission with carrying the baton and questioned what will be said 25 years from now if the request is denied—the Commission missed the boat. The proposed development will strengthen HopeTree and the services it provides. He feels this is a chance to give this piece of land back to the citizens and feels the development will strengthen the community for years to come.

Colin Cash, 49 Hawthorn Road, appeared before the Commission and stated that he grew up on Academy Street in Salem—moved away and came back because he missed the small-town vibe of Salem. He opposes the rezoning. He loves HopeTree and worked there for a period of time. He knows transients have been through the property, children have runaway on the property. He feels that the proposed development will decrease the security of the residents of Salem

Reid McClure, 643 Brookfield Drive, appeared before the Commission and stated that he has been a resident of the community surrounding HopeTree most of his life. He is concerned about the water runoff the proposed development will cause. He is cognizant of the impact of developing 62 acres will have on the surrounding areas—the Lawn, Academy Street, Broad Street. He asked that the Commission look closely at water retention of the development and the impact water runoff will have on Dry Branch Creek. He thanked the Commission for its work.

Dr. Sam Williams, retired surgeon, 834 Red Lane, appeared before the Commission and stated that he and his wife made 834 Red Lane their residence 42 years ago. He enjoys the view, especially to the West. The HopeTree property is a great property

to walk and showcase the area. He knows the property will be developed. He spoke with former City Manager Forest Jones in 2006 and 2008 about his concerns of people walking and riding bikes along Red Lane. He has attended the community meetings and did not realize how the proposal has changed. He feels that issues such as traffic volume, stress on infrastructure, wildlife habitat destruction, impact on Main Street businesses, loss of grade scenery, and more are concerns we should all share.

Robin Ellis 745 W. Carrollton Avenue appeared before the Commission and stated that she supports the rezoning and the comments made by Jane Johnson. She lives less than a mile from the property and feels that this is the best use of the property. She understands that people want to keep the pasture and greenspace, but it is private property, not public property. The proposed plan preserves 40 percent of greenspace and preserves the historic buildings on the property. She stated that she is not an expert on traffic or runoff or engineering of any kind, but she trusts the Planning Commission will ensure that all the proper studies have been done for that and a decision will be based on such things. She encouraged the Commission to recommend the rezoning. She yielded the remainder of her time to her husband David.

David Ellis, 745 W. Carrollton Avenue, appeared before the Commission and echoed Jane Johnson's comments and supports the rezoning. He feels that a lot of the objections he has heard thus far seem to be irrelevant as the property is going to be developed. The current proposal preserves greenspace and will provide housing that is needed in Salem.

Earl Pettrey, 650 Joan Circle, appeared before the Commission and stated that Salem has done things right with schools, sports, and services. Salem is a small city and feels that the larger buildings depicted in the presentation is not Salem and feels that if the commercial aspect of the proposal was removed, the proposal would be better received. He is concerned about the increase of traffic to the area. He asked that the Commission listen to the comments and concerns of the residents and if the Commission listens to the comments and concerns of the citizens, it will know how to vote.

Elizabeth Williams, 834 Red Lane, appeared before the Commission and stated that she agrees with Pastor Susan and knows development is coming, but the commercial aspect needs to be removed. She feels that if the commercial aspect was removed, it would be better received.

Caroline Scarborough Bain, 721 Academy Street, appeared before the Commission and stated that she has lived there 30 years and her office window looks right out on the four-way stop between Academy Street and Carrollton Avenue. She is concerned about the traffic and the number of accidents at the intersection. She stated that from 7:00 to 7:15 this morning, she counted 37 individual cars that passed through—21 rolling stops and 7 "speed roll throughs", plus 22 cars in groups

of two to four cars. From 7:15 to 7:30 AM she counted 22 individual cars, but did not count the roll-throughs.

Mark Nayden, 352 North Broad Street, appeared before the Commission and stated that he and his husband moved to Salem from New York City. He stated that commercial does not need to be on the HopeTree property as it will detract from the businesses on Main Street. He asked that more time be given to ensure that the development will support the businesses along Main Street and will not detract from the business. He and his husband sent out over 500 letters to businesses and citizens of Salem regarding the proposed development. This is a long-term decision and asked that the Commission make the right decision for this property. He strongly opposes the rezoning and asked that the decision be delayed until after the new Comprehensive plan has been approved.

Emily Payne Carter, 335 N Broad Street, appeared before the Commission and stated that she knows that change is necessary, but you don't want to give up your children's and your grandchildren's legacy--you want them to be able to breathe. You also don't want to look back and say "shoulda, woulda, coulda." She is against the rezoning. She yielded her remaining time to Lisa Miller.

Lisa Chapel Miller, 405 Apperson Drive (business address) appeared before the Commission and stated that Salem needs housing and feels beautiful homes could be built on the property. She feels that the proposal develops another downtown Salem and would be a "pocket zoning". She feels more time is needed before a decision is made. As a citizen, she wants to see more information about the development. PUD is described as a flexible development. She discussed the information in the agenda packet. Stated that there needs to be more time before a decision is made.

Nathan Acres, 130 Rutledge Drive, appeared before the Commission and stated that he has lived in South Salem most of his life. He stated that the proposal will capture the same environment as the Dilly Dally has in that area. He feels that the property will be sold regardless and feels the proposed development will provide needed housing in various phases of life. He supports the rezoning.

Andy Bloss, 801 Red Lane yielded his time to Adrian Bloss.

Adrian Bloss, 801 Red Lane, appeared before the Commission and stated that she opposes the rezoning due to negative traffic impact and that it does not keep in character with the neighborhood. The development will be detrimental to safe walking and biking in surrounding neighborhoods. Red Lane is not conducive for walking or bike riding as there are no sidewalks or bike lanes and the current proposal does not add either to the area. She likes the planned unit development, but it is not the best use for the property. PUDs are typically accessed by a major street like West Main Street, not a residential street like Red Lane. She asked the Commission to vote no on the rezoning and keep Salem safe.

Wendy Wall, 303 Academy Street and owns a learning center on Apperson Drive, appeared before the Commission and stated that while she teaches reading, she apparently cannot read because when she looks at the design maps, she cannot tell where apartments are planned to be built on the property verses where houses are planned on the proposal. She stated that apartments are conducive for transient students. She asked the Commission to consider the number of apartments.

James Reinhardt, 213 North Broad Street, yielded his time to Stella Reinhardt after stating that he feels that the information has not been effectively passed along to residents.

Stella Reinhardt, 213 North Broad Street, appeared before the Commission and respectfully requested that the Planning Commission delay the vote and keep the comment period open as new information was just received regarding the development and more time is needed to review the changes. She feels that there are other options to be explored if more time is given before a decision is made. The dense development does not follow the current comprehensive plan and is also considered spot zoning. She stated that she is not against the plan but feels the Hope Tree property is not the right location for the development. It is also not consistent with the surrounding zoning in the area. The businesses along Main Street need to be protected. The property is a pristine, rolling environment with history and needs to be preserved. More time is needed before a decision is made and feels if the neighborhoods that were left out of the process at the very beginning were included and there were more discussions with HopeTree, we could come up with some options that perhaps we could all live with and HopeTree would come out with a better form. The dense development actually goes against the current comprehensive plan. She asked that a decision wait to be made until the new comprehensive plan is adopted. She feels the proposed development is wrong for this location--it is surrounded by historic and established neighborhoods that already have heavy traffic and no good access to Interstate 81. She further stated that there is no good way to handle the traffic of 340 homes and commercial development.

Ashby Garst, Crest Apartments, appeared before the Commission and stated that she looks forward to the rezoning of the HopeTree property for the future of Salem. She stated that she and her boyfriend are among the youngest in the crowd and are currently looking for a community to settle down in. She would like for that to be Salem, but current housing is not affordable in Salem for younger people like herthe north Salem community she loves doesn't have a place for her. She feels the proposed development will offer affordable housing for younger residents and supports the rezoning request.

Lisa Miller, 405 Apperson Drive, reappeared before the Commission and spoke on behalf of several citizens who feel that the proposal presented lacks details. Due to the fact that last minute additions were made to the proposal by HopeTree, she requested that the Commission delay the vote until the June meeting. She presented a digital petition with over 300 signatures in opposition to the rezoning, with more

signatures being added. She further requested that more public meetings be held by HopeTree with more detail regarding the proposal.

No other person(s) appeared related to the request.

Chair Daulton closed the public hearing at 10:42 p.m.

Denise King motioned to continue the vote on the request of Virginia Baptist children's Home (dba HopeTree Family Services), property owner, for rezoning the properties located at 1000 block Red Lane and a portion of 860 Mount Vernon Lane (Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, and a portion of 44-3-10 from RSF Residential Single Family to PUD Planned Unit District to the March 13, 2024, meeting. Reid Garst seconded the motion.

Ayes: Beamer, Conner, Daulton, Garst, King

4. Adjournment

On motion by Member Conner, seconded by Member Beamer, the meeting was adjourned at 10:45 pm.

City Council meeting, March 11, 2024, 6:30 p.m.

Council Chambers, City Hall, 114 North Broad Street

City Council Special Meeting MINUTES

Wednesday, February 21, 2024, 5:30 PM

Joint Meeting with Planning Commission of the City of Salem, Virginia Salem Civic Center, Community Room, 1001 Roanoke Boulevard, Salem, VA 24153

1. Call to Order

A Joint Special Meeting/Work Session of the Council of the City of Salem, Virginia, along with the Planning Commission of the City of Salem was held at the Salem Civic Center, Community Room, 1001 Roanoke Boulevard, Salem, Virginia, 24153, on February 21, 2024, at 5:30 p.m., there being present the following members of said Council, to wit: Renée Ferris Turk, Mayor; James W. Wallace, III, Vice-Mayor; Council members: Byron Randolph Foley, William D. Jones, and H. Hunter Holliday; Chris Dorsey, City Manager and Executive Secretary; H. Robert Light, Assistant City Manager, Clerk of Council, and Deputy Executive Secretary to the Planning Commission; and Chris Dadak, on behalf of Jim Guynn, City Attorney. Also present were Chuck Van Allman, Director of Community Development; Mary Ellen Wines, Planning and Zoning Administrator; Max Dillon, Planner I; and the following members of the Planning Commission: Vicki G. Daulton, Chair; Denise P. King, Vice-Chair; Reid Garst, Neil L. Conner, and Jackson Beamer. In addition, the following representatives for Hope Tree were in attendance: Jon Morris, Hope Tree; Todd Robertson, Stateson Homes; Mike Snyder, Snyder & Associates; Tom Low, Civic By Design; and Chris Burns, Balzer & Associates; and the following business was transacted:

A. Roll Call

- Renée Ferris Turk, Mayor Salem City Council
- 2) Vicki G. Daulton, Chair Planning Commission of the City of Salem, Virginia

Mayor Turk and Chair Daulton called the meeting to order and reported that this date, place, and time had been set for City Council and the Planning Commission to hold a work session.

2. New Business

A. Joint Work Session with Planning Commission

The meeting is an informational meeting only related to the Hope Tree rezoning application; no official action will occur on behalf of Council. There will be no public hearing component at this meeting.

Hope Tree provided an overview of the rezoning request submittal that had been made. Staff reviewed public comments from the public hearing held at the February 14, 2024, Planning Commission meeting. Staff provided insight and Council and the Planning Commission posed questions they had to the Hope Tree representatives.

3. Adjournment

Mayor Turk inquired if there were any other items for discussion and hearing none, adjourned the joint session at 8:45 p.m..

AT A REGULAR MEETING OF THE PLANNING COMMISSION OF THE CITY OF SALEM, VIRGINIA held in the Community Room, Salem, Civic Center, 1001 Roanoke Boulevard, Salem, VA 24153

AGENDA ITEM: Amendment to the Zoning Ordinance

Hold public hearing to consider the request of Virginia Baptist Children's Home (dba HopeTree Family Services), property owner, for rezoning the properties located at 1000 block Red Ln and a portion of 860 Mount Vernon Lane (Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, and a portion of 44-3-10) from RSF Residential Single Family to PUD Planned Unit District.

SUBMITTED BY: Mary Ellen Wines, Planning & Zoning Administrator

SITE CHARACTERISTICS:

Zoning: RSF Residential Single Family Land Use Plan Designation: Residential

Existing Use: Civic

Proposed Use: PUD Planned Unit District

BACKGROUND INFORMATION:

The subject property is commonly known as "HopeTree", formerly as the "Baptist Home" and consists of seven parcels land of approximately 62.318 acres. It is bounded by the Stonegate & Emerald Hills subdivisions and North Broad Street on the west, East Carrollton Avenue on the south, Red Lane on the east, and Interstate 81 to the north. The property is currently, and will continue, to be the home of HopeTree Family Services. These services include clinical services such as equine assisted psychotherapy, therapeutic foster care, the HopeTree Academy, therapeutic group homes, and developmental disability homes.

This request is to rezone the property in order for it to be developed as a planned unit district that will contain the existing HopeTree services, a significant number of residential building types (not to exceed 340 units), and mixed use structures that will contain commercial uses. Approximately 40% of the site will be preserved or used as public or private open space areas including a proposed lawn area near the center of the site. As a planned unit district is extremely flexible by design, the exact building types and locations have not been determined.

The applicant is proposing access adjustments to the property. According to the proposal, the existing main entrance from Mount Vernon Lane and East Carrolton will remain. The northern entrance on Red Lane will be moved in line with the intersection to the North Oaks Subdivision. The second existing entrance from Red Lane will remain and four additional entrances from Red Lane will be added. Two additional entrances will be constructed on East Carrollton Avenue along with the opening and extension of North Broad Street. All roads within the PUD will be privately owned.

Several potential areas for stormwater management are identified throughout the plan. As a PUD is designed to be flexible in nature, the exact size and location of the SWM areas have not been determined. As a light imprint development, stormwater facilities are often small in nature and dispersed throughout the development. The actual number of facilities and their design will depend on engineering and regulatory requirements and will be reviewed and approved through the site plan review process.

PROFFERED CONDITIONS:

The Planned Unit District master plan (labeled PUD Rezoning Application in attached documentation) will constitute the required conditional zoning proffers. All other documentation included throughout the application process is supportive in nature.

INDEPENDENT ANALYSIS OF TRAFFIC DATA SUBMITTED BY THE APPLICANT:

The City hired Mattern & Craig, an independent, licensed professional engineer to review the traffic data that was submitted with the request for accuracy and to obtain a third party opinion.

In summary, Mattern & Craig found the need for an expansion of the study area in regard to the intersections examined (not just Red Lane/East Carrolton Ave and East Carrolton Ave/North Broad St) and data points collected. Additionally, there needs to be justification for the trip generation reduction (currently as assumption of 25%); otherwise, standardized metrics (provided by the Institute of Transportation Engineers or VDOT) should be utilized.

Mattern & Craig's analysis can be found in the supporting documents of this staff report.

Balzer and Associates has responded to Mattern & Craig's independent analysis, and correspondingly updated its Traffic Impact Study. Those materials can be found in the supporting documents of this staff report.

COMMENTS RECEIVED FROM CITY DEPARTMENTS:

The proposed development was submitted to all city departments for comment and review. Below is the response of each department:

COMMUNITY DEVELOPMENT, Engineering Division

If approved, the project will have to comply with all applicable local and state stormwater regulations and requirements, including over-detention.

An independent analysis of the submitted traffic data was performed by Mattern & Craig, Professional Engineers. For more details, please see the Traffic Section above.

COMMUNITY DEVELOPMENT, Planning & Zoning Division

The intent of the Planned Unit District (PUD) is to encourage maximum flexibility in the design and development of land. PUD developments facilitate the adequate and economical provision of streets, utilities and other improvements, and allow for the management of the natural and scenic qualities of vacant land that is proposed for development. The PUD district allows a variety of housing options, as well as commercial, civic and office use types of a number and scale sufficient to serve the needs of the PUD residents.

This proposal offers a delightful light imprint development focused on walkability, open space, amenities, and a sense of community. The revisions to the submitted documents serve as helpful guidelines to ensure that the plan's stated objectives are fulfilled by the development's potential buildout. For example, maximums have been introduced both residentially and commercially, guaranteeing that there will be no more than 340 residential units constructed in the development (not including Accessory Dwelling Units), and no more than 15,000 square feet of retail and restaurant uses (not including other permitted commercial uses). Still, questions remain in regard to absence of a guarantee for the presence of single-family detached homes, as well as the optionality for buildings to be constructed of a singular building material. By an evaluation of the master plan (PUD document) City Council

determines the maximum area devoted to non-residential uses, and while these areas are located in the plan, those maximum figures have not been included in the PUD document.

Since the original submission, the project team has greatly refined the allowable use list in respect to the appropriate uses for HopeTree's location and proximity to downtown. Additional discussion with City staff should be conducted in order to finalize an acceptable use list for each transect.

Currently, the PUD document allows for commercial uses on the ground floor of many building archetypes throughout the various transects. Because the intent of that provision can be satisfied with the City's existing Home Occupation process, commercial uses on the ground floor of non-mixed-use buildings should be removed.

Finally, a more detailed description of the accessibility of amenities to the public should be included in the plan. While staff understands that the specific relevant guidelines for open space and community facilities is impossible to determine at this time, there should be assurances that the open space (and pedestrian facilities) which is described as an amenity to surrounding neighborhoods will remain as such without substantial restrictions in the future.

Economic Development

HopeTree's proposed development appears to be a very creative "outside the box" development, unique to the Roanoke Region. The overall development has the potential for becoming a well-known planned development well outside the Roanoke Valley.

Historically, economic development only engages in commercial and industrial land use development. The proposed HopeTree development is a unique master planned community largely consisting of residential development. However, in the interest of economic development, the plan incorporates several initiatives related to Economic Development's strategic plan and incorporates a small portion of proposed commercial uses. Proposed commercial uses are predominantly associated with the adaptive reuse of older HopeTree buildings.

Related to Economic Development's strategic plan, the HopeTree development supports several objectives, including:

- 1. Opportunities to diversify the housing options in the City of Salem
 - a. Support existing efforts in retention and attraction of talent
- 2. Opportunities to expand quality of life amenities to local residents
 - a. Pedestrian walking paths, preserving open green space and recreation for the public
 - b. Increase beatification efforts in building design and city corridors
 - i. Reference of Wiley Court & pocket parks are positive
- 3. Business attraction & entrepreneurial support
 - a. Enhanced adaptive reuse of older buildings can boost efforts to attract eclectic businesses with potential to be retail/hospitality destinations

Further time for review of proposed uses/zoning and what is a good fit for such a unique development and the larger neighborhood will be needed. For example, "automobile repair services, minor" would not be a good use for the neighborhood as well as "personal storage", "warehousing & distribution". In addition, further time for review of the traffic study and evaluation of other off-site improvements to mediate traffic flow will be needed.

ELECTRIC

Electric loading - The proposed development would not adversely affect the power in that area. We have adequate feeds available for the new load.

Easement/Pre-Construction — This development will require extensive easements and phase planning prior to construction. The existing power on site will need to be replaced/intercepted as Salem Electric will be bringing the existing power up to its code. Well in advance to construction, materials and equipment will need to be decided upon in coordination with the developer and ordered to ensure that they will be available at the time of construction.

Construction – The proposed development will require all new power feeds into the site. Coordinating the existing power with the new facilities will require extensive electrical work and planning to ensure that outages will be manageable and new electric services will be available to the proposed phases of construction.

POLICE

Along the same lines of the Police Department's response to the Simms Farm development, we would anticipate a slight increase in Calls for Police Services which is expected from any development of this nature. We are not in a position to dispute the facts presented in the Traffic Study which details the increase of vehicular traffic in the adjacent neighborhoods. At this time, there is no immediate concern regarding quality of life issues such as homelessness.

SCHOOLS

Thank you for the opportunity to provide input on this matter. Ultimately, please know that the School Board and School Administration trust the City Council and City Administrators to make good decisions that benefit all Salem residents.

From the perspective of the Salem City School Division, new development is likely to increase enrollment. Since 2017, the Salem City School Division has experienced a significant decline in enrollment, negatively affecting state funding (approximately 300 students in grades K-12). Increased enrollment will provide additional revenue from the state on a per–pupil basis for annual instructional costs. Additionally, enrollment increases generally happen over time, which permits staffing and program delivery to adapt and adjust incrementally.

Outside of annual instructional programming, the other consideration is the capacity of school facilities. The proposed development is in what is currently the West Salem Elementary Attendance Zone. West Salem Elementary School has a facility capacity of approximately 450 students and is currently operating below capacity with approximately 400 students, some of whom are nonresident students or in-division transfer students. So, there is capacity for increased enrollment at West Salem. ALMS and SHS also have ample space to address increases in enrollment in grades 6-12.

If additional enrollment results in the need to adjust attendance zones, changes will be phased in over time by permitting current students in affected neighborhoods to continue attending the neighborhood's traditional school while new students are transported to the newly assigned school.

In large or rural districts, the redundant transportation required to phase in changes would be a more significant challenge than it will be here in Salem. While there would be a modest increase in transportation costs during implementation, it would be a small price to pay to mitigate the impact of changing attendance zones on families.

STREET DEPARTMENT

All roads in this PUD will be privately owned; therefore, the City will not have any maintenance cost. All maintenance, snow removal, asphalt patching, and etc. would be the responsibility of the owner.

When it comes to trash, we feel we can service those new residential units initially with current staffing levels and keep the collection day the same as it currently is, until the PUD is fully built out. There will be a slight increase in fuel and maintenance. Once it is completed, we would need to re-evaluate to see if we need to increase staff to handle the total number of residential units there. There is the possibility of increased staff and salary along with fuel and maintenance costs once the PUD is completed.

We will provide a garbage tote to each new residential unit; I'm only counting one tote for each of the units. The traffic study mentions 340 residential units (115 single family detached, 140 single family attached, 85 multi-family units). The current cost of a new tote is about \$75 each including shipping, which is going to cost \$25,500.00. Garbage totes last approximately ten years. I'm estimating the residential units might dispose of 150lbs of garbage per week, which equals 26 tons a week. We currently pay \$55.00 a ton, equals \$1,430.00 a week or \$5,700.00 a month or \$74,400.00 a year for disposal. We would also provide curbside bulk collection. Being they will be new residential units this is a difficult one to estimate; I would estimate \$6,000.00 in tipping fees for bulk. In round numbers, the impact to garbage collection will be approximately \$80K annually.

WATER DEPARTMENT

We still have a concern about how the water metering will be handled since the complex is currently served by a master meter. Likely, some of the existing HopeTree buildings will have to be separately metered.

OPTIONS:

- Continue the consideration of the recommendation until the April Planning Commission meeting.
- 2. Recommend approval of the request.
- 3. Recommend denial of the request.





Pre-application Meeting (optional)

Meetings with the Community Development Staff are recommended prior to submittal of a rezoning application. Please bring a plat to the meeting with a sketch of your proposal.

Application Submittal

- The application deadline is the first of the month for inclusion on the following month's agenda. If the first falls on a weekend or holiday, the application deadline will be the following business day.
- When submitting an application be sure to include the following: a complete application, plat of the subject property, legal description that includes metes and bounds, and supplementary information to support the request (such as conceptual plans and building elevations). Please note: incomplete applications will not be accepted and will be returned to the applicant.
- The application fee is due at time of submittal. (See Page 4)
- PLEASE NOTE: As per 106-520(C) of the City of Salem Zoning Ordinance no application shall be accepted for a lot or parcel that does not comply with the minimum lot area, width, or frontage requirements of the requested zoning district. A variance from the Board of Zoning Appeals must be obtained prior to the submission of a rezoning application.

Application Distribution for City Review

Complete applications may be routed to City departments for review.

Staff/Applicant Meeting

• The staff may contact the applicant to schedule a meeting to discuss comments provided by reviewing agencies, to request additional information or plan revisions, and to negotiate proffers.

Planning Commission

- Revised conceptual plans and draft proffers must be submitted prior to the Planning Commission meeting. Proffers and conceptual plans may be revised in accordance with Staff's recommendations, and revisions incorporating the staff's recommendations must be submitted prior to the Planning Commission meeting.
- A staff report and recommendation is included in the Planning Commission packet. The packet is
 distributed approximately 1 week prior to the Planning Commission meeting.
- The Planning Commission meets on the 1st Wednesday after the 1st City Council meeting of the month.
- Following a public hearing on the rezoning case, the Planning Commission may recommend approval, approval with revisions to the proffers, denial, or deferral of the application.

City Council

- Signed and notarized final proffers must be submitted prior to the City Council meeting.
- A staff report containing the recommendation of the Planning Commission and Staff is sent to the City Council prior to the meeting.
- The City Council typically hears rezoning cases on the 4th Monday of every month. Cases are usually heard by Council at the meeting following the Planning Commission meeting.
- Following a public hearing on the case, the City Council may vote to approve, approve with
 proffered conditions, deny, defer the application to another meeting, or remand the application
 back to the Planning Commission for further consideration.

ATTACHMENTS - For ALL REQUESTS you must submit the following electronically:

- a. A fully completed signed application.
- b. Acknowledgement of Application Fee Payment Procedure (Page 4)
- c. Signed Proffer Statement if applicable (Pages 6 & 7)
- **d.** A plat of the subject property, which accurately reflects the current property boundaries, is drawn to scale, and shows existing structures. (Typically, available from the City Clerk's Office.)
- e. Responses to questions on Page 5
- f. Historic Impact Information (if any)
- g. For applications requiring plans, please submit electronically only. No hard copies will be accepted.
- h. Check here if the conceptual plan will serve as the preliminary plat.

NOTE: Elevations will be required with new development.

TO THE APPLICANT:

It is the policy of the City of Salem City Council, the City of Salem Planning Commission, and City of Salem Board of Zoning Appeals to require a property to be posted when a zoning action is being considered. Such a posting notifies the general public of an impending action and the location being considered.

It is incumbent on you, the applicant, to ensure the sign is in the proper location and remains there until an action has taken place. Consequently, the procedure for posting is as follows:

- 1. The Community Development Staff will post the sign on your property.
- 2. You should check the location of the sign to make certain it is in the right place on your property. If it is not, notify the Community Development Office as soon as possible.
- 3. You should check periodically to ensure the safety of the sign. If it is stolen or otherwise harmed, notify the Community Development Office as soon as possible.

In submitting this rezoning application, you hereby grant permission to the agents and employees of the City of Salem to enter the referenced property for the purposes of processing and reviewing the above application.

Should you have any questions regarding this policy, please contact a member of Community Development.

City of Salem Community Development Application

Request for REZONING or CONDITIONAL REZONING

Case #:		
APPLICANT INFORMATION		
Owner: Virginia Baptist Children's Home (dba HopeTree Family Services)		Telephone No. (540) 389-5468
Contact Name: Jon Morris, President & CEO of HopeTree Family Services		Fax No.
Address: 860 Mount Vernon Lane		Email Address jonm@hopetreefs org
Applicant/Contract Purchaser: Same as owner		Talanhana Na
Contact Name:		Telephone No Fax No
		Email Address
Address:		
PARCEL INFORMATION		ls, please attach a page
(Tax ID #'s) 41-1-1, 41-1-2, 41-1-3, 41-1-4	Total Area (acres/square fe	et) 62.318 acres
41-1-5, 41-1-6, portion of 44-3-10	Current Zoning RSF	
Deed Book 210003146 Page	Requested Zoning PUD	
Subdivision	Requested Use Mixed-Use	
Location Description (Street Address, if applicable)	Current Use Institutional	
860 Mount Vernon Lane	_	
		juest: See Attached Proffer sheets
SIGNATURE OF OWNER CONTRACT PURCH	ASER (attach contract)	
As owner or authorized agent of this property, I herek best of my knowledge, and I hereby grant permission to property for the purpose of processing and reviewing this Signature Print Name	o the agents and employees of th	
Signature		Date
Print Name		
QUESTIONS/ LETTERS/ SHOULD BE FORWARD	DED TO THE FOLLOWING**	k.
Name Jon Morris		Telephone No. (540) 389-5468
Address: HopeTree Family Services		Fax No
860 Mount Vernon Lane		Email Address jonm@hopetreefs.org
Salem, VA 24153		
**It is the responsibility of the contact person to provide copies interested parties to the application.	s of all correspondence to other	

ACKNOWLEDGEMENT OF APPLICATION FEE PAYMENT PROCEDURE

Application fees must be submitted at the time of submittal. I hereby acknowledge that this application is not complete until the payment for all applicable fees has been received by the City of Salem Community Development Department. I acknowledge that I am responsible for ensuring that such fees are received by the City of Salem. I further acknowledge that any application fee submitted after the deadline shall result in the application being considered filed for the next month's meetings.

Signature of applicant/authorized agent	Date:			
Print Name: Jon Morris, Presi	dent & CEO			
Signature of applicant/authorized agent Print Name:	Date: 11/30/23			
If you would like your correspondence emabelow:	ailed and/or faxed, please make selections, and provide the information			
□Email				
FEES:				
All application fees must be paid at the time of submittal. Please make checks payable to the City of Salem:				
Rezoning ap	pplication fee \$1,000			
FOR STAFF USE ONLY				
Staff Reviewer:	Application Complete?			
Date:				

2.	What is the Future Land Use Designation for the subject property? Residential
۷.	Describe in detail the proposed use of the property. See attached narrative.
3.	List any sensitive environmental or unique features on the property. Are there any high voltage transmission lines public utility lines, or others? See attached narrative.
4.	Is the subject property located within the Floodplain District? YES NO If yes, describe the proposed measures for meeting the standards of the Floodplain Ordinance.
5.	Is the subject property listed as a historic structure or located within a historic district? YES NO If yes, describe the proposed measures for meeting the standards of the Department of Historic Resources.
6.	Have you provided a conceptual plan of the proposed development, including general lot configurations and road locations? Are the proposed lot sizes compatible with existing parcel sizes in the area? Conceptual Master Plan
	is provided within the P.U.D. guidelines illustrating the general layout of streets, development areas, etc. and the P.U.D. document sets forth development requirements.
IEAC	
	E RESPOND FOR COMMERCIAL REZONING APPLICATIONS What provisions will be made to ensure safe and adequate access to the subject property? See attached narrative.
1. \ - -	
1. \ - - 2.	What provisions will be made to ensure safe and adequate access to the subject property? See attached narrative. How will the traffic impact of this development be addressed? See attached narrative and traffic study.
	What provisions will be made to ensure safe and adequate access to the subject property? See attached narrative. How will the traffic impact of this development be addressed? See attached narrative and traffic study. Describe why the proposed use is desirable and appropriate for the area. What measure will be taken to assure the subject property?

REZONING NARRATIVE

As outlined in the PUD document, the vision for this property is to allow for the development of a fully integrated, mixed-use, pedestrian-oriented neighborhood woven into the existing HopeTree campus of buildings and surrounding open space, while being sensitive to, and providing meaningful connections to, the surrounding neighborhoods in the community.

On behalf of HopeTree Family Services (HopeTree), we are providing the narrative below as supplemental information to support the rezoning application and Planned Unit District (PUD) document with associated zoning information and guidelines for the development. This request is to rezone a portion of existing Tax Parcel 44-3-10 from RSF-Residential Single Family, to PUD-Planned Unit District for a proposed mixed-use neighborhood to be developed on the property. The HopeTree PUD document is the only document that is proffered with this request and all other documents are provided as supplemental information to further explain the request.

Project Narrative

The portion of the property that is proposed to be rezoned is approximately 62.318 acres along Red Lane and East Carrollton Avenue. The parcel is owned, operated, and occupied by HopeTree Family Services. HopeTree Family Services offers a wide range of ministries for at-risk children and youth and their families. These services include Treatment Foster Care, the HopeTree Academy secondary educational program, and Therapeutic Group Home. HopeTree also serves the needs of adults with intellectual disabilities and their families through their Developmental Disabilities Ministry. HopeTree Family Services is supported by the Virginia Baptist Children's Home & Family Services Foundation and is a mission partner of the Virginia Baptist Mission Board.

Over the last several decades, the use of this property has changed significantly, mainly due to a changing regulatory environment surrounding the specific types of services that have occupied the Salem campus. At its peak, when HopeTree was an orphanage, the campus was home to more than 400 youth ranging in age from 5 to 18. New regulations have discouraged the type of large-scale group home that existed on this campus in the past and have moved instead toward smaller-scale facilities that are integrated with the surrounding communities in which they are located. Because of limits from licensing bodies, the HopeTree campus is now limited to housing no more than 16 youth residents ages 13 to 17. In the past, youth would live on the campus for years until they turned 18. Today, youth residents typically stay no more than 6 months before being moved to another setting or back to their home.

Care for youth and adults is moving away from a congregate, campus-style setting. Today, most services are offered in the communities in which they already live. As a result, HopeTree no longer has a need for the large amount of property that exists at this site; however, there <u>is</u> a strong desire to stay true to HopeTree's roots and maintain a presence in this location.

The HopeTree Board of Directors has been discussing options for the Salem campus since 2007. Several recommendations have been considered over the years, including selling the Salem campus property and moving elsewhere, or selling a portion of property along the Red Lane frontage for development. The proposed rezoning request is a result of HopeTree's desire to "do more" with the property and to create something that will benefit HopeTree, the City of Salem, and its residents for years to come.

The proposed PUD rezoning and associated development will allow HopeTree to remain on the property where they have so much history, while integrating HopeTree's services with the proposed development, which is in keeping with the intent of the new regulations. HopeTree is currently teamed with a residential

home builder (Stateson Homes) and commercial builder (Snyder & Associates), who are providing construction expertise on the project.

Existing Conditions

Existing improvements on the site include approximately 20 buildings of varying condition, drive aisles and parking areas, pool, tennis and basketball courts, two existing baseball fields near Red Lane, picnic shelter, above-ground stormwater management facility, and other miscellaneous improvements. The existing improvements have served various purposes for HopeTree over the years and many of them are under utilized or no longer utilized at all.

Many of the buildings are centered around the core area in the center of the site. Six of these buildings (Portsmouth, Memorial, Carpenter, English, the Infirmary, and Ruth Camp Campbell) are currently vacant and will not be used again by HopeTree and were previously planned to be demolished. The proposed development envisions preserving as many of these structures as possible and converting them to residential or commercial uses that the entire community can benefit from. Utilizing the existing structures will preserve the unique character of the campus and allow this existing infrastructure to be re-purposed for the intended new uses.

Existing topography is rolling with a ridge through the middle of the site running north to south that contains much of the existing development. There is an existing pond and two existing creeks on the property. One creek is on the west side to the south of the pond and the other creek is located in the southeast corner of the site. These features are anticipated to remain and have been incorporated into the Master Plan. There is a wooded area near the pond and creek along the western side of the property and this vegetation will be preserved to the extent practical.

The property has frontage on the public rights-of-way of Red Lane, East Carrollton Avenue, North Broad Street, and Mount Vernon Avenue. This property is designated for residential use on the City of Salem Future Land Use Map dated June 11, 2012. The property is surrounded by Interstate 81 to the north and existing residential development on other sides.

Community Vision

The intent of this project is to preserve the HopeTree campus and buildings to the extent practical (including the buildings that were previously planned to be demolished) and provide new and infill development, where appropriate. Guiding principles of the project are to create a new community that minimizes traffic congestion, suburban sprawl, site grading, infrastructure costs, and preserves natural features and amenities. The plan for the HopeTree project is based on neighborhood design and development conventions which were widely used in the United States up until the 1940s and were based on the principles outlined throughout the PUD document.

A design charette was held in October 2022 to solicit input from, and engage with, adjacent property owners, City staff, elected City officials, and other stakeholders for the project. While engaging with the community during the development of the Master Plan, it was noted that the existing neighborhood lacks pedestrian amenities such as sidewalks or trails. Residents currently walk along Red Lane and the speed of traffic along this road was also cited as a major concern. It is the intent of the project to reduce vehicle trips and encourage pedestrian activity by limiting the width of vehicular drives, providing on-street parking where possible, and providing a network of sidewalks and trails throughout the property. In addition to these design principles, the project also proposes to install on-street parking along the frontage of Red Lane, which will slow traffic and provide additional parking opportunities, and to install a new sidewalk along the frontage of Red Lane to provide safe pedestrian accommodations for the surrounding community.

Density

The City of Salem has very limited land resources remaining to be developed and it is paramount to utilize these remaining land resources to their true potential. The proposed PUD plan allows for the HopeTree property to be developed to its potential while also being sensitive to the existing community and its residents. These are guiding principles of this PUD plan.

The density of the development will be limited by what is allowed in the PUD document. The total number of primary residential units shall not exceed 340. Accessory dwelling units will also be allowed but are not expected to be a major component of the project. Residential uses will make up the majority of the development with the proposed commercial uses and existing HopeTree institutional uses being integrated into the overall development. The commercial uses within the development will be determined based on what this community can support but is anticipated to consist of smaller users that are integrated into the neighborhood at an appropriate scale and in thoughtful locations.

Approximately 40% of the property will be preserved either in a natural state or as public or private open space areas. This includes the large area on the west side of the site that contains the existing pond, creek, and natural vegetation. Several interior open space areas will be provided as well, including the proposed lawn area near the center of the site.

Development Guidelines

The development of the property will be governed by the PUD document. Lot development regulations, architectural standards, etc. are provided within the document and will be enforceable throughout the development. Allowable uses are outlined in the Use Table that is provided within the PUD document.

Roads

Roads and drive aisles internal to the development will be private. On-street parking will be a preferred parking solution for the development and will be utilized where practical. All proposed roads will be paved, and we will work with the appropriate City staff to ensure that sufficient access for emergency and trash collection vehicles is provided. A network of sidewalks will be provided throughout the development to encourage pedestrian activity and connectivity, as this is a central theme of the project.

On-street parking and new sidewalk will be provided on Red Lane along the frontage of the property. The intent of these improvements is to slow traffic along this section of Red Lane, provide additional public parking opportunities, and to provide a dedicated pedestrian accommodation where one does not exist now. This section of Red Lane has a significant amount of pedestrian activity, and these improvements will serve existing and new residents.

Access

There are existing vehicular access points on Red Lane (2 locations) and East Carrollton Avenue (1 location). Additional access points are proposed along Red Lane, East Carrollton Avenue, and at the end of North Broad Street. One of the central themes within this development is to provide multiple access points to increase connectivity within the existing street grid pattern and to allow vehicular trips to be distributed to the existing road network more efficiently.

As requested by the City, a Traffic Study has been prepared by Balzer and Associates, Inc. that analyzes the development and impacts to the existing roadway network adjacent to the project. In addition to this, turn lane warrants have been analyzed. The quantities of residential and commercial uses have been assumed in order to study a reasonable and conservative level of traffic that will be generated by this project. The uses assumed in the study intended to be placeholders and are not intended to represent exactly what will be developed on the property. As outlined in the Traffic Study, the surrounding road network is

sufficient to handle traffic from the proposed development and impacts to delay and level of service are minimal. The development does not meet any turn lane warrants at any of the proposed access points. Sight distance requirements will be required to be met with the final development plans.

Utilities

This project will be served by public water and sewer. As discussed with the City of Salem Water and Sewer Department, sufficient capacity exists within the existing public water and sewer systems to serve the proposed development.

Public water and sewer will be extended through the property to serve the existing and proposed buildings and replace the existing private utility systems that are currently in place. New public water mains are anticipated to provide additional interconnectivity and redundancy in the system, which will improve service to the property and the surrounding area.

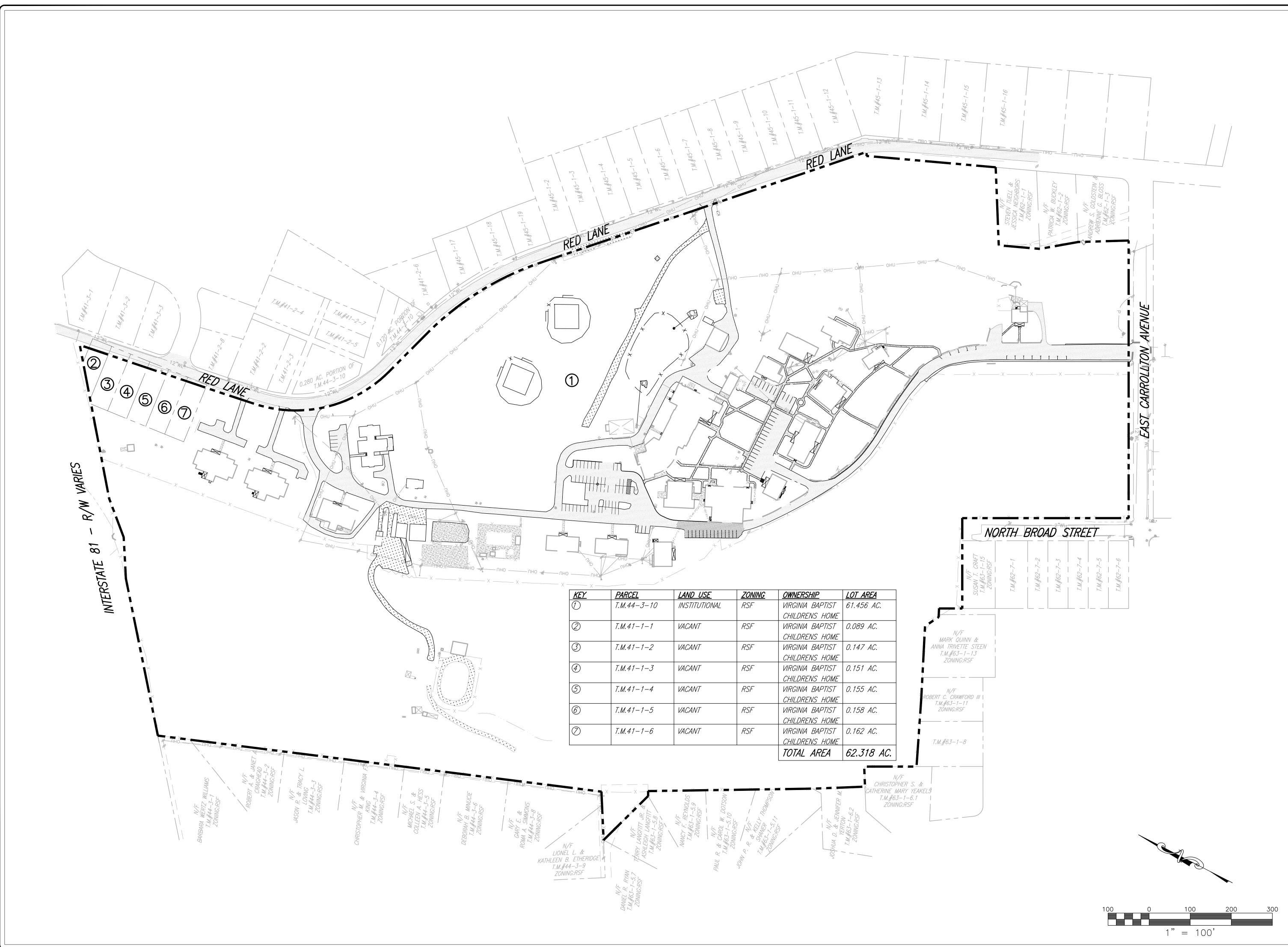
Comprehensive Development Plan

This project is in conformance with many of the Goals and Objectives defined in the City of Salem's current Comprehensive Plan. The development pattern for this project is sensitive to the existing surrounding neighborhoods by centering the most intense uses near the core of the property furthest from the existing residential houses. The least intense residential uses are located around the perimeter of the property, closest to the existing roadways and existing residential homes. The variety of housing types acknowledges and addresses the need for new housing and varying types of housing in the City of Salem. The intent of the project is to maximize the development potential of the most developable portions of the property and to preserve the most environmentally sensitive areas of the property. The preservation of open space, development of pedestrian amenities, and extensive landscaping will all enhance the neighborhood and directly address the goals of improving the beauty and appearance of the City of Salem and Preserving and Enhancing Open Space on Private properties.

Summary

The proposed development regulations and Master Plan are fully outlined in the HopeTree PUD document, attached to this application. It is the intent that this be the official document that will guide the development of this property.

HopeTree has repeatedly stated that its three main goals for the project are "to honor the history of HopeTree on this campus, to position HopeTree for the future, and to make our community proud." We are extremely excited to submit this application for rezoning. This project provides an excellent opportunity for the City of Salem to gain a new mixed-use community that will serve existing and future residents of Salem. The HopeTree project will provide many different housing types, while being sensitive to the surrounding residential neighborhoods, preserving important natural features, and providing services and amenities that will benefit the entire community.





Roanoke / Richmond New River Valley Shenandoah Valley www.balzer.cc

1208 Corporate Circle Roanoke, VA 24018 540.772.9580

DIST USE **PLANNED** HOPETREE

PROPERTY

DRAWN BY CPB DESIGNED BY CPB CHECKED BY 12/1/2023 1" = 100'

DATE SCALE REVISIONS



CITY OF SALEM VIRGINIA

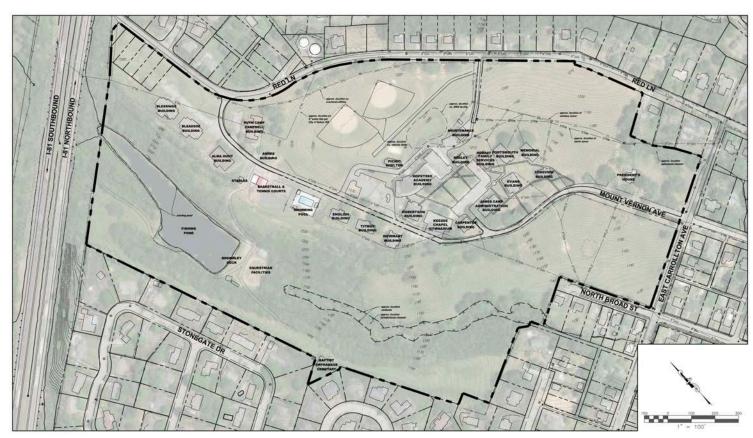
PUD APPLICATION

PLANNING OBJECTIVES

Per the Salem Zoning Application Sec. 106-228.4.

Application process:To initiate an amendment, the applicant shall complete a rezoning application. This information shall be accompanied by graphic and written information, which shall constitute a preliminary master plan. All information submitted shall be of sufficient clarity and scale to clearly and accurately identify the location, nature, and character of the proposed district. At a minimum this information shall include:

- 1.A legal description and plat showing the site boundaries, and existing street lines, lot lines, and easements.
- 2. Existing zoning, land use and ownership of each parcel proposed for the district.
- 3.A general statement of planning objectives to be achieved by the PUD district, including a description of the character of the proposed development, the existing and proposed ownership of the site, the market for which the development is oriented, and objectives towards any specific manmade and natural characteristics located on the site.
- 4.A description and analysis of existing site conditions, including information on topography, natural water courses, floodplains, unique natural features, tree cover areas, etc.
- 5.A land use plan designating specific use types for the site, both residential and non-residential use types, and establishing site development regulations, including setback, height, building coverage, lot coverage, and density requirements.
- 6.A circulation plan, including location of existing and proposed vehicular, pedestrian, bicycle, and other circulation facilities and location and general design of parking and loading facilities. General information on the trip generation, ownership and maintenance and proposed construction standards for these facilities should be included. A traffic impact analysis may be required by the administrator.
- 7.A public services and utilities plan providing requirements for and provision of all utilities, sewers, and other facilities to serve the site.
- 8.An open space plan, including areas proposed for passive and active recreational uses, natural and undisturbed areas, and proposed buffer areas proposed around the perimeter of the site. Information on the specific design and location of these areas and their ownership and maintenance should be included.
- 9.Generalized statements pertaining to any architectural and community design guidelines shall be submitted in sufficient detail to provide information on building designs, orientations, styles, lighting plans, etc.
- 10.A development schedule indicating the location, extent and sequence of proposed development. Specific information on development of the open space, recreational areas, and non-residential uses should be included.



EXISTING SITE PLAN



EXISTING AERIAL PHOTOGRAPH OF SITE

SITE & ZONING SUMMARY:

SITE ADDRESS: 860 MOUNT VERNON LN

VIRGINIA BAPTIST CHILDREN'S HOME

OWNER ADDRESS: 860 MOUNT VERNON LN SALEM, VA 24153

41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, TAX MAP NUMBERS:

and a portion of 44-3-10. 62 318 AC EXISTING LOT SIZE:

RSF - RESIDENTIAL SINGLE FAMILY EXISTING ZONING:

ZONING REQUIREMENTS:

MINIMUM LOT FRONTAGE:

9,000 SF MINIMUM LOT AREA:

SETRACKS:

FRONT: 25' IF RIGHT-OF-WAY IS 50' PR GREATER

75'

50' FROM CENTERLINE IF RIGHT-OF-WAY IS LESS THAN

10% OF LOT WIDTH, NOT REQUIRED TO EXCEED 25' SIDE:

REAR MAXIMUM HEIGHT MAXIMUM BUILDING SIZE:

CONCEPT PLAN NOTE:

1. THIS PLAN IS FOR CONCEPTUAL PLANNING PURPOSES AND HAS BEEN PREPARED USING COMPILED INFORMATION. A CURRENT FIELD SURVEY HAS NOT BEEN PERFORMED

2. AERIAL IMAGERY SOURCED FROM GOOGLE EARTH, DATED NOVEMBER, 2019

1.A legal description and plat showing the site boundaries, and existing street lines, lot lines, and easements.

2. Existing zoning, land use and ownership of each parcel proposed for the district.

EXISTING SITE DESCRIPTION

Existing Development

The site is currently developed with a network of private driveways and several existing buildings on the property. The center core of the site is located on top of a ridge and consists of many of the existing buildings, as well as supporting parking areas and other improvements. Some of the existing buildings are currently being utilized by HopeTree, while others are vacant. There are also two recreational fields located near Red Lane to the north of the center core.

The existing site has road frontage on East Carrollton Avenue, Red Lane, and North Broad Street. There is an existing private access drive (Mount Vernon Lane) from East Carrollton Avenue that accesses through the site and provides access to the center core before continuing through the site and back to Red Lane. A separate private access drive (Printers Lane) from Red Lane provides access to the recreational fields, as well as providing an additional connection to Mount Vernon Lane to the north of the center core. In addition to these private roads, there are also adult homes located at the north end of the property with driveways that access directly from Red Lane.

Existing Topography

There is an existing ridge bisecting the property from north to south. The east side of the property slopes from this ridge and from Red Lane to an existing drainage swale and storm sewer system. There is an existing stormwater management detention pond located near the center core of the property that was constructed with a previous development project.

Existing Natural Features/Floodplain

There is an existing pond located on the property in the northwest corner adjacent to Interstate 81. The pond discharges to an existing creek to the south that conveys stormwater from north to south toward the existing residential area at the end of North Broad Street. There is also an existing creek located at the southeast corner of the property that begins at the end of the existing storm sewer system that conveys water through the HopeTree property. This creek conveys runoff to an existing culvert under East Carrollton Avenue.

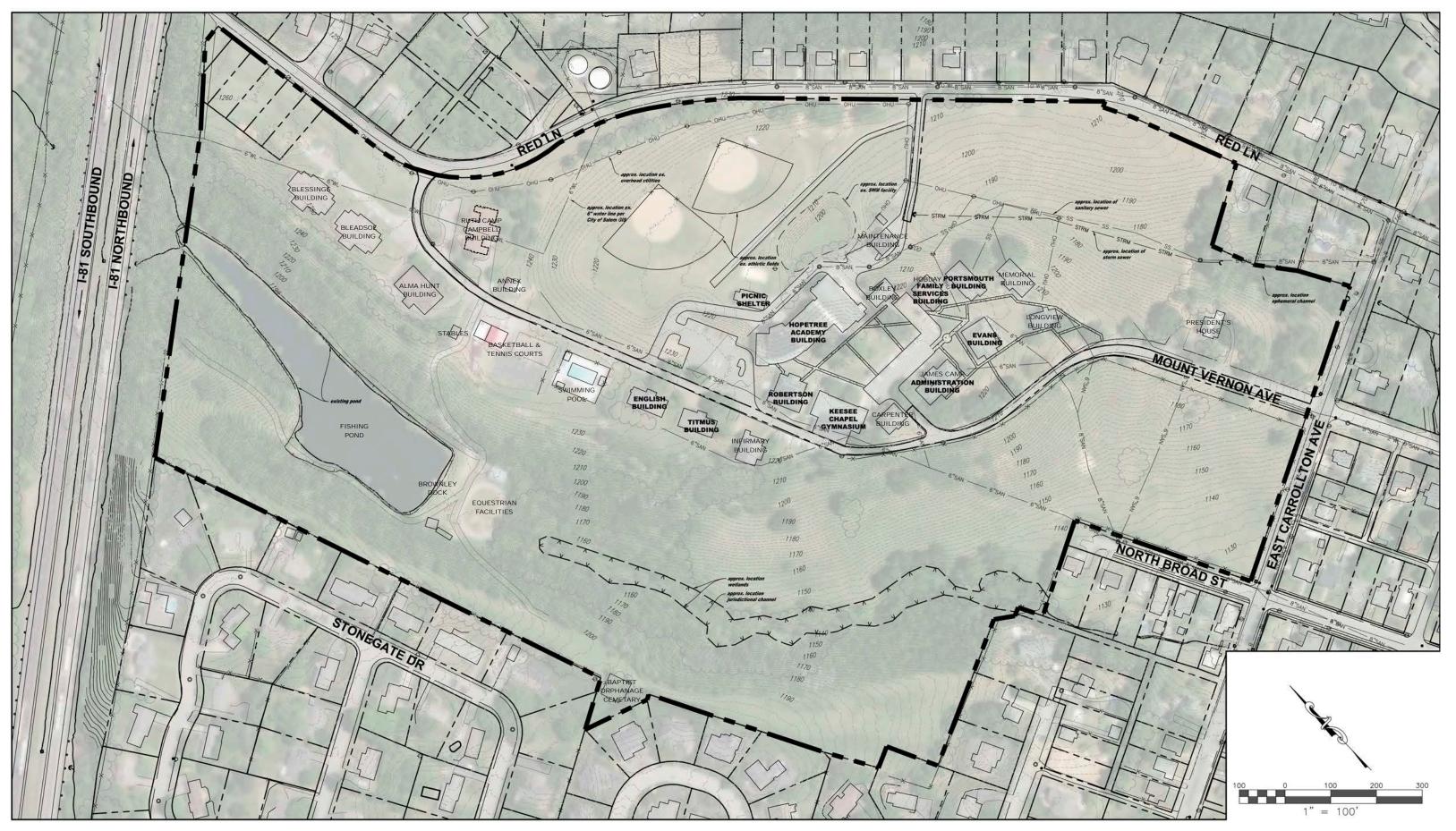
The property is not located within a FEMA-defined floodplain.

Existing Vegetation

Much of the property that is not developed with buildings or pavement/hardscape is covered with a mix of managed turf and pasture. There is a large wooded area on the west side of the property around the pond and existing creek. There is a variation of other trees that are located throughout the property, with many of these being in the southeast corner of the site or along Red Lane.

BALZER AND ASSOCIATES

4.A description and analysis of existing site conditions, including information on topography, natural water courses, floodplains, unique natural features, tree cover areas, etc.



BALZER ENGINEERS



Draft 9.25.22



ILLUSTRATIVE MASTER PLAN WITH AERIAL

CITY OF SALEM VIRGINIA

PUD APPLICATION

HOPETREE Master Planned TND Traditional Neighborhood Development

PLANNING OBJECTIVES

Per the Salem Zoning Application Sec. 106-228.4. - Application process:

" 3. A general statement of planning objectives to be achieved by the PUD district, including a description of the character of the proposed development, the existing and proposed ownership of the site, the market for which the development is oriented, and objectives towards any specific manmade and natural characteristics located on the site."

The purpose of the Hopetree master plan is to allow for the development of fully integrated, mixed-use pedestrian oriented neighborhood woven into the existing Hopetree campus of buildings and surrounding open space while connecting to the surrounding neighborhoods where feasible.

The intent is to preserve the Hopetree campus and buildings and for new and infill development to minimize traffic congestion, suburban sprawl, site grading, infrastructure costs, and environmental degradation. The provisions of the Hopetree neighborhood are based on urban design and development conventions which were widely used in the United States since its founding until the 1940's and were based on the following principles:

- A. All neighborhoods have identifiable centers and edges.
- B. The center of the neighborhood is easily accessed by non-vehicular means from lots on the edges (i.e. approximately one-quarter-mile from center to edge, or a five-minute walk).
- C. Uses and housing types are mixed and in close proximity to one another.
- D. Street networks are interconnected and blocks are small.
- E. Civic buildings are given prominent sites throughout the neighborhood.

THE HOPETREE MASTER PLAN INCLUDES THE FOLLOWING DESIGN FEATURES:

- A. Neighborhood form.
- 1. Dwellings at the edge of the neighborhood are roughly a five-minute walk or less to the center of the neighborhood.
- 2. A great variety of housing types and price ranges is included in the neighborhood, with the highest density of housing located towards the center of the neighborhood.
- 3. Within the neighborhood a mix of land uses is arranged to serve the needs of the residents in a convenient walking environment: open space/recreational areas, civic buildings, low and high density residential, retail/commercial, business/workplace, institutional, educational, and parking.
- 4. The area of the overall master plan includes the existing core campus with the surrounding open areas divided into blocks, streets, lots, greenways, and open space.
- 5. Similar land uses generally front across each street. Dissimilar land uses generally abut at rear lot lines. Corner lots which front on streets of dissimilar use generally observe the setback established on each fronting street.
- 6. Along existing streets, new buildings are compatible with the general spacing of structures, building mass and scale, and street frontage relationships of existing buildings.
- 7. The appearance of the neighborhood blends in with existing surrounding neighborhoods and feature the use of similar materials in construction.

- B. Lots and buildings:
- 1. New lots share a frontage line with a street or public space; lots fronting on a public space shall have access to a rear alley.
- 2. Consistent build-to lines are established along all streets and public space frontages.
- 3. All buildings, except accessory structures, have their main entrance opening on a street or public space.
- 4. No structure exceeds 3 stories in height in the Edge zone, and 4 stories in the General and Center zones. Height of buildings shall be measured per the Salem code and shall not exceed 45' in any location.

C. Streets, alleys and pathways:

- 1. Designs permit comfortable use of the street by motorists, pedestrians and bicyclists. Pavement widths, design speeds, and number of motor travel lanes are minimized to enhance safety for motorists and non-motorists alike. The specific design of each street considers the building types which front on the street and the relationship of the street to the overall town street network. An extensive system of connected pathways is woven through the core campus extending to the perimeter.
- 2. A combination of perimeter public streets and internal private streets provide access to all tracts and lots
- 3. Streets and alleys connect where feasible at other streets within the neighborhood and connect to existing and projected streets outside the development. Cul-de-sac and dead-end streets are discouraged and should only occur where absolutely necessary due to natural conditions.
- 4. Block faces do not have a length greater than 500 feet without dedicated alleys or pathways providing through access.
- 5. To prevent the build-up of vehicular speed, disperse traffic flow, and create a sense of visual enclosure. long uninterrupted seaments of straight streets are avoided.
- 6. A continuous network of rear alleys is provided for the majority of lots.
- 7. Existing and proposed utilities are underground and run along alleys wherever possible as well as some streets and greenways.
- 8. Streets are organized according to a hierarchy based on function, size, capacity and design speed. Streets and rights-of-ways are therefore expected to differ in dimension. The proposed hierarchy of streets is indicated on the submitted master plan and each street type is separately detailed in the master plan.
- 9. Every street, except alleys, has a sidewalk on at least one side that is at least five feet wide. In commercial areas, sidewalks shall be at least ten feet wide.

D. Parking:

- 1. On-street parking is provided on all streets where feasible. Occasional on-street parking may be accommodated without additional pavement width. For streets which serve workplace and storefront buildings, on-street parking is required and should be marked as such. On-street parking is parallel to the street unless the street lends itself to other parking layouts.
- 2. Parking lots are generally located at the rear or at the side of buildings and screened from public rights-of-way and adjoining properties by land forms or evergreen vegetation .
- 3. To the extent practicable, adjacent parking lots are interconnected.
- 4. Small and strategically placed parking areas are also provided.
- 5. Parking areas are paved as required and all parking areas and traffic lanes shall be clearly marked.
- 6. The number, width and location of curb cuts is such as to minimize traffic hazards, inconvenience and congestion.
- 7. Off-street parking and loading requirements as outlined in the city's parking regulations may be used as guidance but there are no minimum parking standards.
- 8. The master plan provides adequate parking and off-street loading areas for different areas of the development, based on the uses allowed and the density of development.
- 9. In addition to landscaping provided for screening above, trees are planted around the perimeter and interior of parking lots to provide shade.

E. Landscaping:

- 1. Trees are planted within right-of-ways parallel to the street along all streets except alleys.
- 2. Tree spacing is determined by species type selected from the City list of approved trees. Large maturing trees are generally planted a minimum of 30 feet and a maximum of 50 feet on center. Small and medium maturing trees are planted a minimum of ten feet and a maximum of 30 feet on center.
- 3. Large maturing trees are generally planted along residential streets and along the street frontages and perimeter areas of parks, squares, greenbelts and civic structures.
- 4. Small maturing trees are generally planted along non-residential streets, interior portions of parks, squares, greenbelts and civic lots. Storefronts are not obstructed by the planting pattern.
- 5. The natural features of the landscape are incorporated into the landscaping plan.
- 6. All plantings are with native or appropriate species (refer to the City list).
- 7. Buffer requirements for property located on the perimeter of the neighborhood has setbacks and buffers that are consistent with the setbacks and buffers of the adjoining zoning district, including provisions for accessory buildings, but are a minimum of 10 feet.

F. Sidewalks and Greenways:

- 1. Sidewalks or greenway easements are proposed in locations shown on the master plan or proposed to connect to pedestrian facilities shown on the master plan.
- 2. Existing sidewalks at the time of development or re-development in each phase are improved, repaired, or replaced as necessary.

G. Uses

- 1. Maximum number of total residential units is 340.
- 2. Maximum number of total hotel rooms is 34
- 3. Maximum total square footage of retail and restaurant uses is 15,000 s.f.
- 4. Home occupations shall not be counted toward any maximum densities.

Permitted uses shall be based on the general category of use that has been established for a lot or group of lots as shown in the Use Table.

3.A general statement of planning objectives to be achieved by the PUD district, including a description of the character of the proposed development, the existing and proposed ownership of the site, the market for which the development is oriented, and objectives towards any specific manmade and natural characteristics located on the site.

3.A general statement of planning objectives to be achieved by the PUD district, including a description of the character of the proposed development, the existing and proposed ownership of the site, the market for which the development is oriented, and objectives towards any specific manmade and natural characteristics located on the site.



ILLUSTRATION BY OPTICOS FOR AARP LIVABLE COMMUNITIES PUBLICATION ON MISSING MIDDLE HOUSING

https://www.aarp.org/content/dam/aarp/livable-communities/housing/2022/Discovering and Developing Missing Middle Housing-spreads-093022.pdf

LESS URBAN 4

EXISTING NEIGHBORHOODS

The existing surrounding neighborhoods consist of primarily traditional single family homes. Home occupations and accessory buildings are evident. Setbacks and landscaping are generally front lawns and vary in character. General surrounding neighborhood houses front on streets facing similar scale homes on the opposite side. Some blocks include rear lanes, while others use front loaded driveways. Existing streets include curbs, planting strips, both with and without sidewalks. Most neighborhoods are arranged with traditional size blocks. In the case of homes immediately around Hopetree, the homes generally face the campus open space in the form of recreation fields, lawn, pasture, or natural vegetation. There are no sidewalks along Red Lane and sidewalks only on one side of one block for North Broad Street and Carrollton Avenue.

SINGLE-FAMILY

HOUSES

General Character

A mix of houses immediately around Hopetree include larger estate houses, smaller single-family houses. Nearby neighborhoods include a range of larger estate houses, smaller single-family houses, multi-family estates, cottages, duplexes, townhouses, stacked flats, multi-family houses, multi-family buildings, and mixed-use buildings. Nearby Wiley Court is a famous example of a pocket court.

Building Placement

Shallow to medium front and side yard setbacks. Outbuilding and parking are accessed from rear lanes.

Frontage Type

Porches, stoops, landscaped front yards

Typical Building

One to two-story, with some three story

Types of Civic Space:

Neighborhood streetscapes with on-street parking, walks, street trees, and linear green fingers with pathways.

T-3 NEIGHBORHOOD EDGE

T-3 The Neighborhood Edge Zone consists of residential scale urban fabric similar to existing neighborhoods and serves as a buffer and transition to higher internal zones that have more residential and other mixed use. Home occupations and accessory buildings are allowed. Setbacks and landscaping are also similar and may vary some. These houses front on existing streets facing similar scale existing homes on the opposite side. Streets include curbs, planting strips, and will include new sidewalks with on-street parking on the Hopetree side arranged with traditional size blocks including connected streets, rear lanes, and greenways.

General Character

A mix of houses with a range of neighborhood density building types including larger estate houses, smaller single-family houses, multi-family estates, cottages, pair houses, stacked flats, townhouses in a variety of configurations, and cottage courts.

Building Placement

Shallow to medium front and side yard setbacks. Outbuilding and parking are accessed from rear

Frontage Type

Porches, stoops, landscaped front yards

Typical Building

One to two-story, with some three story

Types of Civic Space:

Neighborhood streetscapes with on-street parking, walks, street trees, and linear green fingers with pathways.

T-4 NEIGHBORHOOD GENERAL

T-4 The Neighborhood General Zone consists of higher-density scale urban fabric with predominantely attached residential and serves as a transition from neighborhood edge to the neighborhood center with the historic campus core. Home occupation and accessory buildings are allowed. Setbacks and landscaping are also similar and may vary some. These houses front on new streets, and greenways. Streets vary depending on location and may include curbs, planting strips, sidewalks arranged with traditional size blocks including side streets, rear lanes, and greenways.

TRANSECT ZONE DESCRIPTIONS

General Character

A mix of houses with a range of medium to high density building types including a range of single-family urban houses, multi-family estates, cottages, townhouses in a variety of configurations, cottage courts, stacked flats, loft houses, mews houses, multi-family houses, tree houses, and multi-family buildings.

Building Placement

Shallow front and side yard setbacks. Accessory building and parking are accessed from rear lanes.

Frontage Type

Porches, stoops, terraces, light wells, forecourts, shopfronts, Galleries, and arcades.

Typical Building

Two to four-story

Types of Civic Space:

Urban streetscapes with on-street parking, walks, street trees, courtyards, plazas, terraces, mews, and linear green fingers with pathways.

T-5 NEIGHBORHOOD CENTER

T-5 The Neighborhood Center Zone consists of higher-density scale urban fabric with predominantely attached residential and mixeduse buildings including infill in the historic campus core. These buildings front on squares, campus greens, plazas, parking courts, streets, and greenways. Street are limited in the core and vary depending on location and may include curbs, planting strips, sidewalks arranged with traditional size blocks including side streets, rear lanes, and greenways.

General Character

A mix of buildings with a range of medium to high density building types including townhouses in a variety of configurations, tree houses on steep slopes, stacked flats, loft houses, mews houses, multi-family estates, multi-family buildings, and mixed-use buildings.

Building Placement

No setbacks are required for buildings in the general campus parcel. Parking is accessed from on-street parking, rear lanes, in nearby perimeter areas adjacent to the core campus including the parking allee, and in small parking courts that also serve as civic gather space.

Frontage Type

Stoops, terraces, light wells, forecourts, shopfronts, Galleries, and arcades.

Typical Building Two to four-story

Types of Civic Space:

Urban streetscapes with on-street parking, walks, street trees, courtyards, plazas, terraces, mews, and linear green fingers with pathways.

HISTORIC EXISTING CAMPUS CORE

The historic campus consists of a range of institutional buildings originally serving the orphanage as well as newer school buildings, a chapel, dormitories, and other related uses. Each historic building is to be retained where feasible for on going institutional uses, commercial, residential and mixed-use with additional infill mixed-use buildings, building additions, and spaces. These buildings front on squares, campus greens, plazas, parking courts, streets, and greenways. Streets are limited in the core and vary depending on location and may include curbs, planting strips, sidewalks arranged with traditional size blocks including side streets, rear lanes, and greenways.

MORE URBAN

General Character

A mix of buildings with a range of medium to high density building types including townhouses in a variety of configurations, tree houses on steep slopes, stacked flats, loft houses, mews houses, multi-family houses, multi-family buildings, and mixed-use buildings.

Building Placement

Minimum or no setback are required. Parking is accessed from on-street parking, rear lanes, in nearby perimeter areas adjacent to the core campus including the parking allee, and in small parking courts that also serve as civic gathering space.

Stoops, terraces, light wells, forecourts, shopfronts, Galleries, and arcades.

Typical Building

Two to four-story

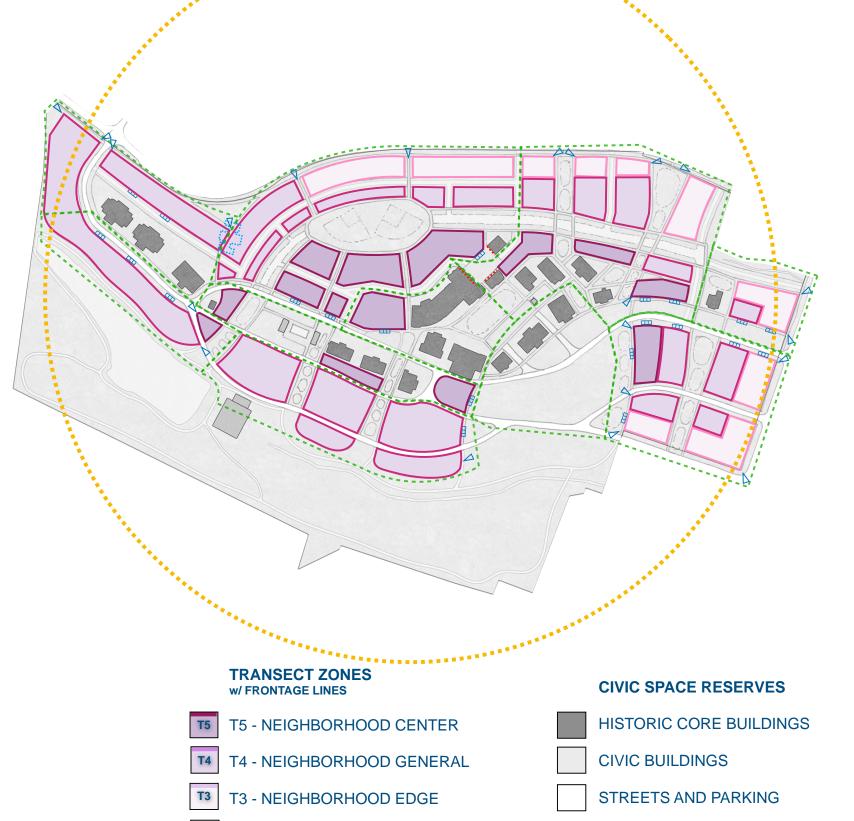
Types of Civic Space:

Urban streetscapes with on-street parking, walks, street trees, courtyards, plazas, terraces, mews, and linear green fingers with pathways.

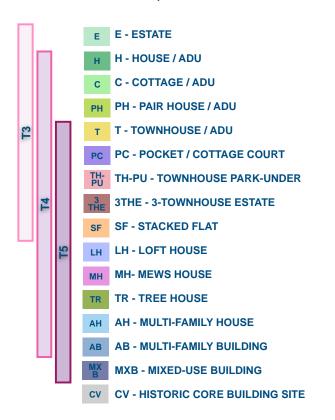
TRANSECT ZONES SUMMARY

GENERAL NOTES:

- Building Types generally provide parking from rear alleys and lanes screened from frontages on lots.
- On-street parking shall be provided along all streets where pratical.
- Each Block Group includes a minimum of three (3) building types.
- Each Block Group shall have 20% minimum of each of the building types
- A minimum of six (6) building types shall be used for the overall project.
- A maximum of five (5) of the same building type attached consecutively.
- Civic or Historic Core Buildings may be converted to T5 -Neighborhood Center transect zone if the current use is discontinued.
- Land may be subdivided into seperate ownership.
- These standards do not



TRANSECT ZONES & BUILDING TYPES KEY (SEE SPECIFIC BUILDING TYPES FOR STANDARDS)





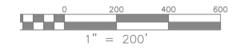
OPEN SPACE / NATURAL

REQUIREMENTS & DETAILS

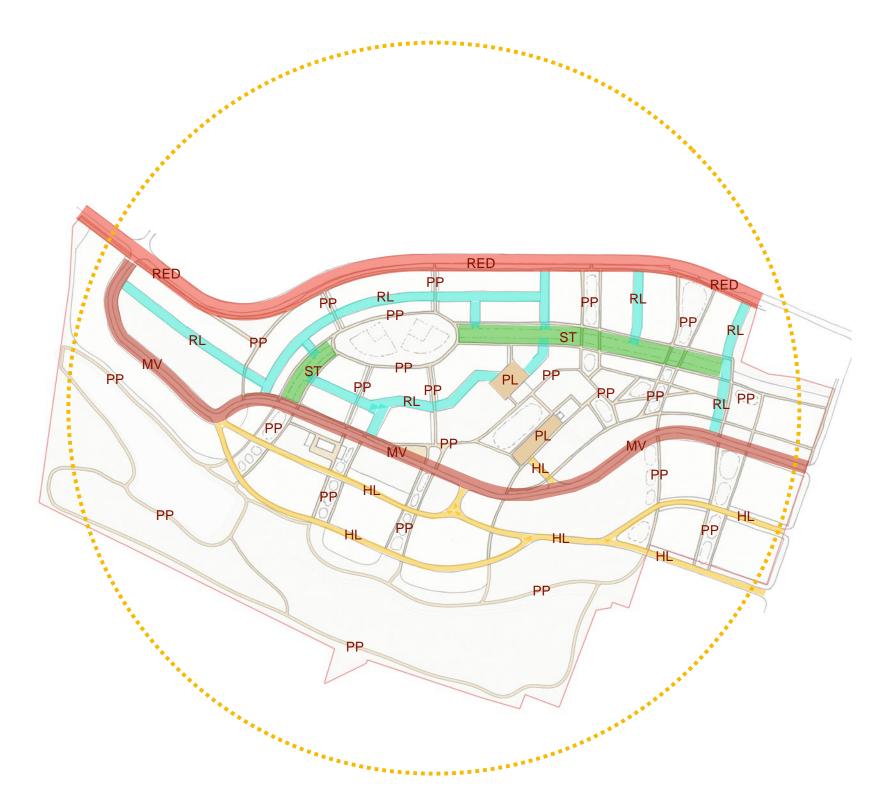




5.A land use plan designating specific use types for the site, both residential and non-residential use types, and establishing site development regulations, including setback, height, building coverage, lot coverage, and density requirements.



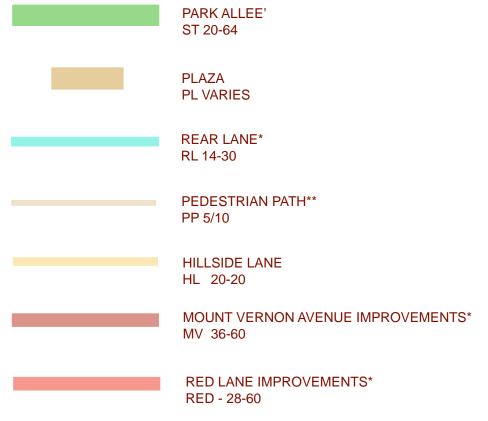
STRUCTURE TO BE REMOVED



The Purpose of Streets designed within Hopetree is to create a network with managed motor vehicle driver speeds that are compatible with safe, comfortable walking and bicycle mobility. Target Speeds are 20 miles per hour. Lane widths of 10 feet maximum and street trees planted between certain parking spaces and between the curb and sidewalk help manage driver speeds via lateral views and provide shade for travelers in summer months. Wet utilities are typically placed in the front of buildings and dry utilities are in the rear. Solid waste is collected in the rear lanes enhancing walkability in front.

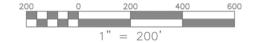
HOPETREE THOROUGHFARE TYPES

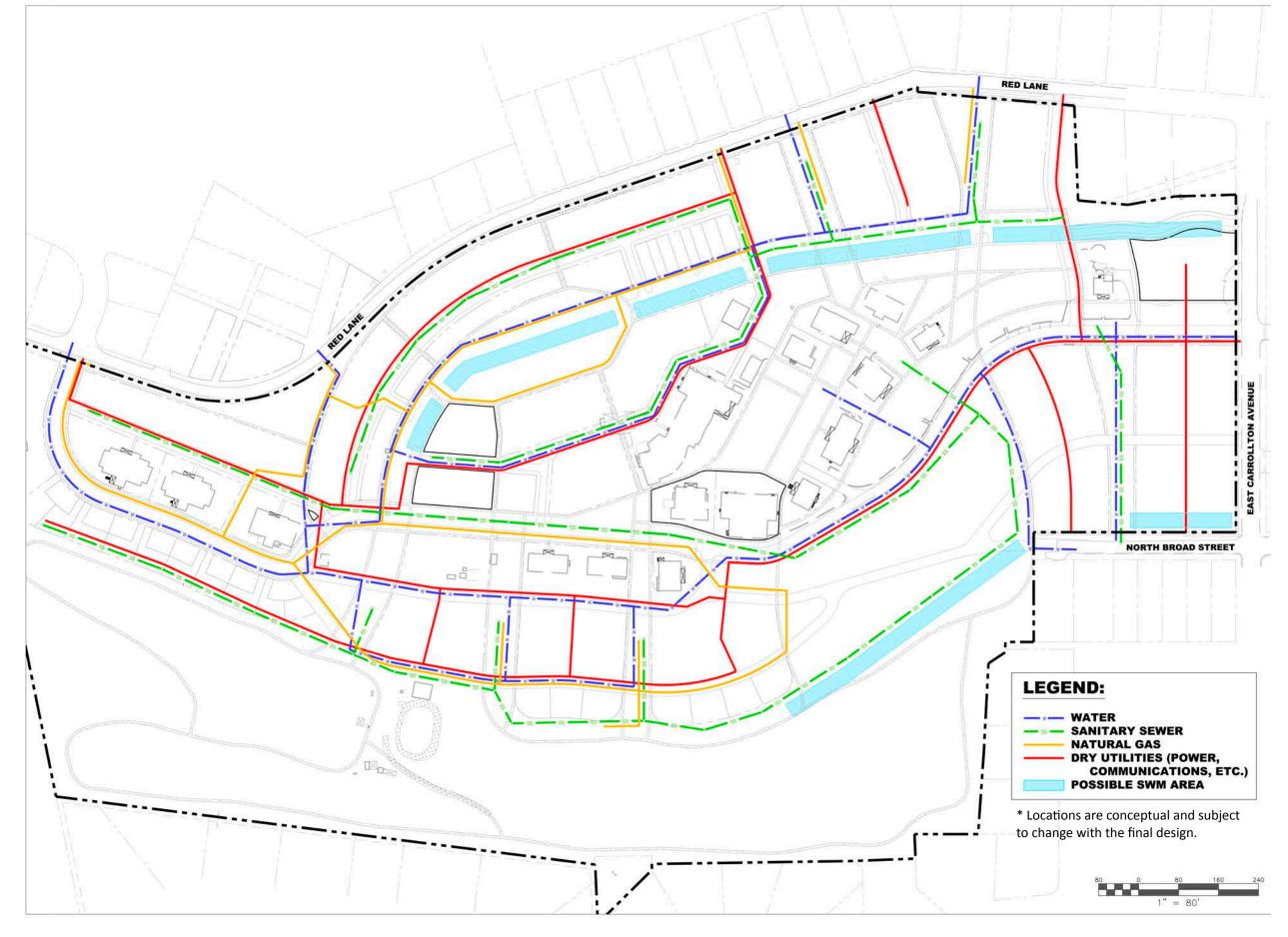
The first number is the estimated pavement width and second is the estimated R.O.W. width but dimensions may vary as the design is engineered in more detail.



- * On-street parking and a minimum 5' sidewalk shall be provided along Red Lane.
- ** On existing thoroughfares dimensions and details may vary based on existing conditions and site constraints.

6.A circulation plan, including location of existing and proposed vehicular, pedestrian, bicycle, and other circulation facilities and location and general design of parking and loading facilities. General information on the trip generation, ownership and maintenance and proposed construction standards for these facilities should be included. A traffic impact analysis may be required by the administrator.





BALZER ENGINEERS

7.A public services and utilities plan

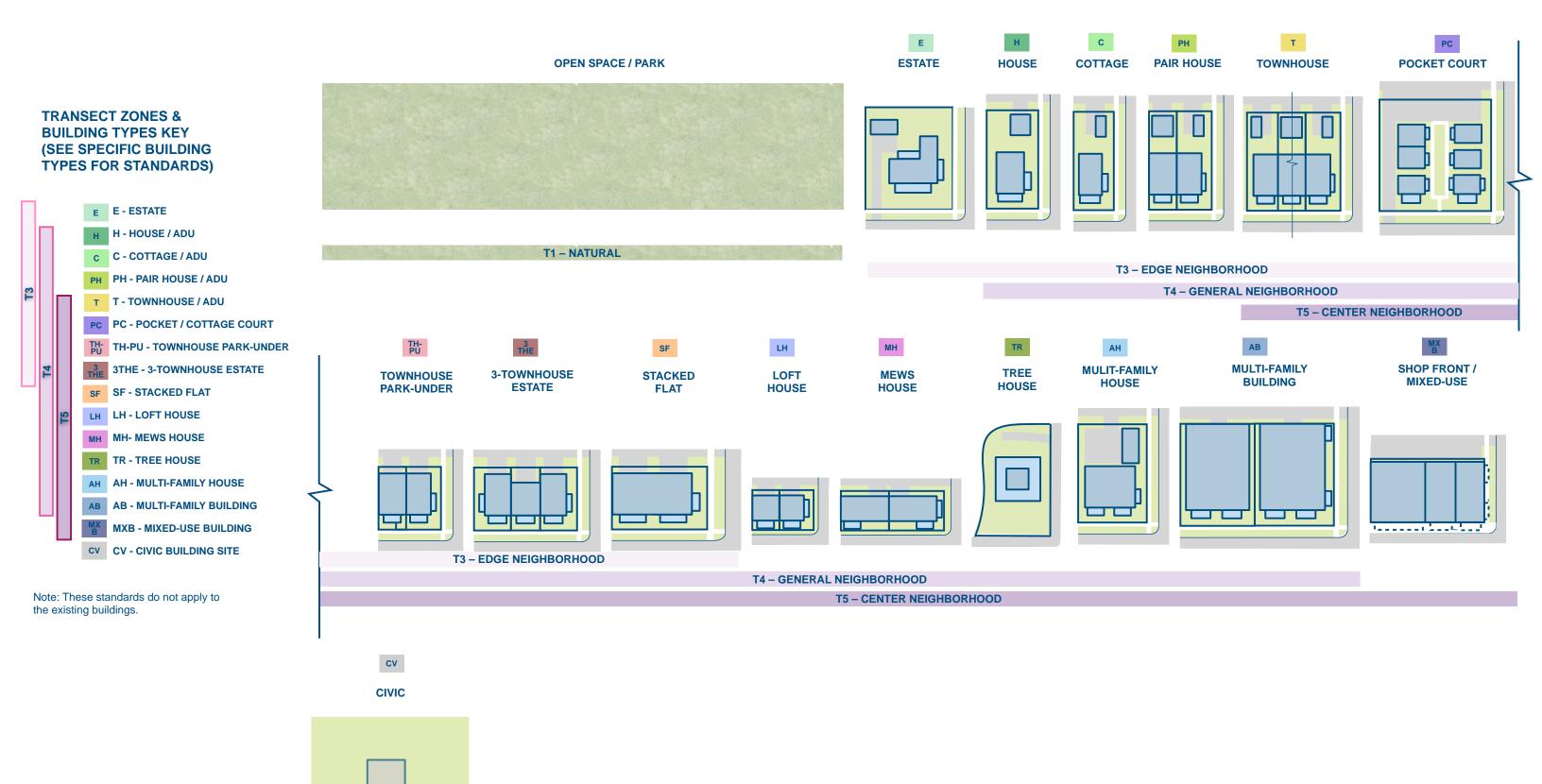
requirements for and provision of all utilities, sewers, and other facilities to serve the site.

providing



8. An open space plan, including areas proposed for passive and active recreational uses, natural and undisturbed areas, and proposed buffer areas proposed around the perimeter of the site. Information on the specific design and location of these areas and their ownership and maintenance should be included.

OPEN SPACE PLAN



HOUSING & BUILDING TYPES BY TRANSECT ZONES

CIVIC

9.Generalized statements pertaining to any architectural and community design guidelines shall be submitted in sufficient detail to provide information on building designs, orientations, styles, lighting plans, etc.

TOWNHOUSE

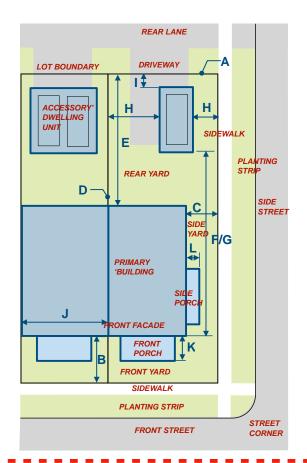
Outbuilding

DESCRIPTION

A Townhouse is a single-family residence that shares a party wall with another of the same type and occupies the full frontage line on its own lot. For Townhouses, garages and/or parking is provided from the rear lane frontages while the primary townhouse front faces a street or public greenway. Townhouses in the Strolling District are permitted to have ground floor mixed-use.

Lot width x depth	16' min. x 80' min. (A)	LOT DIMENSION
Setbacks		
Front	10' min. (B)	
Front Corner	10' min. (C)	
Side	0' min. (D)	
Rear	20' min. (E)	
Parking and Waste from Front Façade	20' min. (F)	
Accessory Buildings from Front	40' min. (Ġ)	
Accessory Buildings Side	Align. (H)	
Accessory Buildings Rear	0' min. (I)	DIMENSIONAL
Building Frontage at Setback	100 %' max. (J)	STANDARDS
Building Front Encroachments	5' max.(K)	
Building Side Encroachments	4' max. (Ĺ)	KEYED TO
	. ,	THE GRAPHIC
Height		
Principle Building	3.5 Stories max.	PLAN
First Floor Above Grade	1.5' min.	

2.5 Stories max.



FORM-BASED GRAPHIC PLAN

SAMPLE STANDARDS TEMPLATE KEY

THIS IS A SAMPLE BUILDING TYPES TEMPLATE KEY FOR REFERENCE ONLY AS A GUILD TO THE BUILDING TYPES STANDARDS GRAPHICS INCLUDED IN THIS DOCUMENT. THE TEXT LABELS IN RED IIDENTIFY THE SPECIFIC STANDARDS FEATURED ON THE GRAPHICS FOR EACH TYPE.

NOTE: THESE STANDARDS DO NOT APPLY TO THE EXISTING BUILDINGS.

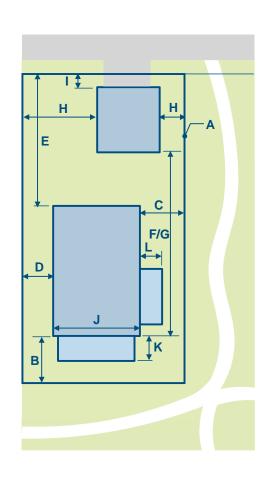
GREENWAY OPTION ESTATE

GREENWAY OPTION — AVAILABLE OF ALL TYPES

A Greenway Option is for reference. Instead of fronting a street, the primary facade faces a public greenway connected to walks and trails while garages and/or parking is generally provided from a rear lane frontage. For each Type the Standards are the same.

EXAMPLE of the HOUSE TYPE SHOWING the GREENWAY OPTION

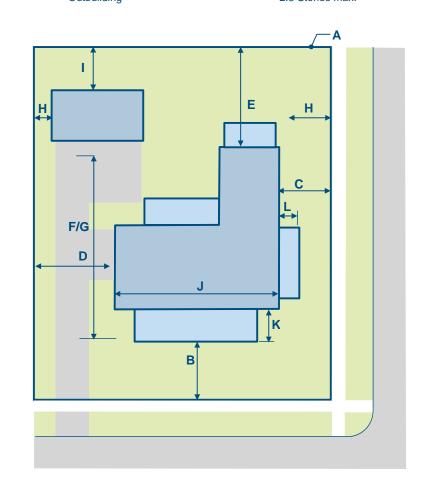
Lot width x depth	50' min. x 100' min. (A)
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Accessory Buildings from Front Accessory Buildings Side Accessory Buildings Rear Building Frontage at Setback Building Front Encroachments Building Side Encroachments	20' min. (B) 15' min. (C) 8' min. (D) 20' min. (E) 20' min. (F) 40' min. (G) 5' min. (H) 5' min. (I) 30' min. (J) 12' max. (K) 8' max. (L)
Height Principle Building First Floor Above Grade Outbuilding	Varied Stories max. 1.5' min. 2.5 Stories max.

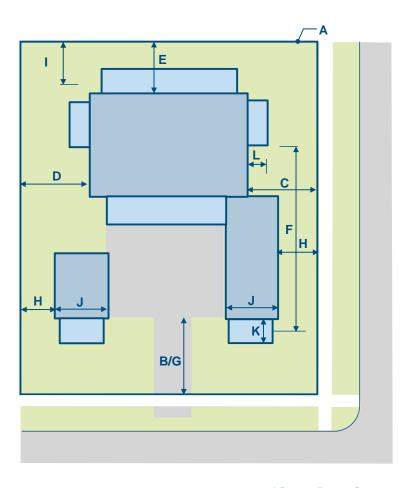


ESTATE

An Estate is a large single-family dwelling on a large lot of more suburban character, often shared by one or more ancillary buildings. The primary facade faces a street or public greenway where a porch and entry are prominent. Garages and/or parking is generally provided from the street frontage and is set back from the primary facade, side-loaded, or set forward side-loaded. Garage forward doors are not permitted to face the street.

Lot width x depth	80' min. x 100' min. (A)
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Accessory Buildings from Front Accessory Buildings Side Accessory Buildings Rear Building Frontage at Setback Building Front Encroachments Building Side Encroachments	25' min. (B) 20' min. (C) 20' min. (D) 20' min. (E) 20' min. (F) 25' min. (G) 10' min. (H) 6' min. (I) 60 % max. (J) 15' max.(K) 12' max. (L)
Height Principle Building First Floor Above Grade Outhuilding	3.5 Stories max. 1.5' min. 2.5 Stories max.





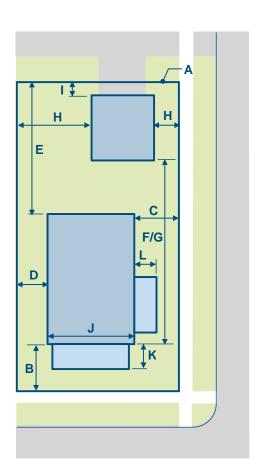
HOUSE

COTTAGE

HOUSE

A House Type is a single-family residence on its own lot. For House the primary facade faces a public street or a greenway where a porch and entry are prominent. Garages and/or parking is generally provided from a rear lane or from the street frontage set back from the primary façade.

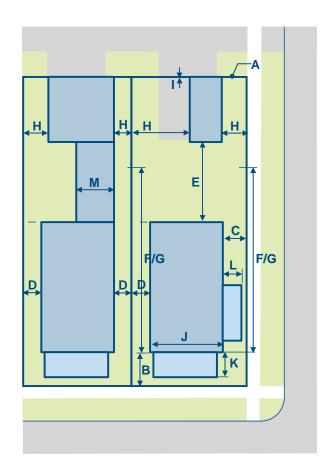
Lot width x depth	50' min. x 100' min. (A
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Accessory Buildings from Front Accessory Buildings Side Accessory Buildings Rear Building Frontage at Setback Building Front Encroachments Building Side Encroachments	20' min. (B) 15' min. (C) 8' min. (D) 20' min. (E) 20' min. (F) 40' min. (G) 6' min. (H) 6' min. (I) 30' min. (J) 12' max. (K) 8' max. (L)
Height Principle Building First Floor Above Grade Outbuilding	3.5 Stories max. 1.5' min. 2.5 Stories max.



COTTAGE

A Cottage is a smaller single-family residence on its own lot. For Cottages garages and/or parking is required to be provided from a rear lane while the primary house front faces a public street or greenway.

Lot width x depth	30' min. x 65' min. (A)
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Accessory Buildings from Front Accessory Buildings Side Accessory Buildings Rear Building Frontage at Setback Building Front Encroachments Building Side Encroachments Building Back Wing	12' min. (B) 8' min. (C) 5' min. (D) 30' min. (E) 40' min. (F) 40' min. (G) Align (H) 0' min. (I) 20' min. (J) 10' max.(K) 6' max. (L) 15' max. (M)
Height Principle Building First Floor Above Grade Outbuilding	3.0 Stories max. 1.5' min. 2.0 Stories max.

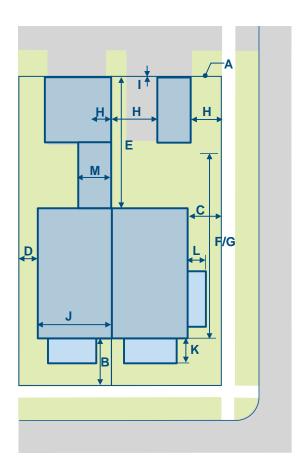


PAIR HOUSE

PAIR HOUSE

A Pair House is a single-family residence that shares a party wall with one other of the same type, each on their own lot. Garages, ADUs and/or parking is provided from the rear lane while the primary front faces a street or public greenway.

Lot width x depth	24' min. x 65' min. (A)
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Accessory Buildings from Front Accessory Buildings Side Accessory Buildings Rear Building Frontage at Setback Building Front Encroachments Building Side Encroachments Building Back Wing	15' min. (B) 10' min. (C) 6' min. (D) 30' min. (E) 35' min. (F) 40' min. (G) Align (H) 0' min. (I) 20' min. (J) 12' max.(K) 6' max. (L) 15' max. (M)
Height Principle Building First Floor Above Grade Outbuilding	3.5 Stories max. 1.5' min. 2 Stories max.

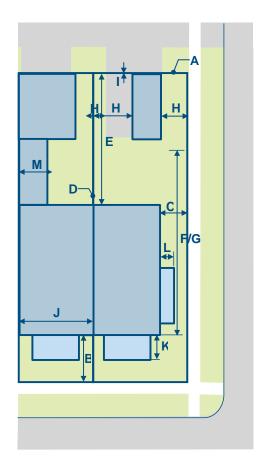


TOWNHOUSE

TOWNHOUSE

A Townhouse is a single-family residence that shares a party wall with another of the same type, with a minimum of three units in a row, and occupies the full frontage line on its own lot. For Townhouses, garages, ADUs, and/or parking is provided from the rear lane frontages while the primary townhouse front faces a street or public greenway. Townhouses in the T-5 Neighborhood Center Strolling District are permitted to have ground floor mixed-use.

Lot width x depth	16' min. x 80' min. (A)
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Accessory Buildings from Front Accessory Buildings Side Accessory Buildings Rear Building Frontage at Setback Building Front Encroachments Building Side Encroachments Building Back Wing	10' min. (B) 8' min. (C) 0' min. (D) 30' min. (E) 35' min. (F) 40' min. (G) Align. (H) 0' min. (I) 100 %' max. (J) 8' max.(K) 6' max. (L) 15' max. (M)
Height Principle Building First Floor Above Sidewalk Grade Outbuilding	3.5 Stories max. 1.5' min. 2.5 Stories max.



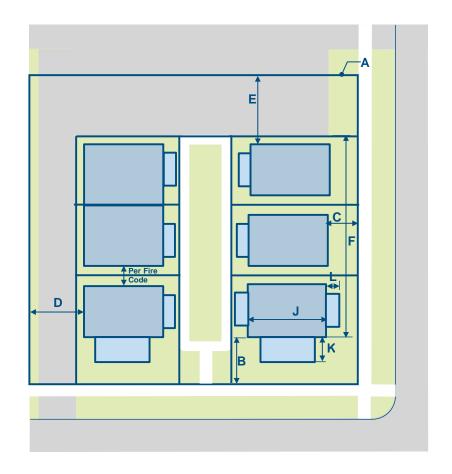
POCKET COURT

LOFT

POCKET COURT

A Pocket Court is permitted with up to 8 units. Pocket Courts permit units that do not front a public vehicular right-of-way, Attached and detached houses can be grouped in pedestrian courts facing a mews, small common, green or garden, shared through an owners' association. A pocket court is often, but not always, arranged in a U-shape. The units are separated from the common area only by a sidewalk, path or other non-vehicular way. Parking is from rear lanes or alleys in attached or detached garages or open parking in a central location.

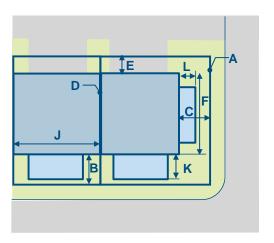
Lot width x depth (may rotate)	60' min. x 90' min. (
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade	5' min. (B) 10' min. (C) 5' min. (D) 20' min. (E) 20' min. (F)
Building Frontage at Setback Building Front Encroachments Building Side Encroachments	80 % max. (J) 5' max. (K) 5' max. (L)
Height Principle Building First Floor Above Grade	2.5 Stories max. 1.5' min.



LOFT

A Loft is a single-family residence that is detached or shares a party wall with another of the same type and occupies the full frontage line on its own lot. For Loft types, garages, and/or parking is provided adjacent or under the townhouse from the rear lane frontages while the primary townhouse front faces a lane, street, or public greenway. Lofts in the T-5 Neighborhood Center Strolling District are permitted to have ground floor mixed-use.

Lot width x depth	20' min. x 30' min. (A
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Building Frontage at Setback Building Front Encroachments Building Side Encroachments	0' min. (B) 0' min. (C) 0' min. (D) 0' min. (E) 20' min. (F) 90 %' max. (J) 8' max. (K) 6' max. (L)
Height Principle Building First Floor Above Grade Outbuilding	3.5 Stories max. 1.5' min. 2.5 Stories max.

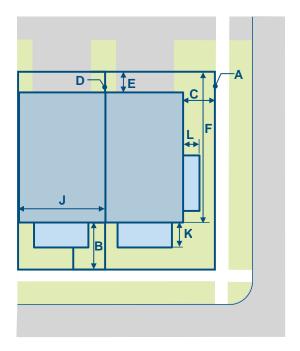


TOWNHOUSE PARK-UNDER

TOWNHOUSE PARK-UNDER

A Townhouse is a single-family residence that shares a party wall with another of the same type and occupies the full frontage line on its own lot. For Townhouse Park-Under types, garages, and/or parking is provided under the townhouse from the rear lane frontages while the primary townhouse front faces a street or public greenway. Townhouses in the T-5 Neighborhood Center Strolling District are permitted to have ground floor mixed-use.

Lot width x depth	20' min. x 50' min. (A
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Building Frontage at Setback Building Front Encroachments Building Side Encroachments	10' min. (B) 8' min. (C) 0' min. (D) 30' min. (E) 30' min. (F) 100 %' max. (J) 8' max. (K) 6' max. (L)
Height Principle Building First Floor Above Grade Outbuilding	3.5 Stories max. 1.5' min. 2.5 Stories max.

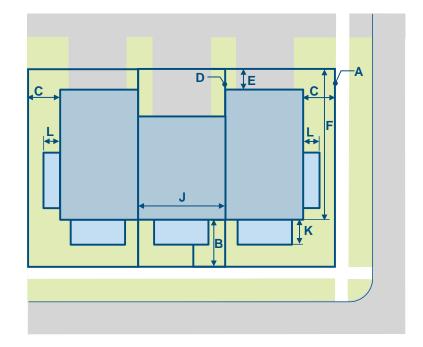


3-TOWNHOUSE ESTATE

3-TOWNHOUSE ESTATE

A 3-Townhouse Estate is a single-family residence that shares a party wall with two other of the same type with the building and architectural massing of a large house or estate. and occupies the full frontage line on its own lot. For 3-Townhouse Estate types, garages, and/or parking is provided under the townhouse from the rear lane frontages while the primary townhouse front faces a street or public greenway. Townhouses in the T-5 Neighborhood Center Strolling District are permitted to have ground floor mixed-use.

Lot width x depth	24' min. x 50' min. (A)
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Building Frontage at Setback Building Front Encroachments Building Side Encroachments	10' min. (B) 8' min. (C) 0' min. (D) 30' min. (E) 30' min. (F) 100 %' max. (J) 8' max. (K) 6' max. (L)
Height Principle Building First Floor Above Grade Outbuilding	3.5 Stories max. 1.5' min. 2.5 Stories max.

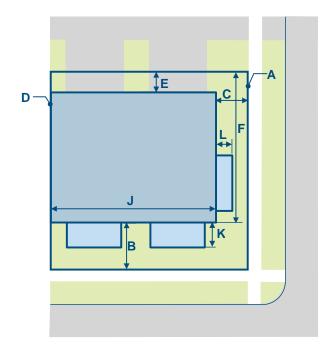


STACKED-FLAT

STACKED-FLAT

A Stacked-Flat is a single floor or town house residence that is stacked vertically with one above the other and occupies the full frontage line on a shared lot lot. For Staked-Flat types, garages, and/or parking is provided under or behind the building accessed from the rear lane frontages while the front faces a street or public greenway. Stacked-Flats in the T-5 Neighborhood Center are permitted to have ground floor mixed-use.

Lot width x depth	60' min. x 50' min.
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Building Frontage at Setback Building Front Encroachments Building Side Encroachments	10' min. (B) 8' min. (C) 0' min. (D) 30' min. (E) 30' min. (F) 80 % max. (J) 8' max. (K) 6' max. (L)
Height Principle Building First Floor Above Grade	4 Stories max. 1.5' min.

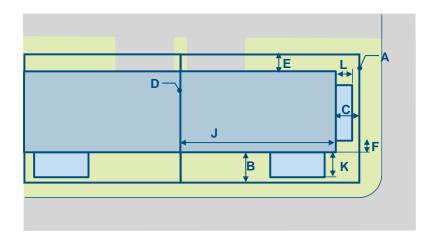


MEWS HOUSE

MEWS HOUSE

A Mews House is a single-family residence that is detached or shares a party wall with another of the same type and occupies the full frontage line on its own lot. Mews House types are generally wide and shallow. For Mews House types, garages, and/or parking is provided adjacent from the rear lane frontages screened from the frontage while the primary townhouse front faces a lane, street, or public greenway. Mews Houses in the T-5 Neighborhood Center are permitted to have ground floor mixed-use.

Lot width x depth	50' min. x 30' min. (A
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Building Frontage at Setback Building Front Encroachments Building Side Encroachments	5' min. (B) 5' min. (C) 5' min. (D) 5' min. (E) Screened (F) 90 % max. (J) 8' max. (K) 6' max. (L)
Height Principle Building First Floor Above Grade Outbuilding	3.5 Stories max. 1.5' min. 2.5 Stories max.

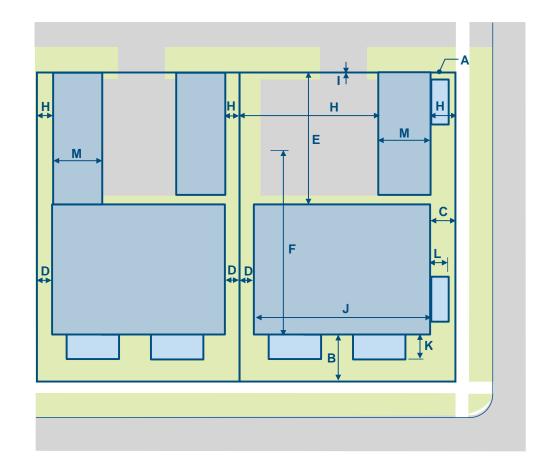


MULTI-FAMILY HOUSE

MULTI-FAMILY HOUSE

A Multi-Family House is a multi-family residence with up to 8 units that is similar in scale, massing, and character with a large single-family house and intended to be compatible in form and adjacency. For Multi-Family Houses, garages, ADUs and/or parking is provided from the street and lane frontages while the primary front faces a street or public greenway. Multi-Family Houses in the T-5 Neighborhood Center are permitted to have ground floor mixed-use.

Lot width x depth	72' min. x 100' min
Setbacks	
Front	12' min. (B)
Front Corner	6' min. (C)
Side	8' min. (D)
Rear	30' min. (È)
Parking and Waste from Front Façade	45' min. (F)
Accessory Buildings from Front	60' min. (Ġ)
Accessory Buildings Side	Align (H)
Accessory Buildings Rear	0' min. (l)
Building Frontage at Setback	90 % max. (J)
Building Front Encroachments	10' max. (K)
Building Side Encroachments	6' max. (L)
Height	
Principle Building	3.5 Stories max.
First Floor Above Grade	1.5' min.
Outbuilding	2.5 Stories max.

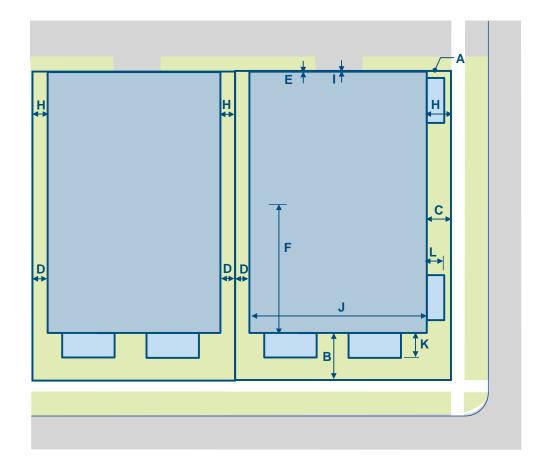


MULTI-FAMILY BUILDING

MULTI-FAMILY BUILDING

A Multi-Family House is a multi-family residence with up to 16 units that is similar in scale, massing, and character with the frontage of a Multi-Family Building and intended to be compatible in form and adjacency. For Multi-Family Buildings, garages, ADUs and/or parking is provided in a rear common parking area and/or park-under garages screened from the street while the primary front faces a street or public greenway. Multi-Family Buildings in the T-5 Neighborhood Center are permitted to have ground floor mixed-use.

I	_ot width x depth	72' min. x 60' min. (A
,	Setbacks	
	Front	6' min. (B)
	Front Corner	6' min. (C)
	Side	6' min. (D)
	Rear	0' min. (E)
	Parking and Waste from Front Façade	45' min. (F)
	Building Frontage at Setback	90 % max. (J)
	Building Front Encroachments	10' max. (K)
	Building Side Encroachments	6' max. (L)
ı	Height	
	Principle Building	4 Stories max.
	First Floor Above Grade	1.5' min.
	Outbuilding	2.5 Stories max.



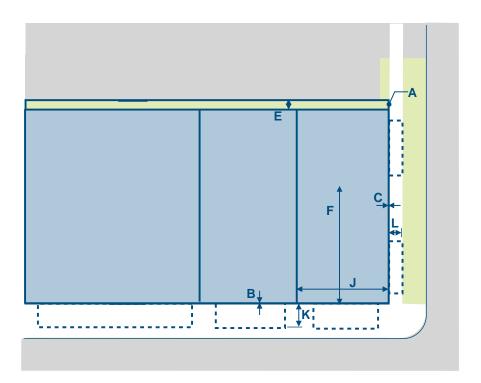
SHOPFRONT / MIXED-USE

SHOPFRONT / MIXED USE

Shopfront and Mixed-Use Buildings are small to medium size size traditional building types typically following the platting patterns of the historic main street. Ground level uses typically include retail shops, restaurants and cafes, and commercial. Upper level uses typically include residential and/or commercial uses. Ground level facades are detailed with inviting storefronts with abundant windows and canopies, balconies, and/or awnings above. Parking is provided on-street and in shared screened parking areas or park-under accessed from a rear alley while the primary front faces the street or public green space. Refer to the Land Use Plan for recommended shopfront locations.

Lot width x depth	12' min. x 40' min. (A)
Building Footprint	5,000 sf building footprint ma:
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade	0' min. (B) 0' min. (C) 0' min. (D) 0' min. (E) 20' min. (F)
Building Frontage at Setback	80 % min. (J)
Building Front Encroachments Above 1st Level	15' max. (K)
Building Side Encroachments Above 1st Level	8' max. (L)
Height Principle Building First Floor Above Grade	4 Stories max. 0' min.

Note: These standards do not apply to the existing buildings.

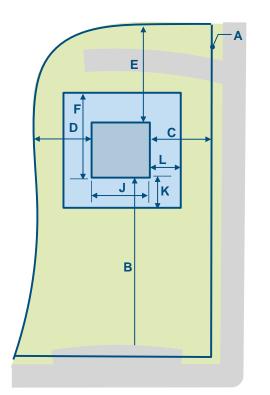


TREEHOUSE

TREEHOUSE

A Treehouse Type is a single-family dwelling. The small footprint is vertical in proportion and typically includes substantially deep cantilevered porches and balconies. Parking is generally provided along the street frontage or by driveways set back from the frontage.

Lot width x depth & max footprint	50' min. x 50' min. (A) 576 sq. ft. max. building footprint
Setbacks Front Front Corner Side Rear Parking and Waste from Front Façade Building Frontage at Setback Building Front Encroachments Building Side & Rear Encroachments	5' min. (B) 12' min. (C) 12' min. (D) 5' min. (E) 20' min. (F) 40 % max. (J) 15' max.(K) 12' max. (L)
Height Principle Building First Floor Above Grade Outbuilding	4 Stories max. 1.5' min. N/A



ACCESSORY BUILDING

ACCESSORY BUILDING

- •Accessory Structures are permitted in zones with residential uses. In all cases, garages and storage buildings should be located behind or set back from the principal dwelling. When the housing type does not include a garage, a storage building is recommended.
- Garages: Garages should be located behind the principal dwelling. Construction of garages for houses should be optional.
- •Accessory buildings are allowed everywhere that accessory building standards are called out in specific Building Types Standards including Estate, House, Cottage, Pair House, Town House, and Multi-Family House.
- •Accessory Dwelling Unit: A secondary dwelling unit associated with a principal residence on a single lot is permitted. ADUs shall be a maximum of 50% of the square footage of the primary building footprint. An accessory unit is typically located over the detached garage of a townhouse or detached house. Refer to each Building Type for specific standards.
- See the Use Table for "accessory apartment" when attached to the principal residence.

Note: These standards do not apply to the existing buildings.

WALLS

Walls shall be in stone, brick, stucco, wood clapboard, board and batten, fiber cement, or vinyl, or polymeric.

Walls shall show no more than two materials above the foundation.

Materials shall change along a horizontal line, with the heavier material below the lighter.

Siding shall be of integral color, painted or stained

Arches and Piers shall be brick, stone, or stucco

Posts shall be pressure treated, wood, or protective wrapped with vinyl or PVC.

Foundations shall be enclosed with horizontal wood boards, wood louvers, stucco over block, stamped poured concrete, stone, or brick.

Trim shall be high grade lumber, pre-painted metal, polymeric, vinyl, or fiber cement board, and shall be 3.5 inches to 6 inches in width at corners and around corners.

Wood, if visible, shall be painted or stained with an opaque stain, except walking surfaces, which may be left natural.

Stucco shall be cement with smooth sand or pebble finish.

OPENINGS

Doors shall provide a clear width of not less than 32". Exterior doors shall have a maximum nominal width of 36" for single doors. If double doors are used, one leaf shall provide a minimum 32" clearance. Local compliance for fire egress and ADA standards takes precedent.

Doors shall be side-hinged swinging type (no sliders) at frontages.

Doors shall be painted.

Windows shall be made of wood, extruded aluminum, vinyl, or hollow steel frame and glazed with clear glass.

Windows shall be with a vertical or square proportion,

Storm Windows and Screens, shall cover the entire window area.

Panes shall be of square or vertical proportion.

Shutters shall be operable w/ shutter dogs, sized, and shaped to meet the associated openings.

ELEMENTS

Porches and Colonnades are generally covered and shall have their columns, and posts.

Porches shall have square or vertically proportioned intercolumniation. Porches may encroach into the setbacks.

Railings shall be made of metal, wood, or composite.

Railings shall have horizontal top and bottom rails centered on the balusters. The openings between balusters shall not exceed 4 inches. Bottom rails shall be raised above the level of the floor.

Equipment including HVAC and utility meters shall be screened and located away from the primary entries.

Vista Points where shown on the Land Use Plan are prominent locations including corners, deflections, and at the axial conclusion of a thoroughfare or public space. A building located at a Vista Point designated on a Regulating Plan is required to be designed in response to this location

Galleries shall be aligned close to the frontage line with an attached cantilevered shed or lightweight colonnade overlapping the Sidewalk.

SUSTAINABILITY GUIDELINES

Sites should be disturbed as little as possible during construction. Natural drainage patterns shall be kept wherever feasible. Excavated soil shall be used for required contour line modifications and onsite backfill.

Materials should be locally sourced where feasible.

Use of Recycled Materials is encouraged.

Building Shape is recommended to be rectangular to allow breezes inside, cross-ventilation, and provide natural cooling.

Landscaping should encourage deciduous trees next to buildings to provide them with shade in summer and solar heating in winter.

Building Shading should be used selectively to minimize unwanted solar heat gain in the summer and maximize heat gains in the winter.

Cross ventilation is recommended to be provided through narrow floor plans with large, operable windows, porches and breezes.

Paints are recommended to have Low-VOC emissions.

Stormwater Management for guidance on stormwater management and the application of tools for paving, channeling, storage, and filtration including maintenance and costs refer to the; Light Imprint Handbook; Integrating Sustainability and Community Design.

9. Generalized statements pertaining to any architectural and community design guidelines shall be submitted in sufficient detail to provide information on building designs, orientations, styles, lighting plans, etc.

ROOFS

Roofs shall be clad in galvanized metal, fiberglass/asphalt shingles, or slate.

Roof Penetrations, including vent stacks, shall be placed on the rear slope of the roof where feasible. Roof penetrations shall be finished to match the color of the roof.

Mechanical equipment including solar panels shall be screened and located away from frontages.

Roof Slope shall be between 6:12 and 12:12. Porch Slope shall be a minimum of 3:12.

Gutters, Downspouts, and Projecting Drainpipes shall be made of galvanized metal, copper, or painted aluminum in white or same color as building.

Flashing shall be galvanized/pre-painted metal or copper.

Eaves shall be continuous.

Eaves shall be either exposed with custom cut rafter tails, partially exposed with square-cut rafter tails, or closed soffits and on the front facade shall project 12 to 36 inches from the exterior wall sheathing to the outer edge of gutter.

Rafter Tails shall not exceed 6 inches in depth at the tip.

HEIGHT

Height of buildings shall be measured per the Salem code.

For residential dwellings the ground floor shall be a minimum of 18" above the back of curb measured at the front corners.

SIGNAGE

A Master Signage Plan and Sign Standards may be submitted prior to specific site plan submissions.

General to all zones:

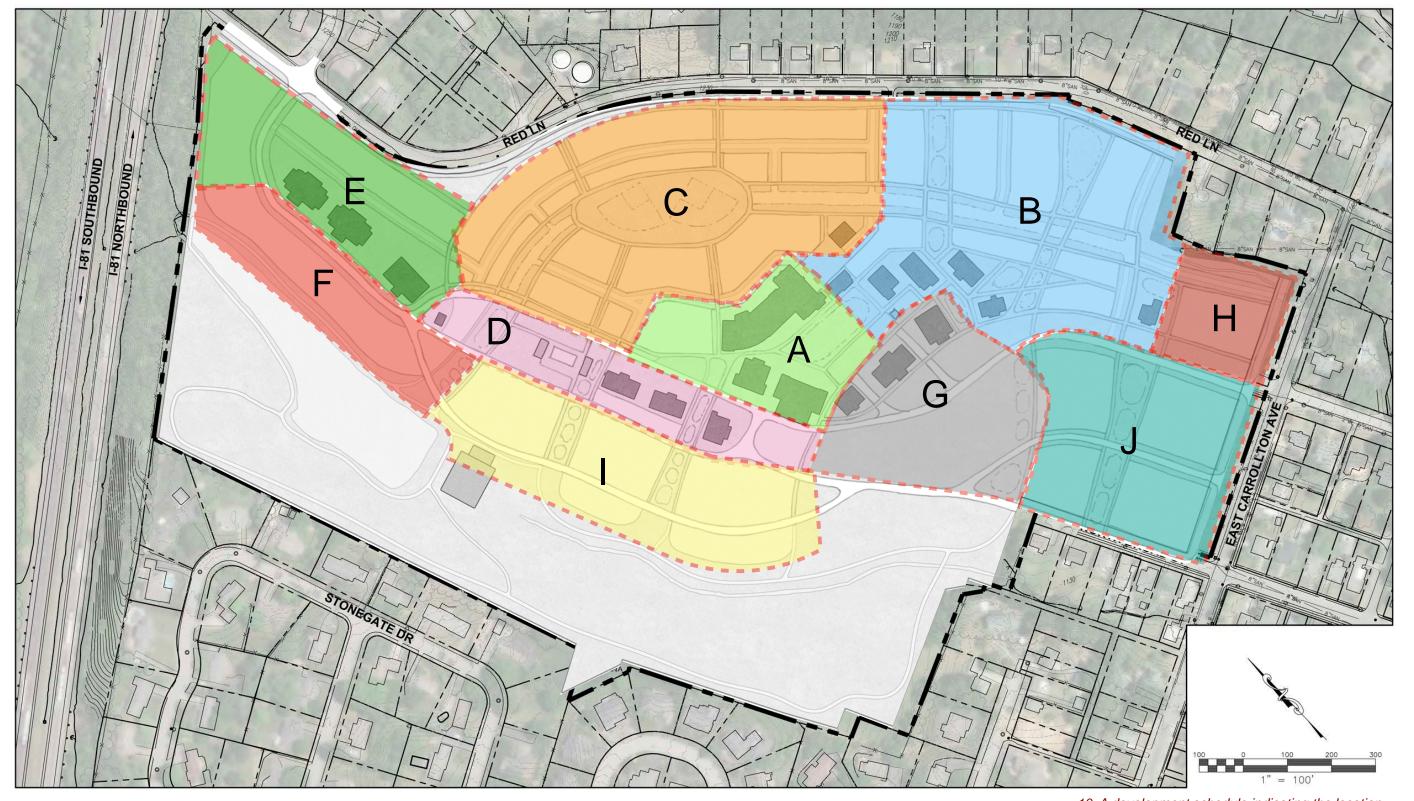
 a. There shall be no signage permitted additional to that specified in this section. Temporary signage for builders is excluded.

General and Edge zone

a. The address number, no more than 6 inches measured vertically, shall be attached to the building in proximity to the Principal Entrance or at a mailbox.

Center zone

- a. Blade signs, not to exceed 6 square ft. for each separate business entrance, may be attached to and should be perpendicular to the Facade, and shall clear 8 feet above the Sidewalk.
- b. A single external permanent sign band may be applied to the Facade of each building, providing that such sign not exceed 3 feet in height by any length.



10. A development schedule indicating the location, extent and sequence of proposed development. Specific information on development of the open space, recreation areas, and non-residential uses should be included.

Use Type	Existing Buildings	Civic Buildings V	Т3	T4 √	T5 √	Open Space / Natural	Any activity carried out on a farm or ranch that allows members of the general public, for recreational, entertainment, or educational purposes, to view or enjoy rural activities, includarin than ing, wineries, ranching, historical, cultural, harvest-your-
Agritourism The C	ity of Sal	om 7	nin	n Ord	linan	CO 44H	ு We astivitism சாவில் அலிப் லி ல் அரிவிர் வெற்றி இரு பாட்டியின் இரு அது பாட்டியின் அது பாட்டியின் இரு வரியின் இரு பாட்டியின் இரு வரியின் இரு பாட்டியின் இரு வரியின் இரு பாட்டியின் இரு
	oity of Sai	em, Z	Jillilé	y Oju	iiiați	Ce√;⊓	one transfer the season of the despite and season of the despite o
Agriculture	1						iculture pose for which it is kept. *Equine Assisted Psychotherapy Any activity carried out on a farm or ranch that allows members of the general public, for recreational, entertainment, or
Agritourism Use Type	Historic Core Buildings	Cjylc Buildings	Т3	₹.	₹\$	Spayce /	educational purposes, to view or enjoy rural activities, including farming, wineries, ranching, historical, cultural, harvest-your-own activities, or natural activities and attractions. Definition
Farm stand	√	√		√	√	√	An establishment for the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the site, or on nearby property. Agricultural goods produced on other properties owned or leased by the operator may also be allowed provided a majority of the produce comes from land surrounding the wayside stand. This use type shall include agricultural products picked by the consumer.
							Any activity carried out on a farm or ranch that allows members of the general public, for recreational, entertainment, or
Agritourism	7	· V		V	V		inductivities, or natural activities and attractions.
Stable Use Type	Historic Core Buil ty ngs	Civic Buildings	Т3	T4.	T5.	Open Space / Natural	An establishment for the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator on the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator of the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator of the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator of the seasonal retail sale of agricultural goods and merchandise primarily produced by the operator of the seasonal retail sale of the seasonal reta
Farm stand		1/*	√*	√*	√*	,	Assecuted a welling ម្នាក់ទៅដូច្នេះ នៅ
Accessory apartment Forestry operations Family day care home Use Type	Existing Buildings	Ci v ic Buildings	Т3	14	1√5	Res	unit. "Detached Accessory Dwellings are also permitted - see specific Building Types. பிருபுத்த pf land for the raising and harvesting of timber, pulp-woods and other forestry products for commercial purposes, க்றியித்த pf land for the raising and harvesting of timber, pulp-woods and other forestry products for commercial purposes, க்றியித்த pf land for the raising and harvesting of timber, pulp-woods and other forestry products for commercial purposes, க்றியித்த photocommercial purposes, க்றியித்த products for commercial purposes, க்றியித்த அருப்பு நிருந்த நிருநிருநிருந்த நிருந்த நிருந்த நிருந்த நிருந்த நிருந்த நிருந்த ந
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	√ Existing	√ Civic		√	√	Res Open	A single family abpelliable invoice oromete actions wheast the the traveliving aloders eigeived of searer protection and quidance, the search and the search
Mamilyadayreandhoene Use Type	Buildings	Buildings	T3	T4	T5	Space /	bann some pation factured homes are also referred to as mobile homes. Amagrafason years on the line work and the line w
Manufactured frome, accessory Accessory apartment	√ *	⅓ *	√ *	√ <u>*</u>	√ _*		Propression of the main distribution and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and subordinate to the main dwelling which is clearly incidental and the main dwelling which is clear to the main dwelling which is clearly incidental and the main dwelling which is cle
Manufactured home, emergency Manufactured home	1	1		1	1		A Heratelectrical proficios of temporarity controps worth income traction of methods in the destruction with the consideration of the considered and
Mamiliaday collection subdivision Manufactured home, accessory		1		,	,		AGABARA BARA OF THE CONTROLL OF THE STATE STATE STATE STATE STATE STATE OF THE STAT
Mameracoupationne park	٧	1	1	٧	1		REPRESENTATION OF THE LIE SECTION PROPERTY OF THE CONSTRUCTION OF
Manufactured home, emergency Multi-family dwelling	√	√		√	√		Assuming shirtus in the content of t
Manufactured home subdivision Manufactured home,parkessory Multidiamilyedvedling, emergency Residential euman sandavidus	*	*	√	∜	*		A tension of the property of t
Manufactured home park	- ₩	√	√	- √	₩		wigsterfür der Beiten Beiten der
Single family dwelling detached Single family dwelling detached Residential human care facility	***	1	∜	*	***		Attendention promoter than the programments of the property of the standard per trainer of the programment o
Residential human care facility Single family dwelling attached	V		√	1	√		A DEMONITATION OF THE PROPERTY
Temporary family health care structure	√	√		√	√		Action perpending designed and an anticular properties and the perpending and the perpend
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Toworfacousedwelling	√	√	√	√	√		A grouping of three or more attached single family dwellings in a row in which each unit has its own front and rear access to the construction of three constructions and the construction of the construction
Home occupation		$\sqrt{}$	$\sqrt{}$				Home occupation is allowed in all zones where residential is allowed.
Use Type	Existing	Civic Buildings Civic Buildings	T3 T3	T4 T4 V	T5 T5	Open Space / National	Definition Governmental-offices providing administrative, clerical or public contact services that deal directly with the citizen. Typical us
Administrative services Use Type	./	4		٠,	1	Hataiai	include rederal, state, county, and city offices.
Administrative services	ν	7		V	V		An vernmental offices providing administrative relegical method means entire that deal directly with the citizen a Typical us uncluded tederal, state of our providing and city offices, maintain a semi-independent life style, not requiring the more extensive care.

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Townhouse $\sqrt{\hspace{1cm} \sqrt{\hspace{1cm} \sqrt{\hspace{1cm}$

A grouping of three or more attached single family dwellings in a row in which each unit has its own front and rear access to the outside, no unit is located over another unit, and each unit is separated from any other unit by one or more common walls.

The use of an individual lot for two dwelling units which share at least one common wall, each occupied by one family.

							Civic
Use Type	Historic Core Buildings	Civic Buildings	Т3	T4	T5	Open Space / Natural	Definition
Administrative services	√	√			√		Governmental offices providing administrative, clerical or public contact services that deal directly with the citizen. Typical uses include federal, state, county, and city offices.
Assisted care residence	√	√			√		An establishment that provides shelter and services which may include meals, housekeeping, and personal care assistance primarily for the elderly. Residents are able to maintain a semi-independent life style, not requiring the more extensive care of a nursing home. Residents will, at a minimum, need assistance with at least one of the following: medication management, meal preparation, housekeeping, money management, or personal hygiene. At least one nurse's aid is typically on duty, with medical staff available when needed.
Camps						√	A use which primarily provides recreational opportunities of an outdoor nature on a daily or overnight basis. Included in this use type would be scout camps, religious camps, children's camps, wilderness camps, and similar uses which are not otherwise specifically described in this chapter.
Cemetery						√*	Land used or dedicated to the burial of the dead, including columbariums, crematoriums, mausoleums, and necessary sales and maintenance facilities. Funeral Services use types shall be included when operated within the boundary of such cemetery. * There is small cemetery located on the edge of our pasture
Clubs	√	√			√		A use providing meeting, or social facilities for civic or social clubs, and similar organizations and associations, primarily for use by members and guests. Recreational facilities, unless otherwise specifically cited in this section, may be provided for members and guests as an accessory use. This definition shall not include fraternal or sororal organizations associated with colleges or universities. A Club does not include a building in which members reside.
Community recreation	√	√			√		A recreational facility for use solely by the residents and guests of a particular residential development, planned unit development, or residential neighborhood, including indoor and outdoor facilities. These facilities are usually proposed or planned in association with development and are usually located within or adjacent to such development.
Correction facilities							A public or privately operated use providing housing and care for individuals legally confined, designed to isolate those individuals from a surrounding community.
Crisis center	√	√			√		A facility providing temporary protective sanctuary for victims of crime or abuse including emergency housing during crisis intervention for individuals, such as victims of rape, child abuse, or physical beatings.
Cultural services	√	√			√		A library, museum, or similar public or quasi-public use displaying, preserving and exhibiting objects of community and cultural interest in one or more of the arts or sciences.
Educational facilities, college/university	√	√		√	√		An educational institution authorized by the Commonwealth of Virginia to award associate, baccalaureate or higher degrees.
Educational facilities, primary/secondary	√	√		√	√		A public, private or parochial school offering instruction at the elementary, junior and/or senior high school levels in the branches of learning and study required to be taught in the public schools of the Commonwealth of Virginia.
Guidance services	√	√		√	V		A use providing counseling, guidance, recuperative, or similar services for persons requiring rehabilitation assistance or therapy for only part of a 24 hour day. This use type shall not include facilities that dispense and/or administer controlled substances and/or pharmaceutical products for the treatment of drug addiction and substance abuse and/or mental health disorders. Non-medicinal counseling-based treatment of drug addiction and substance abuse and/or mental health disorders may be considered guidance services after review by the administrator. Facilities that do dispense and/or administer controlled substances and/or pharmaceutical products for the treatment of drug addiction and substance abuse and/or mental health disorders shall be considered an Outpatient mental health and substance abuse clinic.
Halfway House	V	√					An establishment providing residential accommodations, rehabilitation, counseling, and supervision to persons suffering from alcohol or drug addiction, to persons reentering society after being released from a correctional facility or other institution, or to persons suffering from similar disorders or circumstances.

(Civic Continued) Use Type	Historic Core Buildings	Civic Buildings	Т3	T4	T5	Open Space / Natural	Definition
AUTOGO FOR EASTINITY'S	V	√		√	√		A residential facility primarily for the continuing care of the elderly, providing for transitional housing progressing from independent living in various dwelling units, with or without kitchen facilities, and culminating in nursing home type care where phivalated passes and passes and passes and progressing from the passes and passes and passes and passes and passes and passes are passes and passes and passes and passes and passes are passes and passes and passes are passes are passes are passes are passes and passes are passes ar
Mixed use Nursing home	*	∜		₩	∜		A use providing bed care and in-patient services for persons requiring regular medical attention but excluding a facility Mixedingsisrgisingle ক্রমান্ত ক্রমেন্ড ক্র
Park and ride facility	1	٧				1	Annubling was defined a parking facility for was multiply by this section. Such activities held on publicly owned land shall not
Outdoor gathering Post office	√	√					De included within this use type. Postal services directly available to the consumer operated by the United States Postal Service. Luse of a site for surface parking or a parking structure unrelated to a specific use which provides one or more parking spaces.
Publing คลดาทั้ง Surface/structure	√	√					be included within this use type. Postal services directly available to the consumer operated by the United States Postal Service. Lise of a site for surface parking or a parking structure unrelated to a specific use which provides one or more parking spaces fogeilities ការបានស្រេច នេះ ស្រុក នេះ ប្រជាពល់ ប្
Public maintenance and service facilities	√	√			√		ନ୍ଧି । ନିର୍ଦ୍ଧାନ୍ତ ସେଥିନି । ଜଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ମ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ୟ ବିଷ୍ଟର ବିଷ୍ଟ୍ୟ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍ଟ୍ରମଣ ବିଷ୍
Shooting range, outdoor Public parks and recreational areas	√	√				√	Punptiproemethand ଦେଉର୍ଗରାଡିଣ୍ଡର ଜିଞ୍ଚମ୍ପର୍ଥରେ playgrounds, indoor or outdoor athletic facilities, greenways and open ନ୍ୟନ୍ୟୁଙ୍କିନ୍ଦେପ୍ତେ that is designed and constructed primarily for the purpose of supporting one or more antennas. The term
Religious assembly Tower	1	1					includes danted and perhapitational invariant taking in an orthogonal perhapitation in the companient of the companient
Safety services	√	√					Pachtes of the control of the state of the s
	$\overline{}$	lacksquare	√	<u> </u>	\perp	 	structures. Including in this use type are distribution lines and small facilities that are underground or overhead, such as transformers, relay and booster devices, and well, water and sewer pump stations. Also included are all major utility services
Utility services, minor	Lliatoria	. .				Open	transformers, relay and booster devices, and well, water and sewer pump stations. Also included are all major utility services which were in existence prior to the adoption of this chapter.
Use Type	Historic Core Buildings	Civic Buildings	Т3	T4	T5	Space / Natural	Services of a regional nature which normally entail the construction of new buildings or structures such as generating plants and sources, electrical switching facilities and stations or substitutions, water towers and tanks, community waste water
Utility services, major Financial instutitions	√	√			√*		President prantanetal aintilear familities vicely de donstrin definitionents. কাঞাelactric, একঃ কাৰ্ত্যানিভঃ tilitat familities vicely de donstring lighteetally ক্রিয়াল বিশ্বাল ক্রিয়াল ক
General office	√	√			√		Use of a site for business, professional, or administrative offices, excluding medical offices/clinic. Typical uses include real estate, insurance, management, travel, computer software or information systems research and development, or other business offices; organization and association offices; or law, architectural, engineering, accounting or other professional offices. Retail sales do not comprise more than an accessory aspect of the primary activity of a General Office.
Medical Office/clinic	√	√			√		A facility used for human health care of the body, such as medical, dental, therapeutic, chiropractic or similar consultation, diagnosis, and treatment by one or more practitioners licensed by the Commonwealth of Virginia. Medical offices/clinics provide outpatient care on a routine basis, and may offer minor surgical care, but do not provide overnight care or serve as a base for an ambulance service.
Outpatient mental health and sustance abuse clinic	√	√			√		An establishment which provides outpatient services primarily related to the diagnosis and treatment of mental health disorders, alcohol, or other drug or substance abuse disorders. Services include the dispensing and administering of controlled substances and pharmaceutical products by professional medical practitioners licensed by the Commonwealth of Virginia.
Laboratories	√	√			√		Establishments primarily engaged in performing research or testing activities into technological matters. Typical uses include engineering and environmental laboratories, medical, optical, dental and forensic laboratories, x-ray services, and pharmaceutical laboratories only involved in research and development. Excluded are any laboratories which mass produce one or more products directly for the consumer market.
						Con	nmercial
	Historic	Civic				Open	
Use Type	Core Buildings	Buildings	Т3	T4	T5	Space / Natural	Definition
Adult business							Any adult bookstore, adult video store, adult model studio, adult motel, adult movie theater, adult nightclub, adult store, business providing adult entertainment, or any other establishment that regularly exploits an interest in matters relating to specified sexual activities or specified anatomical areas or regularly features live entertainment intended for the sexual stimulation or titillation of patrons, and as such terms are defined in Chapter 58 of this Code.
Agricultural services	√	√					An establishment primarily engaged in providing services specifically for the agricultural community which is not directly associated with a farm operation. Included in this use type would be servicing of agricultural equipment, independent equipment operators, and other related agricultural services.
Antique shops	√	√			√		A place offering primarily antiques for sale. An antique for the purposes of this chapter shall be a work of art, piece of furniture decorative object, or the like, of or belonging to the past, at least 30 years old.

USE TABLE

(Commercial Continued) Use Type	Historic Core Buildings	Civic Buildings	Т3	T4	T5	Open Space / Natural	Definition
Assembly hall	√	√			1		A building, designed and used primarily for the meeting or assembly of a large group of people for a common purpose. Typical uses include meeting halls, union halls, bingo parlors, and catering or banquet facilities.
Aviation facilities Athletic instruction services Mixed use	√ √	√ √		√	√ √		Establishmentischemaeily assigned in provided gonde one set for other lakel officing in an individual calculation. Petablishmentischemaeily and individual calculation of the content of t
Automobile dealership, new		,					Anystemporant, organized any want represent work text 500 comagne probptimat corporative constructive. Included in this use type would be music festivals, where revivals, carnivals, and fairs, and similar transient.
Automobile dealership, used	V	√				√ √	अंगिपारिक क्रियानिक मार्थिक क्रियानिक क्रियान
Aarkina facility all reserves younger							The included within this use type. Repair of construction equipment, commercial trucks, agricultural implements and similar heavy equipment, including laborionally for construction equipment, commercial trucks, agricultural implements and similar heavy equipment, including laborionally for construction equipment, including laborionally for the laborional state of the laborional state o
Automobile repair services, minor Shooting range, outdoor							Repare of labelitures; have and the clarker by and freques; factor number, for the number, have and, translingting sack water and the clarker and parts. The clarker and the clarker and the conducted and the clarker and the
Automobile rental/leasing					-		Rental of automobiles and light trucks and vans, including incidental parking and servicing of vehicles for rent or lease. វិស្សាទៀបថ្មីរួមទៅក្រុងថ្ងៃ ផ្ទុំនៅព្យាទៅ anglean នៃប្រាស់ នៅព្រះស្វាន់ នៃ នៅព្រះស្វាន់ នៃ នៅព្រះស្វាន់ នៅព្រះស្វាន
Automobile parts/supply, retail	1	1					Installation, and servicing or equipment and parts. Typicaruses include the sales and hardon, wheel and brake shops, our compliance with the Code of the City of Salem. Rental of automobiles and light trucks and vans, including incidental parking and servicing of vehicles for rent or lease. Any is all of automobiles and light trucks and vans, including incidental parking and servicing of vehicles for rent or lease. Any is all of automobiles and light trucks and vans, including incidental parking and servicing of vehicles for rent or lease. Any is all of automobiles and any is a servicing of vehicles for rent or lease. The term includes but need not be limited to radio and television transmission towers, microwave towers, common-carrier towers, and reliable parts and accessories. Any incide automobile parts and accessories which offer new and cellular telephone and wireless communication towers. Tower types include but are not limited to monopoles, lattice towers, wooden poles, and guyed towers. Excluded from this definition are amateur radio towers, which are otherwise defined.
Business support services	√	√	√	√	√	√	Services which are necessary to support existing and future development within the immediate vicinity and hydre only hinor provision of services used by office professional and service establishments. Typical uses include office equipment and structures, include office equipment and structures, included in this use the assumption lines and small facilities that are underground of overhead. Such as such as a support of the such as the such as a support of the such as the such as such as such as such as the
Utility services, minor Business or trade schools	√	√			√		And the construction of th
Campgrounds							and sources, electrical switching facilities and stations or substations, water towers and tanks, community waste water freatment plants, and similar facilities included in this definition are also electric, gas, and other utility transmission lines of a
Utility services, major Car wash							regional nature which are not otherwise reviewed and approved by the Virginia State Corporation Commission. Washing and cleaning of vehicles. Typical uses include automatic conveyor machines and self-service car washes.
Commercial indoor amusement	√	√			√		Establishments which provide multiple coin operated amusement or entertainment devices or machines as other than an incidental use of the premises. Such devices would include pinball machines, video games, and other games of skill or scoring, and would include pool and/or billiard tables, whether or not they are coin operated. Typical uses include game rooms, billiard and pool halls, and video arcades.
Commercial indoor entertainment	√	√			√		Predominantly spectator uses conducted within an enclosed building. Typical uses include motion picture theaters, and concert or music halls.
Commercial indoor sports and recreation	√	√			√		Predominantly non-instructional participant-based uses conducted within an enclosed building. Typical uses include bowling alleys, ice and roller skating rinks, indoor racquetball, swimming, and/or tennis facilities.
Commercial outdoor entertainment							Predominantly spectator uses conducted in open or partially enclosed or screened facilities. Typical uses include sports arenas, motor vehicle or animal racing facilities, and outdoor amusement parks.
Commercial outdoor sports and recreation	√	1				√	Predominantly participant uses conducted in open or partially enclosed or screened facilities. Typical uses include driving ranges, miniature golf, swimming pools, tennis courts, outdoor racquetball courts, motorized cart and motorcycle tracks, and motorized model airplane flying facilities.
Communications services	√	√			√		Establishments primarily engaged in the provision of broadcasting and other information relay services accomplished through the use of electronic and telephonic mechanisms. Excluded from this use type are facilities classified as Utility Services - Major or Towers. Typical uses include television studios, telecommunication service centers, telegraph service offices or film and sound recording facilities.
Construction sales and services							Establishments or places of business primarily engaged in retail or wholesale sale, from the premises, of materials used in the construction of buildings or other structures, but specifically excluding automobile or equipment supplies otherwise classified herein. Typical uses include building material stores and home supply establishments.
Consumer repair services	√	√			√		Establishments primarily engaged in the provision of repair services to individuals and households, rather than businesses, but excluding automotive and equipment repair use types. Typical uses include appliance repair shops, shoe repair, watch or jewelry repair shops, or repair of musical instruments.
Convenience store	V	√			√		Establishments primarily engaged in the provision of frequently or recurrently needed goods for household consumption, such as prepackaged food and beverages, and limited household supplies and hardware. Convenience stores shall not include fuel pumps or the selling of fuel for motor vehicles. Typical uses include neighborhood markets and country stores.
Dance hall	√	√			√		Establishments in which more than ten percent of the total floor area is designed or used as a dance floor, or where an admission fee is directly collected, or some other form of compensation is obtained for dancing.
Day care center	V	√		√	√		Any facility operated for the purpose of providing care, protection and guidance to ten or more individuals during only part of a 24 hour day. This term includes nursery schools, preschools, day care centers for individuals, and other similar uses but excludes public and private educational facilities or any facility offering care to individuals for a full 24 hour period.

USE TABLE

Equipment sales and rental	,	,				,	Establishmeints pancerilly chosecycicing the such equipment tools, trucks, tractors, construction equipment, agricultural
Equipment sales and rentacial Continued)	Historic	Civic				Open	implements, and similar industrial equipment, and the rental of mobile homes. Included in this use type is the incidental subjects of the incidental storage, the incidental storage is the incidental storage.
Fluencemate skeet vices Use Type	Co y e Buil d ings	Buildings	T3	T4	T5	Space / Natural	Establishments engaged in undertaking services such as preparing the dead for burial, and arranging and managing funerals. Establishments primarily engaged in the sale of fental of tools trucks, tractors, construction equipment, agricultural strains and arranging and managing funerals. By a construction equipment and managing funerals of the work of the property
Equipment sales and rental Funeral services Equipment sales and rental Garden center	√	√			√	√	Establishments englagists or langishagishagisharid equipant in order in order in order alternation order or in properties and the second order of the second order or in the second order or in the second order of the second order or in the second order order or in the second order order or in the second order or in the second order orde
Funeral services Garden center	√	√			√	√	Establishments in a good for united tanking pervices such as property the idebter of toxide third and regiment an analyment of the such as the control of th
Gasoline station Golf course Garden center	√	√			√	√	Tenabelish see includes the control of the control
Gallaine station	√	√		√	√		passan you not be executive in the payor to on second the source of the
Homestay inn	√ √	√ √		√	√		A Chartery in More land to the
Hospital Homestay inn	∜	∜		√	∜		services to patients, employees, or visitors. A dwelling in which not more than five bedrooms are provided for overnight guests for compensation, on a daily or weekly เป็นสมบันทอง จารเพิ่มและ เลือนสมบันที่ เลือน เลือน เมื่อเลือน เลือน เล้อน เล้อ
Hotel/motel/motor lodge Ketel/ehotel/motoriabdge	√	√			√		MBGfligh goons and or later chair or lease to the standard of the characteristic of the standard of the characteristic of the chara
Kaundt ycommercial	√	√			√		Establishdnegts reedardy ratgaged nothing rovision of laudolasing tslean into entropied and reign softing the street and being the read of the street and services. Of the street and services are street and services.
Mamufactured home sales	√	√			√		Establishments primarily engaged in the pisplajonetallasaldernegtableanding inordigenaity sérvenes other etdamanous aculares include bulk laundry and cleaning plants, diaper services, or linen supply services.
Manufactured home sales							Establishments paiviagly evegageace of every vehicles also perturnanteen theorem assage where piece an every perturnanteen the parts of the body or other similar procedure.
Massage parlor	./	./			./		Liasingh Heren and his greet by the virginia accorded by the virginia according to the considered according to the scale by the virginia according to the considered according to the scale by the scale by the considered according to the scale by the considered according to the scale by the scale by the considered according to the scale by
Marsagevenior	٧	1			1		signe massage.
Microbietillery	√	√			√		An establishment engaged in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above proposed in the production of spirits/whitia a ignorities and commercial above production are included as a commercial above production and commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production and commercial above production are included as a commercial above production are incl
Microdistilgent	√	√		√	√		Arpersablishonena reagraged hornies to pointurated who paint privitary, significant another interestablishonena reagraged hornies to pointurate who paint privitary, significant another interestablishonena reagraged hornies to pointurate who paint privitary, significant another interestablishonena reagraged hornies to pointurate who paint privitary significant another interestablish because the privitary significant and the privitary significant another interestablish because the privitary significant another interestablish because the privitary significant another interestablish because the privitary significant and the privi
Personal storage	V	√			√		A building designed to provide rental storage space in cubicles where each cubicle has a maximum floor area of 400 square feet. Each cubicle shall be enclosed by walls and ceiling and have a separate entrance for the loading and unloading of stored goods.
Pawn shop							A use engaged in the loaning of money on the security of property pledged in the keeping of the pawnbroker and the incidental sale of such property.
Personal improvement services	√	√			√		Establishments primarily engaged in the provision of informational, instructional, personal improvements and similar services. Typical uses include driving schools, health or physical fitness centers (excluding athletic instruction services), reducing salons, dance studios, handicraft and hobby instruction.
Personal services	√	√			√		Establishments or places of business engaged in the provision of frequently or recurrently needed services of a personal nature. Typical uses include beauty and barber shops; grooming of pets; seamstresses, tailors, or shoe repairs; florists; and Laundromats and dry cleaning stations serving individuals and households.
Recreationsal vehicle sales and service							Retail sales of recreational vehicles and boats, including service and storage of vehicles and parts and related accessories.
Restaurant*	√*	√*			√*		An establishment engaged in the preparation and sale of food and beverages. Service to customers may be by counter or table service, or by take-out or delivery. * Walk-In Only.
Retail Sales	√	√			√		Sale or rental with incidental service of commonly used goods and merchandise for personal or household use but excludes those classified more specifically by these use type classifications.
Short-term lender							Establishments primarily engaged in short-term lending such as payday loans, car title loans, and refund anticipation loans.
Short-term lender		∜			₩		Sale distribution of the control of
Stockilt Safetender	\checkmark	\checkmark			$\sqrt{}$		Sale or rental with incidental service of commonly used goods and merchandise for personal or household use but excludes Example is a service of commonly used goods and merchandise for personal or household use but excludes Example is a service of commonly used goods and merchandise for personal or household use but excludes Example is a service of commonly used goods and merchandise for personal or household use but excludes Example is a service of commonly used goods and merchandise for personal or household use but excludes Example is a service of commonly used goods and merchandise for personal or household use but excludes
Short-term lender							Establishments primarily engaged in short-term lending such as payday loans, car title loans, and refund anticipation loans.



√ √ Civic Buildings	ic T2	√ T4	√ √		modes of ground transportation, including bus terminals, railroad stations, and public transit facilities. A building some receipting transfer seeds to the content of the
Civic Buildings	ic T2	T4	√ √		would be been and anting the industries with the second of
Civic Buildings	ic T2	T4	·		tuses stochuttights iordige warehouses rapated dispanshings totugaots overnightchosodramodations, oretail dades. Telphed to stee involve to the involve firms.
Civic Buildings	ic T2	T4	·		tweiglesiale แล้ยหูปลแบ่ารักร่างและผลrehouses, moving/storage firms.
Civic Buildings	ic T2	T4	·		
Buildings		T4			ellaneous
Buildings		T4			ellaneous
Buildings		T4			
,	ngs 13	14		Open	
√	,		T5	Space / Natural	Definition
			√		A structure on which an antenna is installed for the purpose of transmitting and receiving amateur radio signals erected and operated by an amateur radio operator licensed by the Federal Communications Commission.
					Private or public land areas used or intended to be used for the take-off and landing of aircraft. Aviation facilities may include facilities for the operation, service, fueling, repair and/or storage of the aircraft.
√	′	√	√		Mixed use is a single building or parcel wherein multiple uses such as residential and commercial share space.
√	,				Any temporary organized gathering expected to attract 500 or more people at one time in open spaces outside an enclosed structure. Included in this use type would be music festivals, church revivals, carnivals and fairs, and similar transient amusement and recreational activities not otherwise listed in this section. Such activities held on publicly owned land shall not be included within this use type.
					Use of a site for surface parking or a parking structure unrelated to a specific use which provides one or more parking spaces together with driveways, aisles, turning and maneuvering areas, incorporated landscaped areas, and similar features meeting the requirements established by this chapter. This use type shall not include parking facilities accessory to a permitted principal use.
					The use of land for archery and the discharging of firearms for the purposes of target practice, skeet and trap shooting, mock war games, or temporary competitions, such as a turkey shoot. Excluded from this use type shall be general hunting, and the unstructured and nonrecurring discharging of firearms on private property with the property owner's permission if in compliance with the Code of the City of Salem.
√	′				Any structure that is designed and constructed primarily for the purpose of supporting one or more antennas. The term includes but need not be limited to radio and television transmission towers, microwave towers, common-carrier towers, and cellular telephone and wireless communication towers. Tower types include, but are not limited to monopoles, lattice towers, wooden poles, and guyed towers. Excluded from this definition are amateur radio towers, which are otherwise defined.
√	′ √	√	√	√	Services which are necessary to support existing and future development within the immediate vicinity and involve only minor structures. Including in this use type are distribution lines and small facilities that are underground or overhead, such as transformers, relay and booster devices, and well, water and sewer pump stations. Also included are all major utility services owned and/or operated by the City of Salem, or any major utility services which were in existence prior to the adoption of this chapter.
					Services of a regional nature which normally entail the construction of new buildings or structures such as generating plants and sources, electrical switching facilities and stations or substations, water towers and tanks, community waste water treatment plants, and similar facilities. Included in this definition are also electric, gas, and other utility transmission lines of a regional nature which are not otherwise reviewed and approved by the Virginia State Corporation Commission.
	√	√ √	√ √ √	√ √ √ √	√ √ √ √ √

Transfer station transferred to a landfill.



Sec. 106-228.1. - Statement of intent.

(A) The intent of the Planned Unit District (PUD) is to encourage maximum flexibility in the design and development of land. PUD developments facilitate the adequate and economical provision of streets, utilities and other improvements, and allow for the management of the natural and scenic qualities of vacant land that is proposed for development. The PUD district allows a variety of housing options, as well as commercial, civic and office use types of a number and scale sufficient to serve the needs of the PUD residents.

(Ord. of 3-14-05(2))

Sec. 106-228.2. - Permitted uses.

- (A) Applications for planned unit districts may propose any residential, civic, and/or commercial use type as part of a planned unit district. All land uses proposed shall be shown on the preliminary and final master plans, as required by this chapter.
- (B) All use types proposed shall be reviewed by the Commission and Council pursuant to the provisions of this chapter. No use type may be allowed within the planned unit district unless approved by Council as part of the final master plan.

(Ord. of 3-14-05(2))

Sec. 106-228.3. - Development regulations.

- (A) Each planned unit development shall be subject to the following development standards.
 - Maximum gross density: Maximum gross density allowable in the planned unit district shall be established by Council by approval of the final master plan.
 - Minimum common open space and/or recreational areas: 15 percent of the gross area of the planned unit district.
 - Criteria for all required open space:
 - a. Minimum countable open space: 5,000 contiguous square feet
 - b. Minimum horizontal dimension: 50 feet, except that areas with a horizontal distance of not less than 20 feet shall be counted as open space provided such areas contain facilities such as, but not limited to, bikeways, exercise trails, tot lots, gazebos, picnic tables, etc.
 - c. Common open space shall not include proposed street rights-of-way, open parking areas, or driveways.
 - d. All common open space and/or recreational areas shall be of an appropriate nature and location to serve the residents of the planned unit district.
 - The maximum area devoted to civic, office and commercial use types shall be established by Council by approval of the final master plan.
 - a. Commercial and office uses types shall be located, and shall be of a scale and location suitable to serve the needs of the residents of the planned unit district convenience.
 - b. Commercial, office, and civic use types shall be screened and landscaped so as to be compatible with adjoining residences.

Not Applicable for existing buildings.



- Construction of commercial, office and civic use types shall not begin until 20 percent of the residential units of the total planned unit district have been completed.
- 5. Minimum setback requirements shall be specifically established during the review and approval of the preliminary and final master plans. The following guidelines shall be used in establishing the building spacing and setbacks:
 - Building spacing shall provide privacy within each dwelling unit;
 - Building spacing shall ensure that each room has adequate light and air;
 - Areas between buildings used as service yards, storage of trash, or other utilitarian purposes should be designed so as to be compatible with adjoining dwellings;

Not Applicable due to campus arrangements of multiple buildings.



- Building spacing and design shall provide privacy for outdoor activity areas (patios, decks, etc.) associated with individual dwelling units.
- Streets in the planned unit district may be public in accordance with VDOT and city standards or may be private. In reviewing the planned unit development preliminary master plan, the commission may recommend, and the Council may approve, one or more private streets within the proposed district

(Ord. of 3-14-05(2))

- (A) Prior to submitting a formal application for review and approval under these provisions, the applicant shall meet with city staff to discuss the requirements of the planned unit district. The purpose of the meeting is to obtain a mutual understanding of the application requirements and process. The applicant is encouraged to submit information on the scope and nature of the proposal to allow staff to become familiar with the proposal in advance of this meeting.
- (B) Any application to rezone land to the PUD designation, shall constitute an amendment to the zoning ordinance. The written and graphic information submitted by the applicant as part of the application process shall constitute conditional zoning proffers. Once the Council has approved the final master plan, all accepted proffers shall constitute conditions pursuant to the provisions of this chapter.
- (C) To initiate an amendment, the applicant shall complete a rezoning application. This information shall be accompanied by graphic and written information, which shall constitute a preliminary master plan. All information submitted shall be of sufficient clarity and scale to clearly and accurately identify the location, nature, and character of the proposed district. At a minimum this information shall include:
 - A legal description and plat showing the site boundaries, and existing street lines, lot lines, and easements.
 - Existing zoning, land use and ownership of each parcel proposed for the district.
 - A general statement of planning objectives to be achieved by the PUD district, including a description of the character of the proposed development, the existing and proposed ownership of the site, the market for which the development is oriented, and objectives towards any specific manmade and natural characteristics located on the site.
 - A description and analysis of existing site conditions, including information on topography, natural water courses, floodplains, unique natural features, tree cover areas, etc.
 - A land use plan designating specific use types for the site, both residential and non-residential use types, and establishing site development regulations, including setback, height, building coverage, lot coverage, and density requirements.
 - 6. A circulation plan, including location of existing and proposed vehicular, pedestrian, bicycle, and other circulation facilities and location and general design of parking and loading facilities. General information on the trip generation, ownership and maintenance and proposed construction standards for these facilities should be included. A traffic impact analysis may be required by the administrator.
 - 7. A public services and utilities plan providing requirements for and provision of all utilities, sewers, and other facilities to serve the site.
 - 8. An open space plan, including areas proposed for passive and active recreational uses, natural and undisturbed areas, and proposed buffer areas proposed around the perimeter of the site. Information on the specific design and location of these areas and their ownership and maintenance should be included.
 - 9. Generalized statements pertaining to any architectural and community design guidelines shall be submitted in sufficient detail to provide information on building designs, orientations, styles, lighting plans, etc.
 - 10. A development schedule indicating the location, extent and sequence of proposed development. Specific information on development of the open space, recreational areas, and non-residential uses should be included.
- (D) The completed rezoning application and supporting preliminary master plan materials shall be submitted to the planning commission for review and analysis. The commission shall review this information and make a report of its findings to the Council. The commission shall as part of its review hold a public hearing pursuant to § 15.2-2204 of the Code of Virginia, as amended.
- (E) The commission shall make a report of its findings to the Council within 90 days of the receipt of the materials, unless the applicant requests, or agrees to an extension of this time frame. The commission's report shall recommend approval, approval with modifications, or disapproval of the preliminary master plan. Failure of the commission to make a report of its findings to the Council within this period shall constitute a commission recommendation of approval.
- (F) If the commission recommends denial of the preliminary master plan, or approval with modification, the applicant shall, if requested, have 60 days to make any modifications. If the applicant desires to make any modifications to the preliminary master plan, the council's review and action shall be delayed until such changes are made and submitted for review.
- (G) The Council shall review the preliminary master plan, and act to approve or deny the plan within 90 days. Approval of the preliminary master plan shall constitute acceptance of the plan's provisions and concepts as proffers pursuant to the provisions of this chapter. The plan approved by the Council shall constitute the final master plan for the PUD.

(Ord. of 3-14-05(2))

Sec. 106-228.5. - Revisions to final master plan.

- (A) Major revisions to the final master plan shall be reviewed and approved following the procedures and requirements for zoning map amendments contained in section 106-520 of this chapter. Major revisions include, but are not limited to changes such as:
 - Any increase in the density of the development;
 - Substantial change in circulation or access;
 - Substantial change in the mixture of dwelling unit types included in the project;
 - Substantial changes in the mixture of land uses or an increase in the amount of land devoted to non-residential purposes;
 - Reduction in the approved open space, landscaping or buffering;
 - 6. Substantial change in architectural or site design features of the development;
 - 7. Any other change that the administrator finds is a major divergence from the approved final master plan
- (B) All other changes in the final master plan shall be considered minor amendments. The administrator, upon receipt of a written request of the owner, may approve such minor amendments.
 - A request which is disapproved by the administrator shall be considered a major amendment and shall be subject to the approval process outlined above for such amendments.

Sec. 106-228.6. - Approval of preliminary and final site development plans.

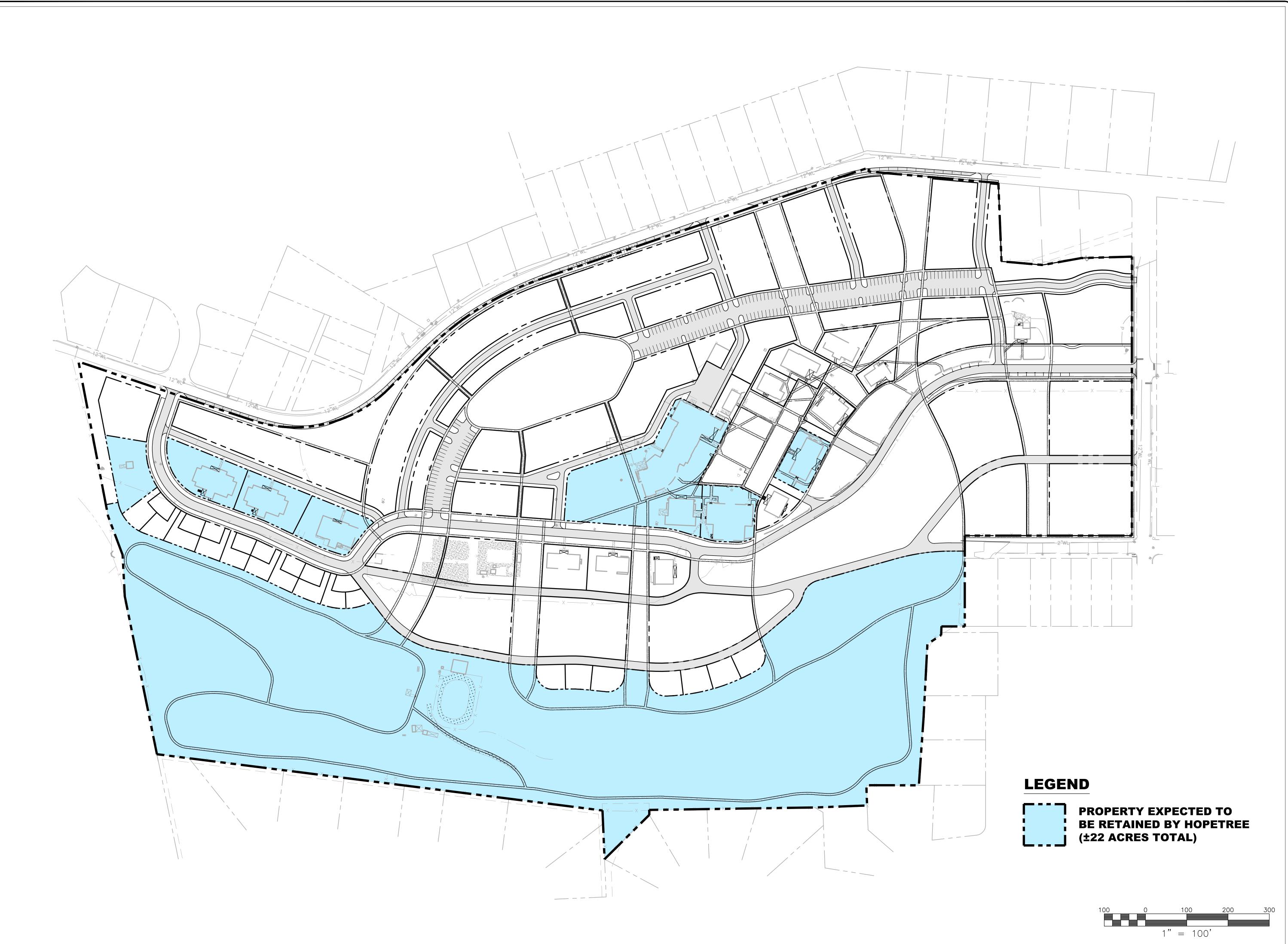
- (A) Following the approval of the final master plan, the applicant or its authorized agent, shall be required to submit preliminary and final site plans for approval.
- (B) It is the intent of this section that subdivision review under the subdivision regulations be carried out simultaneously with the review of a PUD under this section. The plans required under this section shall be submitted in a form which will satisfy the requirements of the subdivision regulations, as determined by the administrator.
- (C) Preliminary and final site plans submitted for review shall in compliance with the final master plan approved by the Council. The city shall review and approve or disapprove any final site plan within 60 days of its submittal.
- (D) No PUD shall be approved and no work shall be authorized on construction until all property included in the Final Master Plan is in common ownership.

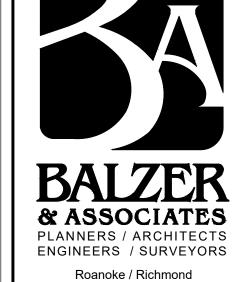
(Ord. of 3-14-05(2))

Sec. 106-228.6. - Approval of preliminary and final site development plans.

- (A) Following the approval of the final master plan, the applicant or its authorized agent, shall be required to submit preliminary and final site plans for approval.
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New River Valley
Shenandoah Valley
www.balzer.cc

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PELININARY

OWNERSHIP EXHIBIT

PROPERTY OWNE

DRAWN BY

DESIGNED BY

CHECKED BY

DATE

SCALE

DRAWN BY

AAA

CP

2/9/202

1" = 10

DATE 2/ SCALE 1' REVISIONS







Traffic Impact Study

B&A Project #04220029.00Date: December 1, 2023

Planners | Architects | Engineers | Surveyors 1208 Corporate Circle, Roanoke, VA 24018 www.balzer.cc

TRAFFIC STUDY FOR

HOPETREE PLANNED UNIT DEVELOPMENT

TAX MAP #: 44-3-10

860 MOUNT VERNON LANE CITY OF SALEM, VIRGINIA

B&A PROJECT #04220029.00

DATE: December 1, 2023





PLANNERS ARCHITECTS ENGINEERS SURVEYORS

1208 Corporate Circle Roanoke, Virginia 24018 Phone: (540) 772-9580



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1. Introduction

HopeTree Family Services is proposing to rezone 62.318 acres of land located along Red Lane in the City of Salem (see Appendix A for vicinity map). The property is proposed to be rezoned from RSF, Residential Single Family, to PUD, Planned Unit Development. The P.U.D. Land Use Plan, prepared by Civic by Design, is included in Appendix B. The development will have a mix of residential and commercial use types. The maximum number of residential units allowed for this development is 340 and these are assumed to be broken down by type as outlined in the list below. Commercial uses will be determined by market conditions and opportunities available at the time of development. The list below outlines the uses that have been assumed for the purposes of this traffic study.

- 115 Single-Family Detached Dwelling Units
- 140 Single-Family Attached Dwelling Units
- 85 Multi-Family Dwelling Units
- 60 Total Hotel Rooms
- 15,000 s.f. of Total General Office Space
- 7,500 s.f. of Total Restaurant Space

The breakdown of uses above is based on what is considered to be a reasonable and conservative expectation for the development based on the P.U.D. Land Use Plan. The actual breakdown may differ from these assumptions. It is recommended that projected trip generation be tracked as the development progresses for comparison to the traffic study. If the actual development results in significantly more traffic than what has been assumed, then it may be necessary to update this study.

The site is located on the west side of Red Lane with East Carrollton Avenue to the south and Interstate 81 to the north. The property is described as City of Salem Tax Parcel #44-3-10. The development has several proposed existing and proposed entrances on Red Lane, East Carrollton Avenue, and North Broad Street.

As discussed with the City of Salem, the following intersections will be analyzed to determine levels of service with the proposed development:

- Red Lane and East Carrollton Avenue (Unsignalized)
- East Carrollton Avenue and North Broad Street (Unsignalized)



All roads in the direct vicinity of the project are two-lane local roads that provide access between mostly residential areas. A mix of residential building types is present in this area, including single-family, two-family, townhome, and multi-family units. Roanoke College is located approximately 0.25 miles from the site to the southeast. The Main Street and downtown Salem commercial corridor is located approximately 0.7 miles south of the site. There are also two golf courses located in this area, Hanging Rock Golf Course to the north and Salem Municipal Golf Course to the west. Red Lane is utilized as a connection between downtown Salem, Hanging Rock Golf Course, and existing residential developments to the north. The speed limit on all of the local roads in the direct vicinity of the project is 25 mph.

Three scenarios will be considered: Existing Condition 2023, Background Condition 2028, and Buildout Condition 2028 to determine the effects of the background traffic growth and the proposed development on the levels of service at the existing intersections.

Level of service (LOS) for unsignalized intersections is evaluated based on control delay per vehicle and the driver's perception of those conditions. Control delay is the portion of the total delay attributed to the control at the intersection. Table 1 depicts the LOS scale with corresponding control delay per vehicle, with LOS "A" representing the best operating conditions and LOS "F" representing the worst.

Level of Service Criteria for Unsignalized Intersections									
Level Of Service	Avg. Control Delay (Sec./Veh)								
Α	<u>< 10</u>								
В	> 10 – 15								
С	> 15 – 25								
D	> 25 – 35								
E	> 35 – 50								
F	<u>≥</u> 50								

Table 1: LOS Criteria for Unsignalized Intersections (HCM)

The *Synchro 11* software was used for traffic modeling and analysis. This study was undertaken by Balzer and Associates, Inc. to:

• determine the total number of vehicle trips generated by the potential development to be added to the adjacent street network;



- determine the impacts to level of service and queue lengths at the existing intersections as a result of the background traffic growth and from the proposed development;
- determine if any roadway or intersection improvements are warranted as a result of the proposed development;
- and to determine turn lane/taper requirements at the proposed entrances to the site.



2. Analysis of Existing Conditions

The site is currently owned and operated by HopeTree Family Services and has been for many years. Changing regulations over the last several decades have greatly decreased the number of permanent residents that are allowed to be housed at the site at any one time. There are many existing buildings, some of which are still in use by HopeTree, and others that are no longer in use. Among other things, the site includes a school, group homes for children and adults, and offices where staff members work on-site.

Other improvements on-site include access drives and parking areas, pool and athletic courts, two existing baseball fields near Red Lane, and other miscellaneous improvements. There is an existing pond and two existing creeks located on the site as well and these will be preserved to the extent practical.

All intersections in the vicinity of the site are unsignalized. 2021 VDOT traffic count data is available for Red Lane just to the north of the site in Roanoke County, and this data is provided below as general background information.

2021 VDOT Traffic Count Data:

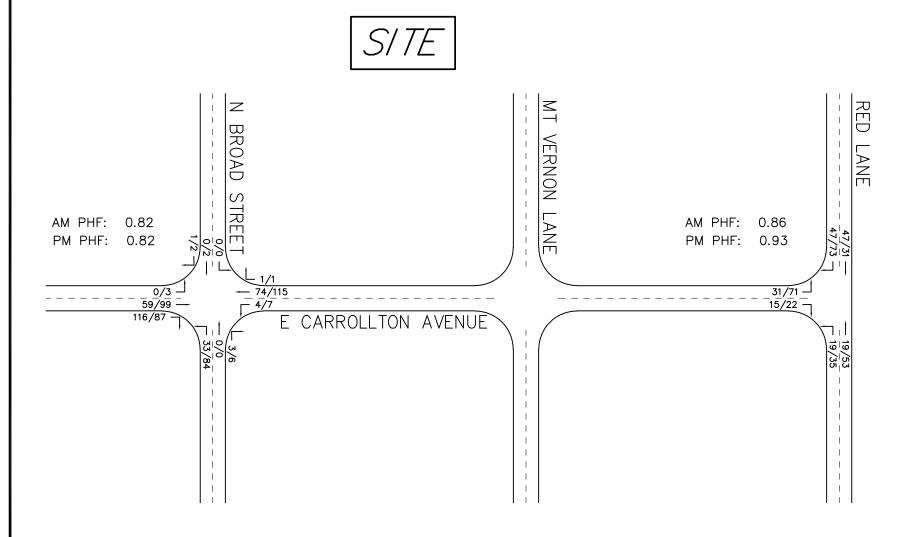
Red Lane, Rte. 705 (from Salem/Roanoke County line to North Road)
AADT = 1,100 vpd
Directional Factor = not provided
K Factor = not provided

In addition to the VDOT published traffic count data, manual traffic counts were performed for each of the study intersections. The counts were performed on Tuesday, October 3, 2023 from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM to capture the AM and PM peak hours. All turning and through movements were counted to facilitate analysis of the intersections. The manual traffic count data is provided in Appendix C. Figure 1 graphically depicts the existing peak hour traffic volumes.

The *Synchro 11* software was used to analyze delay and level of service for existing weekday AM and PM peak hours. The *Synchro 11* results are included in Appendix E.



FIGURE 1: 2023 EXISTING TURNING MOVEMENTS



<u>LEGEND</u>

xx/xx: AM/PM Peak Hour Traffic

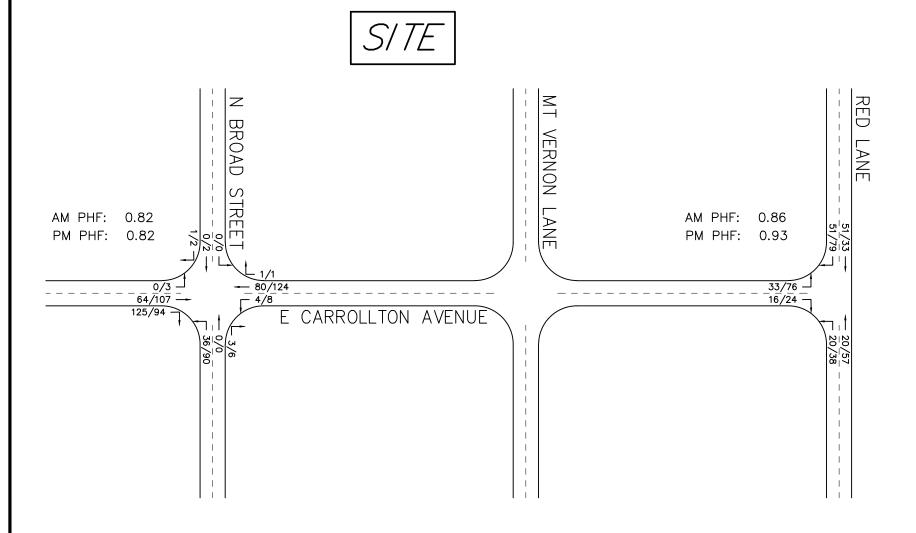
3. Analysis of Future Conditions Without Development

It is anticipated that the proposed development will be constructed and in use by the year 2028. To analyze the future conditions and obtain the projected background traffic volumes, an annual growth factor was applied to the existing traffic volumes. Based on historical VDOT traffic data, the average growth rate over the last 10 years or so has been approximately 1% on Red Lane and there has actually been a reduction in traffic volume over the last 5 years. To provide a conservative analysis, a 1.5% annual growth rate was applied to bring the existing traffic volumes from the current year of 2023 to the buildout year of 2028. Figure 2 graphically depicts the projected background traffic in the year 2028 with the growth rate applied.

The *Synchro 11* software was used to analyze delay and level of service for background weekday AM and PM peak hours. The *Synchro 11* results are included in Appendix E.



FIGURE 2: 2028 PROJECTED TURNING MOVEMENTS



<u>LEGEND</u>

xx/xx: AM/PM Peak Hour Traffic

4. Trip Generation

Trip generation for this study was based on the anticipated and assumed uses outlined in the Introduction and information provided by the developer regarding the possible uses of the property. The policies and procedures found in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, were employed to determine the potential site generated traffic volumes for the proposed development for the average weekday and AM and PM peak hours. Trip generation calculations were performed using the equations provided in the ITE manual. Table 2 shows the potential site-generated traffic for this development.

			Trip Generation									
Lar	nd Use		AM	Peak H	lour	PM	Weekday					
Proposed Development	·		Enter	Exit	Total	Enter	Exit	Total	Total			
Single-Family Detached Housing	210	115 Dwelling Units	21	64	85	71	42	113	1,147			
Single-Family Attached Housing	215	140 Dwelling Units	17	50	67	47	33	80	1,016			
Multi-Family Housing (Low- Rise)	ising (Low- 220 85 Dwelling		12	37	49	36	21	57	620			
Hotel	310	60 Rooms	13	10	23	8	9	17	227			
General Office 710		15,000 s.f.	29	4	33	6	28	34	223			
Sit-Down Restaurants	9.32 7.5		39	33	72	41	27	68	804			
		Total	120	166	286	175	137	312	4,114			

Table 2: Site-Generated Traffic

Please note that the table above does not include traffic volumes for the HopeTree school or office uses. These specific uses are already taking place on the site and will not be trips that are "added" to the street network. The addition of the other use types on-site may actually reduce some of the existing trips due to the fact that some of the existing trips could be redirected to or from the new facilities that are developed within the site.

The intent of the proposed development is to provide a cohesive, connected, walkable community where pedestrian connectivity is a primary focus and vehicular trips are secondary. Due to the nature of the development and the mix of residential, commercial, institutional, and other uses, a portion of the site-generated trips will be pedestrian trips and/or "internally



captured". Internal capture reductions consider site trips "captured" within a mixed-use development, recognizing that trips from one land use can access another land use within a development without having to access the adjacent street system. It is well-documented that this type of pedestrian-friendly, mixed-use development will result in less traffic to the adjacent street network than what is calculated using traditional trip generation methods. Walkable mixed-use developments have been documented to reduce trip generation by as much as 60% during the peak hours dependent on factors such as location, density, mix of uses, etc. Based on the characteristics and initiatives of this P.U.D. development, a 25% reduction was deemed to be reasonable for this project. Table 3 below shows the potential site-generated traffic for this development with the internal capture reduction applied.

			Trip Generation										
Lar	nd Use		AM	Peak H	lour	PM	Peak I	Weekday					
Proposed Development			Enter	Exit	Total	Enter	Exit	Total	Total				
Single-Family Detached Housing	210	210 115 Dwelling Units		48	64	53	32	85	860				
Single-Family Attached Housing			13	37	50	35	25	60	762				
Multi-Family Housing (Low- Rise)	Housing (Low- 220 85		9	28	37	27	16	43	465				
Hotel	310	60 Rooms	10	8	18	6	7	13	170				
General Office	710	15,000 s.f.	22	3	25	4	21	25	167				
High-Turnover Sit- Down Restaurant		7,500 s.f.	29	25	54	31	20	51	603				
		Total	99	149	248	156	121	277	3,027				

Table 3: Site-Generated Traffic w/ 25% Reduction



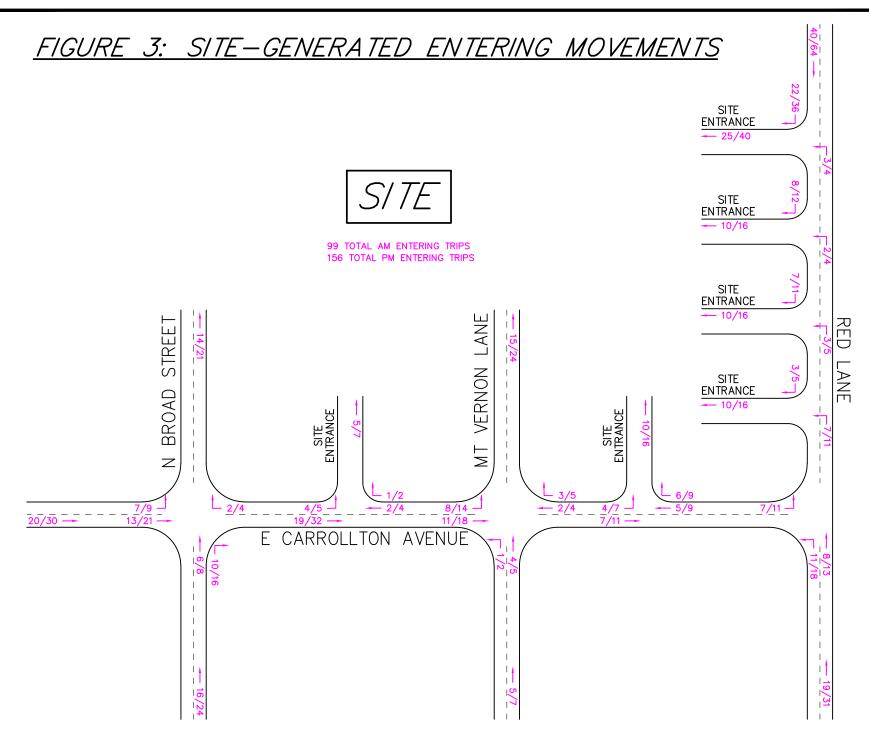
5. Site Traffic Distribution and Assignment

The distribution of potential site generated traffic was completed by applying engineering judgement based on knowledge of the proposed uses, as well as the surrounding area. These assumptions were then applied to the site generated traffic to determine the ingress/egress movements at each entrance and in each direction. Traffic will enter to and exit from the site to the north toward I-81 or to the south or west to go toward downtown Salem. There are several entrances planned for the site in strategic locations to disperse traffic and efficiently distribute vehicles to the adjacent road system in an interconnected grid-type network that is similar to what already exists to the north of Main Street.

This development is proposed to have four access points on Red Lane, three access points on East Carrollton Avenue, and one access point on North Broad Street. The roadway network creates a network of streets within the development with a high level of interconnectivity both internally and externally to the existing streets.

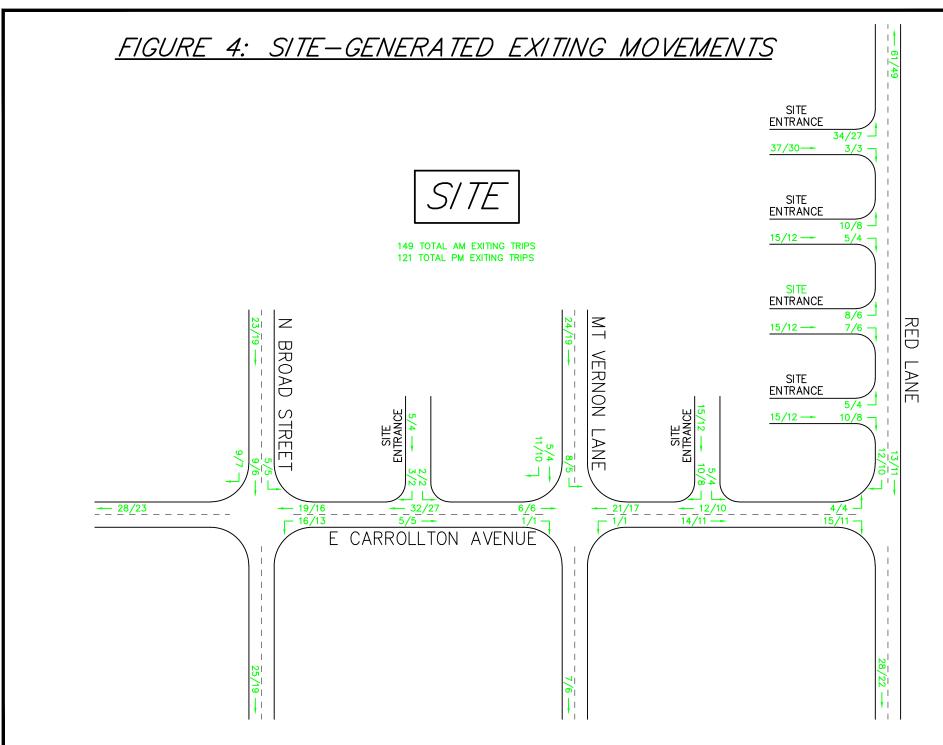
After distribution of trips to the roadway, trips were distributed to each road and intersection based on the assumptions described above. Traffic assignment for traffic entering the development is shown graphically in Figure 3 and for traffic exiting the development is shown graphically in Figure 4.





LEGEND

xx/xx: AM/PM Peak Hour Traffic



LEGEND

xx/xx: AM/PM Peak Hour Traffic

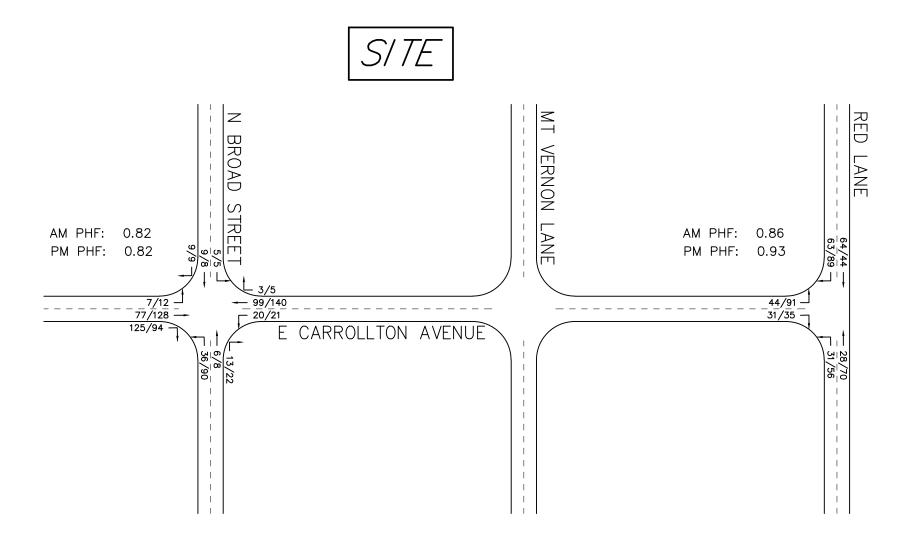
6. Analysis of Future Conditions With Development

The buildout traffic was calculated by adding the 2028 background traffic (Figure 2) to the site-generated traffic (Figures 3 and 4). The 2028 buildout traffic for each of the study intersections is shown in Figure 5. The intersections were then modeled and evaluated using the *Synchro 11* software. Tables 4 and 5 provide a summary of the levels of service and delays calculated at each intersection for the 2023 Existing, 2028 Background, and 2028 Buildout conditions. The detailed *Synchro 11* reports are included in Appendix E.

As shown in the data, all approaches at the two study intersections will function at the same level of service in the Buildout condition as they do in the Existing and Background conditions, with minimal increases in delay. No further improvements are warranted or recommended as a result of the development traffic.



FIGURE 5: 2028 BUILDOUT TURNING MOVEMENTS



LEGEND

xx/xx: AM/PM Peak Hour Traffic

Red Lane and East Carrollton Avenue

CONDITION	LANE	AM PEAK HOUR	PM PEAK HOUR
CONDITION	GROUP	LANE LOS (delay)	LANE LOS (delay)
Eviatina 2022	NBLT	A (7.4)	A (7.9)
Existing 2023 Condition	EBLR	A (7.4)	A (7.9)
Condition	SBTR	A (7.2)	A (7.3)
Background	NBLT	A (7.5)	A (7.9)
2028	EBLR	A (7.5)	A (8.0)
Condition	SBTR	A (7.3)	A (7.4)
Buildout	NBLT	A (7.7)	A (8.4)
2028	EBLR	A (7.7)	A (8.4)
Condition	SBTR	A (7.6)	A (7.7)

Table 4: Red Lane & East Carrollton Avenue LOS Analysis

North Broad Street and East Carrollton Avenue

CONDITION	LANE	AM PEAK HOUR	PM PEAK HOUR
CONDITION	GROUP	LANE LOS (delay)	LANE LOS (delay)
	NBLTR	B (10.3)	B (12.1)
Existing 2023	EBL		A (7.5)
Condition	WBL	A (7.6)	A (7.7)
	SBLTR	A (8.7)	B (10.3)
Daalaanaaaad	NBLTR	B (10.5)	B (12.6)
Background 2028	EBL		A (7.5)
Condition	WBL	A (7.7)	A (7.7)
Condition	SBLTR	A (8.7)	B (10.5)
Duildout	NBLTR	B (11.6)	B (14.8)
Buildout	EBL	A (7.5)	A (7.6)
2028 Condition	WBL	A (7.8)	A (7.8)
Condition	SBLTR	B (10.9)	B (11.8)

Table 5: North Broad Street & East Carrollton Avenue LOS Analysis



7. Turn Lane Warrants

The analyses to determine turn lane requirements for the new development were completed by following the procedures and methodologies found in the *VDOT Road Design Manual*, *Volume I, Appendix F*. Turn lane warrants were analyzed based on the highest volumes for each roadway (Red Lane and East Carrollton Avenue) to show that the warrants are not met and will not be met for any of the intersections.

Right-Turn Lane into Site from Red Lane

AM Peak Hour Analysis:

- 22 Vehicles per Hour Turning Right into site from Red Lane
- Approach Volume = 127 + 22 = 149 VPH Red Lane
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

PM Peak Hour Analysis:

- 36 Vehicles per Hour Turning Right into site from Red Lane
- Approach Volume = 133 + 36 = 169 VPH Red Lane
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

Left-Turn Lane into Site from Red Lane

AM Peak Hour Analysis:

- 7 (9.7%) Vehicles per Hour Turning Left into site from Red Lane Posted Speed Limit = 25 mph
- Advancing Volume = 72 VPH
- Opposing Volume = 127 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).

PM Peak Hour Analysis:

- 11 (6.8%) Vehicles per Hour Turning Left into site from Red Lane Posted Speed Limit = 25 mph
- Advancing Volume = 161 VPH
- Opposing Volume = 133 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).



Right-Turn Lane into Site from East Carrollton Avenue

AM Peak Hour Analysis:

- 6 Vehicles per Hour Turning Right into site from East Carrollton Avenue
- Approach Volume = 122 VPH East Carrollton Avenue
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

PM Peak Hour Analysis:

- 9 Vehicles per Hour Turning Right into site from East Carrollton Avenue
- Approach Volume = 166 VPH East Carrollton Avenue
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

Left-Turn Lane into Site from East Carrollton Avenue

AM Peak Hour Analysis:

- 8 (8.4%) Vehicles per Hour Turning Left into site from East Carrollton Avenue Posted Speed Limit = 25 mph
- Advancing Volume = 95 VPH
- Opposing Volume = 122 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).

PM Peak Hour Analysis:

- 14 (9.0%) Vehicles per Hour Turning Left into site from East Carrollton Avenue Posted Speed Limit = 25 mph
- Advancing Volume = 155 VPH
- Opposing Volume = 166 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).

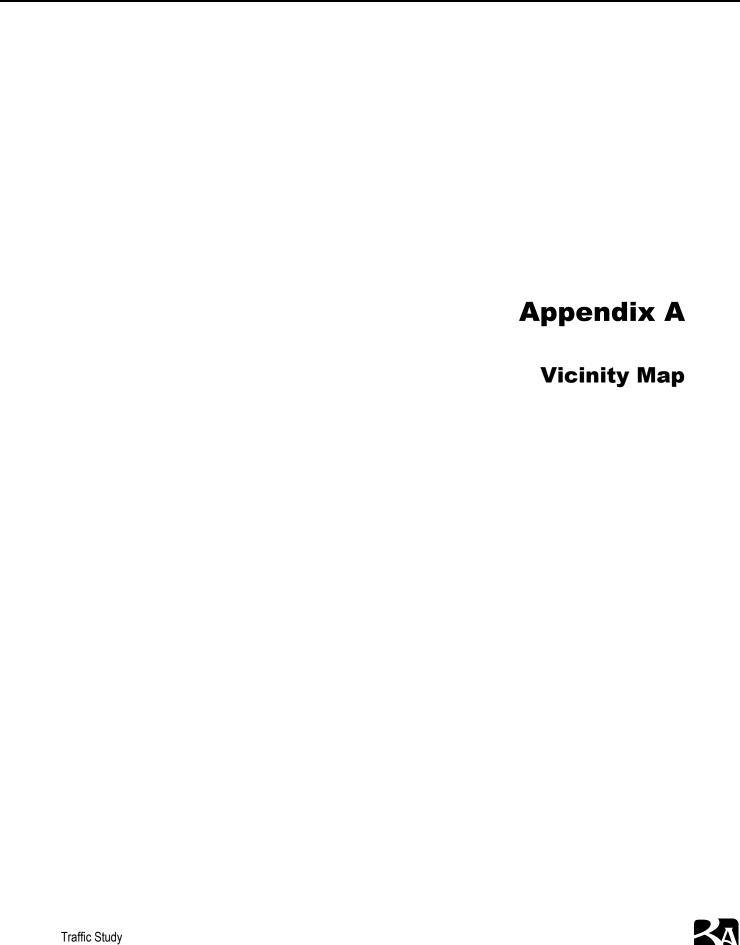


8. Conclusions

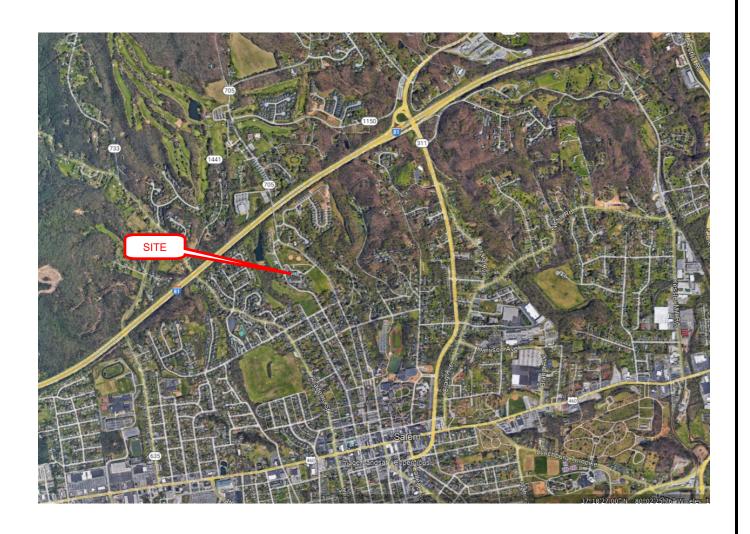
Based on the data collected, the assumptions made, and the projected site-generated traffic, the results of the analysis are outlined below.

- The proposed development will generate additional traffic to the existing road network.
- The proposed development results in very minimal increases in delay at the study intersections and all approaches function at the same level of service in the Existing, Background, and Buildout scenarios.
- No turn lanes or tapers are warranted by the proposed development.

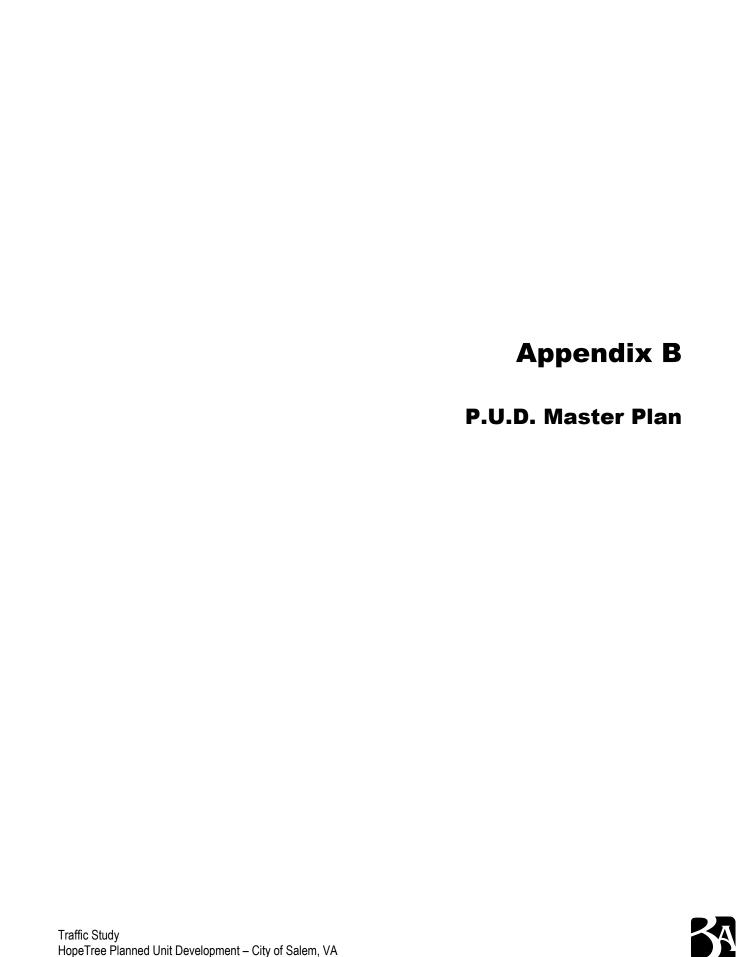






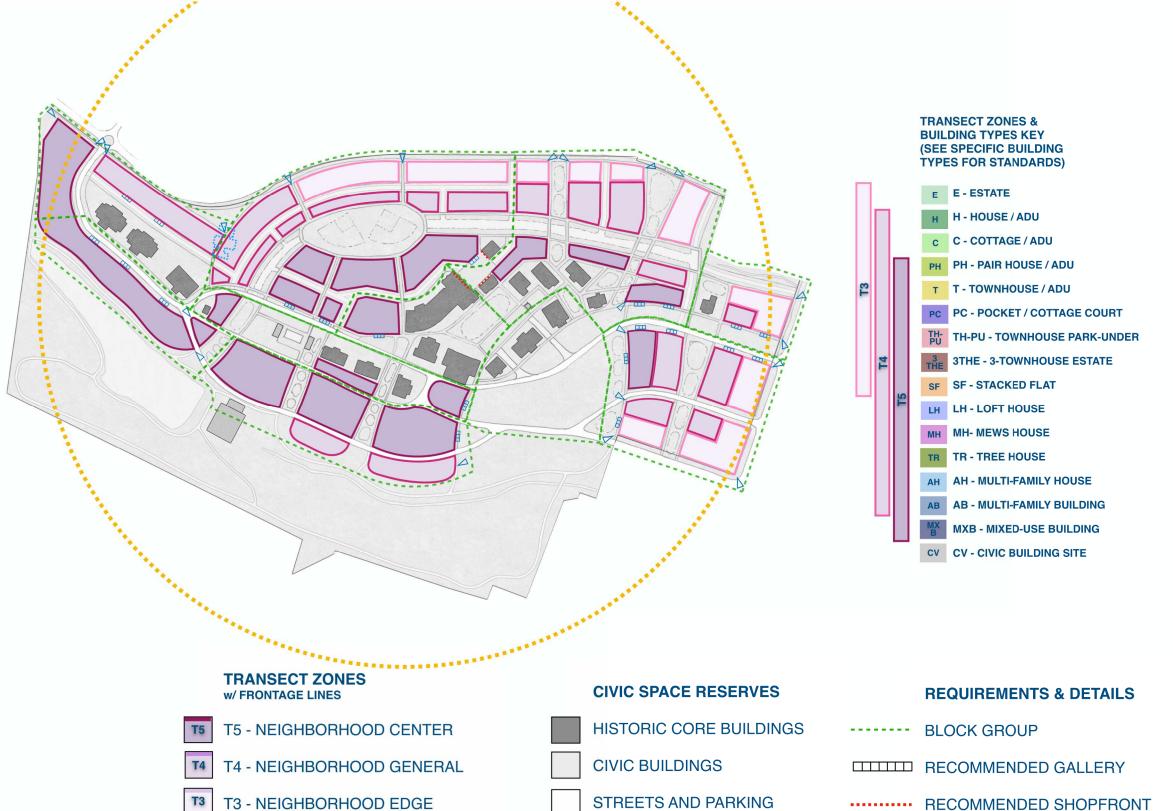






GENERAL NOTES:

- Building Types generally provide parking from rear alleys and lanes screened from frontages on lots.
- On-street parking shall be provided along all streets where pratical.
- Each Block Group includes a minimum of three (3) building types.
- Each Block Group shall have 20% minimum of each of the building types used.
- A minimum of six (6) building types shall be used for the overall project.
- A maximum of five (5) of the same building types are allowed in a row.
- · Commercial, Mixed-Use, & Live-Works are allowed in T-4 and T-5. See Uses
- Land may be subdivided into seperate ownership.



T3 - NEIGHBORHOOD EDGE

OPEN SPACE / NATURAL

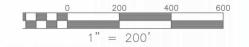
STRUCTURE TO BE REMOVED

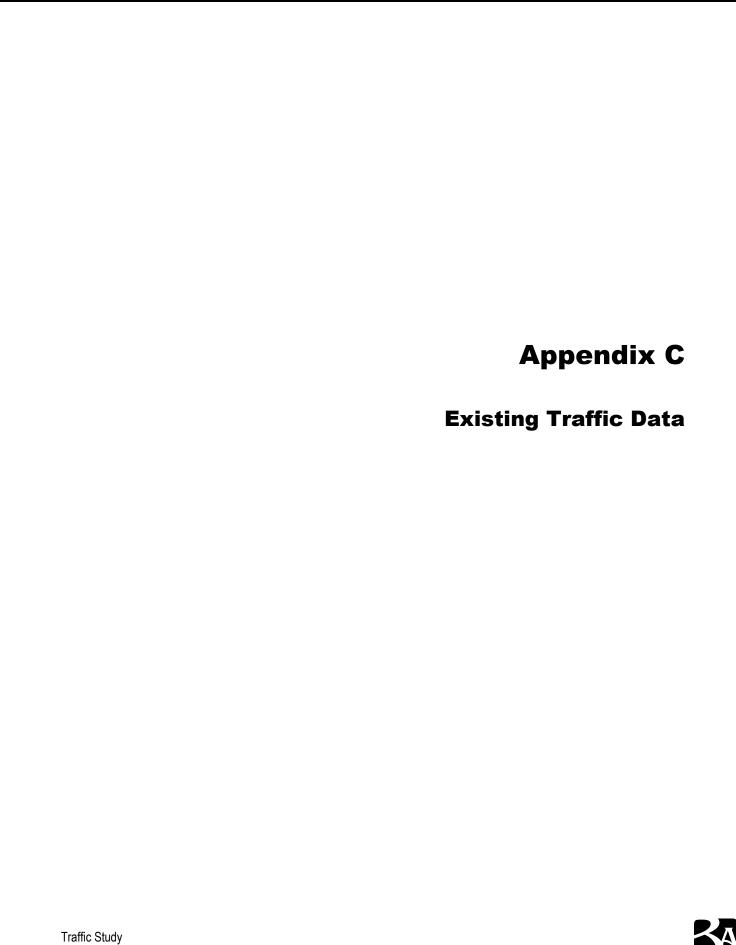
STREETS AND PARKING

VISTA POINTS

PEDESTRIAN SHED -**5 MINUTE WALK RADIUS**

5.A land use plan designating specific use types for the site, both residential and non-residential use types, and establishing site development regulations, including setback, height, building coverage, lot coverage, and density requirements.







TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: North Broad Street and: Carrollton Avenue Location: Salem, Virginia Counted by: VCU

Date: October 03, 2023 Weather: Sunny/Warm

Entered by: SN

Tuesday

Star Rating: 4



Location: Salem, Virginia							Entered by: SN											Star Rating: 4					
TIME	on:	TRAFFI North B		NORTH eet		on:	TRAFFI North B		SOUTH eet		on:	TRAFF Carrollte	IC FROM			on:		IC FROM on Aven			TOTAL N + S +		
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	E+W		
AM																							
7:00 - 7:15	1	2	0	0	3	0	0	3	0	3	0	11	2	0	13	20	5	0	0	25	44		
7:15 - 7:30	0	0	0	0	0	0	0	8	0	8	0	13	2	0	15	21	10	0	0	31	54		
7:30 - 7:45	0	0	0	0	0	1	0	4	0	5	1	18	2	0	21	50	13	0	0	63	89		
7:45 - 8:00	0	0	0	0	0	1	0	7	0	8	0	15	2	0	17	32	20	0	0	52	77		
8:00 - 8:15	0	0	0	0	0	0	0	13	0	13	0	25	0	0	25	15	18	0	0	33	71		
8:15 - 8:30	1	0	0	0	1	1	0	9	0	10	0	16	0	0	16	19	8	0	0	27	54		
8:30 - 8:45	0	1	0	0	1	1	0	7	0	8	0	7	0	0	7	25	11	0	0	36	52		
8:45 - 9:00	1	0	0	0	1	2	3	5	0	10	0	13	0	0	13	16	9	0	0	25	49		
2 Hr Totals	3	3	0	0	6	6	3	56	0	65	1	118	8	0	127	198	94	0	0	292	490		
1 Hr Totals																							
7:00 - 8:00	1	2	0	0	3	2	0	22	0	24	1	57	8	0	66	123	48	0	0	171	264		
7:15 - 8:15	0	0	0	0	0	2	0	32	0	34	1	71	6	0	78	118	61	0	0	179	291		
7:30 - 8:30	1	0	0	0	1	3	0	33	0	36	1	74	4	0	79	116	59	0	0	175	291		
7:45 - 8:45	1	1	0	0	2	3	0	36	0	39	0	63	2	0	65	91	57	0	0	148	254		
8:00 - 9:00	2	1	0	0	3	4	3	34	0	41	0	61	0	0	61	75	46	0	0	121	226		
PEAK HOUR																							
7:30 - 8:30	1	0	0	0	1	3	0	33	0	36	1	74	4	0	79	116	59	0	0	175	291		
PM																							
4:00 - 4:15	0	1	0	0	1	2	0	8	0	10	0	24	0	0	24	19	17	0	0	36	71		
4:15 - 4:30	1	0	0	0	1	0	0	20	0	20	0	20	1	0	21	18	19	0	0	37	79		
4:30 - 4:45	0	0	0	0	0	0	1	12	0	13	0	34	1	0	35	15	20	0	0	35	83		
4:45 - 5:00	0	1	0	0	1	0	0	18	0	18	0	28	3	0	31	12	18	1	0	31	81		
5:00 - 5:15	1	1	0	0	2	2	0	25	0	27	0	35	0	0	35	19	25	1	0	45	109		
5:15 - 5:30	0	0	0	0	0	2	0	23	0	25	0	36	4	0	40	32	26	1	0	59	124		
5:30 - 5:45	1	1	0	0	2	0	0	16	0	16	1	20	1	0	22	17	23	0	0	40	80		
5:45 - 6:00	0	0	0	0	0	2	0	20	0	22	0	24	2	0	26	19	25	1	0	45	93		
2 Hr Totals	3	4	0	0	7	8	1	142	0	151	1	221	12	0	234	151	173	4	0	328	720		
1 Hr Totals 4:00 - 5:00	1	2	0	0	2	2	1	EO	0	61	0	106	_	0	111	64	74	4	0	139	314		
	1	2	-		3		-	58 75		61	-		5		111		74	1					
4:15 - 5:15 4:30 - 5:30	2	2 2	0	0	4 3	2	1 1	75 78	0	78 83	0	117 133	5 8	0	122 141	64 78	82 89	2	0	148 170	352 397		
4:30 - 5:30 4:45 - 5:45	2	3	0	0	3 5	4	0	78 82	0	83 86	1		8	0		80		3	0		397		
4:45 - 5:45 5:00 - 6:00	2	2	0	0	5 4	6	0			90	1	119 115	8 7	0	128 123	87	92 99	3	0	175 189	406		
PEAK HOUR			U	U	4	Ö	U	84	0	90	1	110	1	U	123	01	99	ى 	U	109	400		
5:00 - 6:00	2	2	0	0	4	6	0	84	0	90	1	115	7	0	123	87	99	3	0	189	406		

TOTALS TURNING MOVEMENT COUNT - SUMMARY

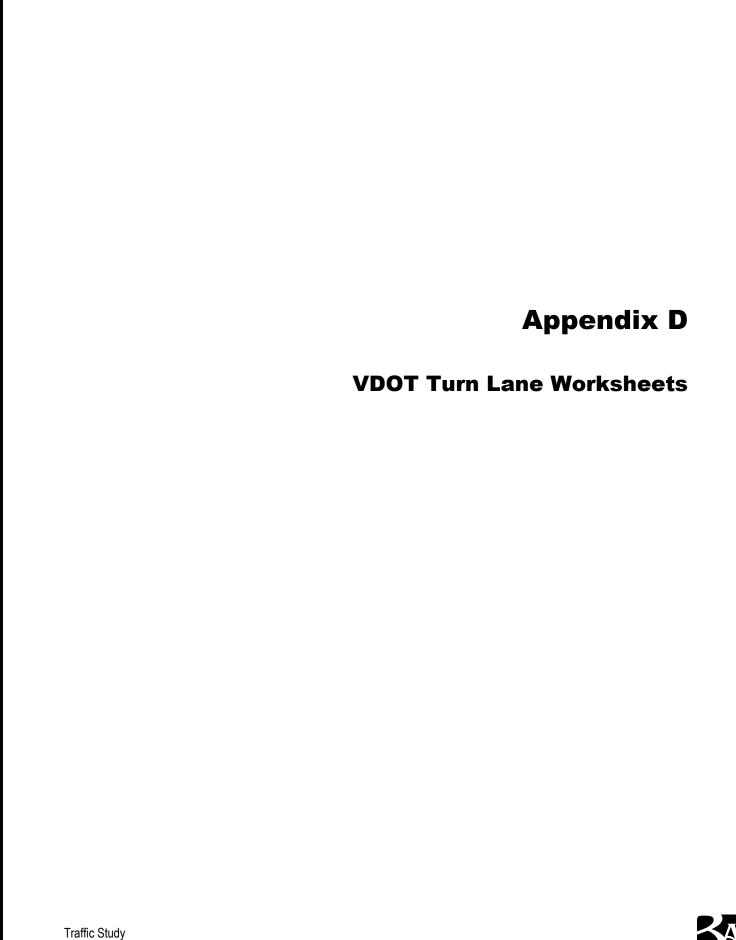
Intersection of: Red Lane and: Carrollton Avenue Location: Salem, Virginia

Counted by: VCU

Date: October 03, 2023 Weather: Sunny/Warm

Tuesday

		LOII AVE			weather: Sunny/warm											Stor Boting: A Group						
	Location: Salem, Virginia							Entered by: SN TRAFFIC FROM SOUTH TRAFFIC FROM EAST										Star Rating. 4				
TIME	TRAFFIC FROM NORTH on: Red Lane						TRAFFI Red Lar		SOUTH		TRAFFIC FROM EAST on:					TRAFFIC FROM WEST on: Carrollton Avenue					TOTAL N+S	
I IIWI E	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	-	
AM																						
7:00 - 7:15	12	6	0	0	18	0	3	2	0	5	0	0	0	0	0	3	0	2	0	5	28	
7:15 - 7:30	9	7	0	0	16	0	1	4	0	5	0	0	0	0	0	2	0	9	0	11	32	
7:30 - 7:45	10	18	0	0	28	0	3	6	0	9	0	0	0	0	0	3	0	8	0	11	48	
7:45 - 8:00	13	9	0	0	22	0	4	3	0	7	0	0	0	0	0	6	0	7	0	13	42	
8:00 - 8:15	14	9	0	0	23	0	6	6	0	12	0	0	0	0	0	4	0	13	0	17	52	
8:15 - 8:30	10	11	0	0	21	0	6	4	0	10	0	0	0	0	0	2	0	3	0	5	36	
8:30 - 8:45	5	2	0	0	7	0	8	1	0	9	0	0	0	0	0	3	0	9	0	12	28	
8:45 - 9:00	10	3	0	0	13	0	6	2	0	8	0	0	0	0	0	2	0	10	0	12	33	
2 Hr Totals	83	65	0	0	148	0	37	28	0	65	0	0	0	0	0	25	0	61	0	86	299	
1 Hr Totals																						
7:00 - 8:00	44	40	0	0	84	0	11	15	0	26	0	0	0	0	0	14	0	26	0	40	150	
7:15 - 8:15	46	43	0	0	89	0	14	19	0	33	0	0	0	0	0	15	0	37	0	52	174	
7:30 - 8:30	47	47	0	0	94	0	19	19	0	38	0	0	0	0	0	15	0	31	0	46	178	
7:45 - 8:45	42	31	0	0	73	0	24	14	0	38	0	0	0	0	0	15	0	32	0	47	158	
8:00 - 9:00	39	25	0	0	64	0	26	13	0	39	0	0	0	0	0	11	0	35	0	46	149	
7:30 - 8:30	47	47	0	0	94	0	19	19	0	38	0	0	0	0	0	15	0	31	0	40	178	
7:30 - 8:30 PM	47	47	U	U	94	U	19	19	U	38	U	U	U	U	U	15	U	31	U	46	1/8	
4:00 - 4:15	18	12	0	0	30	0	13	5	0	18	0	0	0	0	0	7	0	13	0	20	68	
4:15 - 4:30	16	2	0	0	18	0	9	1	0	10	0	0	0	0	0	5	0	15	0	20	48	
4:30 - 4:45	21	7	0	0	28	0	12	7	0	19	0	0	0	0	0	5	0	18	0	23	70	
4:45 - 5:00	21	10	0	0	31	0	12	4	0	16	0	0	0	0	0	3	0	15	0	18	65	
5:00 - 5:15	12	8	0	0	20	0	17	11	1	29	0	0	0	0	0	7	0	18	0	25	74	
5:15 - 5:30	19	6	0	0	25	0	12	13	0	25	0	0	0	0	0	7	0	20	0	27	77	
5:30 - 5:45	13	7	0	0	20	0	10	3	0	13	0	0	0	0	0	2	0	14	0	16	49	
5:45 - 6:00	19	9	0	0	28	0	7	4	0	11	0	0	0	0	0	7	0	13	0	20	59	
2 Hr Totals	139	61	0	0	200	0	92	48	1	141	0	0	0	0	0	43	0	126	0	169	510	
1 Hr Totals																						
4:00 - 5:00	76	31	0	0	107	0	46	17	0	63	0	0	0	0	0	20	0	61	0	81	251	
4:15 - 5:15	70	27	0	0	97	0	50	23	1	74	0	0	0	0	0	20	0	66	0	86	257	
4:30 - 5:30	73	31	0	0	104	0	53	35	1	89	0	0	0	0	0	22	0	71	0	93	286	
4:45 - 5:45	65	31	0	0	96	0	51	31	1	83	0	0	0	0	0	19	0	67	0	86	265	
5:00 - 6:00	63	30	0	0	93	0	46	31	1	78	0	0	0	0	0	23	0	65	0	88	259	
PEAK HOUR																						
4:30 - 5:30	73	31	0	0	104	0	53	35	1	89	0	0	0	0	0	22	0	71	0	93	286	





RED LANE RIGHT TURN WARRANT

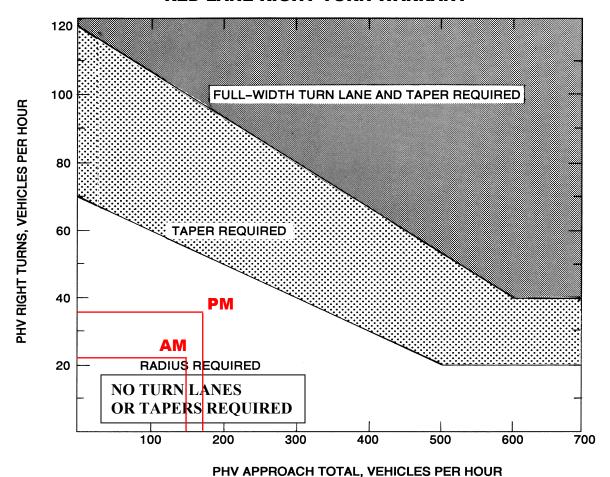


FIGURE 3-26 WARRANTS FOR RIGHT TURN TREATMENT (2-LANE HIGHWAY)

Appropriate Radius required at all Intersections and Entrances (Commercial or Private).

LEGEND

PHV - Peak Hour Volume (also Design Hourly Volume equivalent)

Adjustment for Right Turns

For posted speeds at or under 45 mph, PHV right turns > 40, and PHV total < 300.

Adjusted right turns = PHV Right Turns - 20

If PHV is not known use formula: PHV = ADT x K x D

K = the percent of AADT occurring in the peak hour

D = the percent of traffic in the peak direction of flow

Note: An average of 11% for K x D will suffice.

When right turn facilities are warranted, see Figure 3-1 for design criteria.*

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^{*} Rev. 1/15

RED LANE LEFT TURN WARRANT WARRANT FOR LEFT-TURN STORAGE LANES ON TWO-LANE HIGHWAY

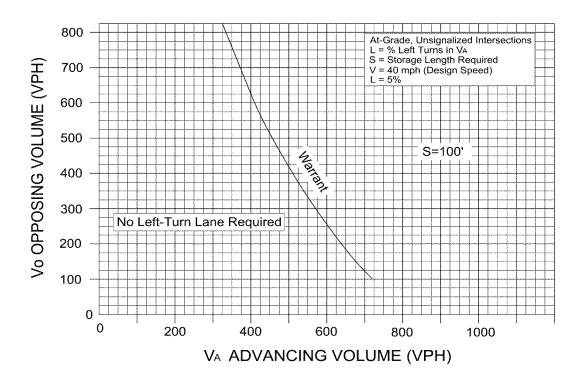


FIGURE 3-4 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

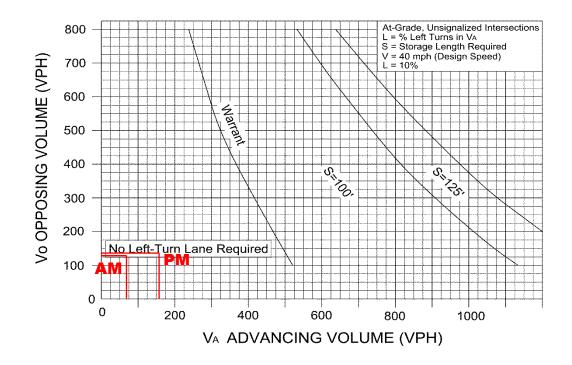


FIGURE 3-5 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

EAST CARROLLTON AVENUE RIGHT TURN WARRANT

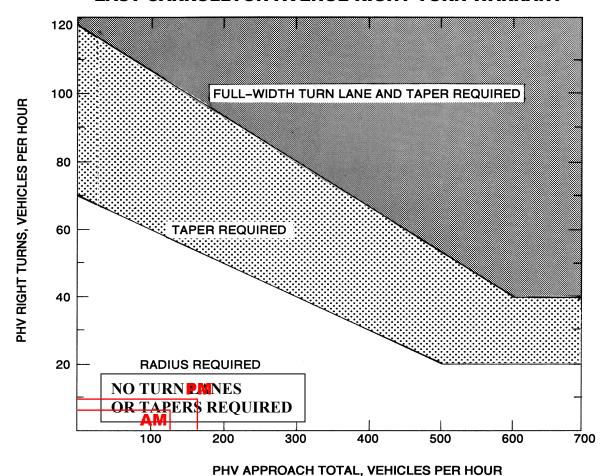


FIGURE 3-26 WARRANTS FOR RIGHT TURN TREATMENT (2-LANE HIGHWAY)

Appropriate Radius required at all Intersections and Entrances (Commercial or Private).

LEGEND

PHV - Peak Hour Volume (also Design Hourly Volume equivalent)

Adjustment for Right Turns

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Adjusted right turns = PHV Right Turns - 20

If PHV is not known use formula: PHV = ADT x K x D

K = the percent of AADT occurring in the peak hour

D = the percent of traffic in the peak direction of flow

Note: An average of 11% for K x D will suffice.

When right turn facilities are warranted, see Figure 3-1 for design criteria.*

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^{*} Rev. 1/15

EAST CARROLLTON AVENUE LEFT TURN WARRANT WARRANT FOR LEFT-TURN STORAGE LANES ON TWO-LANE HIGHWAY

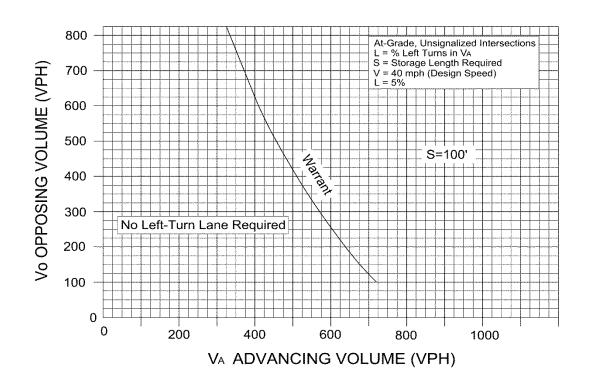


FIGURE 3-4 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

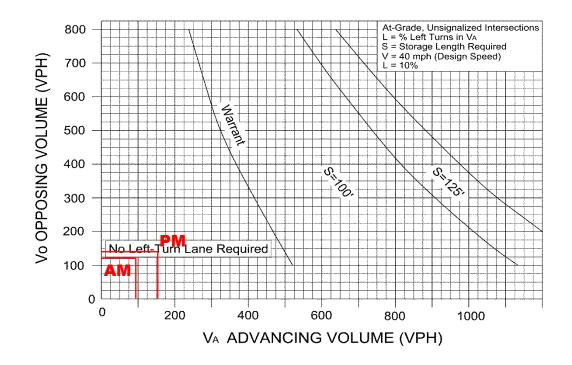


FIGURE 3-5 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

	Appendix E
	0 1 44
	Synchro 11
	Intersection Analysis Data
Traffic Study	

Intersection						
Intersection Delay, s/veh	7.3					
Intersection LOS	A					
Movement	EDI	EDD	NIDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y	4.5	-10	ન	}	47
Traffic Vol, veh/h	31	15	19	19	47	47
Future Vol, veh/h	31	15	19	19	47	47
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	36	17	22	22	55	55
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.4		7.4		7.2	
HCM LOS	Α		Α		Α	
HOW LOS	Α		$\overline{}$		А	
HOW LOS	A		Λ.		A	
	A	NBI n1		SBI n1	A	
Lane	A	NBLn1	EBLn1	SBLn1	A .	
Lane Vol Left, %	A	50%	EBLn1 67%	0%	A	
Lane Vol Left, % Vol Thru, %	A	50% 50%	EBLn1 67% 0%	0% 50%	A	
Lane Vol Left, % Vol Thru, % Vol Right, %	A	50% 50% 0%	EBLn1 67% 0% 33%	0% 50% 50%	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control	A	50% 50% 0% Stop	EBLn1 67% 0% 33% Stop	0% 50% 50% Stop	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane	A	50% 50% 0% Stop 38	EBLn1 67% 0% 33% Stop 46	0% 50% 50% Stop 94	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol	A	50% 50% 0% Stop 38 19	EBLn1 67% 0% 33% Stop 46 31	0% 50% 50% Stop 94	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol	A	50% 50% 0% Stop 38 19	EBLn1 67% 0% 33% Stop 46 31 0	0% 50% 50% Stop 94 0	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol	A	50% 50% 0% Stop 38 19 19	EBLn1 67% 0% 33% Stop 46 31 0 15	0% 50% 50% Stop 94 0 47	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate	A	50% 50% 0% Stop 38 19 19	EBLn1 67% 0% 33% Stop 46 31 0 15 53	0% 50% 50% Stop 94 0 47 47	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp	A	50% 50% 0% Stop 38 19 19 0 44	EBLn1 67% 0% 33% Stop 46 31 0 15 53	0% 50% 50% Stop 94 0 47 47 109	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)	A	50% 50% 0% Stop 38 19 0 44 1	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061	0% 50% 50% Stop 94 0 47 47 109 1 0.113	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)	A	50% 50% 0% Stop 38 19 19 0 44 1 0.051 4.178	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061 4.102	0% 50% 50% Stop 94 0 47 47 109 1 0.113 3.728	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N	A	50% 50% 0% Stop 38 19 0 44 1 0.051 4.178 Yes	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061 4.102 Yes	0% 50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap	A	50% 50% 0% Stop 38 19 19 0 44 1 0.051 4.178 Yes 854	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867	0% 50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		50% 50% 0% Stop 38 19 0 44 1 0.051 4.178 Yes 854 2.218	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867 2.155	0% 50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959 1.764	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		50% 50% 0% Stop 38 19 0 44 1 0.051 4.178 Yes 854 2.218 0.052	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867 2.155 0.061	0% 50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959 1.764 0.114	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		50% 50% 0% Stop 38 19 0 44 1 0.051 4.178 Yes 854 2.218 0.052 7.4	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867 2.155 0.061 7.4	0% 50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959 1.764 0.114 7.2	A	
Lane Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		50% 50% 0% Stop 38 19 0 44 1 0.051 4.178 Yes 854 2.218 0.052	EBLn1 67% 0% 33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867 2.155 0.061	0% 50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959 1.764 0.114	A	

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	59	116	4	74	1	33	0	1	0	0	1
Future Vol, veh/h	0	59	116	4	74	1	33	0	1	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	72	141	5	90	1	40	0	1	0	0	1
Major/Minor N	1ajor1		ı	Major2		N	Minor1		N	/linor2		
Conflicting Flow All	91	0	0	213	0	0	244	244	143	244	314	91
Stage 1	_	_	_		_	_	143	143	_	101	101	_
Stage 2	-	-	-	_	-	-	101	101	-	143	213	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1517	-	-	1369	-	-	714	661	910	714	605	972
Stage 1	-	-	-	-	-	-	865	782	-	910	815	-
Stage 2	-	-	-	-	-	-	910	815	-	865	730	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1517	-	-	1369	-	-	711	658	910	711	603	972
Mov Cap-2 Maneuver	-	-	-	-	-	-	711	658	-	711	603	-
Stage 1	-	-	-	-	-	-	865	782	-	910	812	-
Stage 2	-	-	-	-	-	-	905	812	-	864	730	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.4			10.3			8.7		
HCM LOS							В			Α		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			
Capacity (veh/h)		716	1517	-	-	1369	-	-	972			
HCM Lane V/C Ratio		0.058	-	-	-	0.004	-	-	0.001			
HCM Control Delay (s)		10.3	0	-	-	7.6	0	-	8.7			
HCM Lane LOS		В	A	_	-	Α	A	-	Α			
HCM 95th %tile Q(veh)		0.2	0	-	-	0	-	-	0			

Intersection						
Intersection Delay, s/veh	7.7					
Intersection LOS	Α.					
Interestion Edu	71					
Marrana	EDI	EDE	NIDI	NOT	ODT	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥	00	00	<u>स</u> ्	}	70
Traffic Vol, veh/h	71	22	36	53	31	73
Future Vol, veh/h	71	22	36	53	31	73
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	76	24	39	57	33	78
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.9		7.9		7.3	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		40%	76%	0%		
Vol Thru, %		60%	0%	30%		
Vol Right, %		0%	24%	70%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		89	93	104		
LT Vol		36	71	0		
Through Vol		53	0	31		
RT Vol		0	22	73		
Lane Flow Rate		96	100	112		
Geometry Grp		1	1	1		
Degree of Util (X)		0.113	0.118	0.116		
Departure Headway (Hd)		4.243	4.264	3.727		
Convergence, Y/N		Yes	Yes	Yes		
Cap		835	829	946		
Service Time		2.316	2.349	1.81		
HCM Lane V/C Ratio		0.115	0.121	0.118		
HCM Control Delay		7.9	7.9	7.3		
HCM Lane LOS		Α	Α	Α		

0.4

0.4

0.4

HCM 95th-tile Q

Intersection												
Int Delay, s/veh	3											
• •												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		- 40→			4			4			4	
Traffic Vol, veh/h	3	99	87	7	115	1	84	0	6	0	2	2
Future Vol, veh/h	3	99	87	7	115	1	84	0	6	0	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	_	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	,# -	0	-	-	0	_	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	121	106	9	140	1	102	0	7	0	2	2
M = i = =/N Ai= =	1-1. 1			M-:- 0			No. 4			Alian a O		
	/lajor1			Major2			Minor1			Minor2		
Conflicting Flow All	141	0	0	227	0	0	343	341	174	345	394	141
Stage 1	-	-	-	-	-	-	182	182	-	159	159	-
Stage 2	-	-	-	-	-	-	161	159	-	186	235	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1455	-	-	1353	-	-	615	584	875	613	546	912
Stage 1	-	-	-	-	-	-	824	753	-	848	770	-
Stage 2	-	-	-	-	-	-	846	770	-	820	714	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1353	-	-	606	578	875	603	541	912
Mov Cap-2 Maneuver	-	-	-	-	-	-	606	578	-	603	541	-
Stage 1	-	-	-	-	-	-	822	751	-	845	765	-
Stage 2	-	-	-	-	-	-	835	765	-	811	712	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			12.1			10.3		
HCM LOS	0.1			U. T			12.1 B			В		
TOW LOO							U			U		
Minor Long/Major M		NDL 1	EDI	EDT	EDD	///DI	WDT	WDD	CDL =1			
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :				
Capacity (veh/h)		619	1455	-	-	1353	-	-	679			
HCM Lane V/C Ratio			0.003	-	-	0.006	-	-	0.007			
HCM Control Delay (s)		12.1	7.5	0	-	7.7	0	-	10.3			
HCM Lane LOS		В	A	Α	-	Α	Α	-	В			
HCM 95th %tile Q(veh)		0.6	0	-	-	0	-	-	0			

Intersection						
Intersection Delay, s/veh	7.4					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			4	ĵ»	
Traffic Vol, veh/h	33	16	20	20	51	51
Future Vol, veh/h	33	16	20	20	51	51
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	38	19	23	23	59	59
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.5		7.5		7.3	
HCM LOS	А		Α		A	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		50%	67%	0%		
Vol Thru, %		50%	0%	50%		
Vol Right, %		0%	33%	50%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		40	49	102		
LT Vol		20	33	0		
Through Vol		20	0	51		
RT Vol		0	16	51		
Lane Flow Rate		47	57	119		
Geometry Grp		1	1	1		
			•			
Degree of Util (X)		0.054	0.065	0.123		
Degree of Util (X) Departure Headway (Hd)		0.054 4.19	0.065 4.121	0.123 3.735		
Departure Headway (Hd)		4.19	4.121	3.735		
Departure Headway (Hd) Convergence, Y/N		4.19 Yes	4.121 Yes	3.735 Yes		
Departure Headway (Hd) Convergence, Y/N Cap		4.19 Yes 851	4.121 Yes 862	3.735 Yes 956		
Departure Headway (Hd) Convergence, Y/N Cap Service Time		4.19 Yes 851 2.234	4.121 Yes 862 2.18	3.735 Yes 956 1.774		
Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		4.19 Yes 851 2.234 0.055	4.121 Yes 862 2.18 0.066	3.735 Yes 956 1.774 0.124		
Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		4.19 Yes 851 2.234 0.055 7.5	4.121 Yes 862 2.18 0.066 7.5	3.735 Yes 956 1.774 0.124 7.3		
Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		4.19 Yes 851 2.234 0.055	4.121 Yes 862 2.18 0.066	3.735 Yes 956 1.774 0.124		

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	64	125	4	80	1	36	0	3	0	0	1
Future Vol, veh/h	0	64	125	4	80	1	36	0	3	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	78	152	5	98	1	44	0	4	0	0	1
Major/Minor N	1ajor1		1	Major2		ľ	Minor1		N	/linor2		
Conflicting Flow All	99	0	0	230	0	0	263	263	154	265	339	99
Stage 1	-	-	-	-	-	-	154	154	-	109	109	-
Stage 2	-	-	-	-	-	-	109	109	-	156	230	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1507	-	-	1350	-	-	694	646	897	692	586	962
Stage 1	-	-	-	-	-	-	853	774	-	901	809	-
Stage 2	-	-	-	-	-	-	901	809	-	851	718	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1507	-	-	1350	-	-	691	643	897	687	584	962
Mov Cap-2 Maneuver	-	-	-	-	-	-	691	643	-	687	584	-
Stage 1	-	-	-	-	-	-	853	774	-	901	806	-
Stage 2	-	-	-	-	-	-	896	806	-	848	718	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.4			10.5			8.7		
HCM LOS							В			Α		
Minor Lane/Major Mvmt	. 1	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		703	1507	-		1350	-	-	962			
HCM Lane V/C Ratio		0.068	-	_		0.004	_		0.001			
HCM Control Delay (s)		10.5	0	-	-	7.7	0	-	8.7			
HCM Lane LOS		В	A	_	_	A	A	-	A			
HCM 95th %tile Q(veh)		0.2	0	-	-	0	-	-	0			

Intersection						
Intersection Delay, s/veh	7.8					
Intersection LOS	Α.					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	1	
Traffic Vol, veh/h	76	24	38	57	33	79
Future Vol, veh/h	76	24	38	57	33	79
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	82	26	41	61	35	85
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8		7.9		7.4	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		40%	76%	0%		
Vol Thru, %		60%	0%	29%		
Vol Right, %		0%	24%	71%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		95	100	112		
LT Vol		38	76	0		
Through Vol		57	0	33		
RT Vol		0	24	79		
Lane Flow Rate		102	108	120		
Geometry Grp		1	1	1		
Degree of Util (X)		0.121	0.128	0.125		
Departure Headway (Hd)		4.263	4.288	3.744		
Convergence, Y/N		Yes	Yes	Yes		
Cap		830	824	941		
Service Time		2.344	2.378	1.835		
HCM Lane V/C Ratio		0.123	0.131	0.128		
HCM Control Delay		7.9	8	7.4		
HCM Lane LOS		Α	Α	Α		
HCM 95th-tile Q		0.4	0.4	0.4		

Intersection												
Int Delay, s/veh	3.1											
		EDT	EDD	MDI	MOT	WDD	NIDI	NDT	NDD	0.01	ODT	000
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	_
Traffic Vol, veh/h	3	107	94	8	124	1	90	0	6	0	2	2
Future Vol, veh/h	3	107	94	8	124	1	90	0	6	0	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	130	115	10	151	1	110	0	7	0	2	2
Major/Minor I	Major1			Major2		N	Minor1		N	/linor2		
Conflicting Flow All	152	0	0	245	0	0	370	368	188	371	425	152
Stage 1	152	-	U	245	-	-	196	196	100	172	172	152
Stage 2			-				174	172	-	199	253	-
	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1			-			-	6.1	5.5		6.1	5.5	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-		5.5	-
Critical Hdwy Stg 2	-	-	-	- 2.2	-	-			- 2.2	6.1		2.2
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	524	3.3
Pot Cap-1 Maneuver	1441	-	-	1333	-	-	590	564	859	589		900
Stage 1	-	-	-	-	-	-	810	742	-	835	760	-
Stage 2	-	-	-	-	-	-	833	760	-	807	701	-
Platoon blocked, %	1111	-	-	1222	-	-	E04	EEO	050	E70	E40	000
Mov Cap-1 Maneuver	1441	-	-	1333	-	-	581	558	859	579	518	900
Mov Cap-2 Maneuver	-	-	-	-	-	-	581	558	-	579	518	-
Stage 1	-	-	-	-	-	-	808	740	-	832	754	-
Stage 2	-	-	-	-	-	-	821	754	-	798	699	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			12.6			10.5		
HCM LOS							В			В		
Minor Lane/Major Mvm	+	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	CDI n1			
				LDI	LDK		VVDI	WDR				
Capacity (veh/h)		593	1441	-	-	1333	-	-	658			
HCM Carter Delay (a)		0.197		-	-	0.007	-		0.007			
HCM Control Delay (s)		12.6	7.5	0	-	7.7	0	-	10.5			
HCM Lane LOS		В	A	Α	-	A	Α	-	В			
HCM 95th %tile Q(veh)		0.7	0	-	-	0	-	-	0			

Intersection						
	77					
Intersection Delay, s/veh	7.7					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			ર્ન	î,	
Traffic Vol, veh/h	44	31	31	28	64	63
Future Vol, veh/h	44	31	31	28	64	63
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	51	36	36	33	74	73
Number of Lanes	1	0	0	1	1	0
	רח				CD	
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.7		7.7		7.6	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		53%	59%	0%		
Vol Thru, %		47%	0%	50%		
Vol Right, %		0%	41%	50%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		59	75	127		
LT Vol		31	44	0		
Through Vol		28	0	64		
RT Vol		0	31	63		
Lane Flow Rate		69	87	148		
Geometry Grp		1	1	140		
Degree of Util (X)		0.081	0.1	0.156		
Departure Headway (Hd)		4.273	4.138	3.808		
Convergence, Y/N		Yes	Yes	Yes		
Cap		831	854	932		
Service Time		2.339	2.223	1.87		
HCM Lane V/C Ratio		0.083	0.102	0.159		
HCM Control Delay		7.7	7.7	7.6		
HCM Lane LOS		7.7 A	7.7 A	7.0 A		
		A	A	A		

0.3

0.3

0.6

HCM 95th-tile Q

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	7	77	125	20	99	3	36	6	13	5	8	9
Future Vol, veh/h	7	77	125	20	99	3	36	6	13	5	8	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	94	152	24	121	4	44	7	16	6	10	11
Major/Minor N	/lajor1		1	Major2		N	Minor1		N	/linor2		
Conflicting Flow All	125	0	0	246	0	0	370	361	170	371	435	123
Stage 1	-	-	-	-	-	-	188	188	-	171	171	-
Stage 2	-	-	-	-	-	-	182	173	-	200	264	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1474	-	-	1332	-	-	590	569	879	589	517	933
Stage 1	-	-	-	-	-	-	818	748	-	836	761	-
Stage 2	-	-	-	-	-	-	824	760	-	806	694	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1474	-	-	1332	-	-	563	554	879	561	504	933
Mov Cap-2 Maneuver	-	-	-	-	-	-	563	554	-	561	504	-
Stage 1	-	-	-	-	-	-	812	743	-	830	747	-
Stage 2	-	-	-	-	-	-	788	746	-	778	689	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			1.3			11.6			10.9		
HCM LOS	J. <u>L</u>			1.0			В			В		
Minor Lane/Major Mvmt	,	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	CDI 51			
Capacity (veh/h) HCM Lane V/C Ratio		614 0.109	1474	-	-	1332 0.018	-	-	639 0.042			
		11.6	7.5	-		7.8	-		10.9			
HCM Control Delay (s) HCM Lane LOS		11.0 B		0 A	-	7.8 A	0 A	-	10.9 B			
HCM 95th %tile Q(veh)		0.4	A 0	- A		0.1	- A	-	0.1			
HOW SOUL WILL W(VEII)		0.4	U	-	-	U. I	-	-	0.1			

Intersection						
Intersection Delay, s/veh	8.2					
Intersection LOS	Α					
Mayamant	EDI	EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y	25		र्	^	00
Traffic Vol, veh/h	91	35	56	70	44	89
Future Vol, veh/h	91	35	56	70	44	89
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	98	38	60	75	47	96
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.4		8.4		7.7	
HCM LOS	Α		Α		Α	
			- •			
l ano		NRI n1	FRI n1	SRI n1		
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		44%	72%	0%		
Vol Left, % Vol Thru, %		44% 56%	72% 0%	0% 33%		
Vol Left, % Vol Thru, % Vol Right, %		44% 56% 0%	72% 0% 28%	0% 33% 67%		
Vol Left, % Vol Thru, % Vol Right, % Sign Control		44% 56% 0% Stop	72% 0% 28% Stop	0% 33% 67% Stop		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		44% 56% 0% Stop 126	72% 0% 28% Stop 126	0% 33% 67% Stop 133		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		44% 56% 0% Stop 126 56	72% 0% 28% Stop 126 91	0% 33% 67% Stop 133		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		44% 56% 0% Stop 126 56 70	72% 0% 28% Stop 126 91	0% 33% 67% Stop 133 0		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		44% 56% 0% Stop 126 56 70	72% 0% 28% Stop 126 91 0	0% 33% 67% Stop 133 0 44		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		44% 56% 0% Stop 126 56 70 0	72% 0% 28% Stop 126 91 0 35	0% 33% 67% Stop 133 0 44 89 143		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		44% 56% 0% Stop 126 56 70 0 135	72% 0% 28% Stop 126 91 0 35 135	0% 33% 67% Stop 133 0 44 89 143		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		44% 56% 0% Stop 126 56 70 0 135 1	72% 0% 28% Stop 126 91 0 35 135 1	0% 33% 67% Stop 133 0 44 89 143 1 0.158		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		44% 56% 0% Stop 126 56 70 0 135 1 0.168 4.451	72% 0% 28% Stop 126 91 0 35 135 1 0.169 4.478	0% 33% 67% Stop 133 0 44 89 143 1 0.158 3.967		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		44% 56% 0% Stop 126 56 70 0 135 1 0.168 4.451 Yes	72% 0% 28% Stop 126 91 0 35 135 1 0.169 4.478 Yes	0% 33% 67% Stop 133 0 44 89 143 1 0.158 3.967 Yes		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		44% 56% 0% Stop 126 56 70 0 135 1 0.168 4.451 Yes 807	72% 0% 28% Stop 126 91 0 35 135 1 0.169 4.478 Yes 803	0% 33% 67% Stop 133 0 44 89 143 1 0.158 3.967 Yes 907		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		44% 56% 0% Stop 126 56 70 0 135 1 0.168 4.451 Yes 807 2.466	72% 0% 28% Stop 126 91 0 35 135 1 0.169 4.478 Yes 803 2.496	0% 33% 67% Stop 133 0 44 89 143 1 0.158 3.967 Yes 907 1.982		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		44% 56% 0% Stop 126 56 70 0 135 1 0.168 4.451 Yes 807	72% 0% 28% Stop 126 91 0 35 135 1 0.169 4.478 Yes 803	0% 33% 67% Stop 133 0 44 89 143 1 0.158 3.967 Yes 907		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		44% 56% 0% Stop 126 56 70 0 135 1 0.168 4.451 Yes 807 2.466	72% 0% 28% Stop 126 91 0 35 135 1 0.169 4.478 Yes 803 2.496 0.168 8.4	0% 33% 67% Stop 133 0 44 89 143 1 0.158 3.967 Yes 907 1.982 0.158 7.7		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		44% 56% 0% Stop 126 56 70 0 135 1 0.168 4.451 Yes 807 2.466 0.167	72% 0% 28% Stop 126 91 0 35 135 1 0.169 4.478 Yes 803 2.496 0.168	0% 33% 67% Stop 133 0 44 89 143 1 0.158 3.967 Yes 907 1.982 0.158		

Intersection												
Int Delay, s/veh	4.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	12	128	94	21	140	5	90	8	22	5	9	9
Future Vol, veh/h	12	128	94	21	140	5	90	8	22	5	9	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	156	115	26	171	6	110	10	27	6	11	11
Major/Minor N	/lajor1		ı	Major2		ľ	Minor1		N	Minor2		
Conflicting Flow All	177	0	0	271	0	0	481	473	214	488	527	174
Stage 1	-	-	-	-	-	-	244	244	-	226	226	-
Stage 2	-	-	-	-	-	-	237	229	-	262	301	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1411	-	-	1304	-	-	499	493	831	493	459	875
Stage 1	-	-	-	-	-	-	764	708	-	781	721	-
Stage 2	-	-	-	-	-	-	771	718	-	747	669	-
Platoon blocked, %		-	-	1001	-	-	4= 1	4=0	001	4		
Mov Cap-1 Maneuver	1411	-	-	1304	-	-	471	476	831	457	443	875
Mov Cap-2 Maneuver	-	-	-	-	-	-	471	476	-	457	443	-
Stage 1	-	-	-	-	-	-	754	699	-	771	705	-
Stage 2	-	-	-	-	-	-	733	702	-	704	660	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1			14.8			11.8		
HCM LOS							В			В		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR S	SBLn1			
Capacity (veh/h)		512	1411	-	-	1304	-	-				
HCM Lane V/C Ratio		0.286	0.01	-	-	0.02	-	-	0.051			
HCM Control Delay (s)		14.8	7.6	0	-	7.8	0	-	11.8			
HCM Lane LOS		В	Α	Α	-	Α	Α	-	В			
HCM 95th %tile Q(veh)		1.2	0	-	-	0.1	-	-	0.2			

Randy W. Beckner Bradley C. Craig Wm. Thomas Austin James B. Voso Chad M. Thomas Jason A. Carder Brian R. Newman D. Jason Snapp Ryan P. Kincer



Edwin K. Mattern, Jr. (1949-1982)
Gene R. Cress (1935-2014)
Sam H. McGhee, III (1940-2018)
Stewart W. Hubbell (Retired)
J. Wayne Craig (Retired)
Michael S. Agee (Retired)
Steven A. Campbell (Retired)
Randy L. Dodson (Retired)

December 20, 2023

Mr. William Simpson, Jr., PE Assistant Director/City Engineer City of Salem 21 S Bruffey Street Salem, Virginia, 24153 wsimpson@salemva.gov

Re: Traffic Study Review

HopeTree Planned Unit Development M&C Commission No. 4197-H GESC Contract No. 2021-018

Dear Mr. Simpson,

The purpose of this letter is to summarize Mattern & Craig's (M&C) findings of an independent review of a traffic impact statement/study (TIS) prepared by Balzar & Associates dated December 1, 2023 for the HopeTree Planned Unit Development project proposed within the boundaries of Salem, Virginia. The scope of the review was to determine general conformance with Virginia Department of Transportation (VDOT) and industry standard practices in the preparation of the subject TIS.

The Institute of Transportation Engineers (ITE) publishes many manuals, books, guidelines and methodologies including (but not limited to) the Trip Generation Manual, the Trip Generation Handbook, and the Traffic Engineering Handbook which all contain information on how traffic impact analyses/studies/statements should be conducted and prepared. The information presented by ITE is considered the "industry standard" in the development of TIS's. VDOT provides traffic impact analysis regulations (24 VAC 30-155) to enhance land planning and development review within the state of Virginia. 24 VAC 30-155-60 contains specific information regarding a VDOT Traffic Impact Study/Statement (VTIS). The VDOT Administrative Guidelines for the Traffic Impact Analysis Regulations provides guidance on the application of the traffic analysis regulations and is attached to this letter report for reference as Exhibit A. The VDOT Checklist for the Evaluation of Submitted Traffic Impact Analyses was used to summarize what elements of the TIS were deemed necessary and whether or not the TIS provided those necessary elements. A copy of the completed Checklist is attached to this letter as Exhibit B. During the review of the HopeTree TIS prepared by Balzer & Associates, M&C referred to their general knowledge of the "ITE industry standard methodology" and the "specific criteria required by VDOT" in determining whether or not the TIS was in general conformance with these industry standard and VDOT practices. A tabulated summary of our Comments is listed below in italics. When the comment identifies a concern or deficiency, a Recommended Action is included in **bold** text:

Mr. William Simpson, Jr., PE HopeTree Traffic Study Review 12/20/23 Page 2 of 4

Comment 1: The proposed development is a rezoning of approximately 62 acres of land located along Red Lane in the City of Salem and is proposed as a mixed-use development consisting of single family detached housing, multi-family housing, hotel use, general office use, and retail (restaurant) use. Since the proposed development is a mixed-use development, the study does not qualify as a low volume road submission as defined in the **VDOT Traffic Impact Analysis Regulations** (must be residential only). The "Required Elements of a Traffic Impact Analysis" table as depicted on pages 46-49 of the **Administrative Guidelines** (see Exhibit A) was used in determining conformity with VDOT and standard practices. The unadjusted trip generation contained in the TIS prepared by Balzar & Associates identifies 286 site-generated AM peak hours trips and 312 site-generated PM peak hour trips for the proposed development. As such, the "Less than 500" column in the above-referenced table was used to define the necessary elements of the study.

Recommended Action: None.

Comment 2: Page 1 of the Balzar-prepared TIS identifies the study area intersections (indicated as discussed with the City of Salem) as Red Lane at East Carrollton Avenue and East Carrollton Avenue at North Broad Street.

Recommended Action: Documentation should be provided that shows what conversations were had and what decisions were agreed upon with the City. The defined study area of only two intersections seems insufficient considering the scope of the proposed development, the location of the proposed development, the multiple access points to the development, and the existing transportation infrastructure surrounding the development. At a minimum, along with the two intersections identified above, all existing access points should be included in the study area as well as the intersection of East Carrollton Avenue at Mt. Vernon Lane since this intersection is located in-between the two identified study intersections and serves as an access point to the development. Further intersections for consideration include Mt. Vernon Lane at Red Lane and Printer's Lane at Red Lane. The applicant should provide documentation justifying the limited study area or revise the TIS to include an expanded study area as described above.

Comment 3: Page 3 of the Balzar-prepared TIS indicates that, among other things, the study was undertaken to determine the impacts to level of service and **queue lengths** at the existing intersections. Page 15 of the study includes tabular results of level of service (LOS) and delay (control delay) for the two study intersections but does not include any queue length results.

Recommended Action: The summarized capacity analyses results should include tabulated results of the Synchro 95th percentile queue as well as the SimTraffic max queue or discussion should be included as to the results of the queue length analyses.

Comment 4: The traffic volumes on Figure 1 (existing peak hour turning movement counts) match the raw turning movement count data included in Appendix C of the Balzar-prepared TIS. The use of a 1.5% growth rate over a period of 5 years (to achieve the background year of 2028) seems reasonable and the traffic volumes on Figure 2 (2028 turning movement counts) appear to be correctly calculated.

Recommended Action: None.

Comment 5: Section 4. Trip Generation of the Balzar-prepared TIS provides information related to the trips expected to be generated by the development as well as information on potential trip reduction due to the mixed-use nature of the development (internal capture) and due to the walkable aspect of the proposed development. The unadjusted trips presented in Table 2: Site Generated Traffic on page 8 of the TIS seem reasonable. The ITE Trip Generation Manual and Handbook contains methodology for the application of trip reductions for multi-use developments. In addition, VDOT provides an alternative trip generation methodology for mixed use developments (see page 43 of the

Mr. William Simpson, Jr., PE HopeTree Traffic Study Review 12/20/23 Page 3 of 4

VDOT Administrative Guidelines for Traffic Impact Analysis Regulations in Exhibit A attached to this letter report). Page 9 of the Balzar-prepared TIS applies a flat 25% reduction to the trip generated values presented in Table 1. While this may or may not be a reasonable reduction to apply, it is unclear how this 25% number was realized.

Recommended Action: The TIA should employ the use of either the ITE internal capture trip reduction methodology or the VDOT alternative trip generation methodology to achieve the appropriate trip reduction and document how the reduction numbers are obtained.

Comment 6: Section 5. Site Traffic Distribution and Assignment describes how traffic was distributed to the various existing and proposed access points for the development. Figures 3 and 4 identify 8 different access points which seems excessive for a development of this magnitude.

Recommended Action: The applicant should have discussions with the City of Salem and VDOT regarding the locations of proposed access points to serve the development. If those discussions have already taken place, documentation of those discussions and decisions agreed upon should be provided. While it is true that the multiple access points will "disperse traffic and efficiently distribute vehicles to the adjacent road system" as stated on page 10 of the Balzar-prepared TIS, having multiple access points introduces additional potential conflict points on the existing transportation infrastructure and is counter-productive to modern access management techniques. Generally, proposed access points should be kept to the minimum required to adequately serve the proposed development in an efficient and safe manner. The applicant should consider consolidation of some of the proposed access points or provide documentation as to why this is not feasible.

Comment 7: Section 7. Turn Lane Warrants of the Balzar-prepared TIS contains a summary of the results for analyses of left and right turn lanes at the study intersections. However, analyses were not provided for the left and right turn lanes at the intersection of East Carrollton Avenue at Red Lane (currently a study intersection) or at the intersection of East Carrollton Avenue at Mt. Vernon Lane. Recommended Action: Additional analyses should be performed at the above-mentioned intersections at a minimum and potentially more intersections if the access points to the development are consolidated and/or if either the City or VDOT expand the study area.

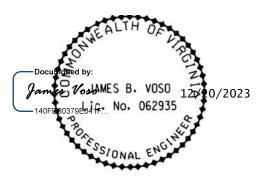
Comment 8: Section 8. Conclusions of the Balzar-prepared TIS concludes that no improvements are recommended to the existing transportation infrastructure as a result of this proposed development.

Recommended Action: Pending the answers provided to the above comments and the further discussions the applicant may need to have with the City and/or VDOT, the Conclusions Section may need to be rewritten to include recommended mitigation improvements.

Mr. William Simpson, Jr., PE HopeTree Traffic Study Review 12/20/23 Page 4 of 4

If any additional information is needed on this subject at this time, please feel free to contact me directly via email at jbvoso@matternandcraig.com or by telephone at 828-254-2201. Thank you for the opportunity to be of assistance to the City of Salem.

Sincerely, Mattern & Craig



James B. Voso, PE Traffic Engineer

Attachments

CHAPTER 155

TRAFFIC IMPACT ANALYSIS REGULATIONS

24VAC30-155-10. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Floor area ratio" means the ratio of the total floor area of a building or buildings on a parcel to the size of the parcel where the building or buildings are located.

"Local traffic impact statement" means a traffic impact statement accepted or prepared by a locality pursuant to its land development approval process and whose requirements regarding content are set out in the locality's ordinances or published policies, if such ordinances or policies have been reviewed and certified by VDOT as requiring acceptable standards of preparation and providing sufficient information to determine the current and future impacts of development proposals.

"Locality" means any local government, pursuant to § 15.2-2223 of the Code of Virginia, that must prepare and recommend a comprehensive plan for the physical development of the territory within its jurisdiction.

"Network addition" means a group of interconnected street segments and intersections shown in a plan of development that is connected to the state highway system and meets the requirements of the Secondary Street Acceptance Requirements (24VAC30-92).

"Pedestrian facility coverage" means the ratio of: (length of pedestrian facilities, such as sidewalks, foot paths, and multiuse trails, along both sides of a roadway) divided by (length of roadway multiplied by two).

"Receipt" means the date on which a proposal or request for a meeting is first in the possession of VDOT or a locality or an agent thereof, as applicable.

"Redevelopment site" means any existing use that generates traffic and is intended to be developed as a different or denser land use.

"Service level" means a measure of the quality, level or comfort of a service calculated using methodologies approved by VDOT.

"Small area plan" means a plan of development for multiple contiguous properties that guides land use, zoning, transportation, urban design, open space, and capital improvements at a high level of detail within an urban development area or for a transit-oriented development that is at least 1/2 square mile in size unless otherwise approved by VDOT due to proximity to existing moderate to high density developments. A small area plan shall include the following: (i) densities of at least four residential units per acre and at least a floor area ratio of 0.4 or some proportional combination thereof; (ii) mixed-use neighborhoods, including mixed housing types and integration of residential, office, and retail development; (iii) reduction of front and side yard building setbacks; and (iv) pedestrian-friendly road design and connectivity of road and pedestrian networks.

"State-controlled highway" means a highway in Virginia that is part of the interstate, primary, or secondary systems of state highways and that is maintained by the state under the direction and supervision of the Commonwealth Transportation Commissioner. Highways for which localities receive maintenance payments pursuant to §§ 33.1-23.5:1 and 33.1-41.1 of the Code of Virginia and highways maintained by VDOT in accordance with §§ 33.1-31, 33.1-32, 33.1-33, and 33.1-68 of the Code of Virginia are not considered state-controlled highways for the purposes of determining whether a specific land development proposal package must be submitted to meet the requirements of this regulation.

"Traffic impact statement" means the document prepared in accordance with best professional practice and standards that assess the impact of a proposed development on the transportation system and recommends improvements to lessen or negate those impacts.

"Transit-oriented development" means an area of commercial and residential development at moderate to high densities within 1/2 mile of a station for heavy rail, light rail, commuter rail, or bus rapid transit transportation and includes the following: (i) densities of at least four residential units per acre and at least a floor area ratio of 0.4 or some proportional combination thereof; (ii) mixed-use neighborhoods, including mixed housing types and integration of residential, office, and retail development; (iii) reduction of front and side yard building setbacks; and (iv) pedestrian-friendly road design and connectivity of road and pedestrian networks.

"Transportation demand management" means a combination of measures that reduce vehicle trip generation and improve transportation system efficiency by altering demand, including but not limited to the following: expanded transit service, employer-provided transit benefits, bicycle

and pedestrian investments, ridesharing, staggered work hours, telecommuting, and parking management including parking pricing.

"Urban development area" means an area designated on a local comprehensive plan pursuant to § 15.2-2223.1 of the Code of Virginia that includes the following: (i) densities of at least four residential units per acre and at least a floor area ratio of 0.4 or some proportional combination thereof; (ii) mixed-use neighborhoods, including mixed housing types and integration of residential, office, and retail development; (iii) reduction of front and side yard building setbacks; and (iv) pedestrian-friendly road design and connectivity of road and pedestrian networks.

"VDOT" means the Virginia Department of Transportation, the Commissioner of Highways, or a designee.

"VDOT traffic impact statement" means a traffic impact statement prepared pursuant to 24VAC30-155-60.

24VAC30-155-20. Authority.

Section 15.2-2222.1 of the Code of Virginia requires localities to submit comprehensive plans and amendments to comprehensive plans that will substantially affect transportation on state-controlled highways to VDOT in order for the agency to review and provide comments on the impact of the item submitted. This section also requires localities to submit traffic impact statements along with proposed rezonings that will substantially affect transportation on state-controlled highways to VDOT for comment by the agency. Chapter 527 of the 2006 Acts of Assembly directs VDOT to promulgate regulations for the implementation of these requirements.

24VAC30-155-30. Comprehensive plan and comprehensive plan amendment.

A. Plan and amendment submittal. Prior to adoption of any comprehensive plan pursuant to § 15.2-2223 of the Code of Virginia, any part of a comprehensive plan pursuant to § 15.2-2228 of the Code of Virginia, or any amendment to any comprehensive plan as described in § 15.2-2229 of the Code of Virginia, including small area plans, if required by this section of this chapter, the locality shall submit such plan or amendment to VDOT for review and comment, such submission should take place at least 100 days prior to anticipated final action by the locality. The Virginia Department of Transportation shall, upon request, provide localities with technical assistance in preparing the transportation plan of the comprehensive plan. The

comprehensive plan or comprehensive plan amendment package shall be submitted to VDOT if it is reasonably anticipated to substantially affect transportation on state controlled highways. Substantially affect, for the purposes of comprehensive plans, includes substantial changes or impacts to the existing transportation network. For the purposes of this section, a substantial impact shall be defined as a change that would allow the generation of 5,000 additional vehicle trips per day on state-controlled highways compared to the existing comprehensive plan, assuming the highest density of permissible use in accordance with the Institute of Transportation Engineers Trip Generation Handbook (see 24VAC30-155-100) or, subject to the approval of VDOT, the regional model as adopted by the local Metropolitan Planning Organization, and substantial change shall include those changes that materially alter future transportation infrastructure, travel patterns, or the ability to improve future transportation facilities on state-controlled highways.

- **B. Required elements.** The submission by the locality to VDOT shall contain sufficient information so that VDOT may evaluate the system of new and expanded transportation facilities, outlined in the transportation plan, that are needed to support the current and planned development of the territory covered by the plan. In order to conduct this evaluation, the package submitted to VDOT shall contain the following items:
 - 1. For a comprehensive plan or a transportation plan, the locality shall provide one paper and one electronic copy of the following:
 - a. A cover sheet, containing:
 - (1) Contact information for the locality, and
 - (2) Summary of major changes made to the comprehensive plan or transportation plan;
 - b. The proposed comprehensive plan or transportation plan, and the following elements:
 - (1) Inventory an inventory (written or graphic) of the existing transportation network, which shall include at a minimum all roadways within the Federal Aid system.
 - (2) Assumptions planning assumptions shall be detailed, since these assumptions directly influence the demand placed on the transportation system. Population growth, employment growth, location of critical infrastructure such as water and sewer facilities, among others, are examples of planning assumptions that may be addressed.

- (3) Needs assessment written or graphic evaluation of the transportation system's current and projected performance and conditions. The needs assessment identifies specific deficiencies.
- (4) Recommendations proposed improvements or additions to the transportation infrastructure. Recommendations should be specific so that the need, location and nature of the proposed improvements are clear and understandable. Localities are encouraged to include pedestrian, bicycle, transit, rail and other multimodal recommendations as they deem appropriate. The transportation plan shall include a map showing road and transportation improvements, taking into account the current and future needs of residents in the locality while considering the current and future needs of the planning district within which the locality is situated. Recommended improvements shall include cost estimates as available from VDOT.
- 2. For an amendment to a comprehensive plan or transportation plan, the locality shall provide one paper and one electronic copy of the following:
 - a. A cover sheet, containing:
 - (1) Contact information for the locality;
 - (2) Summary of proposed amendment or amendments to the comprehensive plan or transportation plan; and
 - (3) Overview of reasoning and purpose for amendments.
 - b. Application forms and documentation presented to or prepared by the local jurisdiction,
 - c. Associated maps or narratives that depict and detail the amendment under consideration,
 - d. Any changes to the planning assumptions associated with the amendment,
 - e. Local assessment of the potential impacts the amendment may have on the transportation system, and
 - f. Those elements identified in subdivision 1 b of this subsection that VDOT determines are needed in order to review and comment on impacts to state-controlled highways.
- **C. Small area plans for urban development areas and transit oriented developments.** A locality that develops a small area plan for all or a portion of an urban development area or

transit-oriented development and corresponding amendments to their comprehensive plan, as described in § 15.2-2229 of the Code of Virginia, that will have a substantial affect on the state transportation network pursuant to this section of the regulation, may in lieu of submitting a comprehensive plan amendment package as required under subsection B of this section submit a small area plan package.

The small area plan package submitted by the locality to VDOT shall contain sufficient information and data so that VDOT may determine the location of the area impacted by the small area plan, its size, its impact on state-controlled highways, and the methodology and assumptions used in the analysis of the impact. Submittal of an incomplete small area plan package shall be considered deficient in meeting the submission requirements of § 15.2-2222.1 of the Code of Virginia and shall be returned to the locality and the applicant, if applicable, identifying the deficiencies noted. A small area plan package submitted to VDOT shall contain the following items:

- 1. A cover sheet containing:
 - a. Contact information for locality;
 - b. Small area plan location, highways and transit facilities adjacent to site, and parcel number or numbers;
 - c. Proposal summary with development names, size, and proposed zoning;
- 2. A VDOT traffic impact statement prepared in accordance with 24VAC30-155-60; and
- 3. A plan of development for the area encompassed by the small area plan.
- **D. Review process.** VDOT may pursuant to § 15.2-2222.1 of the Code of Virginia request a meeting with the locality to discuss the plan or amendment. The request must be made within 30 days of receipt of the proposal. VDOT must provide written comments to the locality within 90 days of the receipt of the plan or plan amendment or by such later deadline as may be agreed to by the parties. VDOT will conduct its review and provide official comments to the locality for inclusion in the official public record of the locality. VDOT shall also make such comments available to the public. Nothing in this section shall prohibit a locality from acting on a comprehensive plan or plan amendment if VDOT's comments on the submission have not been received within the timelines in this section.

E. Concurrent consideration. For the purposes of this regulation, when a related comprehensive plan or comprehensive plan amendment and a rezoning proposal that cover the same geographical area are being considered concurrently by a locality, only a rezoning package as required under 24VAC30-155-40 shall be prepared and provided to VDOT for review.

24VAC30-155-40. Rezoning.

A. Proposal submittal. The locality shall submit a package to VDOT within 10 business days of receipt of a complete application for a rezoning proposal if the proposal substantially affects transportation on state-controlled highways. All trip generation calculations used for the purposes of determining if a proposal meets the criteria shall be based upon the rates or equations published in the Institute of Transportation Engineers Trip Generation (see 24VAC30-155-100), and shall not be reduced through internal capture rates. For redevelopment sites, trips currently generated by existing development that will be removed may be deducted from the total site trips that are generated by the proposed land use. However, no submission shall be required under this section if the rezoning proposal consists of no changes in allowable land use. Furthermore, no submission shall be required if the rezoning proposal results in lower maximum daily trip generation and no increase in maximum trip generation for AM Peak Hour of the adjacent street, PM Peak Hour of the adjacent street, and Weekend Peak Hour when compared to the hourly trip generation of land uses allowed by right under the current zoning, excepting governmental uses such as schools and libraries.

For the purposes of this section, a rezoning proposal shall substantially affect transportation on state-controlled highways if it meets or exceeds one or more of the following trip generation criteria:

1. Within a jurisdiction in which VDOT has maintenance responsibility for the secondary highway system, if the proposal generates more than 5,000 vehicle trips per day at the site's connection to a state-controlled highway. For a site that does not have an entrance onto a state-controlled highway, the site's connection is assumed to be wherever the road network that the site connects with attaches to a state-controlled highway. In cases where the site has multiple entrances to highways, volumes on all entrances shall be combined for the purposes of this determination:

- 2. Within a jurisdiction in which VDOT does not have maintenance responsibility for the local highway system, if the proposal generates more than 5,000 vehicle trips per day and whose nearest property line is within 3,000 feet, measured along public roads or streets, of a connection to a state-controlled highway; or
- 3. The proposal for residential rezoning generates more than 400 daily vehicle trips on a state-controlled highway and, once the site generated trips are distributed to the receiving highway, the proposal's vehicle trips on the highway exceed the daily traffic volume such highway presently carries. For the purposes of determining whether a proposal must be submitted to VDOT, the traffic carried on the state-controlled highway shall be assumed to be the most recently published amount measured in the last traffic count conducted by VDOT or the locality on that highway. In cases where the site has access to multiple highways, each receiving highway shall be evaluated individually for the purposes of this determination.
- **B. Required proposal elements.** The package submitted by the locality to VDOT shall contain sufficient information and data so that VDOT may determine the location of the rezoning, its size, its affect on state-controlled highways, and methodology and assumptions used in the analysis of the affect. Submittal of an incomplete package shall be considered deficient in meeting the submission requirements of § 15.2-2222.1 of the Code of Virginia and shall be returned to the locality and the applicant, if applicable, identifying the deficiencies noted. A package submitted to VDOT shall consist of one paper copy and one electronic copy and include the following items:
 - 1. A cover sheet containing:
 - a. Contact information for locality and developer (or owner) if applicable;
 - b. Rezoning location, highways adjacent to site, and parcel number or numbers;
 - c. Proposal summary with development name, size, and proposed zoning; and
 - d. A statement regarding the proposal's compliance with the comprehensive plan.
 - 2. A local traffic impact statement or, if the local requirements for traffic statements contained in ordinances or policies have not been certified by VDOT, a VDOT traffic impact statement.
 - 3. A concept plan of the proposed development.

C. Rezoning proposals associated with small area plans.

- 1. A traffic impact statement prepared for a small area plan pursuant to 24VAC30-155-30 C, or initiated for a small area plan at the request of a locality prior to the effective date of that subsection and that study contains substantially the same elements as those of a VDOT traffic impact statement, shall serve as the traffic impact statement required pursuant to this section for any rezoning proposals developed in furtherance of the adopted small area plan and related comprehensive plan amendments provided the following:
 - a. That the small area plan package is accompanied by a cover letter that includes a statement that the assumptions made in the traffic impact statement prepared for the small area plan remain generally valid.
 - b. That the following are accurate:
 - (1) The rezoning proposal is in substantial conformance with the adopted small area plan. A deviation in density must be greater than 10% to be considered no longer in substantial conformance with the adopted small area plan.
 - (2) The character and volume of the trip generation by the proposed uses are similar to those proposed by the small area plan.
 - (3) All other assumptions made in the traffic impact statement prepared for the small area plan remain generally valid.
- 2. In instances where the assumptions made in the traffic impact statement prepared for the small area plan are no longer valid, the traffic impact statement may be updated. If the traffic impact statement is updated, it shall serve as the traffic impact statement required pursuant to this section for any rezoning proposals developed in furtherance of the adopted small area plan and related comprehensive plan amendments.
- **D. Review process.** After formal submission of a rezoning proposal for review, VDOT may, pursuant to § 15.2-2222.1 of the Code of Virginia, request a meeting with the locality and rezoning applicant to discuss potential modifications to the proposal to address any concerns or deficiencies. The request must be made within 45 days of receipt by VDOT of the proposal. VDOT must provide written comments to the locality and the rezoning applicant_within 45 days of VDOT's receipt of the proposal if no meeting is scheduled or has been requested or within 120

days of the receipt of the proposal otherwise. VDOT shall not reject or require resubmission, if the package has been prepared in accordance with best professional practice and substantially documents the expected impacts of the proposal. If VDOT determines that the package has not been prepared in accordance with best professional practice, fails to substantially document the expected impacts of the proposal, or if the submission is substantially incomplete, VDOT may request of the applicant, in writing or at the above mentioned meeting, modifications to address concerns. If the concerns are not adequately addressed within 30 days of the transmission of such concerns, VDOT may require resubmission. VDOT shall conduct its review and provide official comments to the locality for inclusion in the official public record. The Department's comments on the proposed rezoning shall be based upon the comprehensive plan, regulations and guidelines of the Department, engineering and design considerations, adopted regional or statewide plans, and short and long term traffic impacts on and off site. VDOT shall also make such comments available to the public. Nothing in this section shall prohibit a locality from acting on a rezoning proposal if VDOT's comments on the submission have not been received within the timelines in this section.

24VAC30-155-50. (Repealed.)

24VAC30-155-60. VDOT traffic impact statement.

A. A VDOT traffic impact statement (VTIS) assesses the impact of a proposed development on the transportation system and recommends improvements to lessen or negate those impacts. It shall (i) identify any traffic issues associated with access from the site to the existing transportation network, (ii) outline solutions to potential problems, (iii) address the sufficiency of the future transportation network, and (iv) present improvements to be incorporated into the proposed development.

If a VTIS is required, data collection shall be by the locality, developer, or owner, as determined by the locality and the locality shall prepare or have the developer or owner prepare the VTIS. If the locality prepares the VTIS it shall provide a copy of the complete VTIS to the applicant when one is provided to VDOT. The completed VTIS shall be submitted to VDOT.

The data and analysis contained in the VTIS shall be organized and presented in a manner acceptable to VDOT and consistent with this regulation.

B. Scope of work meeting.

- 1. For proposals that generate less than 1,000 vehicle trips per peak hour of the generator representatives of the locality, the applicant, or the locality and the applicant may request a scope of work meeting with VDOT to discuss the required elements of a VTIS for any project and VDOT shall reply to such request within 30 days of its receipt of such a request and provide a date that is no more than 60 days from such receipt, time and location for such a scope of work meeting to both the locality and the applicant, if applicable.
- 2. For proposals that generate 1,000 or more vehicle trips per peak hour of the generator representatives of the locality and applicant, if applicable, shall hold a scope of work meeting with VDOT to discuss the required elements of a VTIS. Once a locality or applicant has contacted VDOT regarding the scheduling of a scope of work meeting, VDOT shall reply to both the locality and the applicant, if applicable, within 30 days of such contact_and provide a date that is no more than 60 days from such contact, time and location for such a meeting.

At a scope of work meeting pursuant to this section, the locality, the applicant and VDOT shall review the elements, methodology and assumptions to be used in the preparation of the VTIS, and identify any other related local requirements adopted pursuant to law. The results of the initial scoping meeting may be adjusted in accordance with sound professional judgment and the requirements of this regulation if agreed upon by VDOT, the locality, and applicant, if applicable.

- **C. Required elements.** The required elements and scope of a VTIS are dependent upon the scale and potential impact of the specific development proposal being addressed by the VTIS as determined by VDOT in its sole discretion.
 - 1. At a minimum, the VTIS shall include the elements shown in the table below. The site generated peak hour trips in the table below shall be based upon the gross vehicle trip generation of the site less internal capture and reductions, if applicable. When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, the VTIS shall estimate multimodal trips. All distances in the table below shall be measured along roads or streets.

	Site Generated Peak Hour Trips					
Item	Less than 500	500 to 999	1,000 or more			
Background information						
List of all nonexistent transportation improvements assumed in the analysis	Required	Required	Required			
Map of site location, description of the parcel, general terrain features, and location within the jurisdiction and region.	Required	Required	Required			
Description of geographic scope/ limits of study area.	Within 2,000 feet of site and any roadway on which 50 or more of the new peak hour vehicle trips generated by the proposal are distributed – not to exceed one mile	Within 2,000 feet of site and any roadway on which 10% or more of the new vehicle trips generated by the proposal are distributed – not to exceed two miles	To be determined by VDOT in consultation with the locality			
Plan at an engineering scale of the existing and proposed site uses.	Required	Required	Required			
Description and map or diagram of nearby uses, including parcel zoning.	Required	Required	Required			
Description and map or diagram of existing roadways.	Required	Required	Required			
Description and map or diagram of programmed improvements to roadways, intersections, and other transportation facilities within the study area.	Required	Required	Required			
Analysis of Existing Conditions						
Collected daily and peak hour of the generator traffic volumes, tabulated and presented on diagrams with counts provided in an appendix.	Required	Required	Required			
Analyses for intersections and roadways identified by VDOT. Delay and Level of Service (LOS) are tabulated and LOS is presented on diagrams for each lane group.	Required	Required	Required			

When the type of development proposed would indicate significant potential for walking, bike or transit trips either on - or off - site, analyses of pedestrian and bicycle facilities, and bus route or routes and segment or segments, tabulated and presented on diagrams, if facilities or routes exist.	Within 2,000 feet of site	Within 2,000 feet of site	To be determined by VDOT in consultation with the locality
Speed Study	If requested by VDOT	If requested by VDOT	If requested by VDOT
Crash history near site	If requested by VDOT	If requested by VDOT	If requested by VDOT
Sight distance	If requested by VDOT	If requested by VDOT	If requested by VDOT
Analysis of Future Conditions without Development			
Description of and justification for the method and assumptions used to forecast future traffic volumes.	Required	Required	Required
Analyses for intersections and roadways as identified by VDOT. Delay and Level of Service (LOS) are tabulated and LOS is presented on diagrams for each lane group.	Required	Required	Required
When the type of development proposed would indicate significant potential for walking, bike or transit trips either on or off - site, analyses of pedestrian and bicycle facilities, and bus route or routes and segment or segments tabulated and presented on diagrams, if facilities or routes exist or are planned.	Within 2,000 feet of site	Within 2,000 feet of site	To be determined by VDOT in consultation with the locality at the scope of work meeting
Trip Generation			
Site trip generation, with tabulated data, broken out by analysis year for multiphase developments, and including justification for deviations from ITE rates, if appropriate.	Required	Required	Required
Description and justification of internal capture reductions for mixed use developments and pass-by trip reductions, if appropriate, including table of calculations used.	Required	Required	Required

Site Traffic Distribution and Assignment			
Description of methodology used to distribute trips, with supporting data.	Required	Required	Required
Description of the direction of approach for site generated traffic and diagrams showing the traffic assignment to the road network serving the site for the appropriate time periods.	Required	Required	Required
Analysis of Future Conditions With Development			
Forecast daily and peak hour of the generator traffic volumes on the highway network in the study area, site entrances and internal roadways, tabulated and presented on diagrams.	Future background + site generated traffic, at each expected phase and at build - out or six years after start, whichever is later	Future background + site generated traffic, at each expected phase, at build - out, and six years after build - out, which may be extended or reduced by VDOT in consultation with the locality	At a minimum the future background + site generated traffic, at each expected phase, at build - out, and six years after build - out; may be extended by VDOT in consultation with the locality
Analyses for intersections and roadways identified by VDOT. Delay and Level of Service (LOS) are tabulated and LOS presented on diagrams for each lane group.	Required	Required	Required
When the type of development proposed would indicate significant potential for walking, bike or transit trips either on - or off - site, analyses of pedestrian and bicycle facilities, and bus route or routes and segment or segments tabulated and presented on diagrams, if facilities or routes exist or are planned.	Within 2,000 feet of site	Within 2,000 feet of site	To be determined by VDOT in consultation with the locality
Recommended Improvements			
Description and diagram of the location, nature, and extent of proposed improvements, with preliminary cost estimates as available from VDOT.	Required	Required	Required

Description of methodology used to calculate the effects of travel demand management (TDM) measures, if proposed, with supporting data.	Required if TDM proposed	Required if TDM proposed	Required if TDM proposed
Analyses for all proposed and modified intersections in the study area under the forecast and site traffic. Delay, and Level of Service (LOS) are tabulated and LOS presented on diagrams for each lane group. For intersections expected to be signalized, MUTCD Signal Warrant analysis or ITE Manual for Traffic Signal Design, as determined by VDOT, presented in tabular form.	Required	Required	Required
When the type of development proposed would indicate significant potential for walking, bike or transit trips either on - or off - site, analyses of pedestrian and bicycle facilities, and bus route or routes and segment or segments tabulated and presented on diagrams, if facilities or routes exist or are planned.	Within 2,000 feet of site	Within 2,000 feet of site	To be determined by VDOT in consultation with the locality
Conclusions			
Clear, concise description of the study findings.	Required	Required	Required

Notwithstanding the geographic scope noted above, the geographic scope of the study noted above may be reduced or enlarged based upon layout of the local transportation network, the geographical size of the development, and the traffic volume on the existing network, as determined by VDOT in consultation with the locality and the applicant, if applicable. Typically, analysis will be conducted for any roadway on which the additional trips generated by the proposal have a materially detrimental impact on traffic conditions. The analysis presented in the VTIS need not include all roadway and roadway segments located within the geographic scope of the study as determined by VDOT.

2. A VTIS for a development proposal that only meets the low volume road submission criterion (24VAC30-155-40 A 1 c and 24VAC30-155-50 A 1 c 3) shall, at a minimum, consist of the following elements, unless otherwise directed by VDOT.

- a. All elements contained in the Background Information portion of the above table, except the geographic scope/limits of study area is limited to the highway fronting the proposed development and the closest intersection, in each direction if applicable, of that highway with a highway that has an average daily traffic volume higher than the fronting highway.
- b. A roadway safety inventory study of the roadway segment or segments between the site entrance to the nearest intersections with the higher traffic volume highways, to include such elements as, but not limited to, speed limit, existing warning signs, pavement and shoulder type, pavement and shoulder width, intersection sight distances, and safe horizontal curve speeds.
- c. Daily and peak hour traffic volumes presented on diagrams, with counts provided in an appendix, for the fronting highway at the site, at the highway's intersections with the higher volume highway, and for the higher volume highways at their intersection with the fronting highway.
- d. All relevant elements contained in the Trip Generation portion of the above table.
- e. Projected daily and peak hour of the generator traffic volumes assuming build-out of the proposal, presented on diagrams for the receiving highway at the site, at the highway's intersection with the higher volume highways, and for the higher volume highways at their intersections with the receiving highway.
- f. Delay and level of service analysis for the intersections of the receiving highway with the higher volume highways.
- g. A comparison of the existing geometrics of the fronting highway under proposed buildout traffic conditions with the geometric standards, based upon functional classification and volume, contained in the Road Design Manual (see 24VAC30-155-100).
- 3. A VTIS for a rezoning proposal may be prepared in accordance with the "Less than 500 Site Generated Peak Hour Trips" category in the table above, regardless of actual projected trip generation, provided that:
 - a. The rezoning proposal is in conformance with a locality's adopted comprehensive plan that was reviewed in accordance with 24VAC30-155-30; and

- b. The review of the comprehensive plan included the submission to VDOT of a technical evaluation of the traffic impacts for anticipated development based on the future land use policies and map.
- **D. Methodology and standard assumptions.** A VTIS shall be prepared based upon methodology and assumptions noted below or as may be agreed upon by VDOT based upon the results of a scope of work meeting held by VDOT pursuant to this section.
 - **1. Data collection.** Preparers shall collect traffic data in accordance with the identified study area. The count data shall include at a minimum, weekday 24-hour counts, and directional turning movement counts during AM and PM peak times of the day. The 24-hour counts shall include vehicle classification counts. With approval of VDOT, data collected by the transportation professional preparer within the last 24 months may be used, likewise for data from the VDOT count program.

The preparer shall monitor traffic operations during data collection to ensure extraneous events such as vehicle crashes or special event traffic do not affect integrity of count data. Preparers collecting data for utilization in traffic impact studies shall normally avoid data collection during the following instances:

- a. Holidays or times of the year when the traffic patterns are deemed to be unrepresentative of typical conditions, unless required by VDOT or the locality, or both.
- b. Summer months if school or schools in proximity.
- c. Fridays and weekends unless required by VDOT or the locality, or both.
- d. Other times of the year contingent upon existing adjacent land use activities.
- e. During times of inclement weather.
- **2. Trip generation.** Estimates of trip generation by a proposed development shall be prepared using the Institute of Transportation Engineers Trip Generation (see 24VAC30-155-100), unless VDOT agrees to allow the use of alternate trip generation rates based upon alternate published guides or local trip generation studies. VDOT shall at all times after July 1, 2011, have at least one non-ITE trip generation methodology or alternative rate approved for the use in preparation of small area plan traffic impact statements pursuant to 24VAC30-155-30 C that recognizes the benefits of reduced vehicle trip generation and vehicle miles traveled from developments that

meet the criteria for a small area plan pursuant to this regulation. Such alternate methodology or rate can be modified based upon local factors if agreed to at a scoping meeting. Rezoning proposals shall assume the highest vehicle trip generating use allowable under the proposed zoning classification. In determining which trip generation process (equation or rate) may be used, the preparer shall follow the guidance presented in the Trip Generation Handbook – an ITE Proposed Recommended Practice (see 24VAC30-155-100), which is summarized here, except rates may be utilized if the criteria for the use of regression equations are not met. Regression equations to calculate trips as a result of development shall be utilized, provided the following is true:

- a. Independent variable falls within range of data; and
- b. Either the data plot has at least 20 points; or
- c. R² is greater than 0.75, equation falls within data cluster in plot and standard deviation greater than 110% of weighted average rate.

If the above criteria are not met, then the preparer can use average trip rates, though if the following do not apply a rate based upon the study of similar local sites should be considered:

- d. At least three data points exist;
- e. Standard deviation less than 110% of weighted average rate; and
- f. Weighted average rate falls within data cluster in plot.

3. Internal capture and pass-by trips.

a. Internal capture rates consider site trips "captured" within a mixed use development, recognizing that trips from one land use can access another land use within a development without having to access the adjacent street system. Mixed use developments include a combination of residential and nonresidential uses or a combination of nonresidential uses only. Internal capture allows reduction of site trips from adjacent intersections and roadways. For traffic impact statements prepared for small area plans pursuant to 24VAC30-155-30 C the internal capture rate or rates may be based on the non-ITE trip generation methodology approved by VDOT. For ITE-based methodologies, unless otherwise approved by VDOT, the following internal capture rates should be used if appropriate:

- (1) Residential with a mix of nonresidential components use the smaller of 15% of residential or 15% nonresidential trips generated.
- (2) Residential with office use use the smaller of 5.0% of residential or 5.0% of office trips generated.
- (3) Residential with retail use for AM peak hour, use the smaller of 5.0% residential or 5.0% retail trips generated; for PM peak hour, use the smaller of 10% residential or 10% retail trips generated; for 24-hour traffic, use the smaller of 15% residential or 15% retail trips generated.
- (4) Hotel/motel with office use use 15% of hotel/motel trips, unless the overall volume of the office traffic is more than the overall volume of hotel/motel traffic use in which case use the smaller of 10% of the hotel/motel traffic or the office traffic.
- (5) Multiuse development with more than five million square feet of office and retail internal capture rate should be determined in consultation with and approval of VDOT.
- (6) Office with retail use use the smaller of 5% office or retail trips generated.
- (7) Some combination of the above, if approved by VDOT.
- b. Pass-by trip reductions consider site trips drawn from the existing traffic stream on an adjacent street, recognizing that trips drawn to a site would otherwise already traverse the adjacent street regardless of existence of the site. Pass-by trip reductions allow a percentage reduction in the forecast of trips otherwise added to the adjacent street from the proposed development. The reduction applies only to volumes on adjacent streets, not to ingress or egress volumes at entrances serving the proposed site. Unless otherwise approved by VDOT, the pass-by rates utilized shall be those reported in Trip Generation Handbook, Second Edition an ITE Proposed Recommended Practice (see 24VAC30-155-100). For traffic impact statements prepared for small area plans pursuant to 24VAC30-155-30 C, the pass-by trip reductions may be based on the non-ITE trip generation methodology approved by VDOT.
- **4. Trip distribution.** In the absence of more detailed information, trip distribution shall be in accordance with logical regional travel patterns as suggested by existing highway directional split and intersection movements or population and destination site distribution and shall

recognize the effects of increased street connectivity if such streets meet the requirements of the Secondary Street Acceptance Requirements (see 24VAC30-155-100). If more detailed information is available from trip origin/destination studies, marketing studies, or regional planning models, this may be used to distribute trips upon approval of VDOT.

- **5. Planning horizon.** In general, the analysis years shall be related to (i) the opening date of the proposed development, (ii) build-out of major phases of a multiyear development, (iii) long-range transportation plans, and (iv) other significant transportation network changes. The preparer should establish the planning horizon in consultation with and subject to the acceptance of VDOT.
- **6. Background traffic growth.** Unless directed by VDOT, geometric growth (or compound growth), based upon historical growth rates, shall generally be used for determining future background traffic levels where extensive traffic-count history is available and capacity constraint is not appropriate. This growth rate replicates "natural growth" and is typical for projecting urban growth. Natural growth of traffic can be adjusted consistent with traffic forecasts associated with previously submitted local land development projects within the study area.
- **7. Future conditions.** For the purpose of the VTIS, future conditions shall include background traffic and additional vehicle trips anticipated to be generated by approved but not yet constructed or improved projects.
- 8. Level of service calculation. Level of service (LOS) analysis for highways shall utilize the techniques described in the Highway Capacity Manual (see 24VAC30-155-100). Neither the intersection capacity utilization method nor the percentile delay method may be used in the traffic impact calculations of delay and level of service. Preparers shall consult with VDOT on which traffic analysis software package is to be used to conduct the LOS calculations. The results shall be tabulated and displayed graphically, with levels of service provided for each lane group for each peak period. All data used in the calculations must be provided along with the results of the capacity analysis. Any assumptions made that deviate from the programmed defaults must be documented and an explanation provided as to why there was a deviation. Electronic files used for the analysis shall be provided to VDOT as a digital submission (e.g. .hcs, .sy6, .inp, .trf files), along with the printed report. If intersections analyzed are in close proximity to each other so that queuing may be a factor, VDOT may require the inclusion of

an analysis with a micro simulation model. Unless actual on-ground conditions dictate otherwise, preparers should use the following defaults when utilizing the Highway Capacity Software (HCS) or other approved programs when evaluating roadway components:

- a. Terrain choose the appropriate terrain type. Most of the state will be level or rolling, but some areas may qualify for consideration as mountainous.
- b. Twelve-foot wide lanes.
- c. No parking or bus activity unless field conditions include such parking or bus activity or unless the locality has provided VDOT with a written statement of intent for the services to be provided.
- d. Peak hour factor by approach calculate from collected traffic counts (requires at least a peak hour count in 15-minute increments). However, the use of peak hour factors lower than 0.85 shall only be allowed if based upon the average of more than three peak hour counts. For future conditions analysis, unless specific site conditions can be expected to create extreme peak hour factors, default peak hour factors between 0.92 and 1.00 should be used.
- e. Heavy vehicle factor calculate from collected traffic (classification) counts or obtain from VDOT count publications. For future conditions analysis with development traffic, the existing heavy vehicle factor should be adjusted based upon the nature of the traffic being generated by the development.
- f. Area type non-center of business district.

The VTIS shall identify any existing or proposed bicycle and pedestrian accommodation that would be affected by the proposal. For the purposes of this subsection, a bicycle accommodation is defined as on-street bike lanes, paved shoulders of roadways that are not part of the designated traveled way for vehicles, or exclusive and shared off-street bicycle paths.

For the purposes of this subsection, a pedestrian accommodation is defined as sidewalks, intersection treatments and exclusive or shared off-street trails or paths. If significant potential for bicycle or pedestrian trips exists, the VTIS shall include current and future service level analyses at build-out for existing or proposed bicycle and pedestrian accommodations. When the proposal requires or includes improvements or modifications to the roadway, bicycle or pedestrian accommodations, the VTIS shall analyze the impacts of such improvements and

modifications on bicycle and pedestrian accommodations and service levels, and provide recommendations for mitigation of adverse impacts.

The VTIS shall provide analysis for all bus service with routes that have, or will have a station or stop within 2,000 feet of the proposal. The VTIS shall evaluate and discuss potential for increased demand for bus use due to the proposal, addressing whether such increases will result in longer dwell time at stops or increase the need for buses on a route. The quality of service analysis for bus service shall be determined in accordance with the Transit Capacity and Quality of Service Manual (see 24VAC30-155-100). The VTIS shall provide both route and segment quality of service. The VTIS may consider the benefits of dedicated bus lanes for more frequent and rapid service. The VTIS shall provide recommendations for mitigation of adverse impacts where adverse impacts are expected to the quality of service to bus service. If an analysis of pedestrian quality or level of service is required for calculation of the bus quality of service, the preparer shall use a methodology approved by VDOT.

- 9. Trip reduction, and pedestrian and bicycle accommodations. When a proposal meets the criteria listed below, the preparer of the VTIS may reduce the number of vehicle trips generated by the proposal in the VTIS analysis in accordance with this subsection. Notwithstanding the percentages below, the total number of reductions used by a preparer in accordance with this subsection shall not exceed 500 vehicle trips per peak hour of the generator unless otherwise approved by VDOT. The trip reductions for traffic impact statements prepared for small area plans pursuant to 24VAC30-155-30 C may be based on the non-ITE trip generation methodology approved by VDOT and are not subject to limitations or requirements of this subdivision.
 - a. Pedestrian accommodations. For the purposes of this subsection, a pedestrian accommodation is defined as a sidewalk, pedestrian path, or multiuse trail. Where a pedestrian service level of A exists, vehicle trips per peak hour of the generator may be reduced by 4.0% for those portions of the development within a 2,000-foot radius of the connections between the proposed development and the adjoining network. Where a pedestrian service level of B exists, vehicle trips per peak hour of the generator may be reduced by 3.0%; where a pedestrian service level of C exists, vehicle trips per peak hour of the generator may be reduced by 1.5% for the portion of the development noted above. These reductions may only be taken if:

- (1) Pedestrian facility coverage in a 2,000-foot radius of the connections to the proposed development is on or along at least 80% of the road network;
- (2) The pedestrian facilities inside and outside the development provide reasonably direct access to traffic generators; and
- (3) There are at least two of the 10 major land use classifications, as defined in ITE Trip Generation (see 24VAC30-155-100), within the 2,000-foot radius.
- b. Bicycle accommodations. For the purposes of this subsection, a bicycle accommodation is defined as a street with a design speed of 25 MPH or less that carries 400 vehicles per day or less, on-street bike lanes, a pedestrian accommodation, paved shoulders of roadways that are not part of the designated traveled way for vehicles and are at least two feet wide, or exclusive and shared off-street bicycle paths. Where a bicycle service level of A exists, vehicle trips per day may be reduced by 3.0%. Where a bicycle service level of B exists, vehicle trips per day may be reduced by 2.0%. Where a bicycle service level of C exists, vehicle trips per day may be reduced by 1.0%. These reductions may only be taken if:
 - (1) Bicycle accommodations within a 2,000-foot radius of the connections to the proposed development exist on or along at least 80% of the road network;
 - (2) The bicycle accommodations inside and outside the development provide reasonably direct access to traffic generators; and
 - (3) There are at least two of the 10 major land use classifications as defined in ITE Trip Generation (see 24VAC30-155-100), within the 2,000-foot radius.
- **10. Modal split and trip reduction.** All vehicle trip reductions used in the VTIS pursuant to this subsection are subject to the approval of VDOT.
 - a. If a proposal is located within 1/2 mile along roadways, pedestrian or bicycle accommodations of a transit station, excluding bus stops and stations, reasonable vehicle trip reductions of vehicle trips generated by the proposal may be made with approval of VDOT. The preparer shall submit documentation to justify any such vehicle trip reductions used with the VTIS. When a proposal is located more than 1/2 mile but less than two miles from a transit stop, excluding bus stops and stations, with bicycle parking accommodations,

additional bicycle modal split reductions may be utilized. The analysis of capacity of the parking accommodations shall be included in the VTIS when such trip reductions are used.

- b. If a proposal is located within 1/4 mile along roadways, pedestrian or bicycle accommodations of a bus stop or station where the segment and route service levels are C or higher, reasonable vehicle trip reductions of vehicle trips generated by the proposal may be made with the approval of VDOT. The preparer shall submit documentation to justify any such vehicle trip reductions used with the VTIS.
- c. Transit and bus modal split data from similar developments within the geographic scope of the VTIS or one mile of the proposal, whichever is greater, shall be collected if the VTIS vehicle trip reductions are used pursuant to this subsection and similar developments exist within the geographic scope of the VTIS or one mile of the proposal, whichever is greater.
- **11. Signal warrant analysis.** Traffic signal warrant analysis shall be performed in accordance with the procedures set out in the Manual on Uniform Traffic Control Devices (see 24VAC30-155-100) or ITE Manual of Traffic Signal Design as determined by VDOT.
- **12. Recommended improvements.** Recommendations made in the VTIS for improvements to transportation facilities shall be in accordance with the geometric standards contained within the Road Design Manual (see 24VAC30-155-100).

24VAC30-155-70. Departmental analysis.

After concluding its review of a proposed comprehensive plan or transportation plan or plan amendment, or rezoning, VDOT shall provide the locality and applicant, if applicable, with a written report detailing its analysis and when appropriate recommending transportation improvements to mitigate any potential adverse impacts on state-controlled highways. VDOT shall provide recommendations for facilitating other modes of transportation including but not limited to transit, bus, bicycle and pedestrian facilities or accommodations where such facilities or accommodations are planned or exist, or where such facilities have a significant potential for use. In addition, VDOT shall provide the locality and the applicant, if applicable, with preliminary recommendations regarding compliance with other VDOT regulations such as the Secondary Street Acceptance Requirements (see 24VAC30-155-100), the Access Management Regulations: Principal Arterials (see 24VAC30-155-100), and the Access Management Regulations: Minor Arterials, Collectors, and Local Streets (see 24VAC30-155-100).

24VAC30-155-80. Fees.

A. Locality initiated proposals. No fee shall be charged for review of any comprehensive plan, comprehensive plan amendment, or rezoning proposal initiated by a locality or other public agency.

- **B.** Proposals containing a traffic impact statement as described in subdivision C 1 of 24VAC30-155-40. No fee shall be charged for the review of a rezoning submission that properly includes a traffic impact statement submitted under subdivision C 1 of 24VAC30-155-40.
- **C. All other proposals.** Any package submitted to a locality by an applicant that will be subject to VDOT review pursuant to this chapter shall include any required payment in a form payable directly to VDOT.
 - 1. For initial or second review of all comprehensive plans, comprehensive plan amendments, and transportation plans submitted to VDOT for review, not initiated on behalf of the locality, there shall be a fee of \$1,000 charged to the applicant. This fee shall be paid upon submission of a plan to VDOT for review.
 - 2. For initial or second review of rezoning proposals accompanied by a traffic impact statement not initiated on behalf of the locality, there shall be a single fee for both reviews determined by the number of adjusted vehicle trips generated per peak hour, as follows:

Submission made due to 24VAC30-155-40 A 3 (Low volume road criterion) - \$250 All other submissions - \$1,000

The fee shall be paid upon submission of a package to VDOT for review.

3. For a third or subsequent submission pursuant to subdivisions 1 or 2 of this subsection, that is requested by VDOT on the basis of the failure of the applicant to address deficiencies previously identified by VDOT, the applicant shall be required to pay an additional fee as though the third or subsequent submission were an initial submission and requiring the fees identified above. An applicant or locality may appeal to the district administrator a determination by VDOT that a submitted package failed to address deficiencies previously identified by VDOT.

24VAC30-155-90. (Repealed.)

24VAC30-155-100. Listing of documents incorporated by reference.

Requests for information pertaining to the availability and cost of any of these publications should be directed to the address indicated below the specific document. Requests for documents available from VDOT may be obtained from VDOT's division and representative indicated; however, VDOT documents may be available over the Internet at www.vdot.virginia.gov.

1. Access Management: Minor Arterials, Collectors, and Local Streets (24VAC30-73)

VDOT

1401 E. Broad Street Richmond, Virginia 23219

2. Access Management: Principal Arterials (24VAC30-72)

VDOT

1401 E. Broad Street Richmond, Virginia 23219

3. Highway Capacity Manual, 2010

Transportation Research Board 500 Fifth Street NW Washington, DC 20001

4. ITE Manual of Traffic Signal Design, 1998

Institute of Transportation Engineers 1099 14th Street NW Suite 300 West Washington, DC 20005

5. Manual on Uniform Traffic Control Devices, effective 2003, revised 2004

Federal Highway Administration Superintendent of Documents U.S. Government Printing Office P.O. Box 371954 Pittsburgh, Pennsylvania 15250

6. Road Design Manual, 2011

VDOT 1401 E. Broad Street Richmond, Virginia 23219

7. Secondary Street Acceptance Requirements (24VAC30-92)

Commonwealth Transportation Board 1401 E. Broad Street Richmond, Virginia 23219

8. Transit Capacity and Quality of Service Manual, 2nd Edition, 2003

Transportation Research Board of the National Academies Keck Center of the National Academies Transportation Research Board 500 Fifth Street, NW Washington, DC 20001

9. Trip Generation, 2008

Institute of Transportation Engineers 1099 14th Street NW Suite 300 West Washington, DC 20005

10. Trip Generation Handbook, Second Edition – an ITE Recommended Practice, 2004

Institute of Transportation Engineers 1099 14th Street NW Suite 300 West Washington, DC 20005 Exhibit B

Administrative Guidelines

July 2008

Organization of a Traffic Impact Analysis Report

1) Introduction and Summary

- a) Purpose of report and study objectives
- b) Executive Summary
 - i) Site location and study area
 - ii) Description of the proposed development
 - iii) Principal findings
 - iv) Conclusions
 - v) Recommendations

2) Background Information: Proposed Development (Site and Nearby)

- a) List of all non-existent transportation improvements assumed in the analysis
- b) Description of on-site development
 - i) Map of site location
 - ii) Description of the parcel
 - iii) General terrain features
 - iv) Location within the jurisdiction and region
 - v) Comprehensive Plan recommendations for the subject property
 - vi) Current or proposed zoning of the subject property
- c) Description of geographic scope and limits of study area *
- d) Plan at an engineering scale of the existing and proposed site uses
- e) Description and map or diagram of nearby uses, including parcel zoning
- f) Description and map or diagram of existing roadways
- g) Description and map or diagram of programmed improvements to roadways, intersections, and other transportation facilities within the study area

3) Analysis of Existing Conditions

- a) Collected daily and peak hour of the generator traffic volumes, tabulated and presented on diagrams with counts provided in an appendix *
- b) Analyses for intersections and roadways identified by VDOT *
 - i) Delay and Level of Service (LOS) are tabulated and LOS is presented on diagrams for each lane group
- c) When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s) and segment(s), tabulated and presented on diagrams, if facilities or routes exist *
- d) Speed Study (if requested by VDOT)
- e) Crash history near site (if requested by VDOT)
- f) Sight distance (if requested by VDOT)

4) Analysis of Future Conditions Without Development

- a) Description of and the justification for the method and assumptions used to forecast future traffic volumes *
- b) Analyses for intersections and roadways as identified by VDOT *

i) Delay and Level of Service (LOS) are tabulated and LOS is presented on diagrams for each lane group

c) When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s) and segment(s) tabulated and presented on diagrams, if facilities or routes exist or are planned *

5) Trip Generation

- a) Site trip generation, with tabulated data, broken out by analysis year for multi-phase developments, and including justification for deviations from ITE rates, if appropriate
- b) Description and justification of internal capture reductions for mixed use developments and passby trip reductions, if appropriate, including table of calculations used

6) Site Traffic Distribution and Assignment

- a) Description of methodology used to distribute trips, with supporting data
- b) Description of the direction of approach for site generated traffic and diagrams showing the traffic assignment to the road network serving the site for the appropriate time periods

7) Analysis of Future Conditions With Development

- a) Forecast daily and peak hour of the generator traffic volumes on the highway network in the study area, site entrances and internal roadways, tabulated and presented on diagrams *
- b) Analyses for intersections and roadways identified by VDOT *
 - i) Delay and Level of Service (LOS) are tabulated and LOS is presented on diagrams for each lane group
- c) When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s) and segment(s) tabulated and presented on diagrams, if facilities exist or are planned *

8) Recommended Improvements

- a) Description and diagram of the location, nature, and extent of the proposed improvements, with preliminary cost estimates as available from VDOT
- b) If travel demand management (TDM) measures are proposed, description of methodology used to calculate the effects of TDM measures with supporting data
- c) Analyses for all proposed and modified intersections in the study area under the forecast and site traffic *
 - i) Delay and Level of Service (LOS) are tabulated and LOS presented on diagrams for each lane group
 - ii) For intersections expected to be signalized, MUTCD Signal Warrant analysis or ITE Manual for Traffic Signal Design, as determined by VDOT, presented in tabular form
- d) When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s) and segment(s) tabulated and presented on diagrams, if facilities or routes exist or are planned *

9) Conclusions

a) Clear, concise description of the study findings

^{*} The level of analysis and information provided depends on site generated peak hour traffic. See page 2 of these forms; 24 VAC 30-155-60.C. Required Elements table..

VDOT CHECKLIST

EVALUATION of the SUBMITTED TRAFFIC IMPACT ANALYSIS

$\overline{\mathbf{V}}$	ITEM PROVIDED OR NOT APPLICABLE (NA)	
	Verify Use of Methodology and Standard Assumptions in Regulations (or Changes Approved at Scope of Work Meeting)	
	Verify any Additions to Required Elements Approved at Scope of Work Meeting	
?	Was a Scope of Work Meeting held with the City and/or VDOT?	
	Introduction and Summary	
	Purpose of report and study objectives	
	Executive Summary: Site location and study area; description of the proposed development; conclusions; recommendations.	Not Pro
	Background Information	
	List of all non-existent transportation improvements assumed in the analysis Not Applicable	
	Map of site location, description of the parcel, general terrain features, and location within the jurisdiction and region.	
	Comprehensive plan recommendations for the subject property	
	Current and proposed zoning of the subject property	-
	Description of geographic scope / limits of study area.	-
	Plan at an engineering scale of the existing and proposed site uses.	
	Description and map or diagram of nearby uses, including parcel zoning.	-
	Description and map or diagram of existing roadways.	
	Description and map or diagram of programmed improvements to roadways, intersections, and other transportation facilities within the study area. Not Applicable	-
	Analysis of Existing Conditions	
	Collected daily and peak hour of the generator traffic volumes, tabulated and presented on diagrams with counts provided in an appendix.	
	Analyses for intersections and roadways identified by VDOT. Delay and Level of Service	

\checkmark	ITEM PROVIDED OR NOT APPLICABLE (NA)	
	When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s) and segment(s), tabulated and presented on diagrams, if facilities or routes exist.	Not Provided
	Speed Study Not Applicable	
	Crash history near site Not Applicable	
	Sight distance Not Applicable	
	Analysis of Future Conditions Without Development	
	Description of and justification for the method and assumptions used to forecast future traffic volumes.	
	Analyses for intersections and roadways as identified by VDOT. Delay and Level of Service (LOS) are tabulated and LOS is presented on diagrams for each lane group.	
	When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s) and segment(s) tabulated and presented on diagrams, if facilities or routes exist or are planned.	Not Provided
	Trip Generation	
	Site trip generation, with tabulated data, broken out by analysis year for multi-phase developments, and including justification for deviations from ITE rates, if appropriate.	
	Description and justification of internal capture reductions for mixed use developments and pass-by trip reductions, if appropriate, including table of calculations used.	Not Provided
	Site Traffic Distribution and Assignment	
	Description of methodology used to distribute trips, with supporting data.	
	Description of the direction of approach for site generated traffic and diagrams showing the traffic assignment to the road network serving the site for the appropriate time periods.	
	Analysis of Future Conditions With Development	
	Forecast daily and peak hour of the generator traffic volumes on the highway network in the study area, site entrances and internal roadways, tabulated and presented on diagrams.	
	Analyses for intersections and roadways identified by VDOT. Delay and Level of Service (LOS) are tabulated and LOS presented on diagrams for each lane group.	
	When the type of development proposed would indicate significant potential for walking, bike or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s) and segment(s) tabulated and presented on diagrams, if facilities exist or are planned.	Not Provided

	ITEM PROVIDED OR NOT APPLICABLE (NA)						
	Recommended Improvements						
	Description and diagram of the location, nature, and extent of proposed improvements, with preliminary cost estimates as available from VDOT. Not Applicable						
	Description of methodology used to calculate the effects of travel demand management (TDM) measures, if proposed, with supporting data. Not Applicable						
	Analyses for all proposed and modified intersections in the study area under the forecast and site traffic. Delay, and Level of Service (LOS) are tabulated and LOS presented on diagrams for each lane group. For intersections expected to be signalized, MUTCD Signal Warrant analysis or ITE Manual for Traffic Signal Design, as determined by VDOT, presented in tabular form.						
	When the type of development proposed would indicate significant potential for walking, bik or transit trips either on- or off-site, analyses of pedestrian and bicycle facilities, and bus route(s and segment(s) tabulated and presented on diagrams, if facilities or routes exist or are planned.						
	Conclusions						
	Clear, concise description of the study findings.						
NOT	ES:						
SIGN	ED: DATE:						
PRIN	T NAME:						
	-VDOT Representative-						



1208 Corporate Circle Roanoke, VA 24018 540.772.9580 www.balzer.cc

> Roanoke Richmond New River Valley Shenandoah Valley

February 2, 2024

City of Salem, Virginia Department of Planning 21 South Bruffey Street Salem, VA 24153

Attn: William Simpson, Jr., PE

RE: HopeTree Planned Unit Development

Response to City of Salem Traffic Study Review

B&A Project # 04220029.00

Dear Mary Ellen,

Please find attached the revised Site Plans for the above referenced project. These plans have been revised in accordance with comments in the review letter prepared by Mattern & Craig, dated December 20, 2023, and provided to us by the City of Salem. Mattern and Craig comments are shown in italics, Mattern and Craig recommended actions are shown in bold italics. Balzer responses are provided in bold below each comment and recommended action.

REVIEW LETTER COMMENTS:

1. The proposed development is a rezoning of approximately 62 acres of land located along Red Lane in the City of Salem and is proposed as a mixed-use development consisting of single family detached housing, multi-family housing, hotel use, general office use, and retail (restaurant) use. Since the proposed development is a mixed-use development, the study does not qualify as a low volume road submission as defined in the VDOT Traffic Impact Analysis Regulations (must be residential only). The "Required Elements of a Traffic Impact Analysis" table as depicted on pages 46-49 of the Administrative Guidelines (see Exhibit A) was used in determining conformity with VDOT and standard practices. The unadjusted trip generation contained in the TIS prepared by Balzer & Associates identifies 286 sitegenerated AM peak hours trips and 312 site-generated PM peak hour trips for the proposed development. As such, the "Less than 500" column in the above-referenced table was used to define the necessary elements of the study.

Recommended Action: None.

2. Page 1 of the Balzer-prepared TIS identifies the study area intersections (indicated as discussed with the City of Salem) as Red Lane at East Carrollton Avenue and East Carrollton Avenue at North Broad Street.

Recommended Action: Documentation should be provided that shows what conversations were had and what decisions were agreed upon with the City. The defined area study of only two intersections seems insufficient considering the scope of the proposed development, the location of the proposed development, the multiple access points to the development, and the existing transportation infrastructure surrounding the development. At a minimum, along with the two intersections identified above, all existing access points should be included in the study area as well as the intersection of East Carrollton Avenue at Mt. Vernon Lane since this intersection is located in-between the two identified study intersections and serves as an access point to the development. Further intersections for consideration include Mt. Vernon Lane at Red Lane and Printer's Lane at Red Lane. The applicant should provide documentation justifying the limited study area or revise the TIS to include an expanded study area as described above.

Response:

The scope of the traffic study was previously discussed and agreed upon with the City of Salem. The intersection of Mount Vernon Avenue and East Carrollton Avenue was not chosen for analysis simply because it is evident that the volumes at this intersection



would be very similar to the volumes at the two intersections that were being studied and it seemed redundant to include. However, after further discussion with the City of Salem, this intersection has been included in the traffic study to further document that the existing roadway network and intersections will function adequately. As shown in the study, this intersection will function at a level of service 'A' in all scenarios.

Turn lane warrants have been analyzed for the highest volume entrances to show that turn lanes are not warranted for the development. Level of service and queuing along Red Lane will not be affected at any of these entrance points because there is not a stop condition along this roadway.

3. Page 3 of the Balzer-prepared TIS indicates that, among other things, the study was undertaken to determine the impacts to level of service and queue lengths at the existing intersections. Page 15 of the study includes tabular results of level of service (LOS) and delay (control delay) for the two study intersections but does not include any queue length results.

Recommended Action: The summarized capacity analyzed results should include tabulated results of the Synchro 95th Percentile queue as well as the SimTraffic max queue or discussion should be included as to the results of the queue length analyses.

Responses

SimTraffic queuing analysis has been included for the study intersections for all scenarios. The Buildout queue lengths are very similar to Existing and Background scenarios for all intersections and no improvements are warranted based on these results.

4. The traffic volumes on Figure 1 (existing peak hour turning movement counts) match the raw turning movement count data included in Appendix C of the Balzer-prepared TIS. The use of a 1.5% growth rate over a period of 5 years (to achieve the background year of 2028) seems reasonable and the traffic volumes on Figure 2 (2028 turning movement counts) appear to be correctly calculated.

Recommended Action: None.

5. Section 4. Trip Generation of the Balzer-prepared TIS provides information related to the trips expected to be generated by the development as well as information on potential trip reduction due to the mixed-use nature of the development (internal capture) and due to the walkable aspect of the proposed development. The unadjusted trips presented in Table 2: Site Generated Traffic on Page 8 of the TIS seem reasonable. The ITE Trip Generation Manual and Handbook contains methodology for the application of trip reductions for multi-use developments. In addition, VDOT provides an alternative trip generation methodology for mixed use developments (see page 43 of the VDOT Administrative Guidelines for Traffic Impact Analysis Regulations in Exhibit A attached to this letter report). Page 9 of the Balzer-prepared TIS applies a flat 25% reduction to the trip generated values presented in Table 1. While this may or may not be a reasonable reduction to apply, it is unclear how this 25% number was realized.

Recommended Action: The TIA should employ the use of either the ITE internal capture trip reduction methodology or the VDOT alternative trip generation methodology to achieve the appropriate trip reduction and document how the reduction numbers are obtained.

Response:

The ITE and VDOT methodologies both require a high level of detail about proposed uses that is not available at this time. In addition, these methodologies do not adequately account for other qualities of this development that are expected to further reduce



generated trips. These include urban design principles such as close proximity between uses within the development and outside the development, proximity to downtown, and the very nature of the development, which is to prioritize pedestrian connectivity and de-emphasize vehicle trips. Additional information is included in the traffic study regarding research that has been done on other mixed-use developments.

Based on the characteristics of this development, a 25% reduction is considered to be reasonable and has not been revised in the study. However, additional analysis was performed to determine how the results of the study would be affected if the 25% reduction was eliminated. It was determined that eliminating the 25% reduction results in almost no increase in delay/queuing at the study intersections and would not change the results of the study. These results are not included in the study as they are not deemed to be an accurate representation of trip generation for this development, but are summarized here as supplemental information for this review.

6. Section 5. Site Traffic Distribution and Assignment describes how traffic was distributed to the various existing and proposed access points for the development. Figures 3 and 4 identify 8 different access points which seems excessive for a development of this magnitude. Recommended Action: The applicant should have discussions with the City of Salem and VDOT regarding the locations of proposed access points to serve the development. If those discussions have already taken place, documentation of those discussions and decisions agreed upon should be provided. While it is true that the multiple access points will "disperse traffic and efficiently distribute vehicles to the adjacent road system" as stated on Page 10 of the Balzer-prepared TIS, having multiple access points introduces additional potential conflict points on the existing transportation infrastructure and is counter-productive to modern access management techniques. Generally, proposed access points should be kept to the minimum required to adequately serve the proposed development in an efficient and safe manner. The applicant should consider consolidation of some of the proposed access points or provide documentation as to why this is not feasible.

Response:

Additional discussions have occurred with the City of Salem Engineering Department. While it is true that modern access management technique is to consolidate entrances in most instances, this is more applicable to busier corridors with higher traffic volumes and higher speeds. The location of this development along lower volume roads and in proximity to residential areas warrants a different approach. One of the guiding principles of this type of development is to create a 'block' system of roads with multiple routes to each destination and to avoid high volumes of cars entering or exiting at any specific point. To consolidate entrances would run counter to the type of development that this is.

In addition to this, one of the main concerns that we have heard from existing residents in the area is about vehicle speed on Red Lane combined with pedestrians that walk along Red Lane. The design of this development with multiple access points on Red Lane, on-street parking proposed along Red Lane, and new pedestrian improvements adjacent to Red Lane are all designed to lower traffic speeds on Red Lane and improve pedestrian safety.

7. Section 7. Turn Lane Warrants of the Balzer-prepared TIS contains a summary of the results for analyses of left and right turn lanes at the study intersections. However, analyses were not provided for the left and right turn lanes at the intersection of East Carrollton Avenue at Red Lane (currently a study intersection) or at the intersection of East Carrollton Avenue at Mt. Vernon Lane.



Recommended Action: Additional analyses should be performed at the above-mentioned intersections at a minimum and potentially more intersections if the access points to the development are consolidated and/or if either the City or VDOT expand the study area.

Response:

VDOT turn lane warrants are not appropriate for analyzing the need for turn lanes on local, low speed, roadways with other intersection controls already in place. These warrants are generally utilized for new entrances between existing intersections where there are not already stop controls in place. The provided intersection modeling supports the conclusion that the intersections function at an acceptable level of service in both pre-development and post-development conditions and turn lanes are not warranted at any of these approaches.

Section 8. Conclusions of the Balzer-prepared TIS concludes that no improvements are recommended to the existing transportation infrastructure as a result of this proposed development.

Recommended Action: Pending the answers provided to the above comments and the further discussions the applicant may need to have with the City and/or VDOT, the Conclusions Section may need to be rewritten to include recommended mitigation improvements.

Response:

No revisions to Conclusions as a result of the traffic study revisions.

Please do not hesitate to contact me with any concerns and/or questions.

Respectfully Submitted,

BALZER AND ASSOCIATES, INC.

Christopher Burns, P.E.

Thin Br

Associate Vice President



HOPETREE PLANNED UNIT DEVELOPMENT

Traffic Impact Study

B&A Project #04220029.00

Date: December 1, 2023

Revised: February 2, 2024

Planners | Architects | Engineers | Surveyors 1208 Corporate Circle, Roanoke, VA 24018 www.balzer.cc

TRAFFIC STUDY FOR

HOPETREE PLANNED UNIT DEVELOPMENT

TAX MAP #: 44-3-10

860 MOUNT VERNON LANE CITY OF SALEM, VIRGINIA

B&A PROJECT #04220029.00

DATE: December 1, 2023 REVISED: February 2, 2024





PLANNERS ARCHITECTS ENGINEERS SURVEYORS

1208 Corporate Circle Roanoke, Virginia 24018 Phone: (540) 772-9580



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1. Introduction

HopeTree Family Services is proposing to rezone 62.318 acres of land located along Red Lane in the City of Salem (see Appendix A for vicinity map). The property is proposed to be rezoned from RSF, Residential Single Family, to PUD, Planned Unit Development. The P.U.D. Land Use Plan, prepared by Civic by Design, is included in Appendix B. The development will have a mix of residential and commercial use types. The maximum number of residential units allowed for this development is 340 and these are assumed to be broken down by type as outlined in the list below. Residential and commercial uses will be determined by market conditions and opportunities available at the time of development. The list below outlines the uses that have been assumed for the purposes of this traffic study.

- 115 Single-Family Detached Dwelling Units
- 140 Single-Family Attached Dwelling Units
- 85 Multi-Family Dwelling Units
- 60 Total Hotel Rooms
- 15,000 s.f. of Total General Office Space
- 7,500 s.f. of Total Restaurant Space

The breakdown of uses above is based on what is considered to be a reasonable and conservative expectation for the development based on the P.U.D. Land Use Plan. The actual breakdown will differ from these assumptions. It is recommended that projected trip generation be tracked as the development progresses for comparison to the traffic study. If the actual development results in significantly more traffic than what is included in these assumptions, then it may be necessary to update this study.

The site is located on the west side of Red Lane with East Carrollton Avenue to the south and Interstate 81 to the north. The property is described as City of Salem Tax Parcel #44-3-10. The development has several proposed existing and proposed entrances on Red Lane, East Carrollton Avenue, and North Broad Street.



As discussed with the City of Salem, the following intersections will be analyzed to determine levels of service with the proposed development:

- Red Lane and East Carrollton Avenue (Unsignalized)
- East Carrollton Avenue and Mount Vernon Lane (Unsignalized)
- East Carrollton Avenue and North Broad Street (Unsignalized)

All roads in the direct vicinity of the project are two-lane local roads that provide access between mostly residential areas. A mix of residential building types is present in this area, including single-family, two-family, townhome, and multi-family units. Roanoke College is located approximately 0.25 miles from the site to the southeast. The Main Street and downtown Salem commercial corridor is located approximately 0.7 miles south of the site. There are also two golf courses located in this area, Hanging Rock Golf Course to the north and Salem Municipal Golf Course to the west. Red Lane is utilized as a connection between downtown Salem, Hanging Rock Golf Course, and existing residential developments to the north. The speed limit on all of the local roads in the direct vicinity of the project is 25 mph.

Three scenarios will be considered: Existing Condition 2023, Background Condition 2028, and Buildout Condition 2028 to determine the effects of the background traffic growth and the proposed development on the levels of service at the existing intersections.

Level of service (LOS) for unsignalized intersections is evaluated based on control delay per vehicle and the driver's perception of those conditions. Control delay is the portion of the total delay attributed to the control at the intersection. Table 1 depicts the LOS scale with corresponding control delay per vehicle, with LOS "A" representing the best operating conditions and LOS "F" representing the worst.

Level of Service Criteria for Unsignalized Intersections							
Level Of Service	Avg. Control Delay (Sec./Veh)						
Α	≤ 10						
В	> 10 - 15						
С	> 15 – 25						
D	> 25 – 35						
E	> 35 – 50						
F ≥ 50							

Table 1: LOS Criteria for Unsignalized Intersections (HCM)



The *Synchro 11* software was used for traffic modeling and analysis. This study was undertaken by Balzer and Associates, Inc. to:

- determine the total number of vehicle trips generated by the potential development to be added to the adjacent street network;
- determine the impacts to level of service and queue lengths at the existing intersections as a result of the background traffic growth and from the proposed development;
- determine if any roadway or intersection improvements are warranted as a result of the proposed development;
- and to determine turn lane/taper requirements at the proposed entrances to the site.



2. Analysis of Existing Conditions

The site is currently owned and operated by HopeTree Family Services and has been for many years. Changing regulations over the last several decades have greatly decreased the number of permanent residents that are allowed to be housed at the site at any one time. There are many existing buildings, some of which are still in use by HopeTree, and others that are no longer in use. Among other things, the site includes a school, group homes for children and adults, and offices where staff members work on-site.

Other improvements on-site include access drives and parking areas, pool and athletic courts, two existing baseball fields near Red Lane, and other miscellaneous improvements. There is an existing pond and two existing creeks located on the site as well and these will be preserved to the extent practical.

All intersections in the vicinity of the site are unsignalized. 2021 VDOT traffic count data is available for Red Lane just to the north of the site in Roanoke County, and this data is provided below as general background information.

2021 VDOT Traffic Count Data:

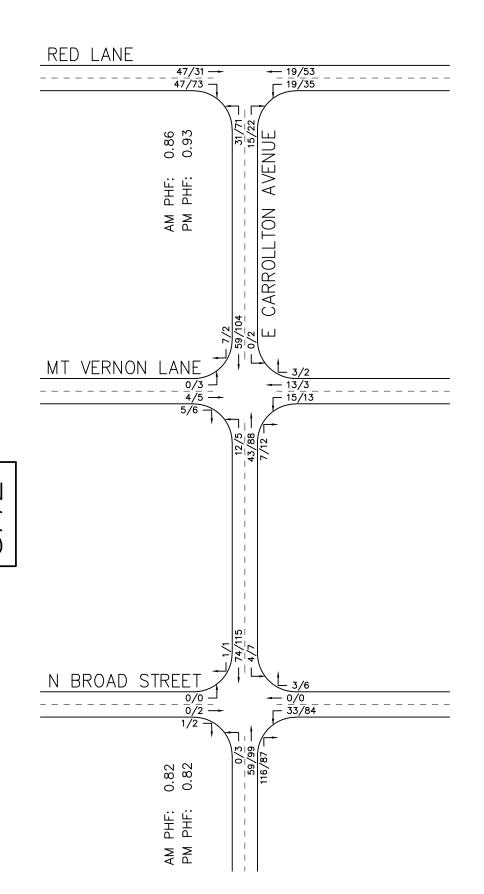
Red Lane, Rte. 705 (from Salem/Roanoke County line to North Road)
AADT = 1,100 vpd
Directional Factor = not provided
K Factor = not provided

In addition to the VDOT published traffic count data, manual traffic counts were performed at two of the study intersections. Counts were performed at the Red Lane/East Carrollton Avenue intersection and the East Carrollton Avenue/North Broad Street intersection on Tuesday, October 3, 2023 from 7:00 AM - 9:00 AM and 4:00 PM - 6:00 PM to capture the AM and PM peak hours. All turning and through movements were counted to facilitate analysis of the intersections. The manual traffic count data for these intersections is provided in Appendix C.

After the first review of the traffic study, it was requested by the City of Salem that the intersection of East Carrollton Avenue/Mount Vernon Lane be added to the analysis. Traffic volumes for this intersection were derived from the previous counts that were obtained at the other two intersections. In addition, a site visit was made to observe traffic patterns at this intersection during the peak traffic times to inform the breakdown of turning movements at each approach. Figure 1 graphically depicts the existing peak hour traffic volumes at all intersections.

The *Synchro 11* software was used to analyze delay and level of service for existing weekday AM and PM peak hours. The *Synchro 11* results are included in Appendix E.





LEGEND

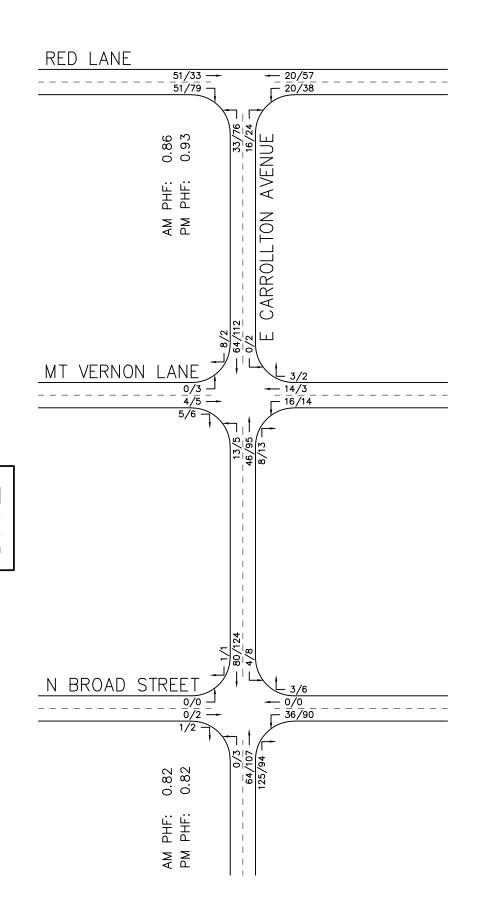
xx/xx: AM/PM Peak Hour Traffic

3. Analysis of Future Conditions Without Development

It is anticipated that the proposed development will be constructed and in use by the year 2028. To analyze the future conditions and obtain the projected background traffic volumes, an annual growth factor was applied to the existing traffic volumes. Based on historical VDOT traffic data, the average growth rate over the last 10 years or so has been approximately 1% on Red Lane and there has actually been a reduction in traffic volume over the last 5 years. To provide a conservative analysis, a 1.5% annual growth rate was applied to bring the existing traffic volumes from the current year of 2023 to the buildout year of 2028. Figure 2 graphically depicts the projected background traffic in the year 2028 with the growth rate applied.

The *Synchro 11* software was used to analyze delay and level of service for background weekday AM and PM peak hours. The *Synchro 11* results are included in Appendix E.





<u>LEGEND</u>

xx/xx: AM/PM Peak Hour Traffic

4. Trip Generation

Trip generation for this study was based on the anticipated and assumed uses outlined in the Introduction and information provided by the developer regarding the possible uses of the property. The policies and procedures found in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, were employed to determine the potential site generated traffic volumes for the proposed development for the average weekday and AM and PM peak hours. Trip generation calculations were performed using the equations provided in the ITE manual. Table 2 shows the potential site-generated traffic for this development.

			Trip Generation						
Land Use			AM Peak Hour			PM Peak Hour			Weekday
Proposed Development	ITE Code	Independent Variable	Enter	Exit	Total	Enter	Exit	Total	Total
Single-Family Detached Housing	210	115 Dwelling Units	21	64	85	71	42	113	1,147
Single-Family Attached Housing	215	140 Dwelling Units	17	50	67	47	33	80	1,016
Multi-Family Housing (Low- Rise)	220	85 Dwelling Units	12	37	49	36	21	57	620
Hotel	310	60 Rooms	13	10	23	8	9	17	227
General Office	710	15,000 s.f.	29	4	33	6	28	34	223
Sit-Down Restaurants	932	7,500 s.f.	39	33	72	41	27	68	804
		Total	131	198	329	209	160	369	4,037

Table 2: Site-Generated Traffic

Please note that the table above does not include traffic volumes for the HopeTree school or office uses. These specific uses are already taking place on the site and will not be trips that are "added" to the street network. The addition of the other use types on-site may actually reduce some of the existing trips due to the fact that some of the existing trips may be redirected to or from the new facilities that are developed within the site.

The intent of the proposed development is to provide a cohesive, connected, walkable community where pedestrian connectivity is a primary focus and vehicular trips are secondary. Due to the nature of the development and the mix of residential, commercial, institutional, and other uses, a portion of the site-generated trips will be pedestrian trips and/or "internally



captured". Internal capture reductions consider site trips "captured" within a mixed-use development, recognizing that trips from one land use can access another land use within a development without having to access the adjacent street system. It is well-documented that this type of pedestrian-friendly, mixed-use development will result in less traffic to the adjacent street network than what is calculated using traditional trip generation methods.

It should also be noted that ITE and VDOT both have methodologies for estimating trip generation reduction for mixed-use developments. These methodologies require a high level of detail about proposed uses that is not available at this time for this particular development. In addition, these methodologies also do not adequately account for other characteristics of this development that are expected to further reduce traffic. These include urban design principles such as proximity between uses interior and exterior to the development, proximity to Roanoke College and downtown, and the very nature of the development which is to prioritize pedestrian connectivity and walkability and de-emphasize vehicle trips.

Walkable mixed-use developments have been documented to reduce traffic dependent on factors such as location, density, mix of uses, etc. A report by the American Planning Association entitled "Getting Trip Generation Right: Eliminating the Bias Against Mixed Use Development," indicates that, on average, conventional trip generation methods overestimate trip generation by 49 percent for typical mixed-use developments.

It is acknowledged that this development does not have all of the characteristics that would warrant a 49 percent reduction in traffic. However, it is expected to share many of the same characteristics such as density, diversification of uses, proximity between uses, and walkability. Based on the characteristics and initiatives of this P.U.D. development and utilizing engineering judgement, a 25% reduction was deemed to be reasonable for this project. Table 3 below shows the potential site-generated traffic for this development with the internal capture reduction applied.



				Trip Generation					
Land Use			AM Peak Hour			PM Peak Hour			Weekday
Proposed Development	ITE Code	Independent Variable	Enter	Exit	Total	Enter	Exit	Total	Total
Single-Family Detached Housing	210	115 Dwelling Units	16	48	64	53	32	85	860
Single-Family Attached Housing	215	140 Dwelling Units	13	37	50	35	25	60	762
Multi-Family Housing (Low- Rise)	220	85 Dwelling Units	9	28	37	27	16	43	465
Hotel	310	60 Rooms	10	8	18	6	7	13	170
General Office	710	15,000 s.f.	22	3	25	4	21	25	167
High-Turnover Sit- Down Restaurant	932	7,500 s.f.	29	25	54	31	20	51	603
		Total	99	149	248	156	121	277	3,027

Table 3: Site-Generated Traffic w/ 25% Reduction



5. Site Traffic Distribution and Assignment

The distribution of potential site generated traffic was completed by applying engineering judgement based on knowledge of the proposed uses, as well as the surrounding area. These assumptions were then applied to the site generated traffic to determine the ingress/egress movements at each entrance and in each direction. Traffic will enter to and exit from the site to the north toward I-81 or to the south or west to go toward downtown Salem. There are several entrances planned for the site in strategic locations to disperse traffic and efficiently distribute vehicles to the adjacent road system in an interconnected grid-type network that is similar to what already exists to the north of Main Street.

This development is proposed to have four access points on Red Lane, three access points on East Carrollton Avenue, and one access point on North Broad Street. The roadway network creates a network of streets within the development with a high level of interconnectivity both internally and externally to the existing streets.

After distribution of trips to the roadway, trips were distributed to each road and intersection based on the assumptions described above. Traffic assignment for traffic entering the development is shown graphically in Figure 3 and for traffic exiting the development is shown graphically in Figure 4.



xx/xx: AM/PM Peak Hour Traffic

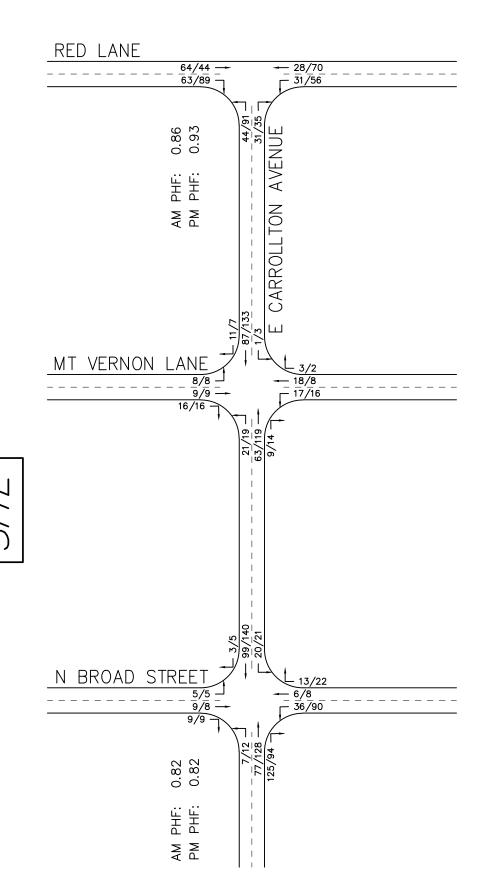
xx/xx: AM/PM Peak Hour Traffic

6. Analysis of Future Conditions With Development

The buildout traffic was calculated by adding the 2028 background traffic (Figure 2) to the site-generated traffic (Figures 3 and 4). The 2028 buildout traffic for each of the study intersections is shown in Figure 5. The intersections were then modeled and evaluated using the *Synchro 11* software. Tables 4 and 5 provide a summary of the levels of service and delays calculated at each intersection for the 2023 Existing, 2028 Background, and 2028 Buildout conditions. The detailed *Synchro 11* reports are included in Appendix E.

As shown in the data, all approaches at the two study intersections will function at the same level of service in the Buildout condition as they do in the Existing and Background conditions, with minimal increases in delay. No further improvements are warranted or recommended as a result of the development traffic.





LEGEND

xx/xx: AM/PM Peak Hour Traffic

Red Lane and East Carrollton Avenue

	LANE	AM PEA	K HOUR	PM PEAK HOUR				
CONDITION	GROUP	LANE LOS	Max.	LANE LOS	Max.			
	GROOP	(delay)	Queue (ft.)	(delay)	Queue (ft.)			
Evicting 2022	visting 2022 NBLT		40	A (7.9)	52			
Existing 2023 Condition	EBLR	A (7.4)	31	A (7.9)	39			
Condition	SBTR	A (7.2)	52	A (7.3)	55			
Background	NBLT	A (7.5)	47	A (7.9)	53			
2028	EBLR	A (7.5)	37	A (8.0)	48			
Condition	SBTR	A (7.3)	55	A (7.4)	55			
Buildout	NBLT	A (7.7)	46	A (8.4)	56			
2028	EBLR	A (7.7)	37	A (8.4)	44			
Condition	SBTR	A (7.6)	57	A (7.7)	62			

Table 4: Red Lane & East Carrollton Avenue LOS & Queuing Analysis

Mount Vernon Lane and East Carrollton Avenue

	LANIE	AM PEA	K HOUR	PM PEAK HOUR				
CONDITION	LANE GROUP	LANE LOS	Max.	LANE LOS	Max.			
	GROOP	(delay)	Queue (ft.)	(delay)	Queue (ft.)			
	NBLTR	A (7.5)	34	A (7.7)	34			
Existing 2023	EBLTR	A (7.5)	53	A (7.8)	61			
Condition	WBLTR	A (7.5)	55	A (7.9)	68			
	SBLTR	A (7.0)	31	A (7.4)	34			
	NBLTR	A (7.6)	43	A (7.8)	32			
Background 2028	EBLTR	A (7.5)	60	A (7.9)	61			
Condition	WBLTR	A (7.5)	52	A (8.0)	70			
Condition	SBLTR	A (7.1)	31	A (7.4)	33			
Duildout	NBLTR	A (7.8)	47	A (8.1)	40			
Buildout 2028	EBLTR	A (7.9)	62	A (8.5)	66			
	WBLTR	A (7.9)	62	A (8.4)	61			
Condition	SBLTR	A (7.5)	45	A (7.8)	44			

Table 5: Mount Vernon Lane & East Carrollton Avenue LOS & Queuing Analysis



North Broad Street and East Carrollton Avenue

	LANE	AM PEA	K HOUR	PM PEAK HOUR				
CONDITION	LANE GROUP	LANE LOS	Max.	LANE LOS	Max.			
	GROUP	(delay)	Queue (ft.)	(delay)	Queue (ft.)			
	NBLTR	B (10.3)	49	B (12.1)	64			
Existing 2023	EBL		2	A (7.5)	11			
Condition	WBL	A (7.6)	22	A (7.7)	27			
	SBLTR	A (8.7)	18	B (10.3)	28			
Do alversa visal	NBLTR	B (10.5)	46	B (12.6)	77			
Background	EBL			A (7.5)	11			
2028 Condition	WBL	A (7.7)	15	A (7.7)	23			
Condition	SBLTR	A (8.7)	18	B (10.5)	31			
Duildout	NBLTR	B (11.6)	50	B (14.8)	76			
Buildout 2028	EBL	A (7.5)	12	A (7.6)	41			
	WBL	A (7.8)	33	A (7.8)	35			
Condition	SBLTR	B (10.9)	34	B (11.8)	47			

Table 6: North Broad Street & East Carrollton Avenue LOS & Queuing Analysis



7. Turn Lane Warrants

The analyses to determine turn lane requirements for the new development were completed by following the procedures and methodologies found in the *VDOT Road Design Manual*, *Volume I, Appendix F*. Turn lane warrants were analyzed based on the highest volumes for each roadway (Red Lane and East Carrollton Avenue) to show that the warrants are not met and will not be met for any of the intersections.

Right-Turn Lane into Site from Red Lane

AM Peak Hour Analysis:

- 22 Vehicles per Hour Turning Right into site from Red Lane
- Approach Volume = 127 + 22 = 149 VPH Red Lane
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

PM Peak Hour Analysis:

- 36 Vehicles per Hour Turning Right into site from Red Lane
- Approach Volume = 133 + 36 = 169 VPH Red Lane
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

Left-Turn Lane into Site from Red Lane

AM Peak Hour Analysis:

- 7 (9.7%) Vehicles per Hour Turning Left into site from Red Lane Posted Speed Limit = 25 mph
- Advancing Volume = 72 VPH
- Opposing Volume = 127 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).

PM Peak Hour Analysis:

- 11 (6.8%) Vehicles per Hour Turning Left into site from Red Lane Posted Speed Limit = 25 mph
- Advancing Volume = 161 VPH
- Opposing Volume = 133 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).



Right-Turn Lane into Site from East Carrollton Avenue

AM Peak Hour Analysis:

- 6 Vehicles per Hour Turning Right into site from East Carrollton Avenue
- Approach Volume = 122 VPH East Carrollton Avenue
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

PM Peak Hour Analysis:

- 9 Vehicles per Hour Turning Right into site from East Carrollton Avenue
- Approach Volume = 166 VPH East Carrollton Avenue
- -- Right-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: *Radius Required* (please see Appendix D).

Left-Turn Lane into Site from East Carrollton Avenue

AM Peak Hour Analysis:

- 8 (8.4%) Vehicles per Hour Turning Left into site from East Carrollton Avenue Posted Speed Limit = 25 mph
- Advancing Volume = 95 VPH
- Opposing Volume = 122 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).

PM Peak Hour Analysis:

- 14 (9.0%) Vehicles per Hour Turning Left into site from East Carrollton Avenue Posted Speed Limit = 25 mph
- Advancing Volume = 155 VPH
- Opposing Volume = 166 VPH
- -- Left-Turn Lane Requirement, as per *VDOT Road Design Manual, Appendix F*: **None Required** (please see Appendix D).

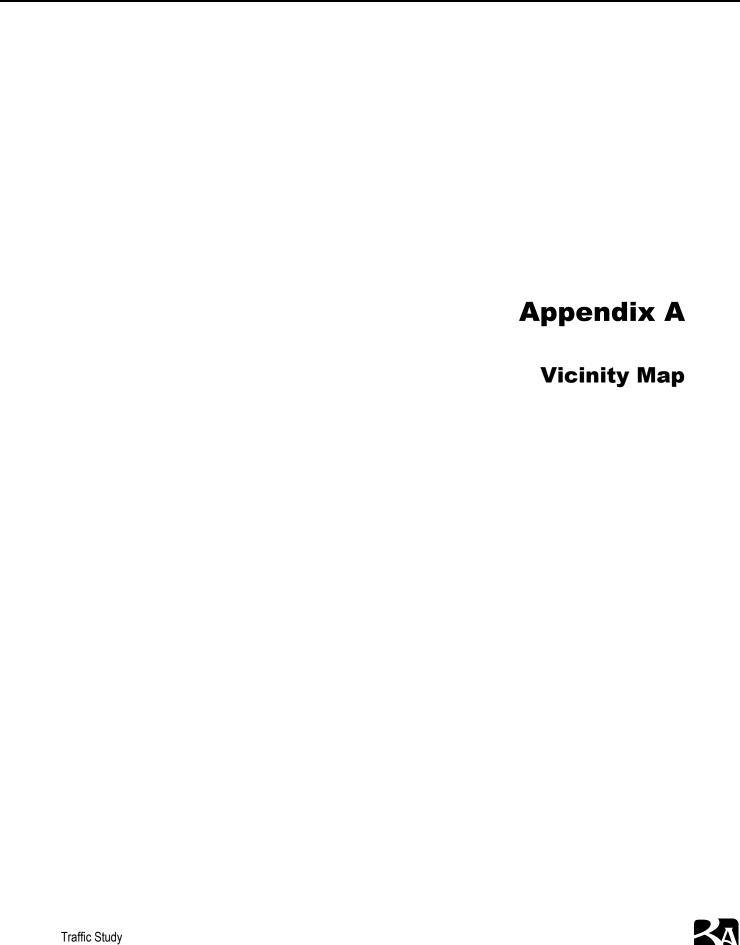


8. Conclusions

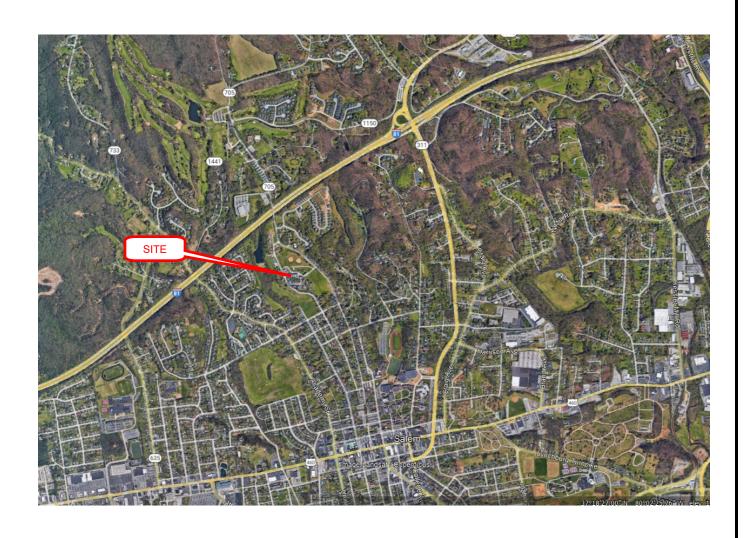
Based on the data collected, the assumptions made, and the projected site-generated traffic, the results of the analysis are outlined below.

- The proposed development will generate additional traffic to the existing road network.
- The proposed development results in very minimal increases in delay and queue lengths
 at the study intersections and all approaches function at the same level of service in the
 Existing, Background, and Buildout scenarios.
- No turn lanes or tapers are warranted by the proposed development.

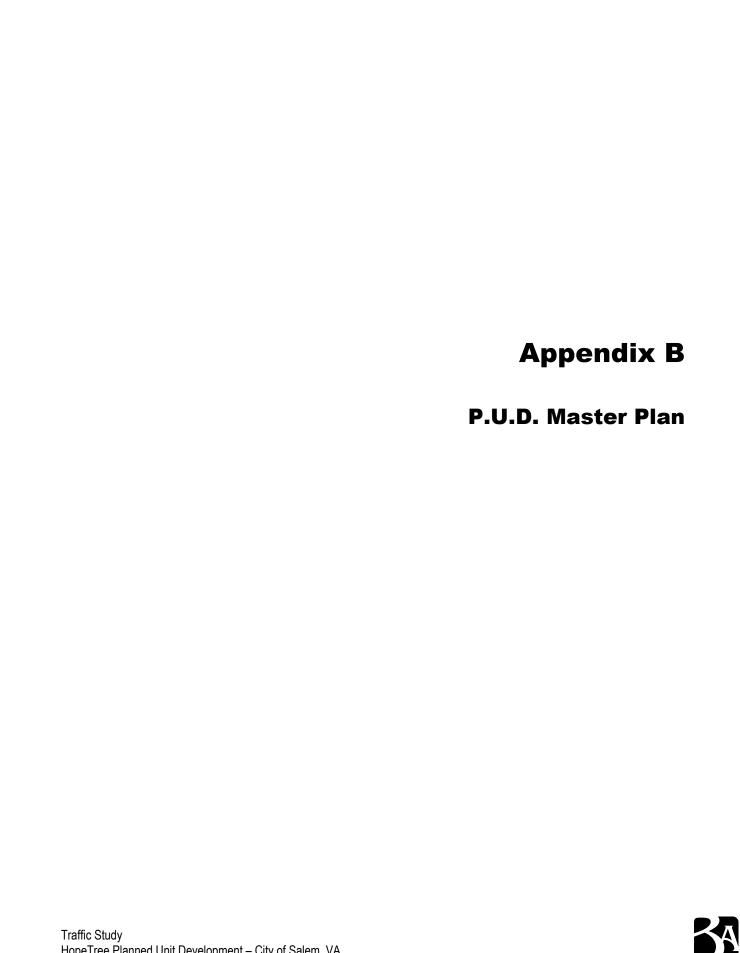






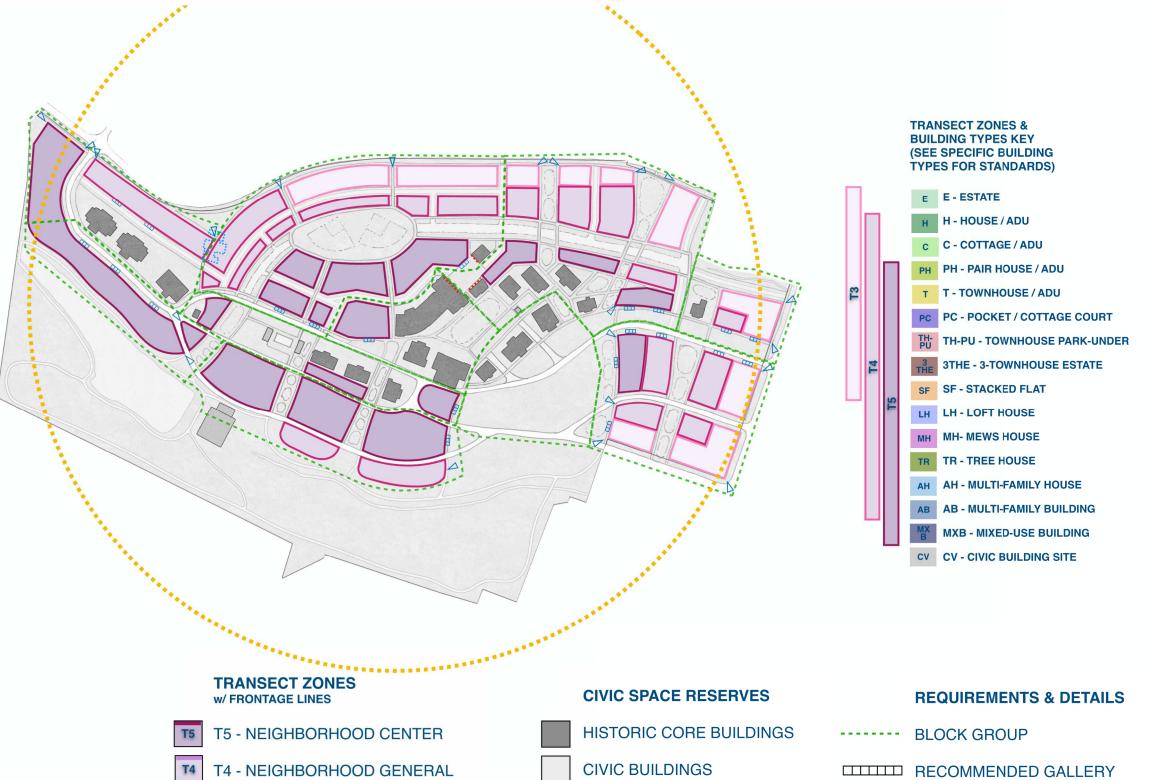






GENERAL NOTES:

- Building Types generally provide parking from rear alleys and lanes screened from frontages on lots.
- On-street parking shall be provided along all streets where pratical.
- Each Block Group includes a minimum of three (3) building types.
- Each Block Group shall have 20% minimum of each of the building types used.
- A minimum of six (6) building types shall be used for the overall project.
- A maximum of five (5) of the same building types are allowed in a row.
- · Commercial, Mixed-Use, & Live-Works are allowed in T-4 and T-5. See Uses
- Land may be subdivided into seperate ownership.



STRUCTURE TO BE REMOVED

T3 T3 - NEIGHBORHOOD EDGE

OPEN SPACE / NATURAL

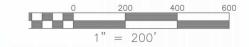
STREETS AND PARKING

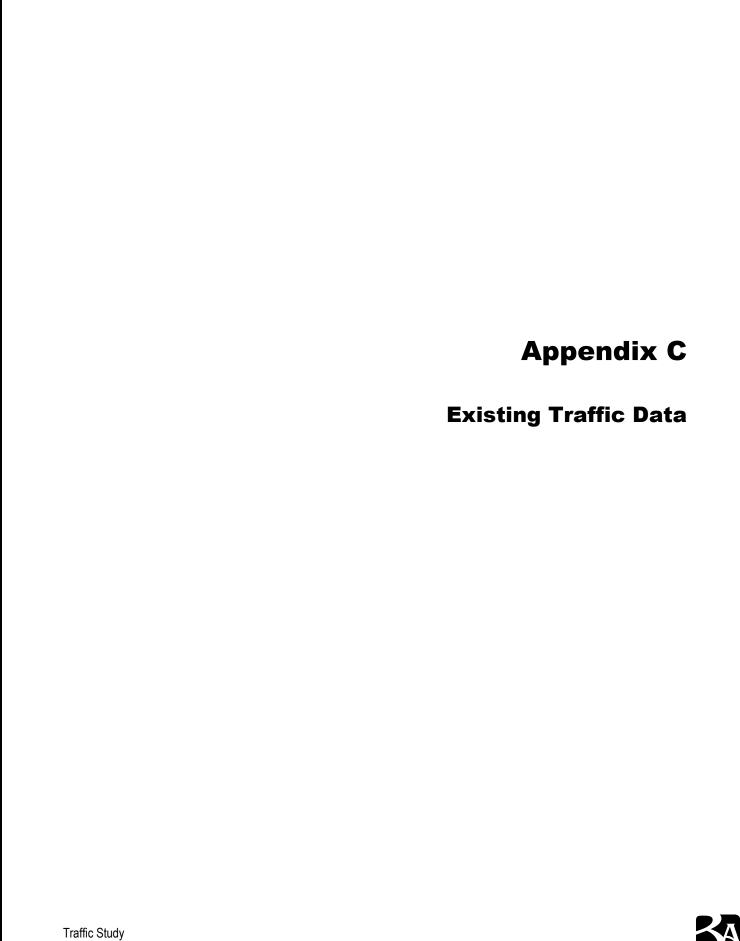
RECOMMENDED SHOPFRONT

VISTA POINTS

PEDESTRIAN SHED -**5 MINUTE WALK RADIUS**

5.A land use plan designating specific use types for the site, both residential and non-residential use types, and establishing site development regulations, including setback, height, building coverage, lot coverage, and density requirements.







TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: North Broad Street and: Carrollton Avenue Location: Salem, Virginia Counted by: VCU

Date: October 03, 2023 Weather: Sunny/Warm

er: Sunny/Warm

Tuesday

The Traffic Group

			Carron									Sunny	vvaiili						G	roup	
	L	ocation:	Salem,	Virginia	а					Ente	ered by:	SN						ating: 4		oup	
TIME	on:	TRAFFI North B	C FROM road Str			on:	TRAFFI North B	C FROM road Str			on:		IC FROM			on:		C FRON			TOTAL N + S +
IIVIE	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	E+W
АМ																					
7:00 - 7:15	1	2	0	0	3	0	0	3	0	3	0	11	2	0	13	20	5	0	0	25	44
7:15 - 7:30	0	0	0	0	0	0	0	8	0	8	0	13	2	0	15	21	10	0	0	31	54
7:30 - 7:45	0	0	0	0	0	1	0	4	0	5	1	18	2	0	21	50	13	0	0	63	89
7:45 - 8:00	0	0	0	0	0	1	0	7	0	8	0	15	2	0	17	32	20	0	0	52	77
8:00 - 8:15	0	0	0	0	0	0	0	13	0	13	0	25	0	0	25	15	18	0	0	33	71
8:15 - 8:30	1	0	0	0	1	1	0	9	0	10	0	16	0	0	16	19	8	0	0	27	54
8:30 - 8:45	0	1	0	0	1	1	0	7	0	8	0	7	0	0	7	25	11	0	0	36	52
8:45 - 9:00	1	0	0		1	2	3	5	0	10	0	13	0	0	13	16	9	0	0	25	49
2 Hr Totals	3	3	0	0	6	6	3	5 56	0	65	1	118	8	0	127	198	94	0	0	292	490
1 Hr Totals	3	3	U	U	6	0	3	30	U	65	'	110	0	U	127	190	94	U	U	292	490
7:00 - 8:00	1	2	0	0	3	2	0	22	0	24	1	57	8	0	66	123	48	0	0	171	264
7:00 - 8:00 7:15 - 8:15	0	0	0	0	0	2	0	32	0	34	1	71	6	0	78	118	61	0	0	171	291
7:30 - 8:30	1	0	0	0	1	3	0	33	0	36	1	74	4	0	76 79	116	59	0	0	179	291
7:45 - 8:45	1	1	0	0	2	3	0	36	0	39	0	63	2	0	65	91	57	0	0	148	254
8:00 - 9:00	2	1	0	0	3	4	3	34	0				0	0	61	75		0	0	121	226
PEAK HOUR		- 1	U	U	3	4	3	34	U	41	0	61	U	U	01	75	46	U	U	121	220
7:30 - 8:30	1	0	0	0	1	3	0	33	0	36	1	74	4	0	79	116	59	0	0	175	291
PM																					
4:00 - 4:15	0	1	0	0	1	2	0	8	0	10	0	24	0	0	24	19	17	0	0	36	71
4:15 - 4:30	1	0	0	0	1	0	0	20	0	20	0	20	1	0	21	18	19	0	0	37	79
4:30 - 4:45	0	0	0	0	0	0	1	12	0	13	0	34	1	0	35	15	20	0	0	35	83
4:45 - 5:00	0	1	0	0	1	0	0	18	0	18	0	28	3	0	31	12	18	1	0	31	81
5:00 - 5:15	1	1	0	0	2	2	0	25	0	27	0	35	0	0	35	19	25	1	0	45	109
5:15 - 5:30	0	0	0	0	0	2	0	23	0	25	0	36	4	0	40	32	26	1	0	59	124
5:30 - 5:45	1	1	0	0	2	0	0	16	0	16	1	20	1	0	22	17	23	0	0	40	80
5:45 - 6:00	0	0	0	0	0	2	0	20	0	22	0	24	2	0	26	19	25	1	0	45	93
2 Hr Totals	3	4	0	0	7	8	1	142	0	151	1	221	12	0	234	151	173	4	0	328	720
1 Hr Totals																					
4:00 - 5:00	1	2	0	0	3	2	1	58	0	61	0	106	5	0	111	64	74	1	0	139	314
4:15 - 5:15	2	2	0	0	4	2	1	75	0	78	0	117	5	0	122	64	82	2	0	148	352
4:30 - 5:30	1	2	0	0	3	4	1	78	0	83	0	133	8	0	141	78	89	3	0	170	397
4:45 - 5:45	2	3	0	0	5	4	0	82	0	86	1	119	8	0	128	80	92	3	0	175	394
5:00 - 6:00	2	2	0	0	4	6	0	84	0	90	1	115	7	0	123	87	99	3	0	189	406
PEAK HOUR																					
5:00 - 6:00	2	2	0	0	4	6	0	84	0	90	1	115	7	0	123	87	99	3	0	189	406

TOTALS TURNING MOVEMENT COUNT - SUMMARY

Intersection of: Red Lane and: Carrollton Avenue Counted by: VCU

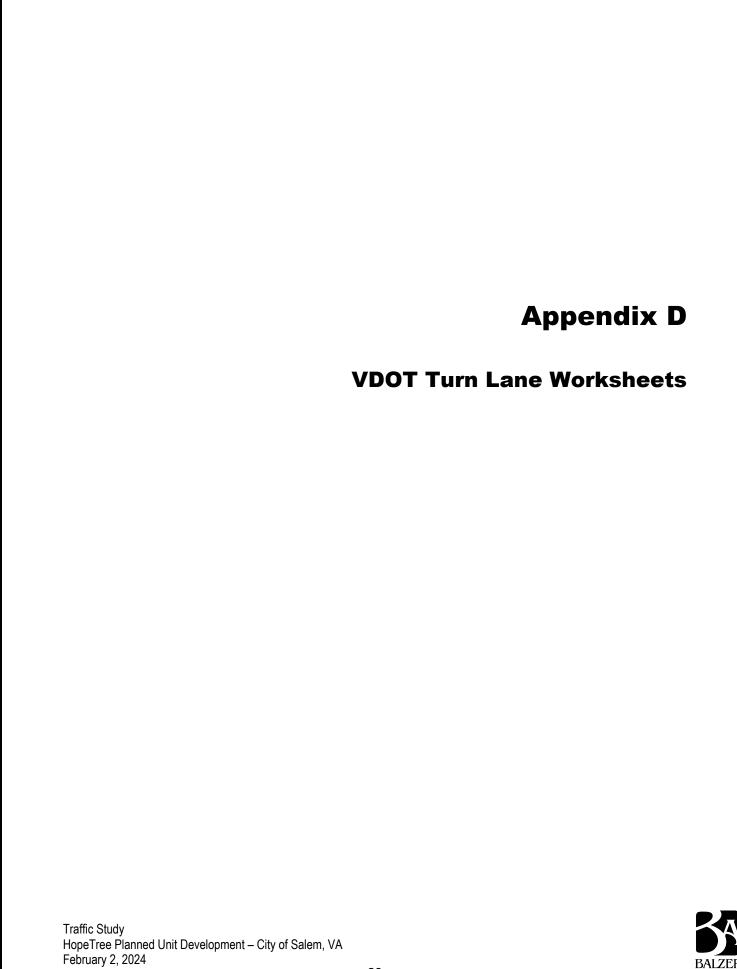
Date: October 03, 2023 Weather: Sunny/Warm Entered by: SN

Tuesday

Star Rating: 4



	L	ocation:	Salem,	Virginia	a					Ente	ered by:	SN					Star R	ating: 4	O	roup	
TIME	on:	TRAFFI Red Lan		NORTH		on:	TRAFFI Red Lan		SOUTH		on:	TRAFF	IC FROM	I EAST		on:		IC FROM on Aven			TOTAL N + S +
	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	RIGHT	THRU	LEFT	U-TN	TOTAL	E+W
AM																					
7:00 - 7:15	12	6	0	0	18	0	3	2	0	5	0	0	0	0	0	3	0	2	0	5	28
7:15 - 7:30	9	7	0	0	16	0	1	4	0	5	0	0	0	0	0	2	0	9	0	11	32
7:30 - 7:45	10	18	0	0	28	0	3	6	0	9	0	0	0	0	0	3	0	8	0	11	48
7:45 - 8:00	13	9	0	0	22	0	4	3	0	7	0	0	0	0	0	6	0	7	0	13	42
8:00 - 8:15	14	9	0	0	23	0	6	6	0	12	0	0	0	0	0	4	0	13	0	17	52
8:15 - 8:30	10	11	0	0	21	0	6	4	0	10	0	0	0	0	0	2	0	3	0	5	36
8:30 - 8:45	5	2	0	0	7	0	8	1	0	9	0	0	0	0	0	3	0	9	0	12	28
8:45 - 9:00	10	3	0	0	13	0	6	2	0	8	0	0	0	0	0	2	0	10	0	12	33
2 Hr Totals	83	65	0	0	148	0	37	28	0	65	0	0	0	0	0	25	0	61	0	86	299
1 Hr Totals																					
7:00 - 8:00	44	40	0	0	84	0	11	15	0	26	0	0	0	0	0	14	0	26	0	40	150
7:15 - 8:15	46	43	0	0	89	0	14	19	0	33	0	0	0	0	0	15	0	37	0	52	174
7:30 - 8:30	47	47	0	0	94	0	19	19	0	38	0	0	0	0	0	15	0	31	0	46	178
7:45 - 8:45	42	31	0	0	73	0	24	14	0	38	0	0	0	0	0	15	0	32	0	47	158
8:00 - 9:00	39	25	0	0	64	0	26	13	0	39	0	0	0	0	0	11	0	35	0	46	149
7:30 - 8:30	47	47	0	0	94	0	19	19	0	38	0	0	0	0	0	15	0	31	0	46	178
PM	47	41	U	U	94	U	19	19	U	30	U	U	U	U	U	10	U	31	U	40	170
4:00 - 4:15	18	12	0	0	30	0	13	5	0	18	0	0	0	0	0	7	0	13	0	20	68
4:15 - 4:30	16	2	0	0	18	0	9	1	0	10	0	0	0	0	0	5	0	15	0	20	48
4:30 - 4:45	21	7	0	0	28	0	12	7	0	19	0	0	0	0	0	5	0	18	0	23	70
4:45 - 5:00	21	10	0	0	31	0	12	4	0	16	0	0	0	0	0	3	0	15	0	18	65
5:00 - 5:15	12	8	0	0	20	0	17	11	1	29	0	0	0	0	0	7	0	18	0	25	74
5:15 - 5:30	19	6	0	0	25	0	12	13	0	25	0	0	0	0	0	7	0	20	0	27	77
5:30 - 5:45	13	7	0	0	20	0	10	3	0	13	0	0	0	0	0	2	0	14	0	16	49
5:45 - 6:00	19	9	0	0	28	0	7	4	0	11	0	0	0	0	0	7	0	13	0	20	59
2 Hr Totals	139	61	0	0	200	0	92	48	1	141	0	0	0	0	0	43	0	126	0	169	510
1 Hr Totals																					
4:00 - 5:00	76	31	0	0	107	0	46	17	0	63	0	0	0	0	0	20	0	61	0	81	251
4:15 - 5:15	70	27	0	0	97	0	50	23	1	74	0	0	0	0	0	20	0	66	0	86	257
4:30 - 5:30	73	31	0	0	104	0	53	35	1	89	0	0	0	0	0	22	0	71	0	93	286
4:45 - 5:45	65	31	0	0	96	0	51	31	1	83	0	0	0	0	0	19	0	67	0	86	265
5:00 - 6:00	63	30	0	0	93	0	46	31	1	78	0	0	0	0	0	23	0	65	0	88	259
PEAK HOUR							-													-	
4:30 - 5:30	73	31	0	0	104	0	53	35	1	89	0	0	0	0	0	22	0	71	0	93	286



RED LANE RIGHT TURN WARRANT

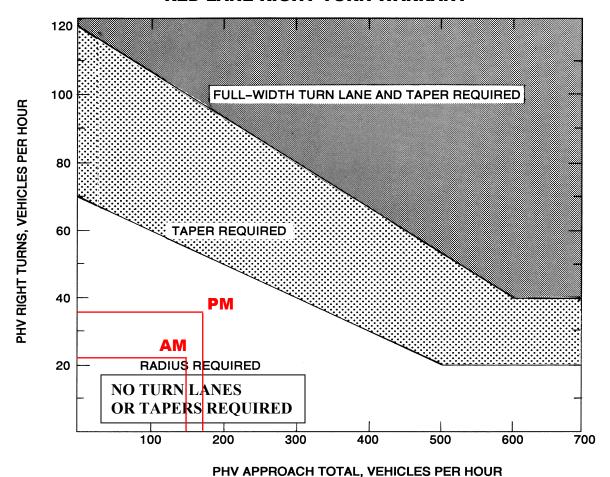


FIGURE 3-26 WARRANTS FOR RIGHT TURN TREATMENT (2-LANE HIGHWAY)

Appropriate Radius required at all Intersections and Entrances (Commercial or Private).

LEGEND

PHV - Peak Hour Volume (also Design Hourly Volume equivalent)

Adjustment for Right Turns

For posted speeds at or under 45 mph, PHV right turns > 40, and PHV total < 300.

Adjusted right turns = PHV Right Turns - 20

If PHV is not known use formula: PHV = ADT x K x D

K = the percent of AADT occurring in the peak hour

D = the percent of traffic in the peak direction of flow

Note: An average of 11% for K x D will suffice.

When right turn facilities are warranted, see Figure 3-1 for design criteria.*

^{*} Rev. 1/15

RED LANE LEFT TURN WARRANT WARRANT FOR LEFT-TURN STORAGE LANES ON TWO-LANE HIGHWAY

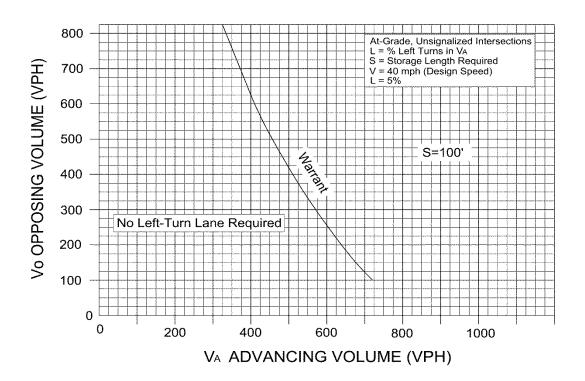


FIGURE 3-4 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

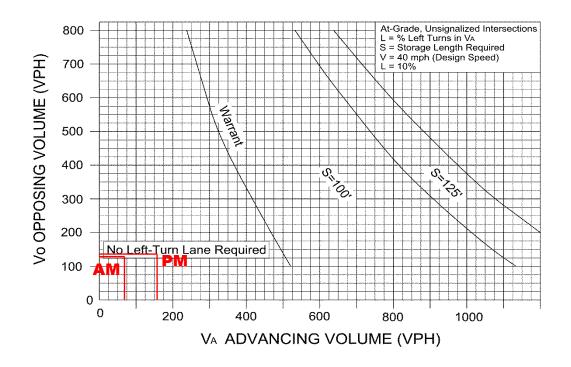
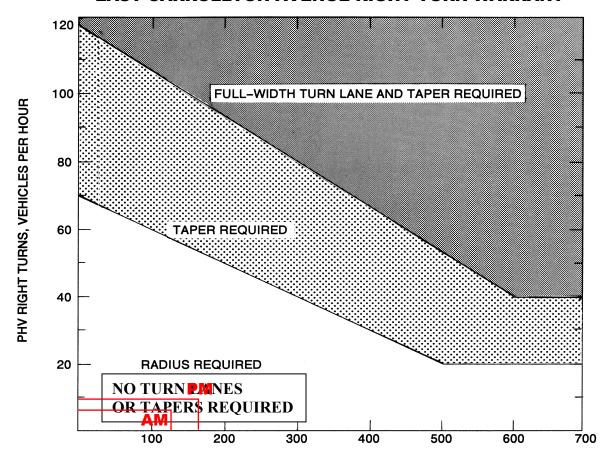


FIGURE 3-5 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

EAST CARROLLTON AVENUE RIGHT TURN WARRANT



PHV APPROACH TOTAL, VEHICLES PER HOUR

FIGURE 3-26 WARRANTS FOR RIGHT TURN TREATMENT (2-LANE HIGHWAY)

Appropriate Radius required at all Intersections and Entrances (Commercial or Private).

LEGEND

PHV - Peak Hour Volume (also Design Hourly Volume equivalent)

Adjustment for Right Turns

For posted speeds at or under 45 mph, PHV right turns > 40, and PHV total < 300.

Adjusted right turns = PHV Right Turns - 20

If PHV is not known use formula: PHV = ADT x K x D

K = the percent of AADT occurring in the peak hour

D = the percent of traffic in the peak direction of flow

Note: An average of 11% for K x D will suffice.

When right turn facilities are warranted, see Figure 3-1 for design criteria.*

^{*} Rev. 1/15

EAST CARROLLTON AVENUE LEFT TURN WARRANT WARRANT FOR LEFT-TURN STORAGE LANES ON TWO-LANE HIGHWAY

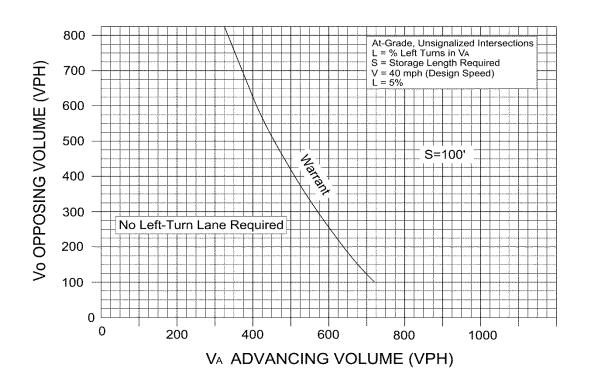


FIGURE 3-4 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

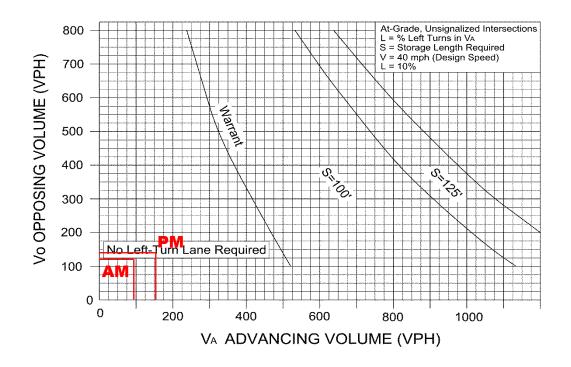


FIGURE 3-5 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

Appendix E
Synchro 11
Intersection Analysis Data

Intersection						
Intersection Delay, s/veh	7.3					
Intersection LOS	А					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥*	LDIX	NDL			אומט
Traffic Vol, veh/h	'T' 31	15	19	र्स 19	1 → 47	47
Future Vol, veh/h	31	15	19	19	47	47
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0.00	0.00	0.00	0.00	0.00	0.00
Mvmt Flow	36	17	22	22	55	55
Number of Lanes	1	0	0	1	1	0
		U		ı	-	U
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.4		7.4		7.2	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		50%	67%	0%		
Vol Thru, %				0,0		
		50%	0%	50%		
		50% 0%	0% 33%			
Vol Right, % Sign Control				50%		
Vol Right, %		0%	33%	50% 50%		
Vol Right, % Sign Control		0% Stop	33% Stop	50% 50% Stop		
Vol Right, % Sign Control Traffic Vol by Lane		0% Stop 38	33% Stop 46	50% 50% Stop 94		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol		0% Stop 38 19	33% Stop 46 31	50% 50% Stop 94 0		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		0% Stop 38 19	33% Stop 46 31 0	50% 50% Stop 94 0		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		0% Stop 38 19 19	33% Stop 46 31 0	50% 50% Stop 94 0 47 47		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		0% Stop 38 19 19 0	33% Stop 46 31 0 15	50% 50% Stop 94 0 47 47		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		0% Stop 38 19 19 0 44	33% Stop 46 31 0 15 53	50% 50% Stop 94 0 47 47 109		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		0% Stop 38 19 19 0 44 1 0.051	33% Stop 46 31 0 15 53 1	50% 50% Stop 94 0 47 47 109 1 0.113		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		0% Stop 38 19 19 0 44 1 0.051 4.178	33% Stop 46 31 0 15 53 1 0.061 4.102	50% 50% Stop 94 0 47 47 109 1 0.113 3.728		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		0% Stop 38 19 19 0 44 1 0.051 4.178 Yes	33% Stop 46 31 0 15 53 1 0.061 4.102 Yes	50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		0% Stop 38 19 19 0 44 1 0.051 4.178 Yes 854	33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867	50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		0% Stop 38 19 0 44 1 0.051 4.178 Yes 854 2.218	33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867 2.155	50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959 1.764		
Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		0% Stop 38 19 19 0 44 1 0.051 4.178 Yes 854 2.218 0.052	33% Stop 46 31 0 15 53 1 0.061 4.102 Yes 867 2.155 0.061	50% 50% Stop 94 0 47 47 109 1 0.113 3.728 Yes 959 1.764 0.114		

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	Α

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	12	43	7	0	59	7	15	13	3	0	4	5
Future Vol, veh/h	12	43	7	0	59	7	15	13	3	0	4	5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	52	9	0	72	9	18	16	4	0	5	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB				WB		NB				SB	
Opposing Approach	WB				EB		SB				NB	
Opposing Lanes	1				1		1				1	
Conflicting Approach Left	SB				NB		EB				WB	
Conflicting Lanes Left	1				1		1				1	
Conflicting Approach Right	NB				SB		WB				EB	
Conflicting Lanes Right	1				1		1				1	
HCM Control Delay	7.5				7.5		7.5				7	
HCM LOS	Α				Α		Α				Α	

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	19%	0%	0%
Vol Thru, %	42%	69%	89%	44%
Vol Right, %	10%	11%	11%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	62	66	9
LT Vol	15	12	0	0
Through Vol	13	43	59	4
RT Vol	3	7	7	5
Lane Flow Rate	38	76	80	11
Geometry Grp	1	1	1	1
Degree of Util (X)	0.045	0.085	0.09	0.012
Departure Headway (Hd)	4.251	4.052	4.013	3.899
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	834	880	889	905
Service Time	2.322	2.094	2.055	1.979
HCM Lane V/C Ratio	0.046	0.086	0.09	0.012
HCM Control Delay	7.5	7.5	7.5	7
HCM Lane LOS	Α	Α	Α	Α
HCM 95th-tile Q	0.1	0.3	0.3	0

Intersection												
Int Delay, s/veh	1.4											
• •												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	0	59	116	4	74	1	33	0	1	0	0	1
Future Vol, veh/h	0	59	116	4	74	1	33	0	1	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mymt Flow	0	72	141	5	90	1	40	0	1	0	0	1
N.A ' /N.A'	4 4			1			1					
	/lajor1			Major2			/linor1			Minor2		
Conflicting Flow All	91	0	0	213	0	0	244	244	143	244	314	91
Stage 1	-	-	-	-	-	-	143	143	-	101	101	-
Stage 2	-	-	-	-	-	-	101	101	-	143	213	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1517	-	-	1369	-	-	714	661	910	714	605	972
Stage 1	-	-	-	-	-	-	865	782	-	910	815	-
Stage 2	-	-	-	-	-	-	910	815	-	865	730	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1517	-	-	1369	-	-	711	658	910	711	603	972
Mov Cap-2 Maneuver	-	-	-	-	-	-	711	658	-	711	603	-
Stage 1	-	-	-	-	-	-	865	782	-	910	812	-
Stage 2	-	-	-	-	-	-	905	812	-	864	730	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.4			10.3			8.7		
HCM LOS	U			0.4			10.3 B			Α		
I ICIVI LUS							D			A		
						10/-	14/5-	14.5	0 D.L			
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :				
Capacity (veh/h)		716	1517	-	-	1369	-	-	972			
HCM Lane V/C Ratio		0.058	-	-	-	0.004	-	-	0.001			
HCM Control Delay (s)		10.3	0	-	-	7.6	0	-	8.7			
HCM Lane LOS		В	Α	-	-	Α	Α	-	Α			
HCM 95th %tile Q(veh)		0.2	0	-	-	0	-	-	0			

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	7:15	7:15	7:15	7:15	7:15	7:15	7:15
End Time	8:30	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	412	419	411	363	368	375	359
Vehs Exited	411	418	405	364	369	380	354
Starting Vehs	2	2	0	3	1	7	2
Ending Vehs	3	3	6	2	0	2	7
Travel Distance (mi)	87	89	85	77	80	79	77
Travel Time (hr)	4.2	4.2	4.0	3.7	3.8	3.8	3.7
Total Delay (hr)	0.8	0.9	8.0	0.7	8.0	0.7	0.7
Total Stops	413	433	403	360	389	365	373
Fuel Used (gal)	3.7	3.8	3.7	3.3	3.4	3.4	3.3

Summary of All Intervals

Run Number	8	9	10	Avg	
Start Time	7:15	7:15	7:15	7:15	
End Time	8:30	8:30	8:30	8:30	
Total Time (min)	75	75	75	75	
Time Recorded (min)	60	60	60	60	
# of Intervals	5	5	5	5	
# of Recorded Intervals	4	4	4	4	
Vehs Entered	384	396	396	385	
Vehs Exited	386	399	399	388	
Starting Vehs	8	5	3	0	
Ending Vehs	6	2	0	0	
Travel Distance (mi)	78	84	83	82	
Travel Time (hr)	3.7	4.0	4.0	3.9	
Total Delay (hr)	0.7	0.8	0.8	0.8	
Total Stops	355	373	399	386	
Fuel Used (gal)	3.4	3.6	3.6	3.5	

Interval #0 Information Seeding

Start Time	7:15
End Time	7:30
Total Time (min)	15
Volumes adjusted by Grow	th Factors, Anti PHF.

No data recorded this interval.

Start Time 7:30 End Time 7:45 Total Time (min) 15
Total Time (min) 15

Run Number	1	2	3	4	5	6	7
Vehs Entered	127	125	124	111	113	103	114
Vehs Exited	125	122	119	106	108	106	109
Starting Vehs	2	2	0	3	1	7	2
Ending Vehs	4	5	5	8	6	4	7
Travel Distance (mi)	26	26	24	23	24	21	24
Travel Time (hr)	1.3	1.3	1.1	1.1	1.2	1.0	1.2
Total Delay (hr)	0.3	0.2	0.2	0.2	0.3	0.2	0.2
Total Stops	128	120	106	108	129	99	113
Fuel Used (gal)	1.2	1.1	1.1	1.0	1.0	0.9	1.0

Interval #1 Information Recording

Start Time	7:30		
End Time	7:45		
Total Time (min)	15		
Volumes adjusted by PHF	, Growth Factors.		

Run Number	8	9	10	Avg	
Vehs Entered	102	120	104	114	
Vehs Exited	104	119	105	113	
Starting Vehs	8	5	3	0	
Ending Vehs	6	6	2	3	
Travel Distance (mi)	21	25	21	24	
Travel Time (hr)	1.0	1.2	1.0	1.1	
Total Delay (hr)	0.2	0.2	0.2	0.2	
Total Stops	95	110	99	110	
Fuel Used (gal)	1.0	1.1	0.9	1.0	

π	Interval #2	Information	Recording
-------	-------------	-------------	-----------

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growt	th Factors. Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	90	90	85	71	94	99	81
Vehs Exited	89	92	87	74	100	101	86
Starting Vehs	4	5	5	8	6	4	7
Ending Vehs	5	3	3	5	0	2	2
Travel Distance (mi)	19	19	18	15	20	21	18
Travel Time (hr)	0.9	0.9	0.9	0.7	1.0	1.0	0.9
Total Delay (hr)	0.2	0.2	0.2	0.1	0.2	0.2	0.2
Total Stops	93	96	86	66	92	104	88
Fuel Used (gal)	0.8	8.0	8.0	0.6	0.9	0.9	0.8

Interval #2 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth	Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	100	99	97	89	
Vehs Exited	105	103	97	94	
Starting Vehs	6	6	2	3	
Ending Vehs	1	2	2	0	
Travel Distance (mi)	21	23	21	20	
Travel Time (hr)	1.0	1.1	1.0	0.9	
Total Delay (hr)	0.2	0.2	0.2	0.2	
Total Stops	102	113	100	92	
Fuel Used (gal)	0.9	1.0	0.9	0.8	

Interval #3 Information Recording

Start Time	8:00
End Time	8:15
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	119	98	94	96	92	96	81
Vehs Exited	120	95	90	93	86	92	82
Starting Vehs	5	3	3	5	0	2	2
Ending Vehs	4	6	7	8	6	6	1
Travel Distance (mi)	24	21	20	20	19	19	18
Travel Time (hr)	1.2	1.0	0.9	1.0	0.9	0.9	0.8
Total Delay (hr)	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Stops	109	109	94	95	93	88	86
Fuel Used (gal)	1.0	0.9	0.9	0.9	0.8	0.8	0.7

Interval #3 Information Recording

Start Time	8:00
End Time	8:15
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	92	88	100	95	
Vehs Exited	88	86	101	93	
Starting Vehs	1	2	2	0	
Ending Vehs	5	4	1	1	
Travel Distance (mi)	17	18	21	20	
Travel Time (hr)	0.8	0.9	1.0	0.9	
Total Delay (hr)	0.1	0.1	0.2	0.2	
Total Stops	71	76	99	92	
Fuel Used (gal)	0.8	8.0	0.9	0.8	

Interval #4 Information Recording

Start Time	8:15
End Time	8:30
Total Time (min)	15
Volumes adjusted by Growth	h Factors, Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	76	106	108	85	69	77	83
Vehs Exited	77	109	109	91	75	81	77
Starting Vehs	4	6	7	8	6	6	1
Ending Vehs	3	3	6	2	0	2	7
Travel Distance (mi)	17	22	23	19	16	17	18
Travel Time (hr)	0.8	1.1	1.1	0.9	0.7	0.8	0.8
Total Delay (hr)	0.2	0.2	0.2	0.2	0.1	0.1	0.2
Total Stops	83	108	117	91	75	74	86
Fuel Used (gal)	8.0	1.0	1.0	0.8	0.7	0.7	0.8

Interval #4 Information Recording

Start Time	8:15
End Time	8:30
Total Time (min)	15
Volumes adjusted by Growt	h Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	90	89	95	86	
Vehs Exited	89	91	96	88	
Starting Vehs	5	4	1	1	
Ending Vehs	6	2	0	0	
Travel Distance (mi)	18	17	20	19	
Travel Time (hr)	0.9	0.8	1.0	0.9	
Total Delay (hr)	0.2	0.1	0.2	0.2	
Total Stops	87	74	101	91	
Fuel Used (gal)	0.8	0.7	0.9	0.8	

Intersection: 2: Red Ln & Carrollton Ave

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	31	40	52
Average Queue (ft)	25	22	32
95th Queue (ft)	43	46	48
Link Distance (ft)	383	305	460
Upstream Blk Time (%)			

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Broad St & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	2	22	49	18
Average Queue (ft)	0	1	20	1
95th Queue (ft)	0	12	46	11
Link Distance (ft)	292	373	621	370
Upstream Blk Time (%)				
O : D !! / !\				

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 8: Mt Vernon Ln & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	53	55	34	31
Average Queue (ft)	29	28	20	10
95th Queue (ft)	50	47	44	33
Link Distance (ft)	373	383	294	364
Unstream Rlk Time (%)				

Upstream Bik Time (%) Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection						
Intersection Delay, s/veh	7.7					
Intersection LOS	Α					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	₩.	LDIX	NDL			אומט
Traffic Vol, veh/h	'T' 71	22	36	र्दी 53	Љ 31	73
Future Vol, veh/h	71	22	36	53	31	73
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0.93	0.93	0.93	0.93	0.93	0.93
Mvmt Flow	76	24	39	57	33	78
Number of Lanes	1	0	0	1	33 1	0
		U		1	•	U
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.9		7.9		7.3	
HCM LOS	Α		Α		Α	
		NIDI 4				
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		40%	76%	SBLn1 0%		
Vol Left, % Vol Thru, %		40%	76%	0%		
Vol Left, %		40% 60%	76% 0%	0% 30%		
Vol Left, % Vol Thru, % Vol Right, %		40% 60% 0%	76% 0% 24%	0% 30% 70%		
Vol Left, % Vol Thru, % Vol Right, % Sign Control		40% 60% 0% Stop	76% 0% 24% Stop	0% 30% 70% Stop		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		40% 60% 0% Stop 89	76% 0% 24% Stop 93 71	0% 30% 70% Stop 104		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		40% 60% 0% Stop 89 36	76% 0% 24% Stop 93 71	0% 30% 70% Stop 104		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		40% 60% 0% Stop 89 36 53	76% 0% 24% Stop 93 71	0% 30% 70% Stop 104 0		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		40% 60% 0% Stop 89 36 53	76% 0% 24% Stop 93 71 0	0% 30% 70% Stop 104 0 31		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		40% 60% 0% Stop 89 36 53 0	76% 0% 24% Stop 93 71 0 22 100	0% 30% 70% Stop 104 0 31 73		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		40% 60% 0% Stop 89 36 53 0 96	76% 0% 24% Stop 93 71 0 22 100	0% 30% 70% Stop 104 0 31 73 112		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		40% 60% 0% Stop 89 36 53 0 96 1	76% 0% 24% Stop 93 71 0 22 100 1 0.118	0% 30% 70% Stop 104 0 31 73 112 1 0.116		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		40% 60% 0% Stop 89 36 53 0 96 1 0.113 4.243	76% 0% 24% Stop 93 71 0 22 100 1 0.118 4.264	0% 30% 70% Stop 104 0 31 73 112 1 0.116 3.727		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		40% 60% 0% Stop 89 36 53 0 96 1 0.113 4.243 Yes	76% 0% 24% Stop 93 71 0 22 100 1 0.118 4.264 Yes	0% 30% 70% Stop 104 0 31 73 112 1 0.116 3.727 Yes		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		40% 60% 0% Stop 89 36 53 0 96 1 0.113 4.243 Yes 835	76% 0% 24% Stop 93 71 0 22 100 1 0.118 4.264 Yes 829	0% 30% 70% Stop 104 0 31 73 112 1 0.116 3.727 Yes 946		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		40% 60% 0% Stop 89 36 53 0 96 1 0.113 4.243 Yes 835 2.316	76% 0% 24% Stop 93 71 0 22 100 1 0.118 4.264 Yes 829 2.349	0% 30% 70% Stop 104 0 31 73 112 1 0.116 3.727 Yes 946 1.81		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		40% 60% 0% Stop 89 36 53 0 96 1 0.113 4.243 Yes 835 2.316 0.115	76% 0% 24% Stop 93 71 0 22 100 1 0.118 4.264 Yes 829 2.349 0.121	0% 30% 70% Stop 104 0 31 73 112 1 0.116 3.727 Yes 946 1.81 0.118		

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	Α

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	5	88	12	2	104	2	13	3	2	3	5	6
Future Vol, veh/h	5	88	12	2	104	2	13	3	2	3	5	6
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	107	15	2	127	2	16	4	2	4	6	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	7.8			7.9			7.7			7.4		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	72%	5%	2%	21%
Vol Thru, %	17%	84%	96%	36%
Vol Right, %	11%	11%	2%	43%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	105	108	14
LT Vol	13	5	2	3
Through Vol	3	88	104	5
RT Vol	2	12	2	6
Lane Flow Rate	22	128	132	17
Geometry Grp	1	1	1	1
Degree of Util (X)	0.028	0.144	0.15	0.02
Departure Headway (Hd)	4.593	4.043	4.092	4.307
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	784	881	871	836
Service Time	2.593	2.097	2.143	2.308
HCM Lane V/C Ratio	0.028	0.145	0.152	0.02
HCM Control Delay	7.7	7.8	7.9	7.4
HCM Lane LOS	Α	Α	Α	Α
HCM 95th-tile Q	0.1	0.5	0.5	0.1

Intersection												
Int Delay, s/veh	3											
• •												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	3	99	87	7	115	1	84	0	6	0	2	2
Future Vol, veh/h	3	99	87	7	115	1	84	0	6	0	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	121	106	9	140	1	102	0	7	0	2	2
Major/Minor N	1ajor1			Major2			/linor1		N	/linor2		
Conflicting Flow All	141	0	0	227	0	0	343	341	174	345	394	141
Stage 1	141	-	U	221	-		182	182	1/4	159	159	141
Stage 1 Stage 2	-	-	-	-	-	-	161	159	-	186	235	-
Critical Hdwy	4.1	-	-	4.1	-		7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	4.1	-	-	4.1	-	-	6.1	5.5	0.2	6.1	5.5	0.2
Critical Hdwy Stg 2	_	-	-	-		-	6.1	5.5	-	6.1	5.5	
Follow-up Hdwy	2.2	-		2.2	-	-	3.5	3.5	3.3	3.5	3.5	3.3
Pot Cap-1 Maneuver	1455	-	<u>-</u>	1353	_	<u>-</u>	615	584	875	613	546	912
Stage 1	1400	-		1000	_	-	824	753	- 0/3	848	770	912
Stage 2	-	-	-	-		-	846	770	-	820	714	
Platoon blocked, %	-	-		_		-	040	110	_	UZU	/ 14	-
Mov Cap-1 Maneuver	1455	-	<u>-</u>	1353			606	578	875	603	541	912
Mov Cap-1 Maneuver	1400	-		1000	-	-	606	578	- 0/3	603	541	912
Stage 1	-	-	<u>-</u>	<u>-</u>	_	<u>-</u>	822	751	-	845	765	
Stage 2	-	-		_	_	-	835	765	<u>-</u>	811	712	-
Slaye Z	_	_	_	<u>-</u>	_	<u>-</u>	000	700	<u>-</u>	011	112	<u>-</u>
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			12.1			10.3		
HCM LOS							В			В		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SRI n1			
		619		LDI		1353			679			
Capacity (veh/h) HCM Lane V/C Ratio		0.177	0.003	=		0.006	-	-	0.007			
		12.1	7.5	0	-	7.7		-	10.3			
HCM Control Delay (s) HCM Lane LOS					-		0		10.3 B			
		0.6	A 0	Α	-	A	Α	-	0			
HCM 95th %tile Q(veh)		0.0	U	-	-	0	-	-	U			

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:45	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	550	568	518	505	500	529	506
Vehs Exited	551	561	518	507	497	528	502
Starting Vehs	9	3	4	7	4	6	7
Ending Vehs	8	10	4	5	7	7	11
Travel Distance (mi)	122	122	115	114	111	118	113
Travel Time (hr)	6.0	5.9	5.6	5.6	5.5	5.7	5.5
Total Delay (hr)	1.3	1.3	1.2	1.2	1.3	1.2	1.2
Total Stops	658	628	623	629	611	640	604
Fuel Used (gal)	5.3	5.3	5.0	4.9	4.9	5.2	4.8

Summary of All Intervals

Run Number	8	9	10	Avg	
Start Time	4:45	4:45	4:45	4:45	
End Time	6:00	6:00	6:00	6:00	
Total Time (min)	75	75	75	75	
Time Recorded (min)	60	60	60	60	
# of Intervals	5	5	5	5	
# of Recorded Intervals	4	4	4	4	
Vehs Entered	517	535	506	522	
Vehs Exited	509	540	509	523	
Starting Vehs	4	7	4	2	
Ending Vehs	12	2	1	5	
Travel Distance (mi)	115	118	111	116	
Travel Time (hr)	5.6	5.8	5.4	5.7	
Total Delay (hr)	1.2	1.3	1.2	1.2	
Total Stops	629	646	590	627	
Fuel Used (gal)	5.0	5.2	4.9	5.0	

Interval #0 Information Seeding

Start Time	4:45
End Time	5:00
Total Time (min)	15
Volumes adjusted by Growt	h Factors, Anti PHF.

No data recorded this interval.

Interval #1	Information	Recording
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Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth	Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	136	126	130	95	108	114	113
Vehs Exited	137	123	128	97	110	115	116
Starting Vehs	9	3	4	7	4	6	7
Ending Vehs	8	6	6	5	2	5	4
Travel Distance (mi)	31	26	28	22	24	27	26
Travel Time (hr)	1.5	1.3	1.4	1.1	1.2	1.3	1.2
Total Delay (hr)	0.3	0.3	0.3	0.2	0.3	0.3	0.3
Total Stops	170	132	148	122	128	147	133
Fuel Used (gal)	1.3	1.1	1.2	1.0	1.0	1.1	1.1

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growt	h Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	135	138	111	120	
Vehs Exited	134	143	108	120	
Starting Vehs	4	7	4	2	
Ending Vehs	5	2	7	3	
Travel Distance (mi)	29	31	24	27	
Travel Time (hr)	1.4	1.5	1.1	1.3	
Total Delay (hr)	0.3	0.4	0.2	0.3	
Total Stops	159	169	124	142	
Fuel Used (gal)	1.3	1.4	1.0	1.2	

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	168	150	138	148	158	159	152
Vehs Exited	171	150	138	143	154	163	153
Starting Vehs	8	6	6	5	2	5	4
Ending Vehs	5	6	6	10	6	1	3
Travel Distance (mi)	38	32	30	32	35	35	33
Travel Time (hr)	1.9	1.6	1.5	1.6	1.7	1.7	1.6
Total Delay (hr)	0.4	0.3	0.3	0.4	0.4	0.4	0.4
Total Stops	204	163	159	180	195	190	180
Fuel Used (gal)	1.7	1.4	1.3	1.3	1.6	1.6	1.4

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	144	155	160	152	
Vehs Exited	142	150	161	153	
Starting Vehs	5	2	7	3	
Ending Vehs	7	7	6	2	
Travel Distance (mi)	32	33	35	34	
Travel Time (hr)	1.6	1.7	1.7	1.7	
Total Delay (hr)	0.4	0.4	0.4	0.4	
Total Stops	181	180	177	183	
Fuel Used (gal)	1.4	1.4	1.6	1.5	

Interval #3 Information R	Recording
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Start Time	5:30
End Time	5:45
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	130	127	115	118	135	137	115
Vehs Exited	131	125	114	124	133	131	111
Starting Vehs	5	6	6	10	6	1	3
Ending Vehs	4	8	7	4	8	7	7
Travel Distance (mi)	28	27	27	27	30	29	25
Travel Time (hr)	1.4	1.3	1.3	1.3	1.5	1.4	1.2
Total Delay (hr)	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Stops	148	143	148	153	166	153	136
Fuel Used (gal)	1.2	1.2	1.2	1.2	1.3	1.3	1.0

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15
Volumes adjusted by Grow	th Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	114	104	111	119	
Vehs Exited	113	106	114	122	
Starting Vehs	7	7	6	2	
Ending Vehs	8	5	3	3	
Travel Distance (mi)	25	23	25	27	
Travel Time (hr)	1.2	1.1	1.2	1.3	
Total Delay (hr)	0.3	0.2	0.3	0.3	
Total Stops	136	131	138	144	
Fuel Used (gal)	1.1	1.0	1.1	1.2	

Interval #4 Information	Recording
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Start Time	5:45	
End Time	6:00	
Total Time (min)	15	
Volumes adjusted by Grov	wth Factors.	

Run Number	1	2	3	4	5	6	7
Vehs Entered	116	165	135	144	99	119	126
Vehs Exited	112	163	138	143	100	119	122
Starting Vehs	4	8	7	4	8	7	7
Ending Vehs	8	10	4	5	7	7	11
Travel Distance (mi)	25	37	30	32	22	27	28
Travel Time (hr)	1.2	1.8	1.5	1.5	1.1	1.3	1.4
Total Delay (hr)	0.2	0.4	0.3	0.3	0.3	0.3	0.3
Total Stops	136	190	168	174	122	150	155
Fuel Used (gal)	1.1	1.6	1.3	1.4	1.0	1.2	1.2

Interval #4 Information Recording

Start Time	5:45				
End Time	6:00				
Total Time (min)	15				
Volumes adjusted by Growth Factors.					

Run Number	8	9	10	Avg	
Vehs Entered	124	138	124	129	
Vehs Exited	120	141	126	129	
Starting Vehs	8	5	3	3	
Ending Vehs	12	2	1	5	
Travel Distance (mi)	28	31	28	29	
Travel Time (hr)	1.4	1.5	1.4	1.4	
Total Delay (hr)	0.3	0.3	0.3	0.3	
Total Stops	153	166	151	157	
Fuel Used (gal)	1.2	1.4	1.2	1.3	

Intersection: 2: Red Ln & Carrollton Ave

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	39	52	55
Average Queue (ft)	29	32	33
95th Queue (ft)	41	46	49
Link Distance (ft)	383	305	460
Upstream Blk Time (%)			

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Broad St & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	11	27	64	28
Average Queue (ft)	0	1	34	4
95th Queue (ft)	6	10	56	20
Link Distance (ft)	292	373	621	370
I Instraam RIk Time (%)				

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 8: Mt Vernon Ln & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	61	68	34	34
Average Queue (ft)	34	34	15	12
95th Queue (ft)	54	50	41	37
Link Distance (ft)	373	383	294	364
Unetroom Plk Time (0/)				

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection						
Intersection Delay, s/veh	7.4					
Intersection LOS	7.4 A					
IIIIOI 360IIOII LOO						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			ની	f)	
Traffic Vol, veh/h	33	16	20	20	51	51
Future Vol, veh/h	33	16	20	20	51	51
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	38	19	23	23	59	59
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.5		7.5		7.3	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Lane Vol Left. %		NBLn1	EBLn1	SBLn1		
Vol Left, %		50%	67%	0%		
Vol Left, % Vol Thru, %		50% 50%	67% 0%	0% 50%		
Vol Left, % Vol Thru, % Vol Right, %		50% 50% 0%	67% 0% 33%	0% 50% 50%		
Vol Left, % Vol Thru, % Vol Right, % Sign Control		50% 50% 0% Stop	67% 0% 33% Stop	0% 50% 50% Stop		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane		50% 50% 0% Stop 40	67% 0% 33% Stop 49	0% 50% 50% Stop 102		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol		50% 50% 0% Stop 40 20	67% 0% 33% Stop 49 33	0% 50% 50% Stop 102		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol		50% 50% 0% Stop 40 20	67% 0% 33% Stop 49 33 0	0% 50% 50% Stop 102 0 51		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		50% 50% 0% Stop 40 20 20	67% 0% 33% Stop 49 33 0	0% 50% 50% Stop 102 0 51		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		50% 50% 0% Stop 40 20 20 0 47	67% 0% 33% Stop 49 33 0 16	0% 50% 50% Stop 102 0 51 51		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp		50% 50% 0% Stop 40 20 20 0 47	67% 0% 33% Stop 49 33 0 16 57	0% 50% 50% Stop 102 0 51 51 119		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		50% 50% 0% Stop 40 20 0 47 1 0.054	67% 0% 33% Stop 49 33 0 16 57 1 0.065	0% 50% 50% Stop 102 0 51 51 119 1		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		50% 50% 0% Stop 40 20 20 0 47 1 0.054 4.19	67% 0% 33% Stop 49 33 0 16 57 1 0.065 4.121	0% 50% 50% Stop 102 0 51 51 119 1 0.123 3.735		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		50% 50% 0% Stop 40 20 20 0 47 1 0.054 4.19 Yes	67% 0% 33% Stop 49 33 0 16 57 1 0.065 4.121 Yes	0% 50% 50% Stop 102 0 51 51 119 1 0.123 3.735 Yes		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		50% 50% 0% Stop 40 20 0 47 1 0.054 4.19 Yes 851	67% 0% 33% Stop 49 33 0 16 57 1 0.065 4.121 Yes 862	0% 50% 50% Stop 102 0 51 51 119 1 0.123 3.735 Yes 956		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time		50% 50% 0% Stop 40 20 0 47 1 0.054 4.19 Yes 851 2.234	67% 0% 33% Stop 49 33 0 16 57 1 0.065 4.121 Yes 862 2.18	0% 50% 50% Stop 102 0 51 51 119 1 0.123 3.735 Yes 956 1.774		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		50% 50% 0% Stop 40 20 0 47 1 0.054 4.19 Yes 851 2.234 0.055	67% 0% 33% Stop 49 33 0 16 57 1 0.065 4.121 Yes 862 2.18 0.066	0% 50% 50% Stop 102 0 51 51 119 1 0.123 3.735 Yes 956 1.774 0.124		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		50% 50% 0% Stop 40 20 0 47 1 0.054 4.19 Yes 851 2.234 0.055 7.5	67% 0% 33% Stop 49 33 0 16 57 1 0.065 4.121 Yes 862 2.18 0.066 7.5	0% 50% 50% Stop 102 0 51 51 119 1 0.123 3.735 Yes 956 1.774 0.124 7.3		
Vol Left, % Vol Thru, % Vol Right, % Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		50% 50% 0% Stop 40 20 0 47 1 0.054 4.19 Yes 851 2.234 0.055	67% 0% 33% Stop 49 33 0 16 57 1 0.065 4.121 Yes 862 2.18 0.066	0% 50% 50% Stop 102 0 51 51 119 1 0.123 3.735 Yes 956 1.774 0.124		

ntersection	
ntersection Delay, s/veh ntersection LOS	7.5
ntersection LOS	А

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	13	46	8	0	64	8	16	14	3	0	4	5
Future Vol, veh/h	13	46	8	0	64	8	16	14	3	0	4	5
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	56	10	0	78	10	20	17	4	0	5	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB				WB		NB				SB	
Opposing Approach	WB				EB		SB				NB	
Opposing Lanes	1				1		1				1	
Conflicting Approach Left	SB				NB		EB				WB	
Conflicting Lanes Left	1				1		1				1	
Conflicting Approach Right	NB				SB		WB				EB	
Conflicting Lanes Right	1				1		1				1	
HCM Control Delay	7.5				7.5		7.6				7.1	
HCM LOS	Α				Α		Α				Α	

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	19%	0%	0%
Vol Thru, %	42%	69%	89%	44%
Vol Right, %	9%	12%	11%	56%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	33	67	72	9
LT Vol	16	13	0	0
Through Vol	14	46	64	4
RT Vol	3	8	8	5
Lane Flow Rate	40	82	88	11
Geometry Grp	1	1	1	1
Degree of Util (X)	0.048	0.092	0.098	0.012
Departure Headway (Hd)	4.278	4.058	4.019	3.924
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	827	878	887	898
Service Time	2.354	2.103	2.064	2.01
HCM Lane V/C Ratio	0.048	0.093	0.099	0.012
HCM Control Delay	7.6	7.5	7.5	7.1
HCM Lane LOS	Α	Α	Α	Α
HCM 95th-tile Q	0.2	0.3	0.3	0

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	LDIX	1100	4	TIDIT	1102	4	TIDIT.	ODL	4	OBIT
Traffic Vol, veh/h	0	64	125	4	80	1	36	0	3	0	0	1
Future Vol, veh/h	0	64	125	4	80	1	36	0	3	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	78	152	5	98	1	44	0	4	0	0	1
Major/Minor N	/lajor1		ı	Major2			Minor1		N	/linor2		
Conflicting Flow All	99	0	0	230	0	0	263	263	154	265	339	99
Stage 1	-	-	-	-	-	-	154	154	-	109	109	-
Stage 2	-	-	-	-	-	-	109	109	-	156	230	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1507	-	-	1350	-	-	694	646	897	692	586	962
Stage 1	-	-	-	-	-	-	853	774	-	901	809	-
Stage 2	-	-	-	-	-	-	901	809	-	851	718	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1507	-	-	1350	-	-	691	643	897	687	584	962
Mov Cap-2 Maneuver	-	-	-	-	-	-	691	643	-	687	584	-
Stage 1	-	-	-	-	-	-	853	774	-	901	806	-
Stage 2	-	-	-	-	-	-	896	806	-	848	718	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.4			10.5			8.7		
HCM LOS							В			Α		
Minor Lane/Major Mvm	t I	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	SBLn1			
Capacity (veh/h)		703	1507	-		1350	-	-	962			
HCM Lane V/C Ratio		0.068	-	_		0.004	-	_	0.001			
HCM Control Delay (s)		10.5	0	-	_	7.7	0	-	8.7			
HCM Lane LOS		В	A	-	-	Α	A	-	Α			
HCM 95th %tile Q(veh)		0.2	0	-	-	0	-	-	0			

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	7:15	7:15	7:15	7:15	7:15	7:15	7:15
End Time	8:30	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	430	415	428	404	400	398	440
Vehs Exited	424	409	426	405	397	399	434
Starting Vehs	1	1	0	3	1	5	3
Ending Vehs	7	7	2	2	4	4	9
Travel Distance (mi)	88	87	92	84	85	85	94
Travel Time (hr)	4.2	4.2	4.4	4.0	4.0	4.1	4.6
Total Delay (hr)	0.8	0.8	0.9	0.7	0.8	8.0	0.9
Total Stops	401	422	468	369	406	402	460
Fuel Used (gal)	3.8	3.8	4.0	3.6	3.6	3.7	4.0

Summary of All Intervals

Run Number	8	9	10	Avg	
Start Time	7:15	7:15	7:15	7:15	
End Time	8:30	8:30	8:30	8:30	
Total Time (min)	75	75	75	75	
Time Recorded (min)	60	60	60	60	
# of Intervals	5	5	5	5	
# of Recorded Intervals	4	4	4	4	
Vehs Entered	394	424	426	416	
Vehs Exited	395	426	425	415	
Starting Vehs	3	5	1	0	
Ending Vehs	2	3	2	0	
Travel Distance (mi)	83	90	89	88	
Travel Time (hr)	4.0	4.3	4.3	4.2	
Total Delay (hr)	0.8	0.9	0.9	0.8	
Total Stops	396	423	417	418	
Fuel Used (gal)	3.6	4.0	3.9	3.8	

Interval #0 Information Seeding

Start Time	7:15	
End Time	7:30	
Total Time (min)	15	
Volumes adjusted by Gro	wth Factors, Anti PHF.	
No data recorded this into	erval.	

Interval #1 I	Information	Recording
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Start Time	7:30	
End Time	7:45	
Total Time (min)	15	
Volumes adjusted by PHF	Growth Factors	

Run Number	1	2	3	4	5	6	7
Vehs Entered	128	117	133	111	118	120	148
Vehs Exited	126	116	129	109	114	121	145
Starting Vehs	1	1	0	3	1	5	3
Ending Vehs	3	2	4	5	5	4	6
Travel Distance (mi)	26	24	29	23	25	25	31
Travel Time (hr)	1.3	1.2	1.4	1.1	1.2	1.2	1.5
Total Delay (hr)	0.3	0.2	0.3	0.2	0.2	0.2	0.3
Total Stops	119	117	149	94	119	115	139
Fuel Used (gal)	1.1	1.1	1.3	1.0	1.0	1.1	1.4

Interval #1 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by PHF,	Growth Factors.

Run Number	8	9	10	Avg	
Vehs Entered	124	130	120	121	
Vehs Exited	121	134	112	121	
Starting Vehs	3	5	1	0	
Ending Vehs	6	1	9	2	
Travel Distance (mi)	26	29	24	26	
Travel Time (hr)	1.2	1.4	1.1	1.3	
Total Delay (hr)	0.3	0.3	0.2	0.3	
Total Stops	120	142	109	120	
Fuel Used (gal)	1.1	1.3	1.1	1.1	

Interval #2 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	107	90	88	83	98	100	94
Vehs Exited	105	88	87	83	101	101	98
Starting Vehs	3	2	4	5	5	4	6
Ending Vehs	5	4	5	5	2	3	2
Travel Distance (mi)	22	18	19	17	21	21	21
Travel Time (hr)	1.0	0.9	0.9	0.8	1.0	1.0	1.0
Total Delay (hr)	0.2	0.2	0.2	0.1	0.2	0.2	0.2
Total Stops	102	87	98	67	106	105	100
Fuel Used (gal)	0.9	0.8	0.8	0.7	0.9	0.9	0.9

Interval #2 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growt	th Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	106	96	99	95	
Vehs Exited	111	95	102	95	
Starting Vehs	6	1	9	2	
Ending Vehs	1	2	6	1	
Travel Distance (mi)	24	21	21	21	
Travel Time (hr)	1.1	1.0	1.0	1.0	
Total Delay (hr)	0.3	0.2	0.2	0.2	
Total Stops	123	101	101	99	
Fuel Used (gal)	1.0	0.9	0.9	0.9	

Interval #3 Information Recording

Start Time	8:00
End Time	8:15
Total Time (min)	15
Volumes adjusted by Growth	Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	110	100	99	107	92	94	110
Vehs Exited	110	98	96	106	89	90	102
Starting Vehs	5	4	5	5	2	3	2
Ending Vehs	5	6	8	6	5	7	10
Travel Distance (mi)	21	21	22	22	19	20	23
Travel Time (hr)	1.0	1.0	1.0	1.0	0.9	1.0	1.1
Total Delay (hr)	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Stops	89	104	110	100	89	101	118
Fuel Used (gal)	0.9	0.9	1.0	0.9	0.8	0.8	0.9

Interval #3 Information Recording

Start Time	8:00
End Time	8:15
Total Time (min)	15
Volumes adjusted by Growt	h Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	79	97	100	99	
Vehs Exited	73	97	105	97	
Starting Vehs	1	2	6	1	
Ending Vehs	7	2	1	3	
Travel Distance (mi)	16	20	22	21	
Travel Time (hr)	0.8	0.9	1.0	1.0	
Total Delay (hr)	0.1	0.2	0.2	0.2	
Total Stops	73	89	95	100	
Fuel Used (gal)	0.7	0.9	0.9	0.9	

Interval #4 Information Recording

Start Time	8:15
End Time	8:30
Total Time (min)	15
Volumes adjusted by Growth	Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	85	108	108	103	92	84	88
Vehs Exited	83	107	114	107	93	87	89
Starting Vehs	5	6	8	6	5	7	10
Ending Vehs	7	7	2	2	4	4	9
Travel Distance (mi)	19	23	22	22	19	18	19
Travel Time (hr)	0.9	1.1	1.1	1.1	0.9	0.9	0.9
Total Delay (hr)	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Stops	91	114	111	108	92	81	103
Fuel Used (gal)	0.8	1.0	0.9	1.0	8.0	0.8	0.8

Interval #4 Information Recording

Start Time	8:15
End Time	8:30
Total Time (min)	15
Volumes adjusted by Growt	h Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	85	101	107	98	
Vehs Exited	90	100	106	97	
Starting Vehs	7	2	1	3	
Ending Vehs	2	3	2	0	
Travel Distance (mi)	17	20	23	20	
Travel Time (hr)	0.8	0.9	1.1	1.0	
Total Delay (hr)	0.2	0.2	0.2	0.2	
Total Stops	80	91	112	100	
Fuel Used (gal)	0.7	0.9	1.0	0.9	

Intersection: 2: Red Ln & Carrollton Ave

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	37	47	55
Average Queue (ft)	26	22	33
95th Queue (ft)	44	46	48
Link Distance (ft)	383	305	460
Upstream Blk Time (%)			
Queuing Penalty (veh)			

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Broad St & Carrollton Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	15	46	18
Average Queue (ft)	1	24	1
95th Queue (ft)	11	47	9
Link Distance (ft)	373	621	370
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Ctorono Dov. Diet (ff)			

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 8: Mt Vernon Ln & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	60	52	43	31
Average Queue (ft)	30	28	20	8
95th Queue (ft)	51	48	46	31
Link Distance (ft)	373	383	294	364
Unstream Rlk Time (%)				

Queuing Penalty (veh) Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection Delay, s/veh	7.8					
Intersection LOS	7.0 A					
Movement	EDI	EDD	NIDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	**	0.4	20	€	}	70
Traffic Vol, veh/h	76 76	24	38	57 57	33	79
Future Vol, veh/h	76	24	38	57	33	79
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow Number of Lanes	82	26	41	61	35 1	85
Number of Lanes	1	0	0	1	•	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8		7.9		7.4	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		40%	76%	0%		
Vol Thru, %						
		60%	0%	29%		
Vol Right, %		0%	0% 24%	29% 71%		
Vol Right, % Sign Control						
		0%	24%	71%		
Sign Control		0% Stop	24% Stop	71% Stop		
Sign Control Traffic Vol by Lane		0% Stop 95	24% Stop 100	71% Stop 112		
Sign Control Traffic Vol by Lane LT Vol		0% Stop 95 38	24% Stop 100 76 0 24	71% Stop 112 0 33 79		
Sign Control Traffic Vol by Lane LT Vol Through Vol		0% Stop 95 38 57	24% Stop 100 76 0	71% Stop 112 0 33		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol		0% Stop 95 38 57	24% Stop 100 76 0 24	71% Stop 112 0 33 79		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate		0% Stop 95 38 57 0 102 1 0.121	24% Stop 100 76 0 24 108	71% Stop 112 0 33 79 120		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd)		0% Stop 95 38 57 0 102	24% Stop 100 76 0 24 108	71% Stop 112 0 33 79 120		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X)		0% Stop 95 38 57 0 102 1 0.121	24% Stop 100 76 0 24 108 1 0.128	71% Stop 112 0 33 79 120 1 0.125 3.744 Yes		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		0% Stop 95 38 57 0 102 1 0.121 4.263 Yes 830	24% Stop 100 76 0 24 108 1 0.128 4.288 Yes 824	71% Stop 112 0 33 79 120 1 0.125 3.744 Yes 941		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N		0% Stop 95 38 57 0 102 1 0.121 4.263 Yes 830 2.344	24% Stop 100 76 0 24 108 1 0.128 4.288 Yes	71% Stop 112 0 33 79 120 1 0.125 3.744 Yes 941 1.835		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap		0% Stop 95 38 57 0 102 1 0.121 4.263 Yes 830 2.344 0.123	24% Stop 100 76 0 24 108 1 0.128 4.288 Yes 824	71% Stop 112 0 33 79 120 1 0.125 3.744 Yes 941 1.835 0.128		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio HCM Control Delay		0% Stop 95 38 57 0 102 1 0.121 4.263 Yes 830 2.344 0.123 7.9	24% Stop 100 76 0 24 108 1 0.128 4.288 Yes 824 2.378	71% Stop 112 0 33 79 120 1 0.125 3.744 Yes 941 1.835 0.128 7.4		
Sign Control Traffic Vol by Lane LT Vol Through Vol RT Vol Lane Flow Rate Geometry Grp Degree of Util (X) Departure Headway (Hd) Convergence, Y/N Cap Service Time HCM Lane V/C Ratio		0% Stop 95 38 57 0 102 1 0.121 4.263 Yes 830 2.344 0.123	24% Stop 100 76 0 24 108 1 0.128 4.288 Yes 824 2.378 0.131	71% Stop 112 0 33 79 120 1 0.125 3.744 Yes 941 1.835 0.128		

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	Α

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			₽	
Traffic Vol, veh/h	5	95	13	2	112	2	14	3	2	3	5	6
Future Vol, veh/h	5	95	13	2	112	2	14	3	2	3	5	6
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	116	16	2	137	2	17	4	2	4	6	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	7.9			8			7.8			7.4		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	EBLn1	WBLn1	SBLn1	
Vol Left, %	74%	4%	2%	21%	
Vol Thru, %	16%	84%	97%	36%	
Vol Right, %	11%	12%	2%	43%	
Sign Control	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	19	113	116	14	
LT Vol	14	5	2	3	
Through Vol	3	95	112	5	
RT Vol	2	13	2	6	
Lane Flow Rate	23	138	141	17	
Geometry Grp	1	1	1	1	
Degree of Util (X)	0.03	0.155	0.161	0.021	
Departure Headway (Hd)	4.641	4.051	4.101	4.35	
Convergence, Y/N	Yes	Yes	Yes	Yes	
Сар	776	878	867	828	
Service Time	2.642	2.111	2.159	2.351	
HCM Lane V/C Ratio	0.03	0.157	0.163	0.021	
HCM Control Delay	7.8	7.9	8	7.4	
HCM Lane LOS	Α	Α	Α	Α	
HCM 95th-tile Q	0.1	0.5	0.6	0.1	

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4		11.02	4	1,51	,,,,,,,	4	, LOIK	751	4	UDIK
Traffic Vol, veh/h	3	107	94	8	124	1	90	0	6	0	2	2
Future Vol, veh/h	3	107	94	8	124	1	90	0	6	0	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	130	115	10	151	1	110	0	7	0	2	2
Major/Minor N	1ajor1			Major2		ı	Minor1		N	/linor2		
Conflicting Flow All	152	0	0	245	0	0	370	368	188	371	425	152
Stage 1	-	-	-	-	-	-	196	196	-	172	172	-
Stage 2	-	-	-	_	-	-	174	172	-	199	253	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1441	-	-	1333	-	-	590	564	859	589	524	900
Stage 1	-	-	-	-	-	-	810	742	-	835	760	-
Stage 2	-	-	-	-	-	-	833	760	-	807	701	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1441	-	-	1333	-	-	581	558	859	579	518	900
Mov Cap-2 Maneuver	-	-	-	-	-	-	581	558	-	579	518	-
Stage 1	-	-	-	-	-	-	808	740	-	832	754	-
Stage 2	-	-	-	-	-	-	821	754	-	798	699	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.5			12.6			10.5		
HCM LOS	J.,			3.0			12.0			В		
Minor Lane/Major Mvmt		NBLn1	EBL	EBT	EBR	WBL	WBT	WBR:	SBLn1			
Capacity (veh/h)		593				1333	-	-				
HCM Lane V/C Ratio		0.197		_		0.007	_		0.007			
HCM Control Delay (s)		12.6	7.5	0	-	7.7	0	_	10.5			
HCM Lane LOS		В	A	A	_	A	A	_	В			
HCM 95th %tile Q(veh)		0.7	0	-	_	0	_	-	0			
2(1011)									_			

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:15	4:15	4:15	4:15	4:15	4:15	4:15
End Time	5:30	5:30	5:30	5:30	5:30	5:30	5:30
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	608	572	581	509	564	592	556
Vehs Exited	608	567	579	507	564	593	547
Starting Vehs	9	7	4	8	4	8	6
Ending Vehs	9	12	6	10	4	7	15
Travel Distance (mi)	135	124	129	115	126	132	125
Travel Time (hr)	6.7	6.1	6.3	5.6	6.2	6.5	6.1
Total Delay (hr)	1.5	1.4	1.4	1.3	1.4	1.4	1.4
Total Stops	743	661	699	627	675	707	684
Fuel Used (gal)	5.9	5.3	5.6	5.0	5.5	5.8	5.4

Summary of All Intervals

Run Number	8	9	10	Avg	
Start Time	4:15	4:15	4:15	4:15	
End Time	5:30	5:30	5:30	5:30	
Total Time (min)	75	75	75	75	
Time Recorded (min)	60	60	60	60	
# of Intervals	5	5	5	5	
# of Recorded Intervals	4	4	4	4	
Vehs Entered	573	574	563	566	
Vehs Exited	569	580	562	569	
Starting Vehs	4	6	4	3	
Ending Vehs	8	0	5	5	
Travel Distance (mi)	130	128	125	127	
Travel Time (hr)	6.4	6.3	6.1	6.2	
Total Delay (hr)	1.4	1.4	1.4	1.4	
Total Stops	718	697	672	684	
Fuel Used (gal)	5.8	5.6	5.4	5.5	

Interval #0 Information Seeding

Start Time	4:15
End Time	4:30
Total Time (min)	15
Valumas adjusted by Crowth Easters	Λnti DUE

Volumes adjusted by Growth Factors, Anti PHF.

No data recorded this interval.

Interval #1	Information	Recording
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Start Time	4:30
End Time	4:45
Total Time (min)	15
Volumes adjusted by Grow	th Factors, Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	150	125	145	112	120	134	120
Vehs Exited	151	126	144	116	121	138	125
Starting Vehs	9	7	4	8	4	8	6
Ending Vehs	8	6	5	4	3	4	1
Travel Distance (mi)	33	26	32	26	27	32	29
Travel Time (hr)	1.6	1.3	1.5	1.3	1.3	1.6	1.4
Total Delay (hr)	0.4	0.3	0.3	0.3	0.3	0.4	0.3
Total Stops	183	139	171	145	140	181	156
Fuel Used (gal)	1.5	1.1	1.4	1.1	1.2	1.4	1.2

Interval #1 Information Recording

Start Time	4:30
End Time	4:45
Total Time (min)	15
Volumes adjusted by Grow	th Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	143	148	130	132	
Vehs Exited	139	152	127	133	
Starting Vehs	4	6	4	3	
Ending Vehs	8	2	7	2	
Travel Distance (mi)	31	34	29	30	
Travel Time (hr)	1.5	1.7	1.4	1.5	
Total Delay (hr)	0.3	0.4	0.3	0.3	
Total Stops	170	191	145	162	
Fuel Used (gal)	1.4	1.5	1.3	1.3	

Interval #2 Information R	ecording
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Start Time	4:45	
End Time	5:00	
Total Time (min)	15	
Volumes adjusted by Grov	vth Factors, Anti PHF.	

Run Number	1	2	3	4	5	6	7
Vehs Entered	144	141	134	114	149	143	141
Vehs Exited	145	138	134	110	149	142	140
Starting Vehs	8	6	5	4	3	4	1
Ending Vehs	7	9	5	8	3	5	2
Travel Distance (mi)	33	31	29	24	32	31	31
Travel Time (hr)	1.6	1.5	1.4	1.2	1.6	1.5	1.5
Total Delay (hr)	0.3	0.3	0.3	0.3	0.4	0.3	0.3
Total Stops	178	170	160	132	181	178	168
Fuel Used (gal)	1.4	1.3	1.2	1.1	1.4	1.3	1.4

Interval #2 Information Recording

Start Time	4:45
End Time	5:00
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	128	124	139	135	
Vehs Exited	134	123	139	135	
Starting Vehs	8	2	7	2	
Ending Vehs	2	3	7	2	
Travel Distance (mi)	31	27	31	30	
Travel Time (hr)	1.5	1.4	1.5	1.5	
Total Delay (hr)	0.4	0.3	0.3	0.3	
Total Stops	176	153	166	166	
Fuel Used (gal)	1.4	1.2	1.3	1.3	

Interval #3 Information Record

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growt	th Factors, Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	146	119	128	126	139	145	128
Vehs Exited	148	120	126	126	129	142	122
Starting Vehs	7	9	5	8	3	5	2
Ending Vehs	5	8	7	8	13	8	8
Travel Distance (mi)	33	25	30	28	32	32	29
Travel Time (hr)	1.6	1.2	1.4	1.4	1.6	1.6	1.4
Total Delay (hr)	0.4	0.3	0.3	0.3	0.4	0.3	0.3
Total Stops	184	134	159	152	172	166	160
Fuel Used (gal)	1.4	1.1	1.3	1.3	1.4	1.4	1.2

Interval #3 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth	Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	131	130	124	133	
Vehs Exited	124	123	128	131	
Starting Vehs	2	3	7	2	
Ending Vehs	9	10	3	6	
Travel Distance (mi)	30	28	27	29	
Travel Time (hr)	1.4	1.4	1.3	1.4	
Total Delay (hr)	0.3	0.3	0.3	0.3	
Total Stops	162	149	160	159	
Fuel Used (gal)	1.3	1.2	1.2	1.3	

Interval #4	Information	Recording
π	IIIIOIIIIauoii	reconding

Start Time	5:15	
End Time	5:30	
Total Time (min)	15	
Volumes adjusted by Ph	IF, Growth Factors.	

Run Number	1	2	3	4	5	6	7
Vehs Entered	168	187	174	157	156	170	167
Vehs Exited	164	183	175	155	165	171	160
Starting Vehs	5	8	7	8	13	8	8
Ending Vehs	9	12	6	10	4	7	15
Travel Distance (mi)	37	41	39	36	36	37	37
Travel Time (hr)	1.8	2.1	1.9	1.8	1.8	1.8	1.8
Total Delay (hr)	0.4	0.5	0.4	0.4	0.4	0.4	0.4
Total Stops	198	218	209	198	182	182	200
Fuel Used (gal)	1.6	1.8	1.7	1.6	1.6	1.7	1.6

Interval #4 Information Recording

Start Time 5:15
Start Tillie 3.13
End Time
End Time 5:30
T. (. T' /'.)
Total Time (min) 15
,
Volumes adjusted by PHF. Growth Factors.

Run Number	8	9	10	Avg	
Vehs Entered	171	172	170	168	
Vehs Exited	172	182	168	169	
Starting Vehs	9	10	3	6	
Ending Vehs	8	0	5	5	
Travel Distance (mi)	39	39	38	38	
Travel Time (hr)	1.9	1.9	1.9	1.9	
Total Delay (hr)	0.4	0.4	0.4	0.4	
Total Stops	210	204	201	199	
Fuel Used (gal)	1.7	1.7	1.6	1.7	

Intersection: 2: Red Ln & Carrollton Ave

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	48	53	55
Average Queue (ft)	30	32	33
95th Queue (ft)	41	49	47
Link Distance (ft)	383	305	460
Unstream RIk Time (%)			

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Broad St & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	11	23	77	31
Average Queue (ft)	0	1	35	4
95th Queue (ft)	6	10	56	20
Link Distance (ft)	292	373	621	370
Unctroom Plk Time (%)				

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 8: Mt Vernon Ln & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	61	70	32	33
Average Queue (ft)	36	34	14	11
95th Queue (ft)	54	51	39	35
Link Distance (ft)	373	383	294	364
Upstream Blk Time (%)				

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection						
Intersection Delay, s/veh	7.7					
Intersection LOS	7.7 A					
IIIGISECTOTI EOS	A					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			ની	f)	
Traffic Vol, veh/h	44	31	31	28	64	63
Future Vol, veh/h	44	31	31	28	64	63
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	51	36	36	33	74	73
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	7.7		7.7		7.6	
HCM LOS	Α.		Α.		7.0 A	
HOW LOO						
1		NDL 4	EDI4	CDL 4		
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		53%	59%	0%		
Vol Thru, %		47%	0%	50%		
Vol Right, %		0%	41%	50%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		59	75	127		
LT Vol		31	44	0		
Through Vol		28	0	64		
RT Vol		0	31	63		
Lane Flow Rate		69	87	148		
Geometry Grp		1	1	1		
Degree of Util (X)		0.081	0.1	0.156		
Departure Headway (Hd)		4.273	4.138	3.808		
Convergence, Y/N		Yes	Yes	Yes		
Сар		831	854	932		
Service Time		2.339	2.223	1.87		
HCM Lane V/C Ratio		0.083	0.102	0.159		
HCM Control Delay		7.7	7.7	7.6		
HCM Lane LOS		Α	Α	Α		

0.3

0.3

0.6

HCM 95th-tile Q

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	Α

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			↔			4	
Traffic Vol, veh/h	21	63	9	1	87	11	17	18	3	8	9	16
Future Vol, veh/h	21	63	9	1	87	11	17	18	3	8	9	16
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	77	11	1	106	13	21	22	4	10	11	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	7.9			7.9			7.8			7.5		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	45%	23%	1%	24%
Vol Thru, %	47%	68%	88%	27%
Vol Right, %	8%	10%	11%	48%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	93	99	33
LT Vol	17	21	1	8
Through Vol	18	63	87	9
RT Vol	3	9	11	16
Lane Flow Rate	46	113	121	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.058	0.131	0.138	0.048
Departure Headway (Hd)	4.536	4.164	4.107	4.26
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	794	849	861	846
Service Time	2.538	2.249	2.191	2.261
HCM Lane V/C Ratio	0.058	0.133	0.141	0.047
HCM Control Delay	7.8	7.9	7.9	7.5
HCM Lane LOS	Α	Α	Α	Α
HCM 95th-tile Q	0.2	0.5	0.5	0.2

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	7	77	125	20	99	3	36	6	13	5	8	9
Future Vol, veh/h	7	77	125	20	99	3	36	6	13	5	8	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	94	152	24	121	4	44	7	16	6	10	11
Major/Minor N	/lajor1		1	Major2		N	Minor1		N	/linor2		
Conflicting Flow All	125	0	0	246	0	0	370	361	170	371	435	123
Stage 1	-	-	-	-	-	-	188	188	-	171	171	-
Stage 2	-	-	-	-	-	-	182	173	-	200	264	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1474	-	-	1332	-	-	590	569	879	589	517	933
Stage 1	-	-	-	-	-	-	818	748	-	836	761	-
Stage 2	-	-	-	-	-	-	824	760	-	806	694	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1474	-	-	1332	-	-	563	554	879	561	504	933
Mov Cap-2 Maneuver	-	-	-	-	-	-	563	554	-	561	504	-
Stage 1	-	-	-	-	-	-	812	743	-	830	747	-
Stage 2	-	-	-	-	-	-	788	746	-	778	689	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			1.3			11.6			10.9		
HCM LOS	J. <u>L</u>			1.0			В			В		
Minor Lane/Major Mvmt	,	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :	CDI 51			
Capacity (veh/h) HCM Lane V/C Ratio		614 0.109	1474	-	-	1332 0.018	-	-	639 0.042			
		11.6	7.5	-		7.8	-		10.9			
HCM Control Delay (s) HCM Lane LOS		11.0 B		0 A	-	7.8 A	0 A	-	10.9 B			
HCM 95th %tile Q(veh)		0.4	A 0	- A		0.1	- A	-	0.1			
HOW SOUL WILL W(VEII)		0.4	U	-	-	U. I	-	-	0.1			

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	7:15	7:15	7:15	7:15	7:15	7:15	7:15
End Time	8:30	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	554	584	531	514	533	592	558
Vehs Exited	553	581	526	516	530	591	560
Starting Vehs	3	0	5	4	3	6	7
Ending Vehs	4	3	10	2	6	7	5
Travel Distance (mi)	118	125	114	108	111	127	119
Travel Time (hr)	5.7	6.1	5.6	5.3	5.4	6.2	5.8
Total Delay (hr)	1.2	1.3	1.2	1.1	1.1	1.4	1.2
Total Stops	580	636	597	522	555	654	599
Fuel Used (gal)	5.2	5.6	5.0	4.7	4.8	5.6	5.1

Summary of All Intervals

Run Number	8	9	10	Avg	
Start Time	7:15	7:15	7:15	7:15	
End Time	8:30	8:30	8:30	8:30	
Total Time (min)	75	75	75	75	
Time Recorded (min)	60	60	60	60	
# of Intervals	5	5	5	5	
# of Recorded Intervals	4	4	4	4	
Vehs Entered	594	567	537	556	
Vehs Exited	595	569	537	556	
Starting Vehs	7	6	4	2	
Ending Vehs	6	4	4	2	
Travel Distance (mi)	127	121	115	119	
Travel Time (hr)	6.2	5.9	5.7	5.8	
Total Delay (hr)	1.3	1.2	1.2	1.2	
Total Stops	637	626	603	600	
Fuel Used (gal)	5.5	5.3	5.0	5.2	

Interval #0 Information Seeding

Start Time	7:15	
End Time	7:30	
Total Time (min)	15	
Volumes adjusted by Grov	vth Factors, Anti PHF.	

No data recorded this interval.

Interval #1	Information	Recording
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Start Time	7:30	
End Time	7:45	
Total Time (min)	15	
Volumes adjusted by PHF	Growth Factors.	

Run Number	1	2	3	4	5	6	7
Vehs Entered	178	159	187	156	163	161	173
Vehs Exited	175	153	186	153	161	157	173
Starting Vehs	3	0	5	4	3	6	7
Ending Vehs	6	6	6	7	5	10	7
Travel Distance (mi)	37	33	39	31	34	34	37
Travel Time (hr)	1.8	1.6	1.9	1.5	1.7	1.6	1.8
Total Delay (hr)	0.4	0.3	0.4	0.3	0.4	0.4	0.4
Total Stops	180	166	208	144	181	179	176
Fuel Used (gal)	1.6	1.5	1.8	1.4	1.5	1.5	1.6

Interval #1 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15
Volumes adjusted by DHE	Growth Eactors

Volumes adjusted by PHF, Growth Factors.

Run Number	8	9	10	Avg	
Vehs Entered	172	177	148	167	
Vehs Exited	168	178	147	165	
Starting Vehs	7	6	4	2	
Ending Vehs	11	5	5	3	
Travel Distance (mi)	36	37	31	35	
Travel Time (hr)	1.8	1.8	1.5	1.7	
Total Delay (hr)	0.4	0.4	0.3	0.4	
Total Stops	187	177	160	175	
Fuel Used (gal)	1.6	1.6	1.3	1.5	

Interval #2 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	121	130	109	110	129	129	132
Vehs Exited	122	130	107	114	131	136	134
Starting Vehs	6	6	6	7	5	10	7
Ending Vehs	5	6	8	3	3	3	5
Travel Distance (mi)	26	28	23	25	27	28	29
Travel Time (hr)	1.3	1.4	1.1	1.2	1.3	1.4	1.4
Total Delay (hr)	0.3	0.3	0.2	0.2	0.3	0.3	0.3
Total Stops	138	147	125	114	126	145	150
Fuel Used (gal)	1.1	1.2	1.0	1.1	1.2	1.3	1.2

Interval #2 Information Recording

Start Time	7:45
End Time	8:00
Total Time (min)	15
Volumes adjusted by Grow	th Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	157	139	122	126	
Vehs Exited	159	141	125	129	
Starting Vehs	11	5	5	3	
Ending Vehs	9	3	2	2	
Travel Distance (mi)	34	31	27	28	
Travel Time (hr)	1.7	1.5	1.3	1.4	
Total Delay (hr)	0.4	0.3	0.3	0.3	
Total Stops	176	167	139	143	
Fuel Used (gal)	1.5	1.3	1.2	1.2	

	Interval #3	Information	Recording
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Start Time	8:00
End Time	8:15
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	143	139	116	114	123	141	129
Vehs Exited	141	140	117	112	118	138	133
Starting Vehs	5	6	8	3	3	3	5
Ending Vehs	7	5	7	5	8	6	1
Travel Distance (mi)	30	30	27	24	26	30	27
Travel Time (hr)	1.5	1.5	1.3	1.2	1.2	1.5	1.3
Total Delay (hr)	0.3	0.3	0.3	0.2	0.3	0.3	0.3
Total Stops	144	150	138	119	126	161	135
Fuel Used (gal)	1.3	1.4	1.1	1.0	1.1	1.3	1.1

Interval #3 Information Recording

Start Time	8:00				
End Time	8:15				
Total Time (min)	15				
Volumes adjusted by Growth Factors, Anti PHF.					

Run Number	8	9	10	Avg	
Vehs Entered	133	127	142	130	
Vehs Exited	135	124	140	129	
Starting Vehs	9	3	2	2	
Ending Vehs	7	6	4	1	
Travel Distance (mi)	28	27	30	28	
Travel Time (hr)	1.4	1.3	1.5	1.4	
Total Delay (hr)	0.3	0.3	0.4	0.3	
Total Stops	137	148	159	141	
Fuel Used (gal)	1.3	1.2	1.3	1.2	

Interval #4 Information Recording

Start Time	8:15
End Time	8:30
Total Time (min)	15
Volumes adjusted by Growth	Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	112	156	119	134	118	161	124
Vehs Exited	115	158	116	137	120	160	120
Starting Vehs	7	5	7	5	8	6	1
Ending Vehs	4	3	10	2	6	7	5
Travel Distance (mi)	24	34	25	28	25	35	26
Travel Time (hr)	1.2	1.7	1.2	1.4	1.2	1.7	1.3
Total Delay (hr)	0.2	0.4	0.3	0.3	0.2	0.4	0.3
Total Stops	118	173	126	145	122	169	138
Fuel Used (gal)	1.1	1.5	1.0	1.2	1.1	1.6	1.1

Interval #4 Information Recording

Start Time	8:15
End Time	8:30
Total Time (min)	15
Volumes adjusted by Growt	h Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	132	124	125	134	
Vehs Exited	133	126	125	131	
Starting Vehs	7	6	4	1	
Ending Vehs	6	4	4	2	
Travel Distance (mi)	28	27	27	28	
Travel Time (hr)	1.4	1.3	1.3	1.4	
Total Delay (hr)	0.3	0.3	0.3	0.3	
Total Stops	137	134	145	141	
Fuel Used (gal)	1.2	1.2	1.2	1.2	

Intersection: 2: Red Ln & Carrollton Ave

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	37	46	57
Average Queue (ft)	27	27	35
95th Queue (ft)	43	47	52
Link Distance (ft)	383	305	460
Upstream Blk Time (%)			

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Broad St & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	12	33	50	34
Average Queue (ft)	1	4	28	16
95th Queue (ft)	7	22	49	41
Link Distance (ft)	292	373	621	370
Upstream Blk Time (%)				

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 8: Mt Vernon Ln & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	62	62	47	45
Average Queue (ft)	33	32	22	22
95th Queue (ft)	53	50	46	47
Link Distance (ft)	373	383	294	364
Unstroom Plk Time (0/)				

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection						
Intersection Delay, s/veh	8.2					
Intersection LOS	Α.2					
Marrana	EDI	EDE	NIDI	NOT	ODT	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			र्स	f)	
Traffic Vol, veh/h	91	35	56	70	44	89
Future Vol, veh/h	91	35	56	70	44	89
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	98	38	60	75	47	96
Number of Lanes	1	0	0	1	1	0
Approach	EB		NB		SB	
Opposing Approach			SB		NB	
Opposing Lanes	0		1		1	
Conflicting Approach Left	SB		EB			
Conflicting Lanes Left	1		1		0	
Conflicting Approach Right	NB				EB	
Conflicting Lanes Right	1		0		1	
HCM Control Delay	8.4		8.4		7.7	
HCM LOS	Α		Α		Α	
Lane		NBLn1	EBLn1	SBLn1		
Vol Left, %		44%	72%	0%		
Vol Thru, %		56%	0%	33%		
Vol Right, %		0%	28%	67%		
Sign Control		Stop	Stop	Stop		
Traffic Vol by Lane		126	126	133		
LT Vol		56	91	0		
Through Vol		70	0	44		
RT Vol		0	35	89		
Lane Flow Rate		135	135	143		
Geometry Grp		1	1	1		
Degree of Util (X)		0.168	0.169	0.158		
Departure Headway (Hd)		4.451	4.478	3.967		
Convergence, Y/N		Yes	Yes	Yes		
Cap		807	803	907		
Service Time		2.466	2.496	1.982		
HCM Lane V/C Ratio		0.167	0.168	0.158		
HCM Control Delay		8.4	8.4	7.7		
HCM Lane LOS		Α	Α	Α		

0.6

0.6

0.6

HCM 95th-tile Q

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	19	119	14	3	133	7	16	8	2	8	9	16
Future Vol, veh/h	19	119	14	3	133	7	16	8	2	8	9	16
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	145	17	4	162	9	20	10	2	10	11	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8.5			8.4			8.1			7.8		
HCM LOS	Α			Α			Α			Α		

Lane	NBLn1	EBLn1	WBLn1	SBLn1	
Vol Left, %	62%	12%	2%	24%	
Vol Thru, %	31%	78%	93%	27%	
Vol Right, %	8%	9%	5%	48%	
Sign Control	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	26	152	143	33	
LT Vol	16	19	3	8	
Through Vol	8	119	133	9	
RT Vol	2	14	7	16	
Lane Flow Rate	32	185	174	40	
Geometry Grp	1	1	1	1	
Degree of Util (X)	0.043	0.22	0.207	0.051	
Departure Headway (Hd)	4.848	4.263	4.279	4.519	
Convergence, Y/N	Yes	Yes	Yes	Yes	
Cap	739	847	842	793	
Service Time	2.871	2.268	2.284	2.541	
HCM Lane V/C Ratio	0.043	0.218	0.207	0.05	
HCM Control Delay	8.1	8.5	8.4	7.8	
HCM Lane LOS	Α	Α	Α	Α	
HCM 95th-tile Q	0.1	8.0	8.0	0.2	

Intersection												
Int Delay, s/veh	4.2											
• •												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Vol, veh/h	12	128	94	21	140	5	90	8	22	5	9	9
Future Vol, veh/h	12	128	94	21	140	5	90	8	22	5	9	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage,	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	156	115	26	171	6	110	10	27	6	11	11
Mai / Mi	1-:			4-10			Nim mad			1: C		
	Major1			Major2			Minor1	4		Minor2		
Conflicting Flow All	177	0	0	271	0	0	481	473	214	488	527	174
Stage 1	-	-	-	-	-	-	244	244	-	226	226	-
Stage 2	-	-	-	-	-	-	237	229	-	262	301	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1411	-	-	1304	-	-	499	493	831	493	459	875
Stage 1	-	-	-	-	-	-	764	708	-	781	721	-
Stage 2	-	-	-	-	-	-	771	718	-	747	669	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1411	-	-	1304	-	-	471	476	831	457	443	875
Mov Cap-2 Maneuver	-	-	-	-	-	-	471	476	-	457	443	-
Stage 1	-	-	-	-	-	-	754	699	-	771	705	-
Stage 2	-	-	-	-	-	-	733	702	-	704	660	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1			14.8			11.8		
HCM LOS	0.4						14.0 B			В		
TOW LOO							U			D		
Minor Long/Major Maren	. ,	MDI ~1	EDI	EDT	EDD	WDI	WDT	WDD	CDI 51			
Minor Lane/Major Mvm	t l	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR :				
Capacity (veh/h)		512	1411	-	-	1304	-	-	554			
HCM Lane V/C Ratio		0.286	0.01	-	-	0.02	-	-	0.051			
HCM Control Delay (s)		14.8	7.6	0	-	7.8	0	-	11.8			
HCM Lane LOS		В	Α	Α	-	Α	Α	-	В			
HCM 95th %tile Q(veh)		1.2	0	-	-	0.1	-	-	0.2			

Summary of All Intervals

Run Number	1	2	3	4	5	6	7
Start Time	4:45	4:45	4:45	4:45	4:45	4:45	4:45
End Time	6:00	6:00	6:00	6:00	6:00	6:00	6:00
Total Time (min)	75	75	75	75	75	75	75
Time Recorded (min)	60	60	60	60	60	60	60
# of Intervals	5	5	5	5	5	5	5
# of Recorded Intervals	4	4	4	4	4	4	4
Vehs Entered	757	750	729	730	679	735	724
Vehs Exited	753	749	730	733	680	739	723
Starting Vehs	7	7	7	9	5	10	10
Ending Vehs	11	8	6	6	4	6	11
Travel Distance (mi)	174	167	165	164	152	164	163
Travel Time (hr)	8.8	8.4	8.3	8.2	7.6	8.2	8.2
Total Delay (hr)	2.1	1.9	1.9	1.9	1.7	1.9	1.9
Total Stops	997	941	925	911	852	916	913
Fuel Used (gal)	7.8	7.5	7.3	7.3	6.7	7.3	7.2

Summary of All Intervals

Run Number	8	9	10	Avg	
Start Time	4:45	4:45	4:45	4:45	
End Time	6:00	6:00	6:00	6:00	
Total Time (min)	75	75	75	75	
Time Recorded (min)	60	60	60	60	
# of Intervals	5	5	5	5	
# of Recorded Intervals	4	4	4	4	
Vehs Entered	745	750	693	727	
Vehs Exited	738	752	689	730	
Starting Vehs	7	10	4	4	
Ending Vehs	14	8	8	6	
Travel Distance (mi)	162	166	151	163	
Travel Time (hr)	8.0	8.3	7.5	8.2	
Total Delay (hr)	1.8	1.9	1.7	1.8	
Total Stops	911	947	856	918	
Fuel Used (gal)	7.2	7.4	6.8	7.2	

Interval #0 Information Seeding

Start Time	4:45		
End Time	5:00		
Total Time (min)	15		
Volumes adjusted by Growth Factors, Anti PHF.			

No data recorded this interval.

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth	n Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	188	163	175	167	144	149	177
Vehs Exited	187	167	174	168	140	152	177
Starting Vehs	7	7	7	9	5	10	10
Ending Vehs	8	3	8	8	9	7	10
Travel Distance (mi)	42	36	40	39	31	34	40
Travel Time (hr)	2.2	1.8	2.0	1.9	1.5	1.7	2.0
Total Delay (hr)	0.5	0.4	0.5	0.4	0.3	0.4	0.4
Total Stops	245	195	224	218	175	189	218
Fuel Used (gal)	1.9	1.7	1.8	1.7	1.4	1.5	1.8

Interval #1 Information Recording

Start Time	5:00
End Time	5:15
Total Time (min)	15
Volumes adjusted by Growth	r Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	172	194	163	169	
Vehs Exited	169	198	156	167	
Starting Vehs	7	10	4	4	
Ending Vehs	10	6	11	3	
Travel Distance (mi)	37	43	35	38	
Travel Time (hr)	1.9	2.1	1.7	1.9	
Total Delay (hr)	0.4	0.5	0.4	0.4	
Total Stops	210	239	188	212	
Fuel Used (gal)	1.7	1.9	1.6	1.7	

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	6	7
Vehs Entered	228	214	203	212	227	217	214
Vehs Exited	226	211	202	207	230	216	221
Starting Vehs	8	3	8	8	9	7	10
Ending Vehs	10	6	9	13	6	8	3
Travel Distance (mi)	51	47	46	46	51	47	50
Travel Time (hr)	2.7	2.4	2.3	2.3	2.6	2.4	2.6
Total Delay (hr)	0.7	0.6	0.5	0.5	0.7	0.6	0.6
Total Stops	296	261	265	257	291	254	289
Fuel Used (gal)	2.2	2.1	2.0	2.0	2.2	2.1	2.2

Interval #2 Information Recording

Start Time	5:15
End Time	5:30
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	214	220	198	214	
Vehs Exited	219	219	198	215	
Starting Vehs	10	6	11	3	
Ending Vehs	5	7	11	6	
Travel Distance (mi)	47	49	44	48	
Travel Time (hr)	2.4	2.5	2.2	2.4	
Total Delay (hr)	0.6	0.6	0.5	0.6	
Total Stops	277	286	244	270	
Fuel Used (gal)	2.1	2.2	1.9	2.1	

Interval #3	Information	Recording
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Start Time	5:30
End Time	5:45
Total Time (min)	15
Volumes adjusted by Growth	Factors, Anti PHF

Run Number	1	2	3	4	5	6	7
Vehs Entered	182	177	176	165	151	183	166
Vehs Exited	187	172	172	168	147	183	159
Starting Vehs	10	6	9	13	6	8	3
Ending Vehs	5	11	13	10	10	8	10
Travel Distance (mi)	44	39	40	38	35	40	36
Travel Time (hr)	2.2	1.9	2.0	1.9	1.7	2.0	1.8
Total Delay (hr)	0.5	0.4	0.4	0.4	0.4	0.4	0.4
Total Stops	248	227	217	214	203	231	208
Fuel Used (gal)	2.0	1.8	1.8	1.7	1.5	1.8	1.6

Interval #3 Information Recording

Start Time	5:30
End Time	5:45
Total Time (min)	15
Volumes adjusted by Growt	th Factors, Anti PHF.

Run Number	8	9	10	Avg	
Vehs Entered	162	150	172	167	
Vehs Exited	156	149	176	168	
Starting Vehs	5	7	11	6	
Ending Vehs	11	8	7	6	
Travel Distance (mi)	35	33	38	38	
Travel Time (hr)	1.7	1.6	1.9	1.9	
Total Delay (hr)	0.4	0.4	0.4	0.4	
Total Stops	187	189	224	214	
Fuel Used (gal)	1.5	1.5	1.7	1.7	

Interval #4	Information	Recording
IIIICI vai ma	· IIIIOIIIIalioii	1 VECOLULIA

Start Time	5:45		
End Time	6:00		
Total Time (min)	15		
Volumes adjusted by Grov	wth Factors.		

Run Number	1	2	3	4	5	6	7
Vehs Entered	159	196	175	186	157	186	167
Vehs Exited	153	199	182	190	163	188	166
Starting Vehs	5	11	13	10	10	8	10
Ending Vehs	11	8	6	6	4	6	11
Travel Distance (mi)	37	45	40	41	35	43	36
Travel Time (hr)	1.8	2.3	2.0	2.0	1.7	2.2	1.8
Total Delay (hr)	0.4	0.5	0.5	0.4	0.3	0.5	0.4
Total Stops	208	258	219	222	183	242	198
Fuel Used (gal)	1.6	2.0	1.8	1.9	1.6	2.0	1.6

Interval #4 Information Recording

Start Time	5:45	
End Time	6:00	
Total Time (min)	15	
Volumes adjusted by	Growth Factors.	

Run Number	8	9	10	Avg	
Vehs Entered	197	186	160	175	
Vehs Exited	194	186	159	178	
Starting Vehs	11	8	7	6	
Ending Vehs	14	8	8	6	
Travel Distance (mi)	42	41	34	40	
Travel Time (hr)	2.1	2.1	1.7	2.0	
Total Delay (hr)	0.5	0.5	0.4	0.4	
Total Stops	237	233	200	219	
Fuel Used (gal)	1.8	1.9	1.5	1.8	

Intersection: 2: Red Ln & Carrollton Ave

Movement	EB	NB	SB	
Directions Served	LR	LT	TR	
Maximum Queue (ft)	44	56	62	
Average Queue (ft)	31	36	36	
95th Queue (ft)	38	53	54	
Link Distance (ft)	383	305	460	

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: Broad St & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	41	35	76	47
Average Queue (ft)	3	5	39	17
95th Queue (ft)	21	24	64	44
Link Distance (ft)	292	373	621	370
Unetroom RIK Time (%)				

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 8: Mt Vernon Ln & Carrollton Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	66	61	40	44
Average Queue (ft)	38	34	19	21
95th Queue (ft)	58	49	45	45
Link Distance (ft)	373	383	294	364
Unstroom Plk Time (%)				

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Randy W. Beckner Bradley C. Craig Wm. Thomas Austin James B. Voso Chad M. Thomas Jason A. Carder Brian R. Newman D. Jason Snapp Ryan P. Kincer



Edwin K. Mattern, Jr. (1949-1982)
Gene R. Cress (1935-2014)
Sam H. McGhee, III (1940-2018)
Stewart W. Hubbell (Retired)
J. Wayne Craig (Retired)
Michael S. Agee (Retired)
Steven A. Campbell (Retired)
Randy L. Dodson (Retired)

February 20, 2024

Mr. William Simpson, Jr., PE Assistant Director/City Engineer City of Salem 21 S Bruffey Street Salem, Virginia, 24153 wsimpson@salemva.gov

Re:

Traffic Study Review

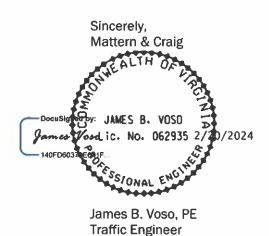
HopeTree Planned Unit Development

M&C Commission No. 4197-H GESC Contract No. 2021-018

Dear Mr. Simpson,

In response to our review of a traffic impact study prepared by Balzer & Associates, for the HopeTree Planned Unit Development, a revised study (and response to our review) was provided to us. We have reviewed the revised study (dated February 2, 2024), and the revised study appears to conform with VDOT and industry standard practices, and addresses our concerns with the original study.

If any additional information is needed on this subject at this time, please feel free to contact me directly via email at jbvoso@matternandcraig.com or by telephone at 828-254-2201. Thank you for the opportunity to be of assistance to the City of Salem.



From: McCart, Christina
To: Maxwell S Dillon

Subject: [Ext.] FW: questions re HopeTree

Date: Thursday, January 04, 2024 12:06:34 PM

Attachments: image001.png

CAUTION: This message has originated from an external source. Please use proper judgment and caution when opening attachments, clicking links or responding to this email.

Max,

Thanks for answering my questions today. Below is the email I sent (and you can see the address) to the planning commission. I would really appreciate it if you could see that they get it.

Thank you,

Chris

From: McCart, Christina

Sent: Monday, December 18, 2023 7:08 AM **To:** planningcommission@salemva.gov

Cc: rturk@salemva.gov; Jim W Wallace < iwallace@salemva.gov >; Hunter Holliday

hholliday@salemva.gov; bjones@salemva.gov; foley@salemva.gov; bjones@salemva.gov; rfoley@salemva.gov;

Subject: questions re HopeTree

Dear Members of the Planning Commission:

I listened with interest to the discussion regarding HopeTree at your last meeting and appreciate your willingness to take questions via email. I've been thoroughly reading traffic reports and have several questions:

1. In the December report, the whole analysis is done using 4 hours of traffic counts (Oct. 3rd 7:00 am to 9:00 am and 4:00 pm to 6:00 pm). Why are these hours and these dates considered peak? And why aren't standard protocols for traffic studies used? (i.e., use a traffic counter and count for a year, not just 4 hours). Please see link below for standard practice.

K factor (traffic engineering) - Wikipedia

2. Why was the 4 way stop on Carrollton, where Academy crosses it, not included in the analysis? People leaving HopeTree to go to West Salem Elementary School or SHS or even just heading into West Salem, would go through that intersection, so why was it not included?

It should be noted that several of us in the neighborhood have been doing informal traffic

counts since we learned about HopeTree last summer, giving me a fairly good idea of current numbers, so when I read the December report I was quite surprised. Please refer to Figure 1 and note the Carrollton/N. Broad St intersection. If you combine the traffic from different directions, you see that the peak traffic in the morning is 291 vehicles and the peak traffic in the evening is 406 vehicles. Being a bit surprised by these numbers, I immediately walked up to the 4 way stop (Carrollton/Academy/Wildwood) and counted cars for 10 minutes. (Friday, Dec. 15 2:30 p.m.) The count was 59 for 10 minutes, so extrapolating that to an hour (which given Balzer's high PHF's is appropriate) results in vehicles per hour of 6*59 = 354 VPH. Note that this is significantly higher than the peak am traffic for the Broad St intersection (of 291). So, was their peak count inaccurate, did they not actually use peak hours, did they not use a peak date, or did they not include the busiest intersection? I was pleased to see that Balzer used a nice traffic simulation model to find all kinds of nice looking and intimidating statistics, but remember the GIGO rule of modeling – garbage in, garbage out. If the whole model is based on only 4 hours of data (which haven't been shown to be peak and which don't include all the affected intersections), how can we have confidence in the output?

- 3. Why was the internal capture rate of HopeTree increased from 20% to 25% between Balzer's August and December reports? The August report (with 20% internal capture) is based on 256 dwelling units, 60 hotel rooms, a 15,000 square foot office building and a 7500 square foot restaurant. The December report leaves the commercial building the same but adds an additional 84 dwelling units. How does adding 84 living units to a PUD (without additional commercial buildup) keep people in the neighborhood so much more of the time?
- 4. The report states "Commercial uses will be determined by market conditions and opportunities available at the time of development." Does this mean the zoning change being sought will grant unrestricted authority over commercial development? If not, please elaborate.
- 5. The report states "It is recommended that projected trip generation be tracked as the development progresses for comparison to the traffic study. If the actual development results in significantly more traffic than what has been assumed, then it may be necessary to update this study." Does this mean that once construction is underway, and people are moving in and taking advantage of the commercial opportunities, that if the roads aren't sufficient to handle the traffic that someone will revisit a traffic study? What does this mean? Salem will then be responsible for road work throughout North Salem to make it work? (at the expense of several neighborhoods) Please elaborate.
- 6. Why is all discussion centered around how much traffic a road can handle rather than the livability of a neighborhood? Below are a couple of interesting reads.
 - a. Numbers Every Traffic Engineer Should Know Mike on Traffic
 - b. http://flpkdr.com/InfoFiles/NeighborhoodStreets.pdf
- 7. Finally, why are they not using vehicle traffic counting equipment to get actual traffic counts along Salem Streets?

Thank you for your willingness to take these questions and get answers for the planning commission before any decisions are made. I have more questions but don't want to detract from the more important ones above, so I will hold them for another time. If you have any questions about my questions, please let me know. For a little background I am sending you my notes from my talks at City Council.

Best,

Chris 316 N. Broad St

Christina D. McCart, PhD Professor Emerita Business Admin. & Economics mobile 540-798-9145 mccart@roanoke.edu



2/14/24



To: Salem Planning Commission

From: Residents of Red Lane / North Salem / Broad Street / Mt Vernon and Carrolton Ave.

After attending the meetings on the various proposals for the building of Communities, Housing,

Restaurant's and Hotels adjutant to Red Lane, we have concerns with the additional traffic and heights of the homes.

We are requesting that no homes be built adjacent to Red Lane that is higher than One (1) Story, Single family homes, and no structure within 40' backing up to Red Lane. The residents of Red Lane are requesting that in the said proposal, that there be a way to slow down the traffic and divert traffic off Red Lane.

If these requests which we feel are reasonable are not part of the final plans that will be submitted to The Planning Commission the residents will have serious concerns about the impact of this project to our neighborhood.

Signed Residents of Red Lane and North Salem.

Cc: Attachment

SIGNATURE alex sutton Efor Just + Sent AKORS. Chi Chuesaberry Natale Goad 9. Van Bresham Bulow Myd Maryan Carehead andi Cracheal Gener Surge Gelbat Mach Blown Turbare year Ventura Ben Senles Le Caroline Hollingen gral Raports Pat Palmer

ADDRESS 928 Red Ln. 0)4/2 11 11 958 Red hn 1246 Red In Est 1240 Rediane Ext 1234 Led LANGEXT. 1302 Red Lone Ext 1314 Redhane Ext 155 N. OAKS DR. SAlon U 475 DEER Rus Curcle; 475 Deep Run Cin S. 138 N. Oak Rd 922 Red ha 922 Rud Lane Salem 134 N. Daks DR. Silem 130 North Opes 20 VAI 131 Nopeh Dales Chow Das 134 Novel Date Des fel 139 N Oaks Dr Salen 139 NOKS De Saka 143 N. Daks De Salem 147 A. Oaks Dr Salem 150 H. COUSDA

Khanda Fouckes Will Dernett Alelosal Sessell Jim Foher Judo John ring Manney Gnes Prodleton Ly Poulleton Yes ILpio Kan Tuga Shirten Rivermon Diane Koropelah Ja Wingol samaitha sakalas Preston Lawis / 3000Lowers Frow. Det Melikda Dusa Kaylo Brown + Adam St. Pierre Michael Kummer

154 North Oaks Delalom 171 N. Oaks Da Saler 171 N. VAKS DESALERLI 175 N. Oaks Dr. Saleni 115 N. Oaks Dr. Salam 191 Dres Rug Cir Salapi 459 Dear Run Che Salows 459 Deca Roa Cian Serlas 479 Over Huncingan Ula Deer Rua Geralen 4 31 Bar Run Cunte also presPunciali 428 Deer Rus Civils 440 Deer Pan Cicle 844 Kocklane 920 RECI Lane, sonem 932 Red Lane Salem 942 Reo Lie Solon 942 Rod Can Sole. 936 Red Lang Jalen 916 Red June, Jalem

Stella Reinhard, 213 N. Broad St., Salem

First, I would like to respectfully request that the Planning Commission Consider delaying the Vote tonight to a future meeting, AND to allow the Public Comment Period to remain open FOR THE ACTUAL VOTE MEETING. Please do not close the Comment Period, because this plan is still developing. The City just released 40 more pages to several residents JUST YESTERDAY, and the latest version of the proposal was released about a week ago. Also much of the Public is just beginning to HEAR about this Rezoning/Development Proposal. Thank you for Considering this.

TAKEAWAYS:

- Don't rezone. Hope Tree and their Developers CANNOT build what they are presenting WITHOUT the rezoning.
 You are NOT REQUIRED to rezone because they asked. We should try to affect their future plans for by-right RSF development in creative, available ways.
- A new Commercial Center is totally against Salem's Comprehensive Plan and the surrounding wholly RSF
 neighborhoods—nix the Commercial
- Delay Consideration of Proposal until Completion of the Comprehensive Plan Review.
- This is Wrong Location for such a DENSE DEVELOPMENT—get VDOT to add exit/entrance to I-81 at Red Lane FIRST before any Consideration.
- Because I have heard some City discussion I wanted to address: Please do NOT believe that this property would attract people from the newly announced Amazon Project in Botetourt—they are already building apartments for workers in Botetourt, we are too far away, not well-connected to the Interstate, and there are many community areas closer.
- HOPE TREE purposely left out the VERY NEIGHBORHOODS that have the best input for such a Proposal. They
 also left out SALEM RESIDENTS. PLEASE DELAY CONSIDERATION until AFTER Hope Tree and/or/with the City of
 Salem offers a couple of Charettes for the Surrounding Neighborhood homeowners, AND for all of Salem since
 this is an Historic Property and the largest Centrally-located open acreage within walking distance of our Historic
 Center, also because this Open Acreage could have a Higher Purpose than a DENSE DEVELOPMENT that will
 drastically and negatively affect the surrounding established/historic neighborhoods.
- Delay Consideration until an ACTUAL SPECIFIC SITE PLAN is developed—this plan is SO WIDE OPEN, it allows
 pretty much anything anywhere. There is Commercial by the Lake, Commercial in the Horse Pasture. The Green
 Space does not connect from the Horse Pasture through to the large Barn Structure by the Lake. They are
 describing 5-level structures and 90% Commercial build-out but with no specific plans.
- We need some Neutral 3rd Party serious studies of this Unique Acreage
 - a. An Impact Study on the effects of added impermeable surfaces from development & new roads on the stormwater run-off and sewer systems of surrounding lower elevation neighborhoods, creeks.
 - b. An environmental Impact Assessment (we just suffered the hottest summer on record, we are near the A.T. which is one of our selling points, this property helps handle our water and clear our air—also offering refuge for eco-systems—another draw for visitors/vacationers—Virginia is a Vacation State, the A.T. and Blue-Ridge Parkway, and Mountains are draws—we can get in on that traffic if we don't indiscriminately build it out.) c. A serious, 3rd party neutral Traffic Study of all the major effected crossroads, covering a cross-section of types of days of traffic following best practices/methods.
 - It is necessary to gain information from our City Departments, but also a neutral feasibility Study on the impact on Schools, Services, and the cost of all of that which will rest on tax-payers.
- We realize Hope Tree owns the land currently—but one of their considered options was to sell all or part and they are planning to SELL TO THE DEVELOPERS. The tax assessed value is \$11,000,000. The buildings are assessed at \$8,000,000. The City could negotiate to purchase what is being offered to Developers (37 acres) or all of the property, and partner with Hope Tree to remain there if they wish, allow time for the Residents/Leaders of Salem to Consider this Special Property carefully with ALL the OPTIONS on the Table, finish the Comprehensive Plan Review process, and THEN REVISIT this Property.

- City of Salem could TRADE HOPE TREE for another property they acquire (such as the Old Brickyard that is much more appropriately located near I-81, zoned Commercial, is already blighted and is flat, so easier to build on), then the City could do what was suggested in the previous list item.
- This is a unique, historic, natural acreage—a SPECIAL PROPERTY—give ALL OF SALEM the Opportunity to CONSIDER OTHER MORE APPROPRIATE OPTIONS—such as something Salem Lacks, a Centrally located large wandering CENTRAL PARK (only .7 mi walk to Historic Main, phenomenal views, varied topography, water features—what a draw for the CITY in multiple ways and in collars over the long term).

COMMENTS:

From my Review of the submitted Plan from Hope Tree's PROPOSED REZONING/DEVELOPMENT—THE REZONING is from RSF, Residential Single Family, to PUD, Planned Use Development (MIXED USES, WIDE OPEN PLANS AT MOMENT), adds multiple NEW through-roads INTO SURROUNDING NEIGHBORHOODS bringing much increased traffic, densely develops up to 5-level structures, builds on narrow alleys (NOT ALLOWED IN REST OF SALEM), includes 340 home units, multiple Commercial Structures, nearly all (90%ish) development is Commercial, the Horse Pasture & the one side of the Lake are commercially built out. Hope Tree will sell 37 acres to Developers FOLLOWING rezoning, AND retain 25 acres This LAST remaining large acreage is walkable from Historic Downtown (.7 mi). THIS IS A VITAL REMNANT of Salem's Central Character.

IT IS SALEM'S CENTRAL HISTORIC AREA INCLUDING THIS ACREAGE AND THE SURROUNDING NEIGHBORHOODS, THE COLLEGE CAMPUS, HISTORIC MAIN, CHURCHES OUR LEGACY SCHOOLS—THIS AREA IS ENJOYED BY ALL SALEM RESIDENTS AND VISITORS, IT IS WALKABLE, IT IS LOVELY AND IT IS WHAT SELLS OUR COMMUNITY TO BUSINESSES, TO COLLEGE STUDENTS AND THEIR PARENTS, TO LARGE EVENTS AND SPORTING OPPORTUNITIES

DOES THIS DENSE DEVELOPMENT PROPOSAL FOLLOW OUR PLAN? NO. Salem's Current Comprehensive Plan lists the Acreage as RSF surrounded by solely RSF established neighborhoods—This GOES AGAINST Salem's current Comprehensive Plan and is Spot Zoning. It is the WRONG PLAN for the WRONG LOCATION—(better locations for this type of development—the old BrickYard?). Salem already has enough homes for every 2 Salem Residents, so is this "highest & best use"? With no easy I-81 entrance/exit, the density of the development will generate thousands more vehicle trips daily through surrounding neighborhoods destabilizing/depressing property values, added hard surfaces will generate storm water run-off/stress old sewer systems, AND there have been no 3rd party neutral Impact Studies, Environmental Studies nor Comprehensive Traffic Studies. Hope Tree, neither INFORMED surrounding neighborhoods NOR INVITED them into ANY Charettes Hope Tree held over a year ago—many are just finding out. Allow them input please. Consider options (Sell_to City? Salem lacks a large Central Park, for example). Delay decisions on this IMPORTANT property until Salem's Comprehensive Plan Revision Process is complete.

HISTORY: The first 16 acres of the Baptist Orphanage, established late 1800s, was donated by John Evans, a Civil War Officer & early Salem Sheriff who built the well-known historic "Gingerbread House," or Evans-Webber National Register Home on N. Broad. Concerned about post-Civil War orphans wandering the Valley, Evan's East Hill Cemetery gravestone states "Friend to Orphans." Part of Salem's History, it has a phenomenal Natural Setting, water features, varied topography, Incredible Views. Once gone, gone forever.

This MATTERS. Thank you.

Stella Reinhard

I want to expand on the DOES THIS FOLLOW THE PLAN SECTION A BIT BELOW:

DOES IT FOLLOW SALEM'S PLAN? NO.

" Salem's Current Comprehensive Plan lists the Acreage as RSF surrounded by solely RSF established neighborhoods— This GOES AGAINST Salem's current Comprehensive Plan and is ALSO Spot Zoning. WHERE IS the SITE PLAN? And REQUESTED ZONING, PUD (planned use development), is WIDE OPEN allowing pretty much ANYTHING without TIGHT ADVANCE PROFFERS set forth. AND WHY is Hope Tree asking for the REZONING, if they are PLANNING TO SELL 37 acres to DEVELOPMENT GROUP? This use of their Century-old Charitable Reputation feels wrong. If the Development Plan WAS APPROPRIATE, why leave out surrounding Neighborhood Input? If FEELS like both realize there are REAL PROBLEMS with this Location.

- " SO, This is the "WRONG PLAN for the WRONG LOCATION"—(MUCH Better locations exist for this type of development-the old Brick Yard? One idea--near Interstate EXIT, development would improve, already more appropriately zoned).
- " Salem already has enough homes for every 2 Salem Residents, so is this REALLY "highest & best use"? Residential Developments are REVENUE NEGATIVE (cost twice what they generate in taxes to develop/maintain).
- " With no easy/direct I-81 entrance/exit, the DENSITY of the development and WIDESPREAD Commercial Areas (map shows NEARLY ALL is Commercial) will generate THOUSANDS more vehicle trips daily through surrounding neighborhoods destabilizing/depressing property values (10-20%), The Commercial Area possible COMPETITION for nearby HISTORIC MAIN.
- * Loss of OPEN SPACE also can DECREASE property values (15-20%)—TOTAL: 25-40% potential DECREASED PROPERTY VALUES for these two factors alone.
- The SIGNIFICANT ADDED HARD SURFACES will generate storm water run-off/stress challenged old sewer systems (for which no ready Government Funding is available to repair)...from LARGE ACREAGE that CURRENTLY acts as a STORMWATER SPONGE in its open state (and a Carbon Sponge, an air filter for our City, a haven for eco-systems, acts in multiple invisible ways FOR SALEM's HEALTH, etc.)
- AND there have been no 3rd party NEUTRAL, COMPREHENSIVE Impact Studies, Feasibility Studies, Environmental Studies nor Traffic Studies. This is a SIGNIFICANT OPEN ACREAGE loss at a time there are Federal Grant Funds opening up to preserve OPEN ACREAGE for our Planet.
- " Hope Tree, neither INFORMED surrounding neighborhoods NOR ADVERTISED or INVITED them into ANY of the MULTIPLE Charettes Hope Tree held over a year ago (documents show only SOME abutting property owners and mainly CITY EMPLOYEES were invited by letter, NO ADVERTISEMENTS IN NEWSPAPERS, etc. This was an admitted, discussed CHOICE on Hope Tree's part (an admission that this PROPOSAL has Problems?). Neighbors are now finding out and have REQUESTED DIALOGUE—AND many are just/still finding out. Allow them input please.

WE ASK OUR SALEM REPRESENTATIVES: PLEASE! Take NECESSARY TIME. Consider OTHER BETTER options (Sell to City? Salem lacks a large iconic Central Park, for example, THIS ACREAGE is walkable from Historic Center—just .7 mi).

§ 10.1-1188. State agencies to submit environmental impact reports on major projects (virginia gov)

Benefits of Green Infrastructure | US EPA

. .

About CPRG Planning Grant Information | US EPA (some initial part of this grant including an intent to pursue is due March 1st, 24)

Maxwell S Dillon

From:

Engineering

Sent:

Tuesday, February 13, 2024 12:42 PM Maxwell S Dillon; Mary Ellen H Wines

To: Subject:

FW: [Ext.] hope tree zoning request

From: Jim Cochrane <jacochran41@gmail.com> Sent: Tuesday, February 13, 2024 12:15 PM To: Engineering <Engineering@salemva.gov> Subject: [Ext.] hope tree zoning request

CAUTION: This message has originated from an external source. Please use proper judgment and caution when opening attachments, clicking links or responding to this email.

My name Is Jim Cochrane, I live at 417 Academy St.(540-375-3744). I am a long-time Salem resident and my home has been on Academy for 2 generations. I have always enjoyed the short walk to the businesses on Broad St. Many businesses on Broad St have closed over the years for lack of the customer support necessary for a profit. All of my neighbors that live on Broad St, Academy St and other streets near the Hopetree location are shocked that Salem would consider rezoning the Hopetree property to commercial. Remodeling of the existing buildings can be done with existing zoning and any new homes sold as single family residences. The open space around the pasture and pond preserved as such. The proposal for to 4 story buildings with 336 units is ridiculous and should be denied.

The apartments that now occupy the old Salem Academy are a good example of minimal impact conversion for existing buildings. Any rezoning request that attempts to change existing zoning should be denied!

Mark Nayden & Richard D. Kennedy 352 North Broad Street • Salem, VA 24153

My name is Mark Nayden. I live at 352 N Broad Street in Salem. I also own a home that is a rental property on Bowman Avenue. Thank you for the opportunity to speak to the Planning Commission this evening about the development and rezoning proposal at Hopetree.

I request that this public meeting remain open through the Planning Commission vote on this issue since additional information was provided by Hopetree as late as yesterday, February 13, 2024 and because of the combined meeting with the City Council, Planning Commission and Hopetree that is scheduled for next week. The public should be able to review all of this information and make comments prior to a vote by the Planning Commission and City Council.

I moved to Salem two and a half years ago with my husband from Brooklyn, NY. This was a big change and not made lightly. We *chose* Salem. It has been very welcoming a perfect adjustment from a move from New York City.

I do not have to speak of the increase of traffic and speeding. The commission is well aware of these issues. They have been, and continue to be detailed by several other citizens. The recently updated traffic studies presented by Hopetree are *still* incomplete. This is an issue for all of the surrounding neighborhoods and streets, especially Carrollton, Red Lane and Mt. Vernon. However, North Broad Street is in the center of town. It is a dynamic and important street both historically and practically for all of Salem. Used by everyone for its proximity to the Farmers market, Friday night events in the summer, Salem Days, the Christmas parade and other holiday events like Halloween. Attracting hundreds of children from around the surrounding areas allowing them to enjoy and wander the street on foot collecting candy from the highly decorated historic houses. It has a diverse demographic ranging from young families just starting out, to retirees, all taking advantage of the walk-able streets and easy access to Main Street, Downtown and the Farmers Market.

As drawn in this proposal, North Broad Street becomes the *only* through street. Any increase in the volume and speed of traffic decreases the safety of the streets.

The current comprehensive plan, now being updated, encourages redevelopment that is *compatible* with existing and planned residential areas. It is important to protect established areas from the impact of commercial development. Developers should have incentives in exchange for the permanent preservation of open spaces incorporated as part of a new development.

The plans for the Hopetree property *do not meet* this objective. Presenting green space on the undevelopable land as part of the retained property of Hopetree does not counteract the 40+ acres heavily developed with housing and commercial space. There is no detailed site plan, only suggestions of types of housing and commercial development. Even a private property development needs to work within the parameters established by planning, zoning and the City Council. Citizens of Salem, including those in Roanoke County, need to be a part of the process.

Salem does *not* need a 60-room hotel on the Hopetree property. The lofts on Main Street did not sell as condos or apartments, now they are run like a hotel. The Rowland Hotel has 16 rooms that are almost always available. The Inn at Burwell Place was on the market for over 100 days removing the listing without a sale at the end of December. There are hotels available on both ends of town off of Main Street and one is being added as part of the Hanging Rock Development just across from our city limits.

The comprehensive plan page 46 says:

"Salem's compact size results in the close proximity of land uses of differing intensities. This pattern should be considered during future re-zonings, and care taken to mitigate negative impacts on surrounding residential neighborhoods."

Why allow a property that has been residential since its establishment to become mixed-use with such close proximity to the Main Street? What analysis has shown that an additional 7500 sq. feet of restaurants would become an asset to Salem's economic development?

There is **no** need for commercial development on the Hopetree property. Commercial establishments in downtown Salem do not need to share their already limited business. Extending North Broad Street and other changes to Red Lane and Mt. Vernon would dramatically affect these neighborhoods by potentially making them over used thoroughfares for services and deliveries – no longer *historic neighborhood* streets. My husband and I owned a bar in Brooklyn for twenty years and have first hand knowledge of mixed-use developments, with apartments over commercial establishments, like nail and hair salons, tattoo parlors, coffee shops. This kind of development in a long established residential neighborhood is not appropriate. This proposed development is better suited on the edges of a town or for re-establishing under utilized areas.

I applaud the city for the re-development of the Valleydale property. Although, I am sure that project has not been without its challenges, it is a prime example of a re-use and re-development of a long abandoned commercial space that will become a dynamic mixed-use property providing Salem with much needed rental properties. It is an example of re-zoning based on a presented plan. The plan changed due to construction issues/problems, and did not needing re-approval because it was still within the new zoning ruling. This example worked for the better for the city and the surrounding neighbors.

However, if the city allows the re-zoning on the Hopetree property without an accurate and detailed site plan, you are giving the developer a clear path to make changes without any goal posts. Per their proposal, one of the largest pieces of property in Salem will be under development for at least ten years and subject to the whim of the developer. The city can and should require a much more detailed plan that does not allow for changes without approval and presentation to all of Salem's citizens.

The new Comprehensive Plan is supposed to take the city to 2045. Do not allow a pocket neighborhood to be developed creating competition – a second city center, when we already have a blended residential to commercial area on Main Street Downtown. Developments like Grand In Village in Roanoke, which the Hopetree plan emulates happened

organically. Houses and businesses existed and blended together. This property has always been residential and should remain as such.

The current comprehensive plan, page 34 says:

"Our downtown area plays an important role in the economic health of Salem. It is a service, retail, and governmental destination, drawing people and wealth into the city."

Page 36 states that there is a need to increase the strength of the existing businesses downtown as well as, encourage activity downtown after work hours.

The city of Salem has invested a great deal of money in the revitalization of the downtown area as the improvements to the sidewalks, lighting and fewer empty storefronts demonstrate. However, I think all of us would agree that this job is *not* finished. Stores and restaurants still struggle to staff and keep open. Reservations later than 8PM are the rarity not the norm. These businesses were not included in any mailings or correspondence about this rezoning request. I hand delivered information to every business because they will be impacted by a change of zoning that would establish a commercial island within a residential community that is away from Downtown Salem.

Despite several citizens pointing out to the city that only the legal minimum of information and dialogue with Hopetree occurred during this multi year process, the city used the same mailing list of approximately 120 residents that Hopetree used, to publish the rezoning application at the end of December.

We reached out with our own mailing to over 500 residents of Salem to give them a chance for their voices to be heard. Over 300 people and counting have signed a petition opposing the rezoning. The city of Salem must do better in its communication to its citizens.

Housing development *can* make sense on that property. While I do not welcome an increase of traffic on the surrounding streets, I understand that something will be built on the Hopetree property. Every city and town is in need of housing in various forms and price points, i.e. apartments, townhomes, patio homes and single-family homes.

However, I hope that Salem does *not* allow for its overdevelopment and re-zoning of a residential neighborhood. Please let any redevelopment become a part of the discussion of the new Comprehensive Plan.

If 85% of useable land in Salem has already been developed, please remember this quote:

"GOAL: to preserve to the maximum extent possible, the scenic landscapes, especially the mountainsides and the ridgelines, in and around Salem, thereby saving one of the quality of life features, which our citizens value most."

Thank you, and I ask that all my comments, included the submitted written notes be entered into the Public record.

change.org. Oppose Rezoning of HopeTree Property Petition (Requesting Delay)

The City of Salem, Virginia is facing a critical decision that could permanently alter its character. A proposal is in the works to rezone the HopeTree property and surrounding green space from residential single family to mixed use, which could include commercial developments such as a hotel, restaurant and retail establishments. This change threatens the integrity of our community's heritage, natural environment and our Main Street businesses.

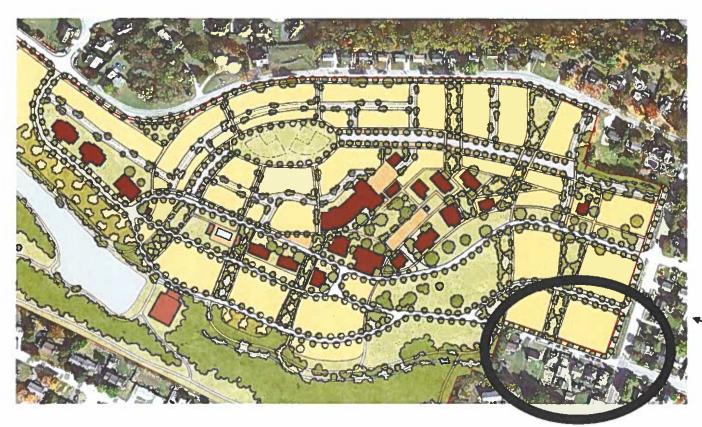
HopeTree is private property, and they have the right to develop it to conform with current requirements in order to continue providing services to the community, but that development should be limited to homes, not commercial businesses.

The proposed rezoning is being considered prior to the completion and approval of a new comprehensive plan for our city. Discussions regarding redevelopment have been underway for over 2 years with city employees and some neighbors but has only recently come to the attention of many more neighbors who will be directly impacted by rezoning and have had no opportunity to offer input. This rushed decision-making process undermines the purpose of having such plans – to guide growth in a way that respects community values and long-term sustainability.

Salem's history is rich, with many buildings dating back to the 18th century. The HopeTree property itself is nestled within this historic context, providing much-needed green space amidst urban development. According to data from Virginia Department of Conservation & Recreation (2019), green spaces contribute significantly towards improving air quality, reducing heat islands effect, enhancing biodiversity among others. This area is one of Salem's last green spaces within established neighborhoods. We urge you not only as residents but also as stewards of our city's history and environment - oppose this premature rezoning until after an updated comprehensive plan has been approved by all relevant bodies. Let's ensure any changes made align with what's best for Salem now and in future generations.

Please sign this petition to oppose rezoning.

Print Name		
Address		Salem VA 24153
Optional Email	@	
Signature	D	ate

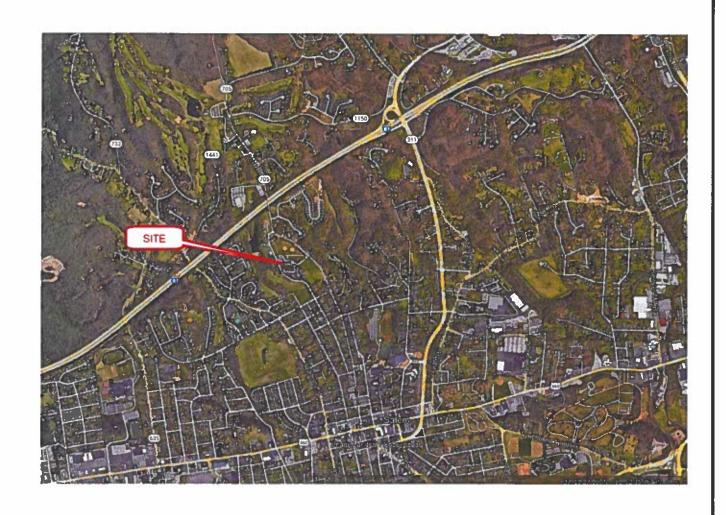


Above image as originally submitted, lower imaged cropped from original above.

Cropped section is from the lower right corner of image above N Broad St and Carrolton



Based on scale, it appears the yellow building square can accommodate 8 homes. If this rendering is representational, there does not seem to be any way the amount of housing they are discussing can physically fit as rendered.





February 14, 2024

Planning Commission Salem Civic Center

Thank you for this opportunity to speak to you this evening, on behalf of everyone who has spoken here tonight and those who wanted to be here but could not due to other commitments or being required to work on one of their busiest days of the year.

This public comments meeting seems to be premature since so many details are undecided or unavailable, which we understand you did not know would be the case at the time of scheduling.

We are presenting you with a digital petition that has received 300 signature in opposition of the rezoning and we will continue to collect signatures in the future.

Due to the last minute additions to the agenda packet, we ask that you not vote until the June Planning Commission meeting or later.

This will allow for information presented at the upcoming February joint meeting with City Council and HopeTree and information from the April Comprehensive Plan meeting that will discuss future housing needs to be evaluated.

We also ask that you schedule a longer, well promoted event to share information on the project and add easily navigated links to the details on the Salem government webpages.

We also ask that you conduct a survey of the public to see if they support this drastic zoning change.

We ask that you enter all verbal & written comments into the official public record.

We also ask that Public Comments remain open until you vote since more info is still being presented for this project that many citizens will want to comment on.

Thank you.

Oppose Rezoning of HopeTree Property Petition (Requesting Delay)

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Salem's history is rich, with many buildings dating back to the 18th century. The *HopeTree* property itself is nestled within this historic context, providing much-needed green space amidst urban development. According to data from Virginia Department of Conservation & Recreation (2019), green spaces contribute significantly towards improving air quality, reducing heat islands effect, enhancing biodiversity among others. This area is one of Salem's last green spaces within established neighborhoods. We urge you not only as residents but also as stewards of our city's history and environment. Oppose this premature rezoning until after an updated comprehensive plan has been approved by all relevant bodies. Let's ensure any changes made align with what's best for Salem now and in future generations.

Please sign this petition to oppose rezoning and please share with your friends and neighbors.

Print Name		
Address		Salem VA 24153
Optional Email	@	
Signature	Doto	



www.change.org: Online Petition (Scan the QR link) or please mail a signed copy of the petition to: Petition PO Box 2221, Salem, VA 24153

Madelaine Shreeman	Salem	VA	24153 US	11/14/23
Margaret McGeever	Salem	VA	24153 US	11/14/23
Angel Lane	Salem	VA	24153 US	11/14/23
ROBERT BROWN	Salem	VA	24153 US	11/14/23
Jeremy McNeill	Salem	VA	24153 US	11/14/23
James Reinhard	Salem	VA	24153 US	11/14/23
Mary Chisholm	Salem	VA	24153 US	11/14/23
Melissa Fobare	Salem	VA	24153 US	11/14/23
Carrie cochran	Salem	VA	24153 US	11/14/23
Rebecca Hancock	Salem	VA	24153 US	11/14/23
Jud Cowling	Salem	VA	24153 US	11/14/23
Christina Sword	Salem	VA	24153 US	11/14/23
Dustie Wiser	Salem	VA	24153 US	11/15/23
Adrian Pierce	Salem	VA	24153 US	11/15/23
Heather Waldron	Salem	VA	24153 US	11/15/23
Joyce Moore	Salem	VA	24153 US	11/15/23
Lynda Hayslett	Salem	VA	24153 US	11/15/23
Caroline Blackwell	Salem	VA	24153 US	11/15/23
Sandra Hart	Salem	VA	24153 US	11/15/23
Molly Armistead	Salem	VA	24153 US	11/15/23
Michael Bentley	Salem	VA	24153 US	11/15/23
Tracy Lintner	Salem	VA	24153 US	11/15/23
Kelly D	Salem	VA	24153 US	11/15/23
Jan Berry	Salem	VA	24153 US	11/16/23
Larry Fasnacht	Salem	VA	24153 US	11/17/23
Robert Matzuga	Salem	VA	24153 US	11/17/23
Matthew Wheeling	Salem	VA	24153 US	11/17/23
Nicole Wheeling	Salem	VA	24153 US	11/17/23
Krin Turpin	Salem	VA	24153 US	11/17/23
Heather Cline	Salem	VA	24153 US	11/18/23
Stephanie Picard	Salem	VA	24153 US	11/19/23
Krista Matzuga	Salem	VA	24153 US	11/21/23
Emily Paine Carter	Salem	VA	24153 US	11/24/23
Mitch Kerr	Salem	VA	24153 US	11/24/23
Jennifer Nelson	Salem	VA	24153 US	11/28/23
Vicki Wood	Salem	VA	24153 US	12/7/23
Karla Murphy	Salem	VA	24153 US	12/8/23
Randy Bowman	Salem	VA	24153 US	12/8/23
Jacob Jackson	Salem	VA	24153 US	12/8/23
Stella Reinhard	Salem	VA	24153 US	12/12/23
Michael Bentley	Salem	VA	24153 US	12/13/23
Anne Lee Stevens	Salem	VA	24153 US	12/15/23

Michael Lane	Salem	VA	24153 US	12/17/23
Kim Miller	Salem	VA	24153 US	12/18/23
Brianna White-Gaynor	Salem	VA	24153 US	12/23/23
Brenda MONNETT	Salem	VA	24153 US	12/24/23
Jenise Taylor	Salem	VA	24153 US	1/2/24
Michael McGeever	Salem	VA	24153 US	1/2/24
Jordan Peters	Salem	VA	24153 US	1/16/24
Charles Hammersley	Salem	VA	24153 US	1/17/24
Lisa Ricci	Salem	VA	24153 US	1/18/24
Caroline Velasquez	Salem	VA	24153 US	1/20/24
Becky May	Salem	VA	24153 US	1/22/24
Karaya Burch	Salem	VA	24153 US	1/22/24
Faye Curren	Salem	VA	24153 US	1/24/24
roseann mcdonald	Salem	VA	24153 US	1/26/24
Wendy Wall	Salem	VA	24153 US	1/27/24
Betty Fletcher	Salem	VA	24153 US	2/1/24
Nancy Miller	Salem	VA	24153 US	2/1/24
Erika Masters	Salem	VA	24153 US	2/4/24
Cynthia Munley	Salem	VA	24153 US	2/7/24
Stacey Porter	Salem	VA	24153 US	2/10/24
Robin Riggs	Salem	VA	24153 US	2/10/24
William Mongan	Salem	VA	24153 US	2/10/24
Fay Wingate	Salem	VA	24153 US	2/10/24
Susan Hall	Salem	VA	24153 US	2/10/24
Sharon Ratliff	Salem	VA	24153 US	2/10/24
Bryan Warriner	Salem	VA	24153 US	2/10/24
James W. Holtman	Salem	VA	24153 US	2/10/24
Diane Koropchak	Salem	VA	24153 US	2/10/24
Patti Gross	Salem	VA	24153 US	2/10/24
Deborah Howard	Salem	VA	24153 US	2/10/24
Pat Cole	Salem	VA	24153 US	2/10/24
Lisa Ricci	Salem	VA	24153 US	2/10/24
Rhonda Foulkes	Salem	VA	24153 US	2/10/24
Carolyn Walter	Salem	VA	24153 US	2/10/24
Rebecca Mullins	Salem	VA	24153 US	2/10/24
Susan Craft	Salem	VA	24153 US	2/10/24
April Woodward	Salem	VA	24153 US	2/10/24
Jimmy Bain	Salem	VA	24153 US	2/10/24
Greg Woodward	Salem	VA	24153 US	2/10/24
Reagan Wyssbrod	Salem	VA	24153-2724 US	2/10/24
George Haley	Salem	VA	24153 US	2/11/24
George Henry	Salem	VA	24153 US	2/11/24

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Ricky Lawrence	Salem	VA	24153 US	2/11/24
Lane Van Arsdale	Salem	VA	24153 US	2/11/24
Hugh Huff	Salem	VA	24153 US	2/11/24
Linda Hess	Salem	VA	24153 US	2/11/24
Dallas Bradley	Salem	VA	24153 US	2/11/24
Ashley Borloz	Salem	VA	24153 US	2/11/24
Lesley Owen	Salem	VA	24023 US	2/11/24
Savannah Blevins	Salem	VA	24153 US	2/11/24
Mary Ann Craighead	Salem	VA	24153 US	2/11/24
Darrell Craighead	Salem	VA	24153 US	2/11/24
Leslie Bauguss	Salem	VA	24153 US	2/12/24
Brooke Bentley	Salem	VA	24153 US	2/12/24
Matthew Marable	Salem	VA	24153 US	2/12/24
Lindsey Malek	Salem	VA	24153 US	2/12/24
Alex Ebel	Salem	VA	24153 US	2/12/24
Carlos (Carl) Hart	Salem	VA	24153 US	2/12/24
Janelle Roman	Salem	VA	24153 US	2/12/24
Carlos S. Roman	Salem	VA	24153 US	2/12/24
Virginia Keast	Salem	VA	24153 US	2/12/24
Mackenzie McNamara	Salem	VA	24153 US	2/12/24
Jennifer Deegan	Salem	VA	24153 US	2/12/24
Eberle Smith	Salem	VA	24153 US	2/12/24
Carrie Cox	Salem	VA	24153 US	2/12/24
Justin Cox	Salem	VA	24153 US	2/12/24
Aimee Barrett	Salem	VA	24153 US	2/12/24
Leo Tingler, Jr.	Salem	VA	24153 US	2/12/24
Travis Brammer	Salem	VA	24153 US	2/12/24
Richard Kennedy	Salem	VA	24153 US	2/12/24
John Givens	Salem	VA	24153 US	2/12/24
Jacqueline Givens	Salem	VA	24153 US	2/12/24
Gerald Daniel	Salem	VA	24153 US	2/12/24
Angela Daniel	Salem	VA	24153 US	2/12/24
Jonathan Branson	Salem	VA	24153 US	2/12/24
Jenny Booze	Salem	VA	24153 US	2/12/24
Jennifer DeSouto	Salem	VA	24153 US	2/12/24
Laura Morris	Salem	VA	24153 US	2/12/24
Kimberly Pitzer	Salem	VA	24153 US	2/12/24
Celeste Hicks	Salem	VA	24153 US	2/12/24
Michelle Bowles	Salem	VA	24153 US	2/12/24
Angela Butt	Salem	VA	24153 US	2/13/24
Jennifer Hagy	Salem	VA	24153 US	2/13/24
Pat Hickson	Salem	VA	24153 US	2/13/24
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Melanie Barger	Salem	VA	24153 US	2/13/24
Kimberly Cash	Salem	VA	24153 US	2/13/24
Cullen Cash	Salem	VA	24153 US	2/13/24
Anthony Cash	Salem	VA	24153 US	2/13/24
Carly O'Keefe	Salem	VA	24153 US	2/13/24
Zach Wright	Salem	VA	24153 US	2/13/24
Stormy Hagy	Salem	VA	24153 U\$	2/13/24
Haley P	Salem	VA	24153 US	2/13/24
Ashley Supan	Salem	VA	24153 US	2/13/24
Amy Bott	Salem	VA	24153 US	2/13/24
Christi Holliday	Salem	VA	24153 US	2/13/24
Braden Cash	Salem	VA	24153 US	2/13/24
Michael Walthall	Salem	VA	24153 US	2/13/24
Michael Moulse	Salem	VA	24153 US	2/13/24
Susan Hall	Salem	VA	24153 US	2/13/24
Michael Hall	Salem	VA	24153 US	2/13/24
Alicia Horvath	Salem	VA	24153 US	2/13/24
Michele Green	Salem	VA	24153 US	2/13/24
Buster Mowles	Salem	VA	24153 US	2/13/24
Amy Powell	Salem	VA	24153 US	2/13/24
Reid McClure	Salem	VA	24153 US	2/13/24
Robert Vest	Salem	VA	24153 US	2/13/24
Gloria Preast	Salem	VA	24153 US	2/13/24
Sarah Summerlin	Salem	VA	24153 US	2/13/24
Thomas Summerlin	Salem	VA	24153 US	2/13/24
Jenny Cox	Salem	VA	24153 US	2/13/24
Neil Miller	Salem	VA	24153 US	2/13/24
Robert Rowell	Salem	VA	24154 US	2/14/24
Edward Kirmse	Salem	VA	24513 US	2/14/24
Kathryn Hubbard	Salem	VA	24153 US	2/14/24
Karen Bachman	Salem	VA	24153 US	2/14/24
Stephen Coffman	Salem	VA	24153 US	2/14/24
Kiera Kolb	San José		95139 US	2/2/24
Virginia Jones	Seattle	WA	98188 US	2/12/24
Lydie Boussoukou	Skokie		60076 US	2/6/24
Alana Preziosi	Swedesboro		8085 US	2/3/24
Jason Akers	Tacoma		98446 US	2/2/24
Jennifer Culver	Vinton	VA	24179 US	11/15/23
Scott Dreyer	Vinton	VA	24179 US	1/28/24
Amal Issa	Wayne	NJ	7470 US	2/10/24
Narjis Abdulabas	Westbrook		4092 US	1/31/24
Eric Crocker	Woodbridge	VA	22193 US	11/15/23

Amanda Maish	Roanoke	VA	24018 US	2/10/24
Jamiann Clark	Roanoke	VA	24015 US	2/10/24
Caroline Scarborough Ba	in Roanoke	VA	24018 US	2/10/24
Gail Grabiec	Roanoke	VA	24018 US	2/11/24
George Gross	Roanoke	VA	24018 US	2/11/24
Kyleigh Bradley	Roanoke	VA	24014 US	2/11/24
Ronnie Taylor	Roanoke	VA	24018 US	2/12/24
Douglas McCart	Roanoke	VA	24018 US	2/12/24
Scott Wise	Roanoke	VA	24017 US	2/12/24
Ted Lawrence	Roanoke	VA	24023 US	2/12/24
Neil Demasters	Roanoke	VA	24018 US	2/12/24
Peggy Robinson	Roanoke	VA	24018 US	2/12/24
Monica McLain	Roanoke	VA	24018 US	2/12/24
Carol Shifflett	Roanoke	VA	24016 US	2/12/24
Mary Lou Reynolds	Roanoke	VA	24018 US	2/12/24
Nancy Duffy	Roanoke	VA	24019 US	2/12/24
Amy Lawrence	Roanoke	VA	24023 US	2/12/24
Janine Brizendine	Roanoke	VA	24018 US	2/13/24
Summer Mathis	Roanoke	VA	24018 US	2/13/24
Susan Russell	Roanoke	VA	24018 US	2/13/24
Tracey Bennett	Roanoke	VA	24018 US	2/13/24
Tom Simpson	Roanoke	VA	24012 US	2/13/24
Robert Walker	Roanoke	VA	24018 US	2/13/24
Beverley Witt	Roanoke	VA	24020 US	2/13/24
Fran Kingery	Roanoke	VA	24018 US	2/13/24
Julie Mowles	Roanoke	VA	24018 US	2/13/24
Terri McClure	Roanoke	VA	24018 US	2/13/24
Jesse Webster	Roanoke	VA	24018 US	2/13/24
Adam Fender	Roanoke	VA	24015 US	2/14/24
Jeremy Sather	Roanoke	VA	24018 US	2/14/24
Marissa Yi	Roanoke	VA	24014 US	2/14/24
Mary Parsell	Roanoke	VA	24023 US	2/14/24
Jonathan Gross	Saint Paul	MN	55113 US	2/11/24
Ellen Pruitt	Salem	VA	24153 US	11/14/23
Susan E. Bentley	Salem	VA	24153 US	11/14/23
Anna Steen	Salem	VA	24153 US	11/14/23
Mary Warriner	Salem	VA	24153 US	11/14/23
Harry Brewbaker	Salem	VA	24153 US	11/14/23
Richard Kennedy	Salem	VA	24153 US	11/14/23
Mark Nayden	Salem	VA	24153 US	11/14/23
Christina McCart	Salem	VA	24153 US	11/14/23
Matt Kennedy	Salem	VA	24153 US	11/14/23

Name	City	State	Postal Code	Country	Signed On
Gregg Levine	Astoria	NY	11102	US	2/12/24
kathy wheeler	Bedford	VA	24523	U\$	2/12/24
Alison Eubank	Bedford	VA	24523	US	2/12/24
Tracey Dempsey	Blacksburg	VA	24060	US	2/13/24
Beth Gunter	Blue Ridge	VA	24064	US	1/28/24
matthew tomaszewski	bordentown		8610	US	2/4/24
Robert Hunt	Bristol	TN	37620	US	1/3/24
Lacinda Pescinska	Brunswick	ОН	44212	US	2/11/24
Emily Howell	Charlotte	NC	28233	US	11/15/23
jill angelichio	charlotte		28204	US	1/31/24
lizabeth Douglas	Charlottesville	VA	22903	US	11/17/23
Diane Ribble	Charlottesville	VA	22911	US	1/24/24
Steve Fish	Chicago		60614	US	2/3/24
Alan Cortes-Alcantar	Chicago	IL	60609	US	2/14/24
Maria Beury	Chicago	IL	60605	US	2/14/24
Margie Bowles	Christiansburg	VA	24073	US	2/14/24
Erika Rikhiram	Clermont		34711	US	2/6/24
cayden peters	Clermont	FL	34714	US	2/14/24
Donald Pitzer	Daleville	VA	24083	US	2/13/24
Jacob Darland	Dallas		75233	US	1/31/24
Carolyn Rafferty	Delmar		12054	US	2/3/24
Teresa Lumley	Dyersburg		38024	US	11/26/23
Anna Laidler	East Stroudsburg		18301	US	11/26/23
Michael Anthony Melice	East Syracuse	NY	13057	US	2/12/24
Thomas Fraticelli	Fort Myers	FL	33912	US	2/10/24
Jonathan Miller	Fort Wayne	IN	46808	US	2/13/24
Benjamin Radcliffe	Frostburg		21532	US	2/4/24
Elysse Soberano	Gaithersburg		20877	US	2/1/24
Tammy Rickman	Goodview	VA	24095	US	11/15/23
Albert Taylor	Goodview	VA	24095	US	2/13/24
Carter Saul	Grove City		43123	US	2/5/24
Russell Deyerle	Henrico	VA		US	1/22/24
Olivia Battani	Henrico		23228	US	2/5/24
Kelly Hubbard	Hilton Head Island	SC	29928	US	2/11/24
Kelly Curran	Hilton Head Island	SC	29928	US	2/12/24
Nana Adi	Houston			US	2/7/24
Lendi Haley	Hyattsville	MD	20785	US	11/15/23
Cuyra Kennedy	Jonesburg	MO	63351	US	2/12/24
Gordon Poston	Kingstree		29556	US	12/14/23
Josh Standiford	Lake Zurich		60047	US	11/25/23
Patrick Wells	Lawton		173505	US	12/14/23

	4.						
*							
	Carolyn West	Lebanon			32034 US		2/7/24
	Mary Cataldo	Leesburg	VA		20177 US		/15/23
	Taylor Jackson	London			US		/14/23
	james finely	Manassas			20111 US	12	/13/23
	Deborah Holmes	Manlius	NY		13104 US	11	/15/23
	Carlos Romo	McKinney	TX		75069 US	11	/26/23
	Jessica Romo	McKinney	TX		75070 US	11	/26/23
	Robert Standifer	McLoud			74851 US	12	/14/23
	Julie Millner	Midlothian	VA		23112 US	11	/15/23
	Yaqueen Sulaiman	Nashville			37211 US	1,	/31/24
	Helen Parker	New York			10118 US		2/5/24
	Shawn Palmer	Newport News	VA		23602 US	11,	/15/23
	Richard Bond	Pawleys Island	SC		29585 US	2,	/11/24
	lidice lopez	pembroke pines	FL		33024 US	2	/11/24
	Joshua Curphey	Peterborough		PE7	US	12,	/13/23
	Alysha Allen	Philadelphia			19107 US	1,	/31/24
	Faye Manspile	Philadelphia	PA		19104 US	2,	/12/24
	Milo :3	Reading			19606 US	11	/25/23
	Linda Weaver	Richmond	VA		23234 US		1/4/24
	Fran Getchell	Richmond	VA		24153 US	2,	/10/24
	Stacy Deyerle	Richmond	VA		23238 US	2,	/11/24
	Allan Morrison	Riverside			60546 US	12	/13/23
	Ryan Watson	Roanoke	VA		24018 US	11	/14/23
	Henry Scott	Roanoke	VA		24012 US	11,	/14/23
	Elizabeth Scott	Roanoke	VA		24014 US	11,	/14/23
	Ralph Johnson	Roanoke	VA		24018 US	11,	/14/23
	Matthew Gregory	Roanoke	VA		24018 US		/14/23
	Graham Whitaker	Roanoke	VA		24018 US		/14/23
	Breckell Gregory	Roanoke	VA		24018 US	11	/14/23
	Olivia Bell	Roanoke	VA		24017 US	11,	/14/23
	Sara Warren	Roanoke	VA		24018 US	11	/14/23
	David Barker	Roanoke	VA		24012 US	11	/15/23
	Linda Wheeling	Roanoke	VA		24018 US	`	/17/23
	April Woodward	Roanoke	VA		24019 US		/17/23
	Hilary Seiler	Roanoke	VA		24018 US		/22/23
	Donna Crotts	Roanoke	VA		24018 US		/24/23
	Anne Perrin	Roanoke	VA		24018 US		 2/8/23
	Paula Henry	Roanoke	VA		24018 US		/15/24
	Dan Wells	Roanoke	VA		24018 US		/17/24
	Jennie Mongan	Roanoke	VA		24012 US		/10/24
	Amy Minucie	Roanoke	VA		24018 US		/10/24
	Charles Minucie	Roanoke	VA		24018 US		/10/24
	-					_,	,

Dan De Yo	Yorba Linda	92886 US	12/14/23
Elizabeth Miller		U\$	11/9/23
Jack Dennis		US	12/14/23
Ron Hunt		US	1/2/24
James Cochrane		US	1/24/24
Sadie McClelland		US	2/5/24
Andrew Floyd		US	2/11/24
			×

Neighbors STANDING TOGETHER Against Rezoning HOPETREE

62 Acres Currently Zoned RSF Proposed Zoning Change to Commercial and High Density Residential 300+ homes

Homes: YES Businesses: NO & LIMIT Traffic

This packet contains a collaborative effort compiled by a citizen group via comments, texts, posts and misc. for a completely amateur attempt to offer a common sense alternative for rezoning the HopeTree property in a responsible manner.

If the property cannot remain as is ...

WHAT IF ...



WHAT IF...

HopeTree could fulfill their mission by being able to sell property to someone who wants to responsibly develop it while maintaining green spaces and views and still provide needed, affordable housing options?

It could be as simple as reshuffling the mix of uses, eliminating new commercial and adjusting the quantities of each housing type.

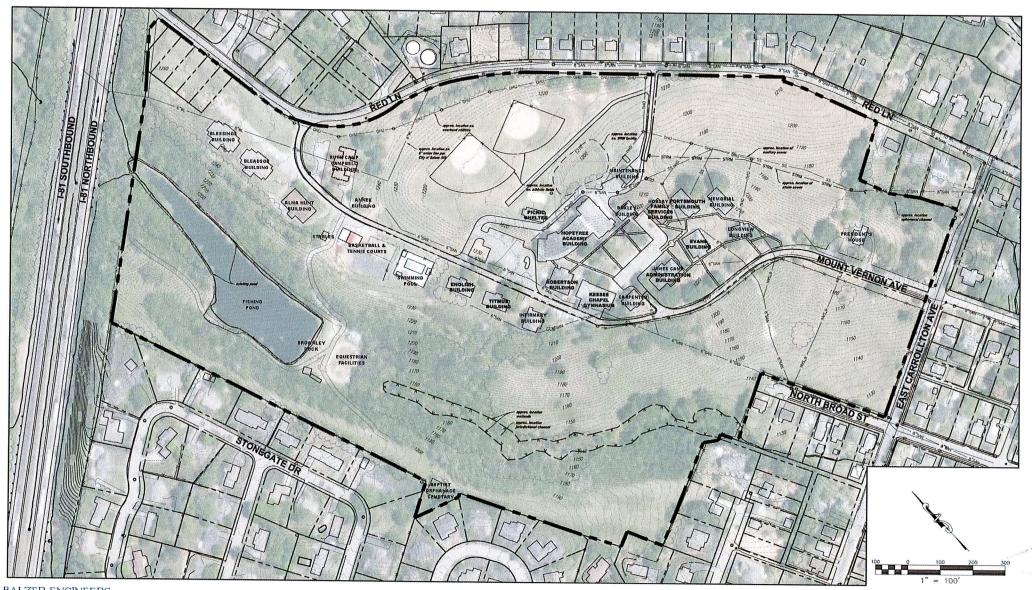
HopeTree could remain in its home with the limited use of spot zoning and a mix of RSF and RMF, not a full PUD rezoning leading to risky overdevelopment.



HopeTree Supplied Images



© 2.9.24



BALZER ENGINEERS

EXISTING SITE PLAN

HOPETREE PUD 4 SALEM, VIRGINIA



ILLUSTRATIVE MASTER PLAN WITH AERIAL





The lovely rendering is not to scale.



Above image as originally submitted, lower imaged cropped from original above. Cropped section is from the lower right corner of image above N Broad St and Carrolton



Based on scale, it appears the yellow building square can accommodate 8 homes. If this rendering is representational, there does not seem to be any way the amount of housing they are discussing can physically fit as rendered.



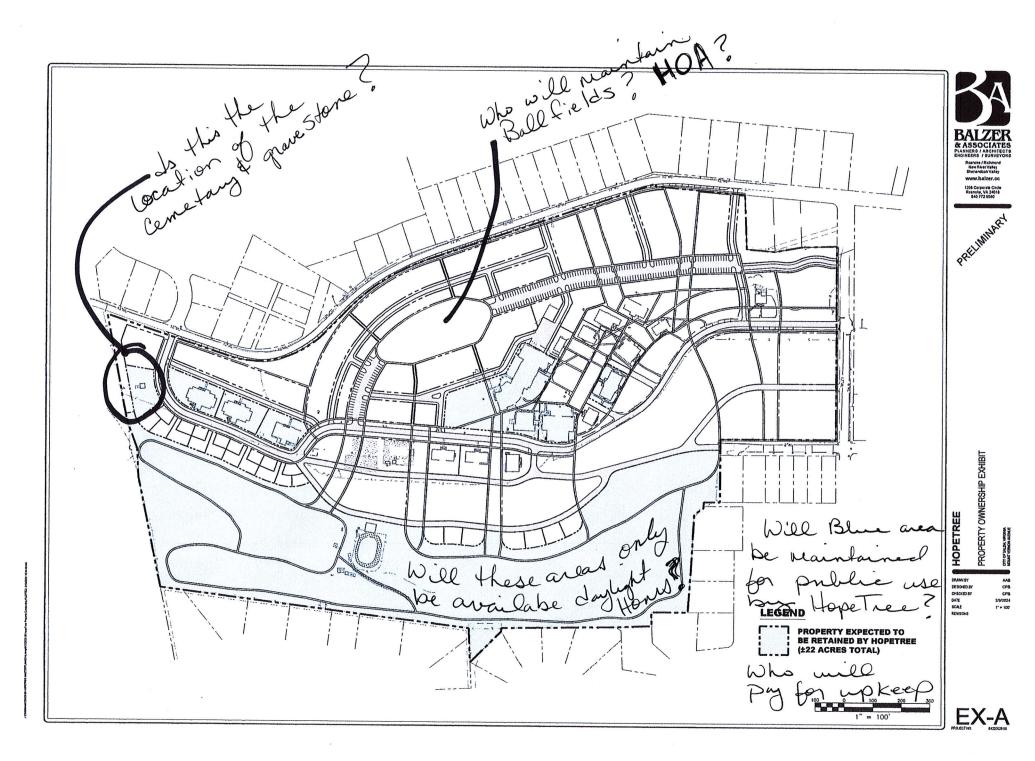
HopeTree will be retaining the blue shaded parcels.

Most respectfully, where is the cemetery?

Has the entire property been scanned for gravesites of the child residents or those of Native Americans or African Americans preceding the Virginia Baptist Home?

How will the cemetery be maintained?

Does the plan conform to the 5 acre rule?



Who will have access to and maintain the ballfields? Will the HOA cover the costs or taxpayers?

How many HOAs are anticipated?

Who will maintain HopeTree owned green space near the pond and stables?

Will HopeTree be responsible for the maintenance costs? What will the access hours be for these areas?

The Open Space Plan includes an area above the pond that is listed both as OPEN and zoned T5

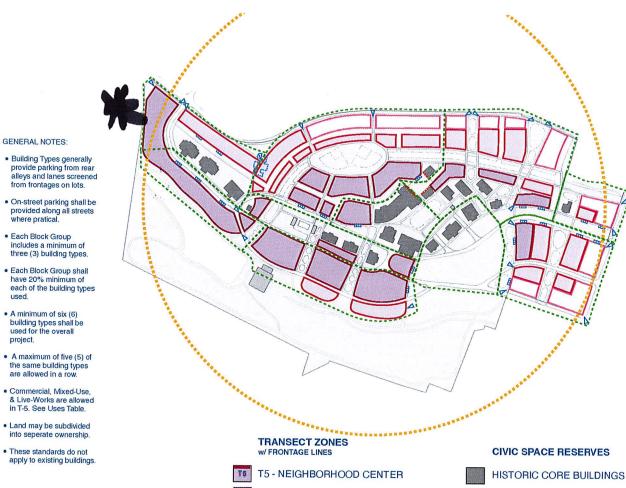
How can it be both?



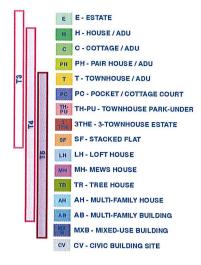
8. An open space plan, including areas proposed for passive and active recreational uses, natural and undisturbed areas, and proposed buffer areas proposed around the perimeter of the site. Information on the specific design and location of these areas and their ownership and maintenance should be included.

OPEN SPACE PLAN

SHOWING PARKS, GREENWAYS, GREEN FINGERS, TREE CANOPY, TREE PLANTINGS, ,WATER FEATURES, & THE QUADRANGLE



TRANSECT ZONES & **BUILDING TYPES KEY** (SEE SPECIFIC BUILDING TYPES FOR STANDARDS)



T4 - NEIGHBORHOOD GENERAL

T3 - NEIGHBORHOOD EDGE

OPEN SPACE / NATURAL

STRUCTURE TO BE REMOVED

CIVIC BUILDINGS

STREETS AND PARKING

REQUIREMENTS & DETAILS

BLOCK GROUP

RECOMMENDED GALLERY

RECOMMENDED SHOPFRONT

VISTA POINTS

PEDESTRIAN SHED -**5 MINUTE WALK RADIUS**

5.A land use plan designating specific use types for the site, both residential and non-residential use types, and establishing site development regulations, including setback, height, building coverage, lot coverage, and density requirements.



HOPETREE PUD 9 SALEM, VIRGINIA

LAND USE PLAN

If the original legacy buildings would make a nice boutique hotel, wouldn't they make lovely condos?

Concentrate new T5 commercial at the new main entrance at Red Land and North Oaks.

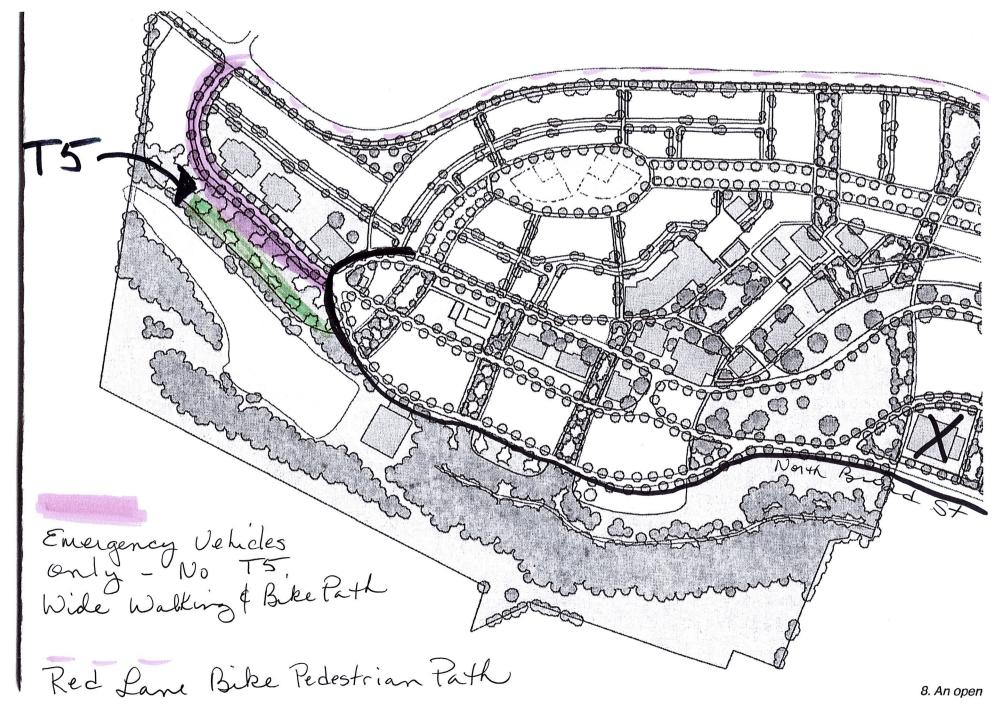
Do not create a "business island".



Do not extend N Broad to Red Lane, even with a name change.

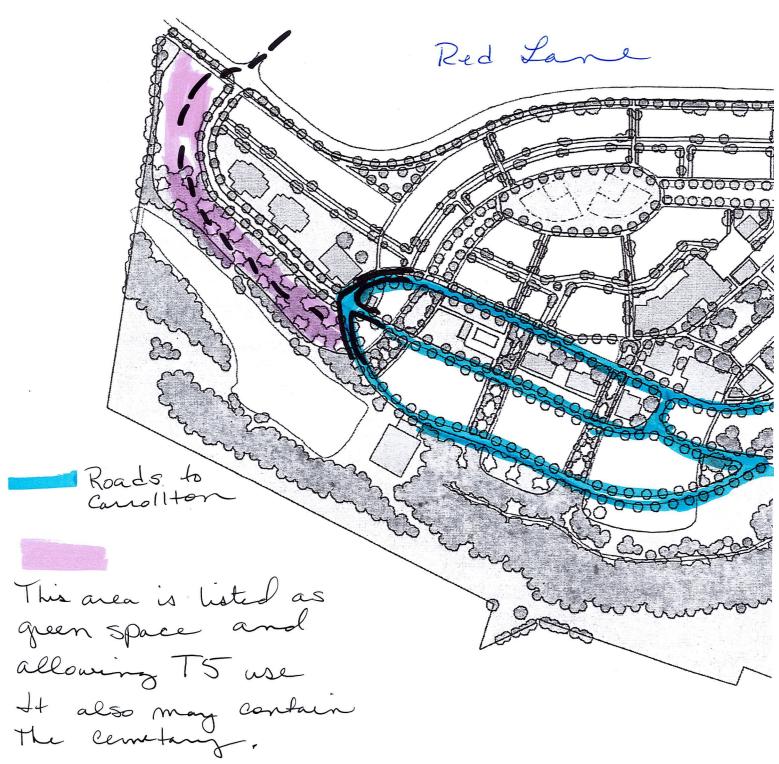
The proposed N Broad extension could be a pedestrian / bike path, wide enough for emergency vehicles only.

If N Broad loops back to Carrollton, the thru traffic problem may be eliminated.





Green Space & T5?



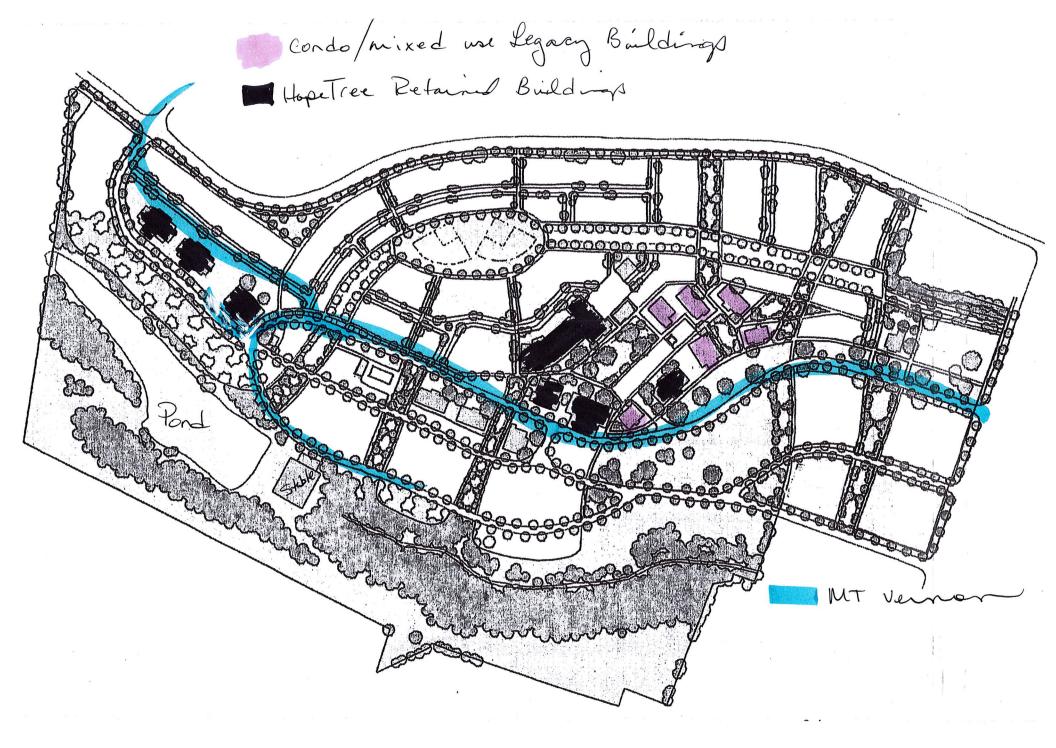
OPEN SPACE PLAN

SHOWING PARKS, GREENWAYS, GREEN FINGERS, TREE CANOI ,WATER FEATURES, & THE QUADRANGLE

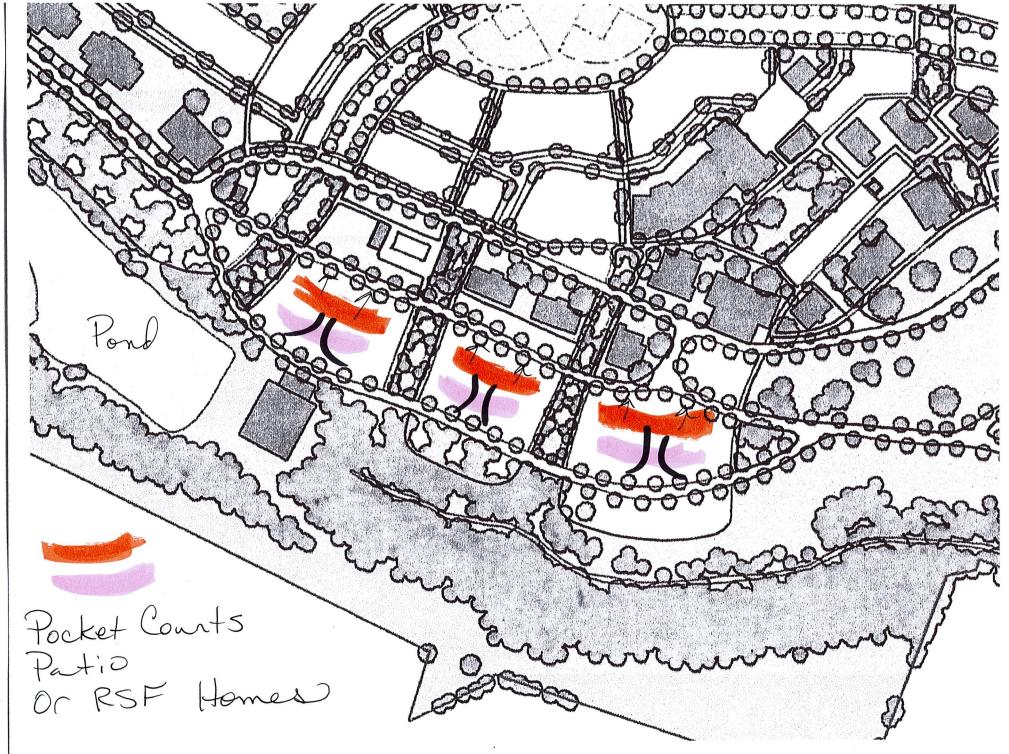
Emergency Vehicles only

If a single street is needed from Red Lane to Carrollton

Mt Vernon is a better choice in front of the HopeTree retained commercial buildings.

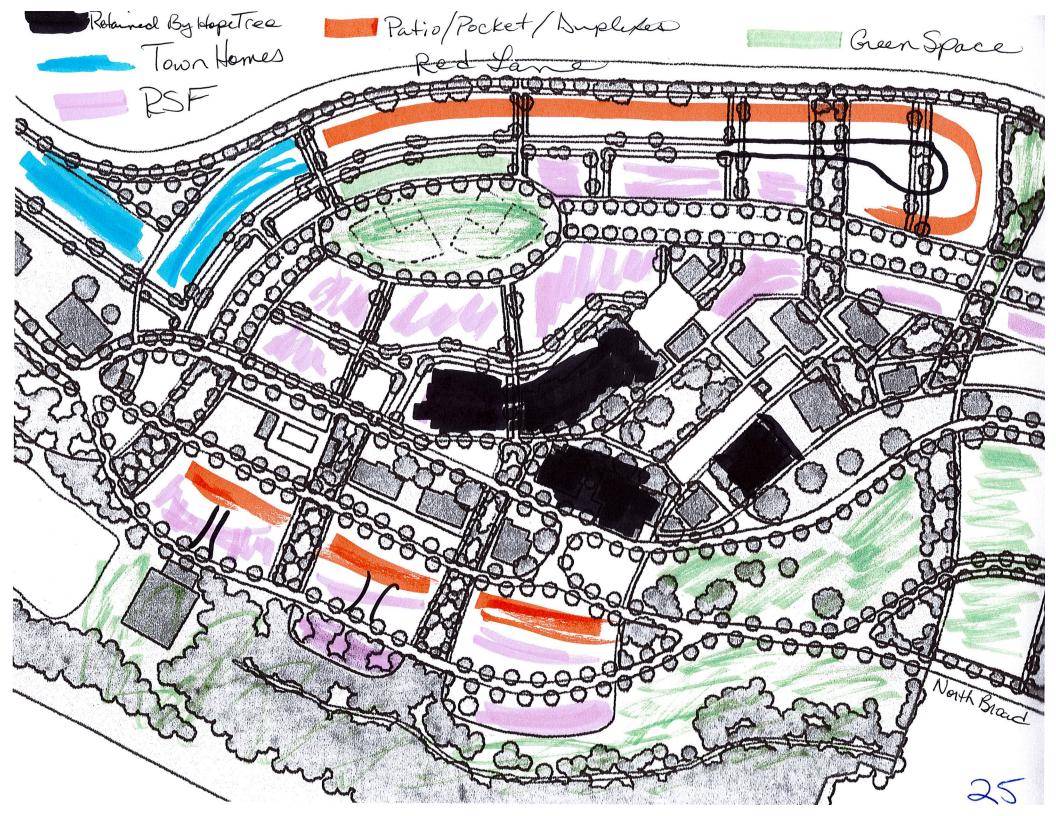


Pocket courts, patio homes and RSF would be best Along the green way near the pond.



This could be a good mix of homes and green space.





The 4 "squares" at Carrollton and N Broad are exceptionally steep. It would be a lovely option for the 2 interior "squares" to become part of the natural green space and the yellow sections could be RSF facing Carrollton.

(This may be the "Treehouse" location but who really wants a small house, on a steep hill, with questionable parking and lots of stairs? Not to mention the ecological impact.)

Access to the homes would be on the new entrance off N Broad, at the rear of the homes overlooking green space. These homes could have both front and rear porches.



The residents on Red Lane need our help.

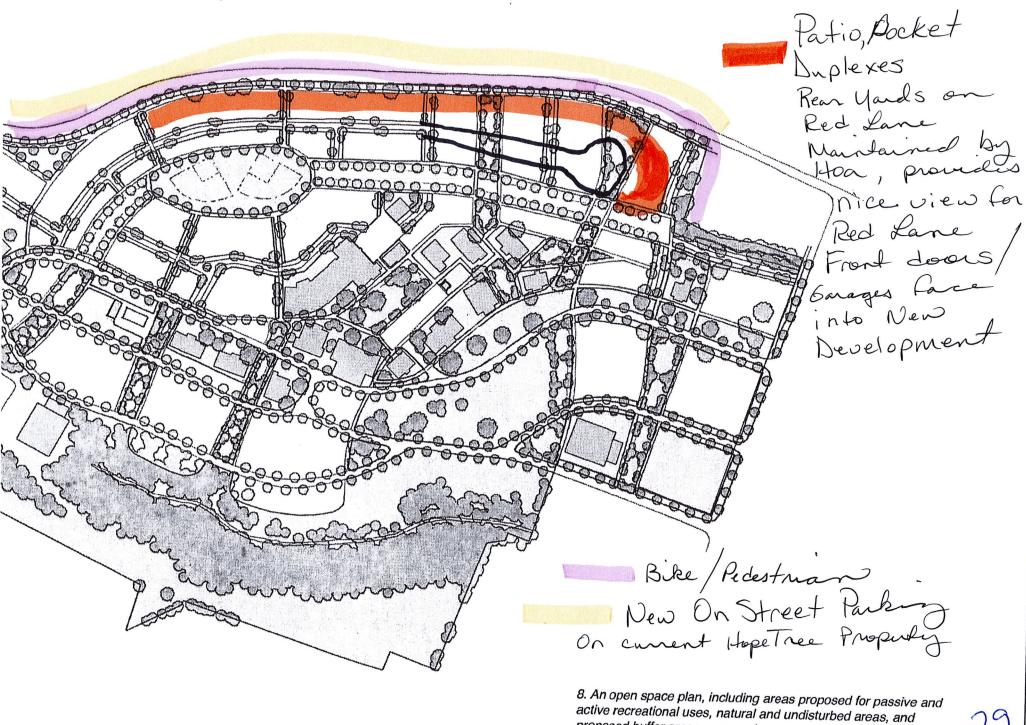
What if we created the onstreet parking they need

Buffered the bike traffic between the parking and sidewalk

And built the patio, duplexes and pocket courts with the professionally maintained back yards facing Red Lane?

These lower profile homes with grassy rear lawns would create a nicer view and the entrances to each home would be in front of the homes, not on Red Lane.

Existing Red Lane Homes



proposed buffer areas proposed around the perimeter of the site. Information on the specific design and location of these gross and What if we worked together, HopeTree, citizens, developers and the City to create a lovely green focused housing development for Salem residents.

A housing development for those just starting out, the empty nesters and those downsizing.

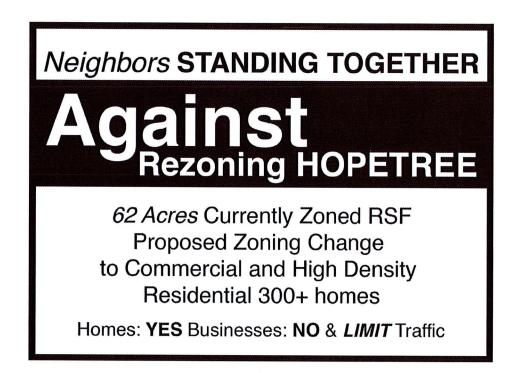
(The last two may free up more RSF housing in the city for 1st time buyers, move up buyers and new residents.)

We need housing options, not more commercial spaces or hotels and restaurants isolated by neighborhoods of single family homes.

Thank you for taking the time to review these

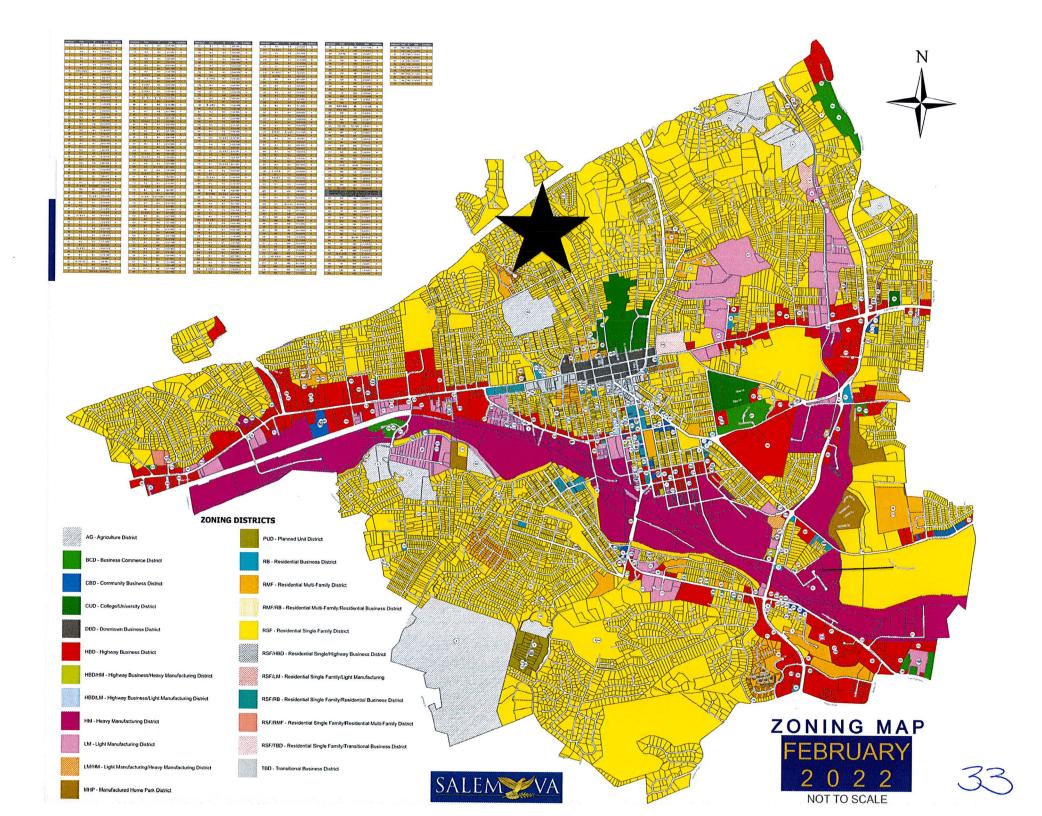
alternate ideas to the dramatic and risky PUD rezoning application before each of you.

Please vote no and send it back to the drawing board.



on Facebook at Salem VA Neighbors and Friends





Stateson Homes builds lovely homes.

The Daleville townhomes start at \$329,900

The RSF available are \$525,000

With the increase in raw materials and the additional difficulty of building on the HopeTree property without infrastructure, the purchase price of the newly constructed homes in a few years will most likely be substantially higher.



BROWSE BUSINESS DIRECTORY >

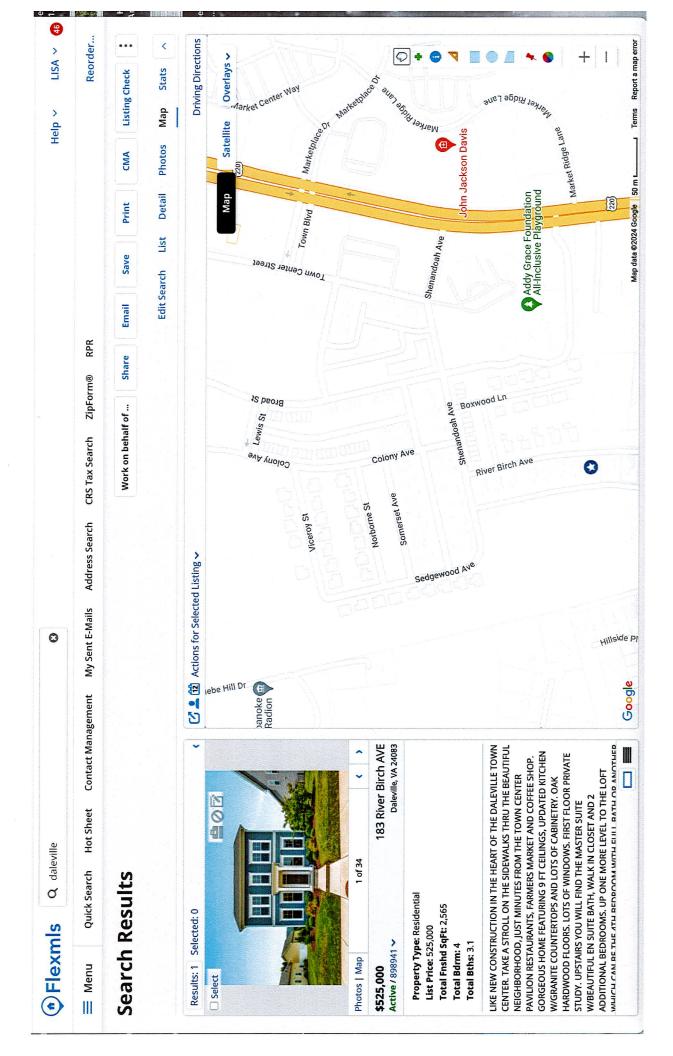
A Destination for All

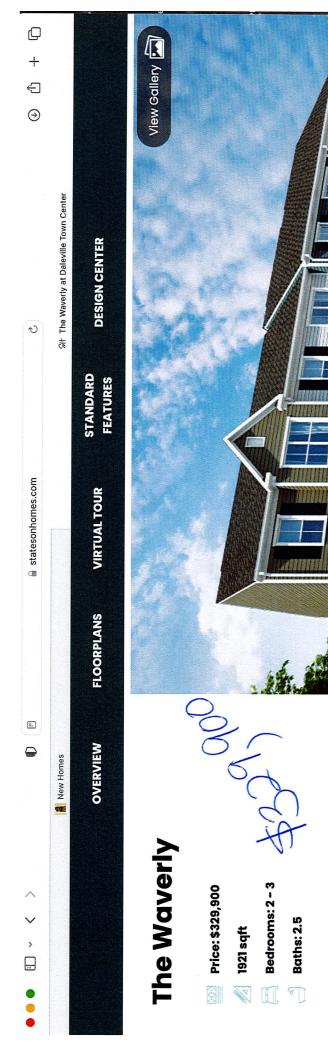
Whether you're looking for a place to shop, dine, work, or play, Daleville Town Center has it all. Our vibrant town center boasts a range of shops, restaurants, and local businesses, all connected by beautifully landscaped sidewalks and trails. Here, every path leads to a new adventure.

AVAILABLE APARTMENTS >

HOMES FOR SALE >





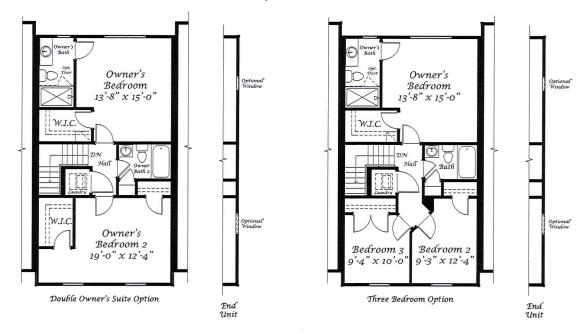


MAKE APPOINTMENT

The Waverly at Daleville Town Center features 2-3 bedrooms and 2.5 bathrooms.

THE WAVERLY

Top Level



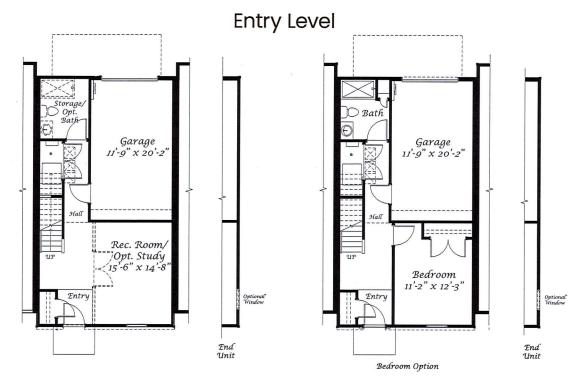
Renderings and floor plans are conceptual only. Actual details may vary. Stateson Homes' continuing research and development means specifications and plans are subject to change without notice. Please consult Sales Manager for details.

STATESON HOMES

THE WAVERLY



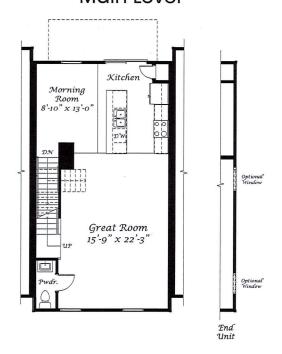
THE WAVERLY



STATESON HOMES

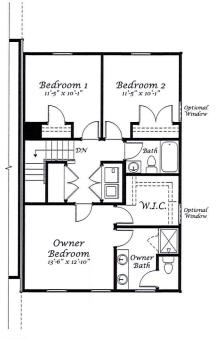
THE WAVERLY

Main Level



THE FAIRFAX

Third Floor



Renderings and floor plans are conceptual only. Actual details may vary. Stateson Homes' continuing research and development means specifications and plans are subject to change without notice. Please consult Sales Manager for details.

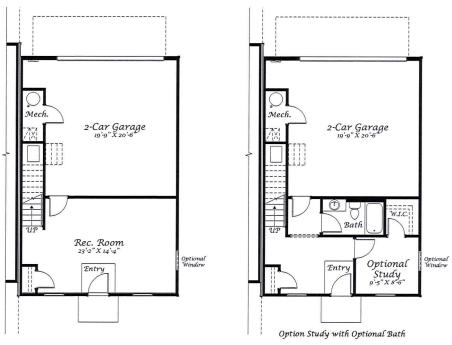
STATESON HOMES

THE FAIRFAX



THE FAIRFAX

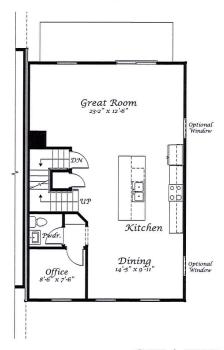
First Floor



STATESON HOMES

THE FAIRFAX

Second Floor



flexmls Web

Property Type: Residential - Attached

Address: 125 Broad ST, Daleville, VA 24083

Status:

148

88(19)148

0

0

Subdiv Map:

Lot:

Block:

Section:



List Number: 903920 List Price: \$399.950 Property Sub-Type: Townhouse Year Built: 2022 Construction Status: Completed

Zoning Code: Lot Dimensions: Tax ID: Municipality: **Botetourt County** Annual Taxes: \$2,538.27

Listing Type: Exclusive Right to Represent Seller

0.05

Major Area: 07 - Botetourt County Area: 0700 - Botetourt County Subdivision: Daleville Town Center

Phase: 4

Total Acreage:

Entry Above Grd Fin SQFT: 520 Upper Above Grd Fin SQFT: 720 720 Other Above Grd Fin SQFT: Entry Below Grd Fin SQFT: Lower Below Grd Fin SQFT:

Detached Above Grd Fin SQFT: Total Above Grd Fin SQFT: 1.960 Total Fnshd SqFt: 1,960 Total Unfin SQFT: 0 Grand Total Attached SQFT: 1,960

Total Bdrm: 2 Total F Baths: 2 Total H Baths: Prim. Covered Prking: Garage Attached

Other Below Grd Fin SQFT:

Prim Cov Spaces:

Primary Covered sqft:

Add'l Covered Parking:

Basement: # Add Cov Spaces: Addl Covered Parking SQFT: Total Cov'd Prk Spc:

Basement Y/N:

Elementary School: Greenfield Middle School: Central Academy **High School:** Lord Botetourt Water ID: Water Class: N/A

Room

Name

Dining

Area

Eat-in

Kitchen

Family

Room

Foyer

Living

Room

Laundry

Primary

Bedroom

Primary

Bedroom

Level Remarks

Upper

Upper

Entry

Entry

Other

Upper

Other

Other

0 Uncovered Parking: Length of Waterfront: Uncovered # Spaces:

No

Slab

Directions: 220N through Daleville to left into Daleville Town Center (Town Blvd.), Left onto Town Center Street, First Right, then Right onto Broad Street. Home on Left.

Public Remarks: Modern and thoughtfully planned townhome overlooking the common area at the Daleville Town Center. Take in the mountain views or the sounds of a concert from the two story front porch or enjoy more privacy from the rear deck off of the kitchen. Featuring an open floor plan, modern finishes, two primary suites, and a garage. High Speed internet installed! Flex space in the basement for additional utility. Walk to restaurants, medical appts, or the YMCA.

Level Lot Lot Description:

Construction: Hard Board Heating: Heat Pump Gas Cooling: Central Cooling

Interior Ceiling Fan; Walk-in-Closet

Features:

Exterior Deck; Paved Driveway

Features:

Dishwasher; Disposer; Clothes Dryer; Microwave Oven (Built In); Garage Door Opener; Wall Oven; Appliances:

Refrigerator; Range Electric; Clothes Washer

Misc Maint-Free Exterior; Paved Road; Underground Util

Features: Area

Restaurant Amenities:

Floors:

Luxury Vinyl Plank; Carpet; Vinyl

Porch: Front Porch Public Water Water

Description:

Sewer Public Sewer

Description:

Water Heater Tank-less

Type: Water Htr

Natural Gas

Energy: Internet

Fiber; Cur'nt Internet Prov: Lumos

Access: Primary

Primary BR Entry LvI: 0: Primary BR Upper LvI: 0: Primary BR Lower LvI: 0: Primary BR Other LvI: 2

Bedrooms:

Bedrooms: BR Entry Level: 0; BR Upper Level: 0; BR Lower Level: 0; BR Other Level: 2

Full Baths: Full Baths Entry LvI: 0; Full Baths Upper LvI: 0; Full Baths Lower LvI: 0; Full Baths Other LvI: 2 Half Baths Entry Lvl: 0; Half Baths Upper Lvl: 1; Half Baths Lower Lvl: 0; Half Baths Other Lvl: 0 Half Baths:

Limited Not Limited Service

Service:

flexmls Web

2/19/24, 11:08 AM

List Date: 12/20/2023

Days On Market: 62 Cumulative DOM: 62 $\begin{array}{c} \textbf{Buyer Agent Comp:} \\ 3 \end{array}$

Subagent Comp: 0

POA Y/N: Yes

POA/Condo Terms A/M: Monthly

POA/Condo Dues: 152

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Property Type: Rental - Detached



Address: 40 Viceroy ST, Daleville, VA 24083

List Number: 898447 Status: Cancelled Monthly Rent: \$3,550 Unit Level: 01 Furnished ?: No

Unit Type:Single FamilyFurnished ?:NoYear Built:2022Rental Period:Minimum 12 Months

Total Acreage: 0.18 Opt to Purchase Y/N: Yes

Lot Dimensions:
Municipality: Botetourt County
Major Area: 07 - Botetourt County

Area: 0700 - Botetourt County Subdivision: Daleville Town Center

Phase: 0

Entry Above Grd Fin SQFT:	1,195	Entry Above Grd Unfin SQFT:		Detached Above Grd Fin SQFT:	
Upper Above Grd Fin SQFT:	1,195	Upper Above Grd Unfin SQFT:		Total Above Grd Fin SQFT:	2,390
Other Above Grd Fin SQFT:	0	Other Above Grd Unfin SQFT:		Total Fnshd SqFt:	2,390
Entry Below Grd Fin SQFT:		Entry Below Grd Unfin SQFT:		Total Unfin SQFT:	1,195
Lower Below Grd Fin SQFT:		Lower Below Grd Unfin SQFT:	1,195	Grand Total Attached SQFT:	3,585
Other Below Grd Fin SQFT:		Other Below Grd Unfin SQFT:	**		

Elementary School: Total Bdrm: Basement Y/N: Yes Greenfield 3 Total F Baths: Basement: Walkout - Full Middle School: Read Mountain Total H Baths: 0 # Add Cov Spaces: **High School:** Lord Botetourt Addl Covered Parking SQFT: Prim. Covered Prking: Garage Attached Water ID:

Prim Cov Spaces: 2 Total Cov'd Prk Spc: 2 Water Class: N/A

Primary Covered sqft: Uncovered Parking: Length of Waterfront:

Add'l Covered Parking: Uncovered # Spaces:

Directions: 220 to Catawba Rd, Right on River Birch

Public Remarks: Beautiful 5 bedroom, 3 baths, home located in the Daleville Town Center subdivision. This home features open floor plan, hardwood floors on the main and upper level. 4 Bedrooms are located on the upper level, 1 bedroom and full bath located on the main level. This home has a large unfinished basement that offers plenty of space for storage, 2 car garage and driveway for off-street parking. Lawn maintenance and snow removal included. HOA rules apply. NO PETS!

Other Rental Terms:	Applic. Fee: Yes; Applic. Fee \$: 40; Sec. Deposit: Yes; Sec. Deposit \$: 3,550; Renter's Ins Req:	Room	Level Remarks
	Yes; No Smoking; No Pets	Name	

Construction:Hard BoardPrimaryUpperManufactured ?:Not ManufacturedBedroom

Heating: Heat Pump Gas Bedroom Entry
Cooling: Central Cooling 2

Fireplace: #Fireplaces: 1; Family Room Bedroom Upper

Int Features:Alarm; Gas Log Fireplace; Storage; Walk-in-Closet3Ext Features:Deck; Paved DrivewayBedroom Upper

Appliances: Dishwasher: Disposer: Garage Door Opener: Microwave Oven (Built In): Range Gas: 4

Refrigerator Bedroom Upper

Misc Features: Cable TV; Maint-Free Exterior; Paved Road; Underground Util 5

Area Amenities: Restaurant Eat-in Entry

Floors: Tile - i.e. ceramic; Wood Kitchen

Sewer:Public SewerFoyerEntryWater:Public WaterOfficeEntry

Internet Access: Cable Dining
Bedrooms: BR Entry Level: 1: BR Lower Level: 0: BR Upper Level: 4: BR Other Level: 0
Room

Full Baths: Full Baths Entry Lvl: 1; Full Baths Lower Lvl: 0; Full Baths Upper Lvl: 2; Full Baths Other Lvl: 0 Laundry Upper

Half Baths: Half Baths Entry Lvl: 0; Half Baths Lower Lvl: 0; Half Baths Upper Lvl: 0; Half Baths Other Lvl: 0

Unfinished Attached Lower Below Grd Unfin SQFT: 1,195

SQFT:

List Date: 05/22/2023 Days On Market: 15 POA Y/N: Yes Finder's Fee Amount:

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Entry

flexmls Web 2/19/24, 11:38 AM

Property Type: Rental - Attached



Address: 105 Broad ST, Daleville, VA 24083

List Number: 903587 Status: Closed \$2,300 Monthly Rent: Unit Level: 01 Unit Type: Townhouse Furnished ?: No Year Built: 2019 **Rental Period:** Minimum 12 Months

Total Acreage: 0.09 Opt to Purchase Y/N: No Lot Dimensions:

Municipality: **Botetourt County** Major Area: 07 - Botetourt County Area: 0700 - Botetourt County Subdivision: Daleville Town Center

Phase: 2

Entry Above Grd Fin SQFT:	614	Entry Above Grd Unfin S	QFT:	Detached Above Grd Fin	SQFT:
Upper Above Grd Fin SQFT	: 814	Upper Above Grd Unfin S	QFT:	Total Above Grd Fin SQF	T: 2,242
Other Above Grd Fin SQFT:	814	Other Above Grd Unfin S	QFT:	Total Fnshd SqFt:	2,242
Entry Below Grd Fin SQFT:		Entry Below Grd Unfin So	QFT:	Total Unfin SQFT:	0
Lower Below Grd Fin SQFT		Lower Below Grd Unfin S	QFT:	Grand Total Attached SQ	FT: 2,242
Other Below Grd Fin SQFT:		Other Below Grd Unfin S	QFT:		
Total Bdrm:	3	Basement Y/N:	No	Elementary School:	Greenfield
Total F Baths:	2	Basement:	Slab	Middle School:	Read Mountain
Total H Baths:	1	# Add Cov Spaces:		High School:	Lord Botetourt
Prim. Covered Prking:	Garage Under	Addl Covered Parking		Water ID:	
# Prim Cov Spaces:	1	SQFT:		Water Class:	N/A
Primary Covered sqft:		Total Cov'd Prk Spc:	1	Length of Waterfront:	
Add'l Covered Parking:		Uncovered Parking:	Off Street		
-			Parking		
		Uncovered # Spaces:	01 - 1940 Page 14 00 C		

Directions: 220N past Lord Botetourt High School, left onto Town Boulevard, left onto Town Center Street, right onto Shenandoah, right onto Broad Street to home on left.

Public Remarks: This modern, spacious townhome in Daleville Town Center is an end unit with additional space with windows in the living room allowing abundant natural light. Entry offers extra living area, 1 car garage and is plumbed for an additional full bath; second floor includes an open concept kitchen and living room with granite countertops, white cabinets, stainless steel appliances, pantry, and functional island with hardwood floors throughout. Upper level offers 3 bedrooms including a master suite with cathedral ceiling and on demand water heater. Easy walk to the YMCA, restaurants, and live music events. Other Rental Applic. Fee: Yes; Applic. Fee \$: 25; Sec. Deposit: Yes; Sec. Deposit \$: 2,400; Renter's Ins Req: Yes;

O tiloi i tolitai	7 (pp. 100) 100 (100) 100 (100) 20, 200 (20) 20 (20) 20 (20) 20 (20) 20 (20) (20)	TOOIII	LCVCI	Remarks
Terms:	No Smoking; Pet Restrictions; Pet Deposit	Name		
Parking	Visitor Parking	Primary	Other	
Details:		Bedroom		
Views:	Mountain	Bedroom	Other	Third
Construction:	Hard Board	1		Level
Manufactured	Not Manufactured	Bedroom	Other	Third
?:		2		Level
Heating:	Forced Air Gas	Bedroom	Other	Third
Cooling:	Central Cooling	3		Level
Int Features:	Breakfast Area; Cathedral Ceiling; Storage; Walk-in-Closet	Breakfast	Upper	
Ext Features:	Deck; Paved Driveway	Area		
Appliances:	Clothes Dryer; Clothes Washer; Dishwasher; Disposer; Garage Door Opener; Microwave Oven (Built	Dining	Upper	
	In); Range Electric; Refrigerator	Area		
Misc	Cable TV; Paved Road	Eat-in	Upper	
Features:		Kitchen		
Area	Restaurant	Foyer	Entry	
Amenities:		Office	Entry	
Floors:	Carpet; Vinyl; Wood	Recreation	Entry	
Sewer:	Public Sewer	Room		
Water:	Public Water	Laundry	Other	
Internet	Cable	Living	Upper	
Access:		Room	13.450	
Bedrooms:	BR Entry Level: 0; BR Lower Level: 0; BR Upper Level: 0; BR Other Level: 3			
Full Baths:	Full Baths Entry Lyl: 0: Full Baths Lower Lyl: 0: Full Baths Upper Lyl: 0: Full Baths Other Lyl: 2			

Full Baths Entry LvI: 0; Full Baths Lower LvI: 0; Full Baths Upper LvI: 0; Full Baths Other LvI: 2 Half Baths Entry LvI: 0; Half Baths Lower LvI: 0; Half Baths Upper LvI: 1; Half Baths Other LvI: 0 Half Baths:

List Date: 12/03/2023 Days On Market: POA Y/N: Finder's Fee Amount: 250.00 Rented Date: 01/20/2024 Rented Amount:

SA: SARA H FISHER 540-529-1541 sarafisherrealtor@gmail.com

SO: LICHTENSTEIN ROWAN, REALTORS® 540-904-6888

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2.250

Level Remarks

Room

Property Type: Residential - Detached

Address: 183 River Birch AVE, Daleville VA 24083

List Number: 898941 \$525,000 List Price: Style of House: 2 Story

Property Sub-Type: Single Family Residence Year Built: 2019

Construction Status: Completed Total Acreage: 0.19 Lot Dimensions:

Municipality: **Botetourt County** Listing Type: Exclusive Right to Represent Seller

Major Area: 07 - Botetourt County Area: 0700 - Botetourt County Subdivision: Daleville Town Center

Phase: 2

Entry Above Grd Fin SQFT: 1.026 Upper Above Grd Fin SQFT: 1,026 Other Above Grd Fin SQFT: 513 Entry Below Grd Fin SQFT:

Lower Below Grd Fin SQFT: Other Below Grd Fin SQFT:

Total Bdrm: Total F Baths: 3 Total H Baths: Garage Attached

Prim. Covered Prking: # Prim Cov Spaces: Primary Covered sqft: Add'l Covered Parking: Basement Y/N: Basement: # Add Cov Spaces:

Addl Covered Parking SQFT: Total Cov'd Prk Spc: Uncovered Parking: Uncovered # Spaces:

Elementary School: Middle School: **High School:**

Total Fnshd SqFt:

Total Unfin SQFT:

Water ID: Water Class: Length of Waterfront:

Status:

Lot:

Block:

Section:

Tax ID:

Detached Above Grd Fin SQFT:

Total Above Grd Fin SQFT:

Grand Total Attached SQFT:

Subdiv Map:

Zoning Code:

Active

88914059

Greenfield

Upper

Entry

N/A

Read Mountain

Lord Botetourt

59

0

0

Annual Taxes: \$3,320.37

Daleville Towncent

2,565

2,565

2.565

No

2

Slab

Directions: 220N TO CATAWBA RD, RIGHT ON RIVER BIRCH

Public Remarks: LIKE NEW CONSTRUCTION IN THE HEART OF THE DALEVILLE TOWN CENTER. TAKE A STROLL ON THE SIDEWALKS THRU THE BEAUTIFUL NEIGHBORHOOD, JUST MINUTES FROM THE TOWN CENTER PAVILION RESTAURANTS, FARMERS MARKET AND COFFEE SHOP. GORGEOUS HOME FEATURING 9 FT CEILINGS, UPDATED KITCHEN W/GRANITE COUNTERTOPS AND LOTS OF CABINETRY, OAK HARDWOOD FLOORS. LOTS OF WINDOWS. FIRST FLOOR PRIVATE STUDY, UPSTAIRS YOU WILL FIND THE MASTER SUITE W/BEAUTIFUL EN SUITE BATH, WALK IN CLOSET AND 2 ADDITIONAL BEDROOMS. UP ONE MORE LEVEL TO THE LOFT WHICH CAN BE THE 4TH BEDROOM WITH FULL BATH OR ANOTHER FAMILY ROOM AREA. PRIVATE, LEVEL BACKYARD BACKS UP TO THE WOODS. WALK TO THE COMMUNITY FIREPIT. HOA INCLUDES LAWN MAINTAINANCE AND SNOW REMOVAL AND THE SHARED PICNIC AREA W/FIREPIT.

Lot Description: Level Lot Room Name Level Remarks Other - See Remarks Construction: Bedroom 2 Upper Heating: Forced Air Gas Cooling: Central Cooling Bedroom 3 Upper Interior Features: Ceiling Fan; Storage; Walk-in-Closet Bedroom 4 Other Exterior Covered Porch; Paved Driveway Dining Area Entry Features: Dishwasher; Disposer; Microwave Oven (Built In); Garage Door Opener; Refrigerator; Range Family Room Entry Appliances: Electric Foyer Entry Misc Features: Cable TV; Maint-Free Exterior; Paved Road; Underground Util Kitchen Entry Area Amenities: Restaurant Laundry Upper Vinyl; Wood Floors:

Rear Porch Porch: Water Public Water Description: Public Sewer Sewer

Description:

Water Heater Tank-less Type:

Water Htr Energy: Natural Gas

Primary Primary BR Entry LvI: 0; Primary BR Upper LvI: 1; Primary BR Lower LvI: 0; Primary BR

Bedrooms:

Bedrooms: BR Entry Level: 0; BR Upper Level: 3; BR Lower Level: 0; BR Other Level: 1

Full Baths: Full Baths Entry LvI: 0; Full Baths Upper LvI: 2; Full Baths Lower LvI: 0; Full Baths Other LvI:

Half Baths: Half Baths Entry Lvl: 1; Half Baths Upper Lvl: 0; Half Baths Lower Lvl: 0; Half Baths Other

LvI: 0

Limited Service: Not Limited Service

List Date: 06/09/2023

Days On Market: 255

Cumulative DOM: 255

Buyer Agent Comp: 3

Subagent Comp: 0

POA Y/N: Yes

POA/Condo Terms A/M: Monthly

Primary

Office

Bedroom

POA/Condo Dues: 165

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The market is speaking as to what types of homes are desired in Salem.

The W Calhoun St townhomes are very well built but are not selling as expected. They are not considered affordable by many in their target market and have been available for rent for over 45 days in a market that has very little inventory.

flexmls Web

2/19/24, 11:31 AN	4	4	7	2	5
4	4	4	2	2	
1,908	1,908	1,908	1,384	1,542	1,545
415,000	415,000	415,000 4 c	429,950	445,000	459,950
Residential	Residential Residential	Residential 2	Residential	Residential	Residential
\$415,000 134 W Calhoun ST Salem, VA 24153 Active / 902973	\$415,000 138 W Calhoun ST Salem, VA 24153 Active / 904164	\$415,000 140 W Calhoun ST Salem, VA 24153 Active / 904167	\$429,950 415 Kimball AVE Salem, VA 24153 Active / 902947	\$445,000 417 Kimball AVE Salem, VA 24153 Active / 902946	21 419 Kimball AVE 419 Kimball AVE Salem, VA 24153 Active / 902943
16	17	18	19	20	21

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\$415,000132 W Calhoun ST Salem, VA 24153
Active / 902569

Residential

415,000

1,908

4

Page 2 of 3

Expired

122-9-1.2

1,908

1,908

0 1,908

Level Remarks

Entry ensuite

Upper ensuite

Upper ensuite

Upper master

Entry

Entry

Entry

Entry

A5

0

0

Status:

Lot:

Block:

Tax ID:

Total Unfin SQFT:

Grand Total Attached SQFT:

Room Name

Bedroom 2

Bedroom 3

Bedroom 4

Dining Area

Living Room

Kitchen

Laundry

Primary

Bedroom

Section:

Subdiv Map:

Zoning Code:

Annual Taxes: \$2,500

Property Type: Residential - Attached



Address: 132 W Calhoun ST, Salem, VA 24153

List Number: 897439 List Price: \$425,000 Style of House: 2 Story Property Sub-Type: Townhouse Year Built: 2023

Construction Status: Under Construction Total Acreage: Lot Dimensions:

City of Salem Municipality:

Listing Type: Exclusive Right to Represent Seller

Major Area: 03 - City of Salem Area: 0300 - City of Salem

Subdivision: N/A

Phase: 0

Entry Above Grd Fin SQFT: Detached Above Grd Fin SQFT: Upper Above Grd Fin SQFT: Total Above Grd Fin SQFT: 928 Other Above Grd Fin SQFT: Total Fnshd SqFt:

Entry Below Grd Fin SQFT: Lower Below Grd Fin SQFT: Other Below Grd Fin SQFT:

Total Bdrm:

Total F Baths:

Total H Baths:

Basement Y/N: Elementary School: No West Salem 4 Basement: Slab Middle School: Andrew Lewis # Add Cov Spaces: **High School:** Salem High

Prim. Covered Prking: Addl Covered Parking SQFT: Water ID: Garage Attached # Prim Cov Spaces: Total Cov'd Prk Spc: Water Class: N/A

Uncovered Parking: Off Street Parking Length of Waterfront: **Primary Covered sqft:**

Uncovered # Spaces: Add'l Covered Parking:

Directions: W. Main St to Chestnut St; Left on W Calhoun. Townhome on right.

Public Remarks: Now presenting the Calhoun Townhomes! These wonderful well-constructed townhomes are built by Alam Design Group. These townhomes have 4 bedrooms (3 with ensuites) Each townhome unit is approximately 1900 finished square feet with 3 ton Heat Pump all electric. Constructed with Steel bracing, Floor trusses, roof trusses, with exterior finishes of Hardie board siding & Brick. There are two styles A & B. Pella Windows, SS LG Kitchen package, kitchen island, One bedroom ensuite is on the main level along with the laundry room, Living room, Kitchen and bonus room. Each townhome has a garage and driveway parking along with additional parking space in the parking area. The HOA is being set up as construction in on going.

Lot Description: Level Lot Brick; Hard Board Construction: Heat Pump Electric Heating: Heat Pump Electric Cooling:

Appliances: Dishwasher; Disposer; Microwave Oven (Built In); Garage Door Opener; Refrigerator; Range

Electric

Laminate

Floors: Windows: Insulated Water Public Water

Description: Sewer

Public Sewer Description:

Primary Primary BR Entry Lvl: 1; Primary BR Upper Lvl: 2; Primary BR Lower Lvl: 0; Primary BR Other

Bedrooms:

BR Entry Level: 1; BR Upper Level: 3; BR Lower Level: 0; BR Other Level: 0 Bedrooms:

Full Baths Entry Lvl: 1; Full Baths Upper Lvl: 3; Full Baths Lower Lvl: 0; Full Baths Other Lvl: 0 Full Baths: Half Baths Entry Lvl: 0; Half Baths Upper Lvl: 0; Half Baths Lower Lvl: 0; Half Baths Other Lvl: Half Baths:

Limited Service: Not Limited Service

Days On Market: 184 List Date: 04/14/2023 **Buyer Agent Comp:** POA Y/N: Yes

Cumulative DOM: 184 POA/Condo Terms A/M: Annual

> POA/Condo Dues: 500 Subagent Comp: 0

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+ MLS#	Status	Price	% Change	Date	DOM	CDOM Address
- 902569	Active	\$415,000	-2.4%	10/18/2023	119	302 132 W Calhoun ST
+	Text, etc.	\$415,000		02/09/2024	5	
+	Open House	\$415,000		02/07/2024	7	
+	Open House	\$415,000		01/29/2024	16	
+	Open House	\$415,000		01/23/2024	22	
+	Open House	\$415,000		01/20/2024	25	
+	Text, etc.	\$415,000		01/19/2024	26	
+	Text, etc.	\$415,000		01/18/2024	27	
+	Text, etc.	\$415,000		01/17/2024	28	
+	Open House	\$415,000		01/17/2024	28	
+	Open House	\$415,000		01/16/2024	29	
+	Open House	\$415,000		01/10/2024	35	
+	Open House	\$415,000		01/05/2024	40	
+	Open House	\$415,000		12/29/2023	46	
+	Open House	\$415,000		12/27/2023	48	
+	Price Change	\$415,000	-2.4%	12/17/2023	59	
+	Open House	\$425,000		12/14/2023	62	
+	Open House	\$425,000		12/14/2023	62	
+	Open House	\$425,000		12/05/2023	71	
+	Open House	\$425,000		12/05/2023	71	
+	Photos	\$425,000		12/02/2023	73	
+	Open House	\$425,000		11/29/2023	77	
+	Open House	\$425,000		11/29/2023	77	
+	Open House	\$425,000		11/20/2023	86	
+	Open House	\$425,000		11/20/2023	86	
+	Open House	\$425,000		11/15/2023	91	
+	Open House	\$425,000		11/15/2023	91	
+	Open House	\$425,000		11/15/2023	91	
+	Open House	\$425,000		11/14/2023	92	
+	Open House	\$425,000		11/14/2023	92	
+	Open House	\$425,000		11/10/2023	96	
+	Open House	\$425,000		11/07/2023	99	
+	Photos	\$425,000		10/25/2023	112	
+	Open House	\$425,000		10/23/2023	114	
+	Photos	\$425,000		10/22/2023	115	
+	Open House	\$425,000		10/21/2023	115	
+	Photos, etc.	\$425,000		10/21/2023	116	

+	Text, etc.	\$425,000	10/20/2023	117	
+	Open House	\$425,000	10/19/2023	118	
+	Photos	\$425,000	10/19/2023	118	
+	New	\$425,000	10/18/2023	119	
+	Documents	\$425,000	10/18/2023	119	
- 897439	Expired	\$425,000	10/14/2023	184	184 132 W Calhoun ST
+	Status	\$425,000	10/15/2023	0	
+	Photos	\$425,000	10/09/2023	6	
+	Tour	\$425,000	10/09/2023	6	
+	Open House	\$425,000	08/23/2023	52	
+	Open House	\$425,000	08/22/2023	54	
+	Photos	\$425,000	07/29/2023	78	
+	Photos, etc.	\$425,000	07/26/2023	81	
+	Primary_picture	\$425,000	07/20/2023	87	
+	Photos	\$425,000	07/18/2023	89	
+	Text, etc.	\$425,000	05/18/2023	150	
+	Photos	\$425,000	04/29/2023	169	
+	Text, etc.	\$425,000	04/27/2023	171	
+	Photos	\$425,000	04/18/2023	180	
+	Documents	\$425,000	04/17/2023	181	
+	New	\$425,000	04/14/2023	184	

flexmls Web 2/19/24, 11:49 AM

Property Type: Rental - Attached



Address: 138 W Calhoun ST, Salem, VA 24153

List Number: 904172 Status: Active
Monthly Rent: \$2,695 Unit Level: 01
Unit Type: Townhouse Furnished ?: No

Year Built: 2023 Rental Period: Minimum 12 Months

Total Acreage: 0.07 Opt to Purchase Y/N: No Lot Dimensions:

Municipality: City of Salem
Major Area: 03 - City of Salem
Area: 0300 - City of Salem

Subdivision: N/A

Phase: 0

Entry Above Grd Fin SQF	T: 980	Entry Above Grd Unfin SQFT:		Detached Above Grd Fin SC	QFT:
Upper Above Grd Fin SQF	T : 928	Upper Above Grd Unfin SQFT:		Total Above Grd Fin SQFT:	1,908
Other Above Grd Fin SQF	T: 0	Other Above Grd Unfin SQFT:		Total Fnshd SqFt:	1,908
Entry Below Grd Fin SQF	Г:	Entry Below Grd Unfin SQFT:		Total Unfin SQFT:	0
Lower Below Grd Fin SQF	T:	Lower Below Grd Unfin SQFT:		Grand Total Attached SQFT	1,908
Other Below Grd Fin SQF	T:	Other Below Grd Unfin SQFT:			
Total Bdrm:	4	Basement Y/N:	No	Elementary School:	West Salem
Total F Baths:	4	Basement:	Crawl Space	Middle School:	Andrew Lewis
Total H Baths:	0	# Add Cov Spaces:		High School:	Salem High
Prim. Covered Prking:	Garage Attached	Addl Covered Parking SQFT:		Water ID:	
# Prim Cov Spaces:	1	Total Cov'd Prk Spc:	1	Water Class:	N/A
Primary Covered sqft:		Uncovered Parking:		Length of Waterfront:	
Add'l Covered Parking:		Uncovered # Spaces:			

Directions: W Main St to Chestnut St. Townhome on left.

Lawn Care: Parking

Rent

Public Remarks: This townhome has 4 bedrooms (4 with ensuites) Each townhome unit is approximately 1900 finished square feet with 3 ton Heat Pump all electric. Constructed with Steel bracing, Floor trusses, roof trusses, with exterior finishes of Hardie board siding & Brick. Recently upgraded all bathrooms w/ marble like glossy ceramic tile surrounds tub. Pella Windows, SS LG Kitchen package, kitchen island, One bedroom ensuite is on the main level along with the laundry room, Living room, Kitchen and bonus room. Each townhome has a garage and driveway parking along with additional parking space in the parking area.

Includes:	2000.000.000.000	Name	
Other Rental	Applic. Fee: Yes; Applic. Fee \$: 45; Sec. Deposit: Yes; Sec. Deposit \$: 2,695; Renter's Ins Reg: Yes; No	Primary	Entry
Terms:	Smoking; Pet Restrictions; Pet Deposit	Bedroom	•
Construction:	Brick; Hard Board	Bedroom	Upper
Manufactured	Not Manufactured	2	
?:		Bedroom	Upper
Heating:	Heat Pump Electric	3	
Cooling:	Central Cooling; Heat Pump Electric	Bedroom	Upper
Int Features:	Ceiling Fan; Walk-in-Closet	4	
Ext Features:	Paved Driveway	Dining	Entry
Appliances:	Dishwasher; Disposer; Garage Door Opener; Microwave Oven (Built In); Range Electric; Refrigerator	Area	
Misc	New Construction	Office	Entry
Features:		Kitchen	Entry
Floors:	Luxury Vinyl Plank	Laundry	Entry
Sewer:	Public Sewer	Living	Entry
Water:	Public Water	Room	

Bedrooms: BR Entry Level: 1; BR Lower Level: 0; BR Upper Level: 3; BR Other Level: 0

Full Baths: Full Baths Entry Lvl: 1; Full Baths Lower Lvl: 0; Full Baths Upper Lvl: 3; Full Baths Other Lvl: 0 Half Baths: Half Baths Entry Lvl: 0; Half Baths Lower Lvl: 0; Half Baths Upper Lvl: 0; Half Baths Other Lvl: 0

List Date: 01/05/2024 Days On Market: 46 POA Y/N: Yes Finder's Fee Amount: 200

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Room

Level Remarks

flexmls Web 2/19/24, 11:51 AM

Property Type: Rental - Attached



Address: 140 W Calhoun ST, Salem, VA 24153

List Number: 904173 Status: Active Monthly Rent: \$2,695 Unit Level: 01 Unit Type: Year Built: Townhouse Furnished ?: No Rental Period: 2023

Minimum 12 Months

Opt to Purchase Y/N: No

Lot Dimensions: Municipality: City of Salem Major Area: 03 - City of Salem

0.07

Area: 0300 - City of Salem Subdivision: N/A

Total Acreage:

Phase: 0

Entry Above Grd Fin SQF Upper Above Grd Fin SQ Other Above Grd Fin SQF Entry Below Grd Fin SQF Lower Below Grd Fin SQ	FT: 928 FT: 0 FT:	Entry Above Grd Unfin SQ Upper Above Grd Unfin SQ Other Above Grd Unfin SQ Entry Below Grd Unfin SQ Lower Below Grd Unfin SQ	QFT: RFT: FT:	Detached Above Grd Fin SC Total Above Grd Fin SQFT: Total Fnshd SqFt: Total Unfin SQFT: Grand Total Attached SQFT	1,908 1,908 0
Other Below Grd Fin SQF		Other Below Grd Unfin SQ	- 100 m to 1	Grand Total Attached SQFT	1,908
Total Bdrm:	4	Basement Y/N:	No	Elementary School:	West Salem
Total F Baths:	4	Basement:	Crawl Space	Middle School:	Andrew Lewis
Total H Baths:	0	# Add Cov Spaces:		High School:	Salem High
Prim. Covered Prking:	Garage Attached	Addl Covered Parking		Water ID:	
# Prim Cov Spaces:	1	SQFT:		Water Class:	N/A
Primary Covered sqft:		Total Cov'd Prk Spc:	1	Length of Waterfront:	
Add'l Covered Parking:		Uncovered Parking:	Off Street		
			Parking		
		Uncovered # Spaces:	, - ;		

Directions: W Main St to Chestnut St. Townhome on left.

Public Remarks: This townhome has 4 bedrooms (4 with ensuites) Each townhome unit is approximately 1900 finished square feet with 3 ton Heat Pump all electric. Constructed with Steel bracing, Floor trusses, roof trusses, with exterior finishes of Hardie board siding & Brick. Recently upgraded all bathrooms w/ marble like glossy ceramic tile surrounds tub. Pella Windows, SS LG Kitchen package, kitchen island, One bedroom ensuite is on the main level along with the laundry room, Living room, Kitchen and bonus room. Each townhome has a garage and driveway parking along with additional parking space in the parking area.

Rent Lawn Care: Parking

	nti additional parking space in the parking area.			
Rent	Lawn Care; Parking	Room	Level	Remarks
Includes:		Name		
Other Rental	Applic. Fee: Yes; Applic. Fee \$: 45; Sec. Deposit: Yes; Sec. Deposit \$: 2,695; Renter's Ins Req: Yes; No	Primary	Entry	
Terms:	Smoking; Pet Restrictions; Pet Deposit	Bedroom	.,	
Construction:	Brick; Hard Board	Bedroom	Upper	
Manufactured	Not Manufactured	2		
?:		Bedroom	Upper	
Heating:	Heat Pump Electric	3		
Cooling:	Central Cooling; Heat Pump Electric	Bedroom	Upper	
Int Features:	Ceiling Fan; Walk-in-Closet	4		
Ext Features:	Paved Driveway	Dining	Entry	
Appliances:	Dishwasher; Disposer; Garage Door Opener; Microwave Oven (Built In); Range Electric; Refrigerator	Area	-	
Misc	New Construction	Office	Entry	
Features:		Kitchen	Entry	
Floors:	Luxury Vinyl Plank	Laundry	Entry	
Sewer:	Public Sewer	Living	Entry	
Water:	Public Water	Room		
Bedrooms:	BR Entry Level: 1; BR Lower Level: 0; BR Upper Level: 3; BR Other Level: 0			
Full Baths:	Full Baths Entry Lvl: 1; Full Baths Lower Lvl: 0; Full Baths Upper Lvl: 3; Full Baths Other Lvl: 0			

List Date: 01/05/2024 Days On Market: 46 POA Y/N: Yes Finder's Fee Amount: 200

Half Baths Entry Lvl: 0; Half Baths Lower Lvl: 0; Half Baths Upper Lvl: 0; Half Baths Other Lvl: 0

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Half Baths:

21 Properties

Residential 168,500 1,075 2 A 24153 904750 Residential 179,999 1,027 2 set Ridge RD VA 24018 904364 Residential 189,950 1,049 2 1. VA 24018 904954 Residential 189,950 1,294 2 2. A 24179 PO1049499 Residential 189,950 1,804 3 2. A 24179 PO10586 PO105969 PO		Price / Status / MLS #	Property Type	List Price	Total Fnshd SqFt	Total Bdrm	Total Bths
## 179,999 1,027 2 **Total State 1,027 2 **Residential 179,999 1,027 2 **Residential 185,000 1,390 2 **Residential 185,000 1,390 2 **Residential 189,950 1,049 2 **Residential 189,950 1,294 2 **Residential 189,950 1,294 2 **Residential 189,950 1,419 3 **Residential 1,804 **Residential 1,804	7-	\$168,500 2515 Gatehouse LN Salem, VA 24153 Pending / 904750	Residential	168,500	1,075		7
## 185,000 ## 1,390 ## 1,30 ## 1,	2	\$179,999 3277 Forest Ridge RD Roanoke, VA 24018 Pending / 904768	Residential	179,999	1,027	2	7
\$189,950 Residential 189,950 1,049 2 7237 Woods Crossing DR Roanoke, VA 24018 Pending / 904954 \$189,950 \$1,294 2 7226 Birch CT Roanoke, VA 24018 Pending / 904949 Pending / 904949 Pending / 904327 \$230,900 1,804 3 \$230,900 1,804 3 Fed 10 Dyer CT Roanoke, VA 24018 Pending / 902786 Pending / 902786	es	\$185,000 3333 Forest Ridge RD Roanoke, VA 24018 Pending / 903886	Residential	185,000	1,390	2	7
\$189,950 Residential 189,950 1,294 2 7226 Birch CT Roanoke, VA 24018 Residential 189,950 1,419 3 \$189,950 Residential 176 Gretchen CT 1,419 3 Vinton, VA 24179 Pending / 904327 Residential 230,900 1,804 3 \$230,900 Roanoke, VA 24018 Pending / 902786 1,804 3			Residential	189,950	1,049	7	
\$189,950 1,419 3 176 Gretchen CT Vinton, VA 24179 Pending / 904327 Pending / 904327 Residential 230,900 1,804 3 \$230,900 Roanoke, VA 24018 3 Pending / 902786 Pending / 902786 1,804 3	2	\$189,950 7226 Birch CT Roanoke, VA 24018 Pending / 904949	Residential	189,950	1,294	2	2.1
\$230,900 4610 Dyer CT Roanoke, VA 24018 Pending / 902786	9	\$189,950 176 Gretchen CT Vinton, VA 24179 Pending / 904327	Residential	189,950	1,419	က	2.1
		\$230,900 4610 Dyer CT Roanoke, VA 24018 Pending / 902786	Residential	230,900	1,804	က	2.1

\$ \$259,900 \$259,900 \$3050 McVitty Forest DR 209 Residential 259,900 Roanoke, VA 24018 Pending / 898358 Residential 274,950 \$274,950 Residential 274,950 Residential 275,000 Active / 904489 Residential 275,000 Active / 904791 Residential 300,000 12 S30,000 Residential 326,500 Active / 902328 Residential 326,500 Active / 902328 Residential 399,950 Active / 902328 Residential 399,950 Active / 902328 Active / 9023	Koanoke, VA 24014 Pending / 904432	4448 Pheasant Ridge RD #402 Roanoke, VA 24014 Pending / 904432			
\$274,950 Residential 6682 MIDDLE Pk LN Roanoke, VA 24019 Active / 904489 Active / 904489 Active / 904791 Roanoke, VA 24018 Active / 904791 S300,000 Residential 2220 Carolina AVE SW 308 Roanoke, VA 24014 Pending / 904888 Active / 902328 Active / 903328	259,900 0050 McVitty Forest DR 3 Roanoke, VA 24018 Pending / 898358		259,900	1,761	2
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000000	\$399,950 125 Broad ST Daleville, VA 24083 Active / 903920	Resio	399,950	1,960	2.7
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Chris Dorsey, City Manager Planning Commission c/o Mary Ellen Wines

February 14, 2024

Mr. Dorsey and the Planning Commission,

I am writing for the purpose of having comments concerning the proposed rezoning of the Hope Tree Family Services property entered into the official record.

First, a note of personal history. My family has lived in the same house in the 900 block of Red Lane for nearly 70 years. I have lived in that home for almost all of my 61 years, the most recent eleven with my wife. I had numerous friends among the Children's Home's residents, and I have walked, run, and played many sports all over the property. I frequented Mrs. Motley's candy and ice cream store - the first example of a mixed-use structure in the area - on the curve across from the grand old dairy barn. I watched in sadness as that same landmark went up in flames in 1975. In short, the Virginia Baptist Children's Home - now Hope Tree - has been an enormous part of my life. This emotional bond, combined with the very real prospect of living in the middle of a construction zone for a few years, leaves me highly invested in the fate of the property. I think I can fairly say that, all things considered, very few Salem residents have more of a personal stake in the outcome of this proposed project.

When we received the first letter from Hope Tree in August of 2022, it seemed all of our worst fears might be realized. In my nightmares, I envisioned a row of small, cheaply-constructed houses all pushed right up to the entire length of Red Lane, staring us in the face, and presenting vastly more traffic with which to deal. I sweated as I pictured these glorified hovels filled with rental tenants and college kids. And of course, we bemoaned the loss of what is perhaps our home's chief asset - the glorious, sweeping view to the southwest, across Salem Municipal golf course and over South Salem to the peak of 12 O' Clock Knob.

My wife and I attended all five meetings with the design team and Jon Morris at Hope Tree. And, wonder of wonders - by the unveiling of the proposed master plan, we found ourselves excited by the prospect of living practically within such a unique, high-quality community. The team that Hope Tree has assembled of Tom Low and Civic By Design, Stateson Homes, and Snyder & Associates can honestly be dubbed the "A Team". We felt as if they actually listened to our concerns and ideas, and the Rezoning Narrative and the PUD Document seems to verify that.

What do we like about the Master Plan and the proposed PUD? First and foremost, rezoning to a Planned Use District would ensure that the property would be developed according to the Master Plan; a developer couldn't just haphazardly cram as many homes as they could possibly shoehorn along Red Lane, and elsewhere. We greatly appreciate the fact that a parking lane and sidewalk is envisioned for the west side of Red Lane, as we suggested. We really like the site design, which has retained several green fingers, and its overall walkability. The potential is there to walk to both new amenitites within the site, and the existing natural areas such as the hill above the pond (Mother Hill, to those of us who ran cross country back in the '70s), and the pastures that border the back of the Emerald Hills developments. As stated above, we are excited at the prospect of the involvement of the A Team - if this property has to be developed, these are the right people, who will do it the right way. Ironically, if the project proceeds according to the Master Plan, something we'd dreaded could become something we enjoy.

This is not to say we are now without any concerns at all. We are still quite concerned about the potential increase in traffic volume. Absolutely no disrespect meant to the stalwart engineers who authored the traffic study, but - as someone who seemingly has to wait to walk across the street or check the mailbox at any time of day or night - color me highly skeptical of the claim that the overall traffic volume on Red Lane has actually decreased in the past five years. I can assure you it has not. The new traffic load created by development of the Hope Tree property must be borne by all the streets crossing the property boundaries. Perhaps signage and one-way streets can be utilized to direct traffic to Mt. Vernon Avenue and Broad Street; Red Lane alone absolutely can not shoulder the entire load. And, something else to consider - which can't officially be considered, in this case - is the increase in traffic volume which will result from the construction of 60+ new homes off of Edgebrook Road, just short of two miles to the north in Roanoke County. A great deal of the traffic from those homes will be heading down Red Lane. What can be done about this, I don't know.

Of even greater concern to us is the problem of vehicles speeding on Red Lane. Something MUST be done about the speeding along our street, from the entrance to Pickwick Lane almost all the way down to Carrollton Avenue. The improvements included with the Hope Tree development would seem to afford the perfect opportunity to address this issue. A traffic circle was shown on the preliminary Master Plan at the entrance to the North Oaks development; it seems to have since been removed from the plan. A traffic circle at that, and perhaps another location on Red Lane, such as one of the new egress/access roads or Printer's Lane, would seem to be a good measure. Other possible solutions, in combination with traffic circles, could include traffic calming, protected crosswalks, and yes, even the dreaded speed bumps (they work on private property, they can work on public streets routinely terrorized by serial speeders).

Another concern that we have is the near-complete loss of our afore-mentioned spectacular view, and inappropriate development in the areas immediately bordering existing neighborhoods. The PUD document has mostly addressed this by stating that the edge areas (T-3) will be the lowest density development, populated with structures that resemble their existing across-the-street counterparts; this allays much of our concern. However, structures in those T-3 areas would be permitted to be as tall as three stories, which would completely obliterate existing residents' views. I would strongly suggest that structures in the edge T-3 areas be restricted to one-and-a-half stories at the most.

Aside from these concerns, we remain - against almost all odds - excited about the proposed Hope Tree Master Plan. Do we relish the thought of yet more traffic whizzing by our front door? Absolutely not. Do we look forward to losing most of our cherished view out the front windows? Not in the least. Are we excited about living in a construction zone for three to five years? Quite the opposite. But the sad fact we longtime residents are facing is, all of those things are going to happen anyway, whether this Master Plan is approved or not. If it's going to happen, this is the plan that should be followed, and these are the people to do it. We find this PUD rezoning solution VASTLY preferrable to the alternative of staring across the street at another Russlen Farms, Simms Farm, or any similar sprawling subdivision, laid out with little thought. With the team of creative, competent professionals Hope Tree has assembled, this development has the potential to be something in which the City of Salem can take great pride. My wife and I live in a small house on Red Lane, not one of the grand homes half a mile or more away on Broad or Academy Street. As people living smack dab in the thick of it who will be directly impacted, we enthusiastically endorse this Master Plan, and recommend the Planning Commission approve the it and the associated rezoning.

Thank you all very much for your time and consideration.

Sincerely,

Mike Kummer 916 Red Lane



February 20, 2024

Honorable Mayor Renée Turk Salem City Council 114 North Broad Street Salem, VA 24153

Dear Honorable Mayor Turk & Salem City Council Members,

I am writing to express support for HopeTree Family Services' proposal to rezone a significant portion of their land for future mixed-use development. We believe this is a smart, forward-thinking, strategic vision that will pay dividends to the City of Salem and the region for years to come.

The Roanoke Regional Chamber's mission is to Promote, Stimulate, and Improve Business. We represent over 800 businesses and organizations across the entire region including multiple counties and jurisdictions. We have a robust program of work that supports this mission. Additionally – we are very active in public policy by taking stands on issues within numerous categories. We strive to ensure a strong business climate.

HopeTree's goals for the project include: honoring their history, positioning the organization for a strong future, and ensuring this development is something the community would be proud of. HopeTree's impact continues to be strong in the communities they serve. However, licensing and regulations have changed how that impact occurs. Today, their services are much more clinical in nature allowing for stronger relationship building and customized care offsite. This means their current campus blueprint is not necessary for the future.

We believe the future redevelopment will be an economic driver and continue the great reputation the City of Salem already has for being a welcoming and robust community. The City of Salem is an important asset in Virginia's Blue Ridge. This project will help the region continue to thrive and bolster its reputation of being a great place to live, work, play, and raise a family.

We value HopeTree & the City of Salem as members of the Roanoke Regional Chamber of Commerce and appreciate your consideration of their application. Please do not hesitate to contact me using the information below to discuss this further.

Sincerely.

Eric Sichau President & CEO

Roanoke Regional Chamber of Commerce

esichau@roanokechamber.org

540-682-2101

LEGAL DESCRIPTION OF PROPERTY TO BE REZONED

Beginning at a point at the intersection of the North line of West Carrollton Avenue and the East line of North Broad Street,

thence along the East line of North Broad Street N 27°07'26" W a distance of 405.00' to a point at the terminus of North Broad Street;

thence S 62°50'44" W a distance of 220.00' to a point;

thence N 27°07'26" W a distance of 56.58' to a point;

thence S 65°21'08" W a distance of 20.97' to a point;

thence N 60°42'55" W a distance of 39.80' to a point;

thence S 65°51'41" W a distance of 177.30' to a point;

thence S 66°49'50" W a distance of 165.36' to a point;

thence N 27°06'48" W a distance of 127.34' to a point;

thence S 60°36'41" W a distance of 49.06' to a point;

thence N 29°18'28" W a distance of 127.22' to a point;

thence N 27°59'13" W a distance of 401.04' to a point;

thence S 61°59'55" W a distance of 12.00' to a point;

thence N 71°49'41" W a distance of 152.51' to a point;

thence N 60°22'31" E a distance of 118.03' to a point;

thence N 19°56'17" W a distance of 1088.42' to a point on the South line of Interstate 81;

thence along the South line of Interstate 81 N 51°21'30" E a distance of 390.06' to a point;

thence N 59°46'44" E a distance of 100.89' to a point;

thence N 42°21'32" E a distance of 100.52' to a point;

thence N 52°01'06" E a distance of 380.85' to a point at the intersection of the South line of Interstate 81 and the West line of Red Lane;

thence along the West line of Red Lane S 08°26'28" E a distance of 365.95' to a point;

thence S 08°55'13" E a distance of 83.12' to a point;

thence with a curve turning to the left with an arc length of 353.82', with a radius of 320.00', with a chord bearing of S 40°35'45" E, with a chord length of 336.07', to a point;

thence S 72°16'18" E a distance of 141.44' to a point;

thence with a non-tangent curve turning to the right with an arc length of 318.24', with a radius of

710.00', with a chord bearing of S 58°42'30" E, with a chord length of 315.58', to a point;

thence S 45°54'08" E a distance of 839.41' to a point;

thence S 67°53'11" W a distance of 9.99' to a point;

thence S 22°06'49" E a distance of 315.70' to a point;

thence leaving the West line of Red Lane S 60°35'11" W a distance of 190.10' to a point;

thence S 22°06'49" E a distance of 100.00' to a point;

thence S 37°19'34" E a distance of 95.13' to a point;

thence S 28°44'42" E a distance of 122.90' to a point on the North line of West Carrollton Avenue;

thence along the North line of West Carrollton Avenue S 62°51'48" W a distance of 676.02' to a point; which is the point of beginning,

having an area of 2,714,568 square feet, 62.318 acres, being known as part of tax map number 44-3-10 and lying in the City of Salem, Virginia.

AFFADAVIT OF MAILING PURSUANT TO \$15.2-2204 CODE OF VIRGINIA

PLANNING COMMISSION JANUARY 10, 2024

ITEM#

This is to certify that I mailed letters in reference to the rezoning request of Virginia Baptist Children's Home (dba HopeTree Family Services), property owner for rezoning the properties located at 1000 blk Red Ln and a portion of 860 Mount Vernon Lane (Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, and a portion of 44-3-10), from RSF Residential Single Family to PUD Planned Unit District, to the following property owners and adjacent property owners on December 22, 2023, in the 2:00 p.m. mail:

LESTER, MARY FRANCES-LIFE 204 BENTWOOD CT ESTATE 206 BENTWOOD CT HERNDON, PATRICK A HERNDON, EMILY Z 206 BENTWOOD CT SALEM, VA 24 208 BENTWOOD CT COWLING, RAYMOND J III 208 BENTWOOD CT SALEM, VA 24	
206 BENTWOOD CT HERNDON, PATRICK A HERNDON, EMILY Z 206 BENTWOOD CT SALEM, VA 24 208 BENTWOOD CT COWLING, RAYMOND J III 208 BENTWOOD CT SALEM, VA 24	153
208 BENTWOOD CT COWLING, RAYMOND J III 208 BENTWOOD CT SALEM, VA 24	
210 BENTWOOD CT PEASLEE ROBERT B 210 BENTWOOD CT SALEM, VA 24	
217 BENTWOOD CT STADER, WILLIAM B SECRIST, APRIL L 217 BENTWOOD CT SALEM, VA 24	
HINRICHS, SANDRA	
209 BENTWOOD CT STOVALL STUART W 209 BENTWOOD CT SALEM, VA 24 JANOSCHKA, MACEL	153
200 BENTWOOD CT JANOSCHKA, STEPHEN P H 200 BENTWOOD CT SALEM, VA 24	153
202 BENTWOOD CT VALUE HOUSING PARTNERS LLC 5211 S CONCOURSE DR ROANOKE, VA	X 24019
1002 RED LN FELL, LUKE E BRIMER, ALLYSON R 1002 RED LN SALEM, VA 24 HOLMES LETHA ELLA EARLY-	
	CITY, GA 30269
984 RED LN LONG REGINALD ALAN 338 WARWICK AVE SOUTH ORAN HOLMES LETHA ELLA EARLY-	·
	CITY, GA 30269
900 RED LN BLK EDWARDS ALMA HOLMES 410 VANDERWALL PEACHTREE (COPLAND, BRENDA	CITY, GA 30269
102 NORTH OAKS DR COPLAND, JAMES HENRY SUE 102 NORTH OAKS DR SALEM, VA 24	153
104 NORTH OAKS DR KENNY, OTIS KENNY, BARBARA 104 NORTH OAKS DR SALEM, VA 24	153
107 NORTH OAKS DR OLDE SALEM CONTRACTING INC PO BOX 2492 SALEM, VA 24	153
105 NORTH OAKS DR OLDE SALEM CONTRACTING INC PO BOX 2492 SALEM, VA 24	153
103 NORTH OAKS DR SURRATT RICK 103 NORTH OAKS DR SALEM, VA 24 HUTCHISON,	153
108 NORTH OAKS DR HUTCHISON, KATHERINE GUIDRY RICHARD RYAN 108 NORTH OAKS DR SALEM, VA 24 HARRISON, TRACEY	153
1024 STONEGATE DR HARRISON, JAMES EDWARD LEA 1024 STONEGATE DR SALEM, VA 24	153
1015 STONEGATE DR ESTILL LLOYD H 1015 STONEGATE DR SALEM, VA 24	153
1009 STONEGATE DR SNOW RICHARD M 1009 STONEGATE DR SALEM, VA 24	153
107 BARTLEY DR BRUSSEAU WESLEY 107 BARTLEY DR SALEM, VA 24	153
108 BARTLEY DR PERRY, KEVIN J PERRY, WENDY L 108 BARTLEY DR SALEM, VA 24 JEAN O WHEELING REVOCABLE	153
987 STONEGATE DR DECLARATION OF TRUST 987 STONEGATE DR SALEM, VA 24	153
971 STONEGATE DR LOWE CARL J 971 STONEGATE DR SALEM, VA 24	153
955 STONEGATE DR YOUNG, HOLLIE 955 STONEGATE DR SALEM, VA 24	153
1020 STONEGATE DR WILLIAMS, BARBARA WERTZ 1020 STONEGATE DR SALEM, VA 24 1617 STRAWBERRY	153
1016 STONEGATE DR CRAIGHEAD ROBERT A MOUNTAIN DRIVE ROANOKE, VA	24018
4040 STONECATE DR. LOVING JACON D. LOVING TRACKLE AND STONECATE DR. CALERA MACA	153
1010 STONEGATE DR LOVING, JASON R LOVING, TRACY L 1010 STONEGATE DR SALEM, VA 24	153
1010 STONEGATE DR LOVING, JASON R LOVING, TRACY L 1010 STONEGATE DR SALEM, VA 24 1006 STONEGATE DR KING CHRISTOPHER M 1006 STONEGATE DR SALEM, VA 24	153
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1006 STONEGATE DR KING CHRISTOPHER M 1006 STONEGATE DR SALEM, VA 24	
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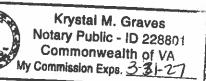
834 RED LN	WILLIAMS SAMUEL J		834 RED LN	SALEM, VA 24153
826 RED LN	BELOUS, RICHARD S		826 RED LN	SALEM, VA 24153
958 RED LN	BAILEY, DEITRA D		958 RED LN 5211 SOUTH	SALEM, VA 24153
954 RED LN	VALUE HOUSING PARTNERS LLC		CONCOURSE DR 5211 SOUTH	ROANOKE, VA 24019
950 RED LN	VALUE HOUSING PARTNERS LLC		CONCOURSE DR	ROANOKE, VA 24019
946 RED LN	TUCK, DONALD S		946 RED LN	SALEM, VA 24153
942 RED LN	PRUSA, FRANK W JR	PRUSA, MELINDA A	942 RED LN	SALEM, VA 24153
936 RED LN	ST PIERRE, ADAM THOMAS MARY FRANCES BOWEN	BROWN, KAYLA DANIELLE	936 RED LANE	SALEM, VA 24153
934 RED LN	IRREVOCABLE TRUST		5406 SNOW OWL DR	ROANOKE, VA 24018-0000
932 RED LN	OWEN JONATHAN C		227 TAYLOR AVE	SALEM, VA 24153
930 RED LN	LOWE, DAVID	LOWE, DEBORAH	106 ROSELAND DR	CHRISTIANSBURG, VA 24073
928 RED LN	SAKALAS, ALEXANDER J		928 RED LN	SALEM, VA 24153
922 RED LN	HUNT, RONALD E		922 RED LN	SALEM, VA 24153
805 HONEYSUCKLE RD 819 HONEYSUCKLE	MUSGRAVE DONNA L		805 HONEYSUCKLE RD	SALEM, VA 24153
RD	ENGLAND, ROBERT KENNETH II		819 HONEYSUCKLE RD	SALEM, VA 24153
851 HONEYSUCKLE RD	WALLACE, NATHAN W	WALLACE, JESSICA E	851 HONEYSUCKLE RD	SALEM, VA 24153
900 HONEYSUCKLE RD BLK	THE BLISS PROPERTY TRUST		8960 RIDGEMONT DR	SANDY SPRINGS, GA 30350
821 RED LN	TUELL, STEVEN	NEIGHBORS, JESSICA	821 RED LN	SALEM, VA 24153
803 RED LN	GLASBY, LEON K	GLASBY, DEBORAH R	803 RED LN	SALEM, VA 24153
801 RED LN	GOLDSTEIN ANDREWS		801 RED LN	SALEM, VA 24153
818 RED LN	DEMPSEY, TRACEY L	DEMPSEY, JACOB A	818 RED LN	SALEM, VA 24153
808 RED LN	CHAMBERLAND SETH R	MOOFFUED	808 RED LN	SALEM, VA 24153
800 RED LN	MCGEEVER, MICHAEL	MCGEEVER, MARGARET	800 RED LANE	SALEM, VA 24153
718 RED LN	MAY ROBERT L	LAIGH II EGDB	718 RED LN	SALEM, VA 24153-0553
721 RED LN 702 MOUNT VERNON	WOHLFORD, DAVID A	WOHLFORD, WHITNEY S	721 RED LANE	SALEM, VA 24153
AVE 710 MOUNT VERNON	PFEIFFER JULIE KRISTINE		702 MT VERNON AVE	SALEM, VA 24153
AVE 720 MOUNT VERNON	COX MICHAEL F CARLOS B HART JR REVOCABLE		710 MT VERNON AVE	SALEM, VA 24153
AVE	TRUST		720 MT VERNON AVE	SALEM, VA 24153
707 RED LN 721 MOUNT VERNON	TAYLOR, ALLEN WAYNE		707 RED LN	SALEM, VA 24153
AVE 18 E CARROLLTON	MURPHY, KARLA		721 MT VERNON AVE	SALEM, VA 24153
AVE	PICARD JASON R	SUSAN E HALL	18 E CARROLLTON AVE	SALEM, VA 24153
		REVOCABLE		
715 MOUNT VERNÓN AVE	MICHAEL É HALL REVOCABLE DECLARATION OF	DECLARATION OF TRUST	1383 WALDHEIM RD	SALEM, VA 24153
709 MOUNT VERNON AVE	JOHNSON, RENITA ANNE		709 MT VERNON AVE	SALEM, VA 24153
701 MOUNT VERNON AVE	WHEELING MATTHEW P		701 MT VERNON AVE	SALEM, VA 24153
		HAKKENBERG,		
710 N BROAD ST 706 N BROAD ST	HAKKENBERG, MICHAEL NANCY ELLEN UTZ LIVING TRUST	DAWN	710 N BROAD ST 706 N BROAD ST	SALEM, VA 24153 SALEM, VA 24153
		COFFMAN, BONNIE		
714 N BROAD ST	COFFMAN, STEPHEN	MOULSE	320 W MAIN ST UNIT 74	SALEM, VA 24153
718 N BROAD ST 14 E CARROLLTON	SHREEMAN, MADELAINE ROSE		718 N BROAD ST	SALEM, VA 24153
AVE 14 W CARROLLTON	HALL ELIZABETH A		1814 BELLEVILLE RD SW	ROANOKE, VA 24015-2708
AVE 10 W CARROLLTON	WEEKS, JAMES R JR		5938 VIEWPOINT AVE	SALEM, VA 24153
AVE	GREGORY MATTHEW H		10 W CARROLLTON AVE	SALEM, VA 24153
717 N BROAD ST	WARRINER, BRYAN K	WARRINER, MARY G	717 N BROAD ST	SALEM, VA 24153
823 N BROAD ST	GRESHAM, JAMES L	GRESHAM, JUDY S	433 DEER RUN CIR	SALEM, VA 24153
819 N BROAD ST	MUSNUG FRED A		819 N BROAD ST	SALEM, VA 24153
815 N BROAD ST	MILLIGAN BRUCE P		815 N BROAD ST	SALEM, VA 24153
809 N BROAD ST	HARRIS, MELVIN LEE		809 N BROAD ST	SALEM, VA 24153

805 N BROAD ST	DUFFY LIVING TRUST		409 STONEWALL CIR	SALEM, VA 24153
801 N BROAD ST	HENRY GEORGE M		801 N BROAD ST	SALEM, VA 24153
956 STONEGATE DR	ETHERIDGE LIONEL L		956 STONEGATE DR	SALEM, VA 24153
29 CORBETT ST	CRAWFORD, ROBERT C III	OTESM ANDIA	29 CORBETT ST	SALEM, VA 24153
19 CORBETT ST	STEEN, MARK QUINN	STEEN, ANNA TRIVETTE	19 CORBETT ST 132 W CARROLLTON	SALEM, VA 24153
901 N BROAD ST	CRAFT, SUSAN T		AVE	SALEM, VA 24153
944 STONEGATE DR	MARTIN THOMAS J		PO BOX 628	SALEM, VA 24153-0628
927 SADDLE DR	DOTSON PAUL R		927 SADDLE DR	SALEM, VA 24153
929 SADDLE DR	SHANER, JOHN P R		929 SADDLE DR	SALEM, VA 24153
931 SADDLE DR	SMITH, ROBERT C III	SMITH, KRISTEN KAY	931 SADDLE DR	SALEM, VA 24153
932 SADDLE DR	DELAPP VICTOR B		932 SADDLE DR	SALEM, VA 24153
928 SADDLE DR	WILEY, DARLENE C VAUGHAN ESTHER S-TRUSTEE OF		928 SADDLE DR	SALEM, VA 24153
924 SADDLE DR	VAUGHAN LIVING TRUST		924 SADDLE DR	SALEM, VA 24153
920 SADDLE DR	CROWGEY, TERENCE H DAVID AND RICHIA GREGSTON REVOCABLE TRUST	CROWGEY, MAEVE N	920 SADDLE DR 916 SADDLE DR	SALEM, VA 24153 SALEM, VA 24153
916 SADDLE DR				,
915 SADDLE DR	ADVANTAGE BUILDERS LLC		1618 CASCADE COURT	SALEM, VA 24153
917 SADDLE DR	BAKER, KEVIN WARREN		917 SADDLE DR	SALEM, VA 24153
921 SADDLE DR	RYAN, DANIEL R		921 SADDLE DR	SALEM, VA 24153
923 SADDLE DR	LANGFITT, TERRY JR	LANGFITT, ASHLEIGH	923 SADDLE DR	SALEM, VA 24153
925 SADDLE DR	REYNOLDS NANCY F	MARY, YEAKEL	925 SADDLE DR	SALEM, VA 24153
808 SCOTT CIR	CHRISTOPHER, YEAKEL S	CATHERINE FLETCHER, MELISSA	808 SCOTT CIR	SALEM, VA 24153
836 ACADEMY ST	FLETCHER, KEVIN L	H WRIGHT, AMANDA	836 ACADEMY ST	SALEM, VA 24153
842 ACADEMY ST	WRIGHT, CASEY WALLACE	GURLEY	842 ACADEMY ST	SALEM, VA 24153
810 SCOTT CIR	YERTON JOSHUA D		810 SCOTT CIR	SALEM, VA 24153
812 SCOTT CIR	POLLARD RICHARD H		812 SCOTT CIR	SALEM, VA 24153
814 SCOTT CIR	EDWARDS, GARY	EDWARDS, NANCY FELDENZER, KAREN	814 SCOTT CIR	SALEM, VA 24153
811 SCOTT CIR	FELDENZER, JOHN A	С	811 SCOTT CIRCLE	SALEM, VA 24153
809 SCOTT CIR	EVANS, MICHAEL D	EVANS, LISA DAWN	809 SCOTT CIR	SALEM, VA 24153
806 SCOTT CIR	GETSI MICHAEL N STEEN RICHARD D-TRST ELBERT		806 SCOTT CIR	SALEM, VA 24153
20 CORBETT ST BLK 19 W CARROLLTON	R STEEN (ESTATE) IRREV		34 CORBETT ST	SALEM, VA 24153
AVE	HUGHES STEVEN M		19 W CARROLLTON AVE	SALEM, VA 24153
40 CORBETT ST	BARTON, TIMMY D	BARTON, ANITA B	40 CORBETT ST	SALEM, VA 24153
38 CORBETT ST	RIGANTI ROCCO		38 CORBETT ST	SALEM, VA 24153-2629
34 CORBETT ST	STEEN, RICHARD D		34 CORBETT ST	SALEM, VA 24153
30 CORBETT ST	MORRIS, LAURA W		30 CORBETT ST	SALEM, VA 24153
26 CORBETT ST	MONNETT, BRENDA L		26 CORBETT ST	SALEM, VA 24153
22 CORBETT ST	STEEN RICHARD D-TRST ALBERT R STEEN (ESTATE) IRREV STEEN RICHARD D-TRST ELBERT		34 CORBETT ST	SALEM, VA 24153
20 CORBETT ST BLK 18 W CARROLLTON	R STEEN (ESTATE) IRREV		34 CORBETT ST	SALEM, VA 24153
AVE	CORBETT, BRIAN J		18 W CARROLLTON AVE	SALEM, VA 24153
711 N BROAD ST	TWO LANE HOLDINGS LLC		409 N BROAD ST	SALEM, VA 24153
707 N BROAD ST	PEDIGO, MARVIN L VDOT COUNTY OF ROANOKE		1901 MAIN ST SW 731 HARRISON AVE PO BOX 29800	ROANOKE, VA 24015-3019 SALEM VA 24153 ROANOKE VA 24018
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City of Salem
Commonwealth of Virginia
The foregoing instrument was acknowledged before me this day of December, 2033, by

Granes Notary Public

My commission expires: March, 31, 2027





December 22, 2023

Mr. Jon Morris HopeTree Family Services 860 Mount Vernon Lane Salem, VA 24153

RE: Petition For Zoning Amendment (Rezoning)
1000 block Red Lane and a portion of 860 Mount Vernon Lane
Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6 and a portion of
44-3-10)

To Whom It May Concern:

You and/or your agent shall appear before the Planning Commission on:

Wednesday, January 10, 2024 at 7:00 p.m. in the

Community Room, Salem Civic Center 1001 Roanoke Boulevard

AND

Salem City Council on:

Monday, January 22, 2024 at 6:30 p.m. in the

Community Room, Salem Civic Center 1001 Roanoke Boulevard, Salem, Virginia

for consideration of your request for rezoning the above referenced property.

If you have any questions regarding this matter, please contact our office at (540) 375-3032.

Mary Ellen H. Wines, CZA CFM Planning and Zoning Administrator



IMPORTANT NOTICE OF PUBLIC HEARINGS PROPOSAL TO CHANGE ZONING

Notice is hereby given that a request has been filed with the City of Salem by the property owner/petitioner of the property described below. The Planning Commission of the City of Salem will consider this request at its meeting listed below and make a recommendation to the City Council. The City Council of the City of Salem will also consider this request, and the recommendation of the Planning Commission at its meeting listed below. City Council will make the final decision in this matter.

Property Owner/Petitioner:

Virginia Baptist Children's Home (dba HopeTree Family Services)

Location of Property:

1000 block Red Ln and a portion of 860 Mount Vernon Lane (Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, and a portion of 44-3-10)

Purpose of Request:

To rezone the property located at 1000 Block of Red Ln and a portion of 860 Mount Vernon Lane (Tax Map #'s 41-1-1, 41-1-2, 41-1-3, 41-1-4, 41-1-5, 41-1-6, and a portion of 44-3-10) from RSF Residential Single Family to PUD Planned Unit District.

The date, time, and place of the public hearing scheduled by the Planning Commission on this request are as follows:

WEDNESDAY, JANUARY 10, 2024 – 7 P.M. COMMUNITY ROOM, SALEM CIVIC CENTER 1001 ROANOKE BOULEVARD, SALEM, VIRGINIA

The date, time, and place of the public hearing scheduled by City Council on this request are as follows:

MONDAY, JANUARY 22, 2024 – 6:30PM COMMUNITY ROOM, SALEM CIVIC CENTER 1001 ROANOKE BOULEVARD, SALEM, VIRGINIA

Additional information on this request may be obtained in the Community Development Department, 21 South Bruffey Street, Salem, Virginia or at (540) 375-3032.

H. Robert Light
Deputy Executive Secretary
Planning Commission

AT A REGULAR MEETING OF THE PLANNING COMMISSION OF THE CITY OF SALEM, VIRGINIA held in the Council Chambers of City Hall, 114 North Broad Street Salem, VA 24153

AGENDA ITEM: Amendment to the Zoning Ordinance

Hold public hearing to consider the request of E3MAG, LLC, property owner, for rezoning the property located at 744 Electric Road (Tax Map # 155-2-2.2) from HBD Highway Business District to HM Heavy

Manufacturing District.

SUBMITTED BY: Max Dillon, Planner

SUMMARY OF INFORMATION:

SITE CHARACTERISTICS:

Zoning: HBD Highway Business District Land Use Plan Designation: Industrial

Existing Use: Vacant

Proposed Use: Future Development (commercial, office, industrial)

The subject property (744 Electric Road) consists of a 2.036 acre tract of land which currently sits within the HBD Highway Business District designation. To provide a bit of history, this parcel was formerly zoned HM Heavy Manufacturing until a 2007 rezoning reverted its designation to HBD Highway Business District. Since then, the St. John Place Commerce Center has developed in an industrial nature, and correspondingly, this request seeks to return 744 Electric Road to the HM Heavy Manufacturing classification. This request mimics several successful rezoning applications in recent months to revert the undeveloped land within the St. John Place Commerce Center to an industrial setting. This parcel is currently vacant, but a concept plan has been submitted to prepare it for future development.

While there is no concrete site plan for the future development of the property, the uses specified in the HM Heavy Manufacturing District are consistent with existing development in the adjacent St. John Place Commerce Center. Although some of the site sits within the floodplain, any future development will be elevated above the 100-year floodplain to meet the necessary requirements.

The Future Land Use Map (FLUM) identifies this area as industrial which is consistent with the proposed future utilization of the property.

REQUIREMENTS:

The proposal meets the requirements of Section 106-220.3. Site development regulations for HM.

OPTIONS:

- 1. Recommend approval of the request.
- 2. Recommend denial of the request.

City of Salem Community Development Application

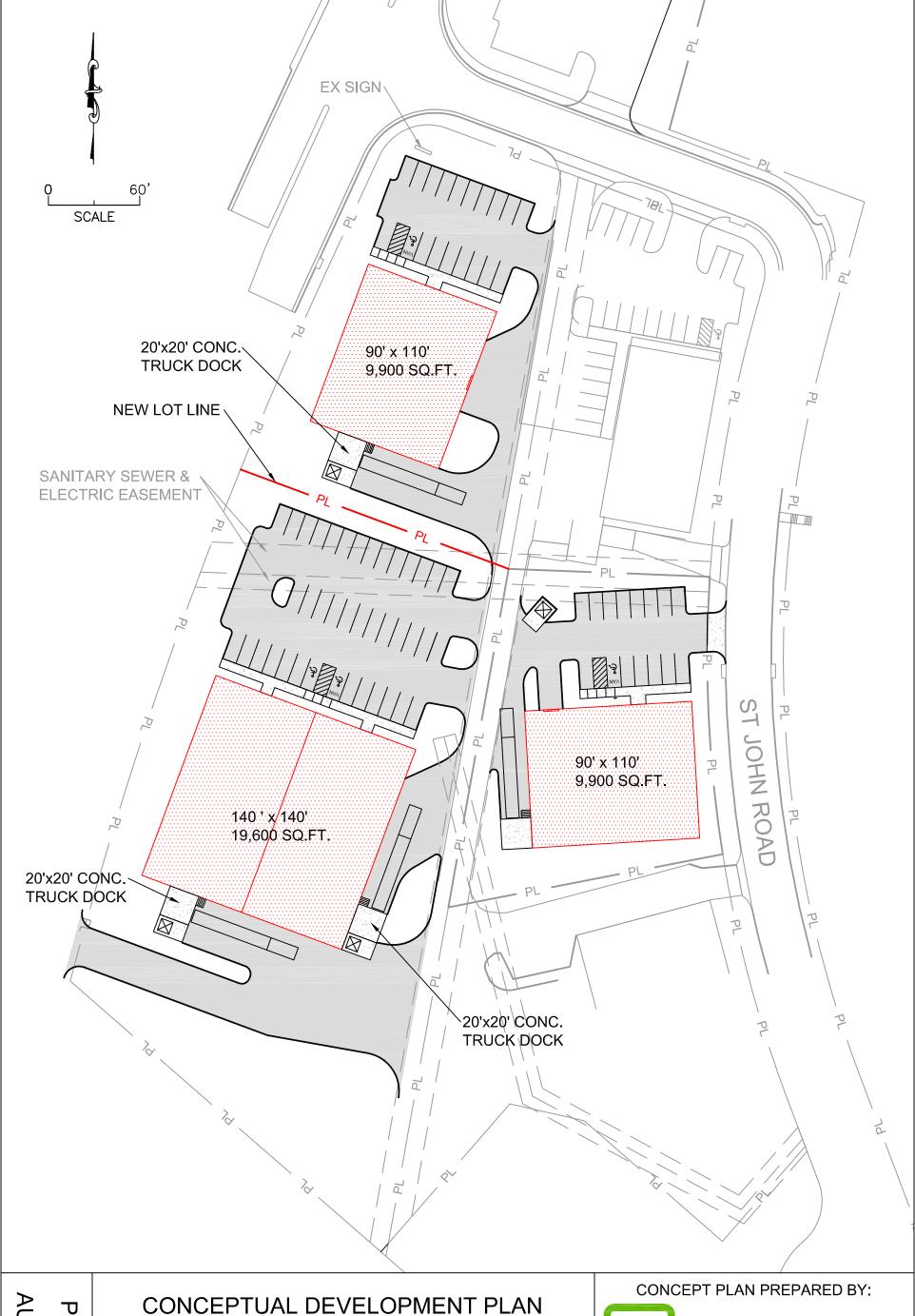
Request for REZONING or CONDITIONAL REZONING

Case #:					
APPLICANT INFORMATION 744 Electric Ro	oad Alle Alle Alle Alle Alle Alle				
Owner: E3MAG LLC Contact Name: Stephen Magenbauer (Acting Manager) Address: 1819 Electric Rd Suite E, Roanoke, VA 24018	Telephone No. 540-520-4681 Fax No. Email Address e3bus@outlook.com				
Applicant/Contract Purchaser: Same as Owner Contact Name: Address:	Telephone No Fax No Email Address				
PARCEL INFORMATION	For multiple parce	els, please attach a page			
Tax ID#'s) 155-2-2.2 Deed Book Inst. 230001821 Page Subdivision Location Description (Street Address, if applicable) 744 Electric Road	Commercial Lease Building(s) Ded lot Request: See Attached Proffer sheets				
SIGNATURE OF OWNER CONTRACT PURCH	ASER (attach contract)				
As owner or authorized agent of this property, I herebest of my knowledge, and I hereby grant permission to property for the purposes of processing and reviewing the Signature	o the agents and employees of t	is complete and accurate to the the City of Salem to enter the Date//8/2024 Date			
OUESTIONS/LETTERS/SHOULD BE FORWARD					
Name Brushy Mountain Engineering, PLLC Address: 3553 Carvins Cove Road Salem, VA 24153 **It is the responsibility of the contact person to provide copies interested parties to the application.		Telephone No. 540-526-6800 Fax No Email Address barney@brushymtnengr.com			

ACKNOWLEDGEMENT OF APPLICATION FEE PAYMENT PROCEDURE

Application fees must be submitted at the time of submittal. I hereby acknowledge that this application is not complete until the payment for all applicable fees has been received by the City of Salem Community Development Department. I acknowledge that I am responsible for ensuring that such fees are received by the City of Salem. I further acknowledge that any application fee submitted after the deadline shall result in the application being considered filed for the next month's meetings. LL ML Date: 1/18/2024 Signature of applicant/authorized agent Stephen Magenbauer (Acting Manager) Signature of applicant/authorized agent ______ Date: If you would like your correspondence emailed and/or faxed, please make selections, and provide the information below: ■Email e3bus@outlook.com FEES: All application fees must be paid at the time of submittal. Please make checks payable to the City of Salem: Rezoning application fee \$1,000 FOR STAFF USE ONLY Staff Reviewer: Application Complete? ☐ YES Date:

PLEAS	E RESPOND FOR ALL REZONING APPLICATIONS:
1.	and the state of t
2.	Describe in detail the proposed use of the property. Exact development layout is not yet known. The
	intended use will be commercial lease space. Likely one large building or two separate buildings
	depending on market demand.
3.	List any sensitive environmental or unique features on the property. Are there any high voltage transmission lines public utility lines, or others? No unique features.
4.	Is the subject property located within the Floodplain District? YES NO If yes, describe the proposed measures for meeting the standards of the Floodplain Ordinance. The eastern portion of the site is
	located within the 100-yr flood plain. Future building(s) will be elevated to be well above the
	100-year flood level.
5.	Is the subject property listed as a historic structure or located within a historic district? YES NO
	If yes, describe the proposed measures for meeting the standards of the Department of Historic Resources.
6.	Have you provided a conceptual plan of the proposed development, including general lot configurations and road locations? Are the proposed lot sizes compatible with existing parcel sizes in the area? A concept plan for
	showing possible one large building configuration is attached. Building(s) appearance will be
	similar to the existing buildings along St John Road.
PLEAS	E RESPOND FOR COMMERCIAL REZONING APPLICATIONS
1.	What provisions will be made to ensure safe and adequate access to the subject property? The site will be
	primarily accessed via private shared drive off of St John Road. There is an existing curb cut
•	from Electric Road into the southwest corner of lot which may be right in, right out.
2.	How will the traffic impact of this development be addressed? The impact of new traffic will be minimal as the majority of site traffic will exit onto St John Road which is a feeder road onto Electric
	Road.
3.	Describe why the proposed use is desirable and appropriate for the area. What measure will be taken to assure the
	the proposed use will not have a negative impact on the surrounding vicinity? The planned use is consistent with the existing and planned buildings on St John Road. Future development will
	comply with landscaping and screening requirements.
4.	What type of signage is proposed for the site? Future ground sign similar to existing signs along St John Road.
5.	Have architectural/building elevations been submitted with this application? Similar facade to 68 St John Rd



AUG 02, 2023 PLAN DATE

ST JOHN PLACE

TAX PARCEL ID: 155-3-2 CITY OF SALEM, VIRGINIA



BRUSHY MOUNTAIN ENGINEERING, PLLC

3553 Carvins Cove Road Salem, VA 24153 (540) 526-6800 www.brushymtnengr.com

Tax Parcel 155-2-2.2 (744 Electric Road)

BEGINNING at a point on the east side of the Electric Road right-of-way at the northwest corner of Tax Parcel 189-2-1; thence following the Electric Road right-of-way line along a curve to the right with a Radius of 2825.29 feet, Arc Length 354.39 feet, Chord Bearing of N 18° 25′ 02″ E, and Chord Length of 354.16 feet to a point; thence departing said right-of-way and following the southern property line of Tax Parcel 155-2-2.1 a bearing of S 69° 39′ 28″ E for a distance of 187.89 feet to a point on the centerline of a 24′ cross-access easement (as recorded in P.B. 11, PG. 48-50, Slide 193); thence following said easement centerline a bearing of S 10° 07′ 00″ W for a distance of 449.97 feet to a point; thence departing the centerline of said cross-access easement a bearing of S 41° 03′ 47″ W for a distance of 7.41 feet to a point on the northern property line of Tax Parcel 189-2-1; thence following said property line a bearing of N 48° 56′ 13″ W for a distance of 270.76 feet to the point of BEGINNING, and being known as Lot 13-A-2, containing 2.0356 acres, as shown on "Resubdivision Plat for Wiley Development, LLC, Showing Lot 13-A, Resubdivision Plat for the St. John Place Commerce Center (P.B. 12 PG. 5-6, Slide 199)", dated August 04, 2023, by Caldwell White Associates, recorded in the Clerk's Office of the Circuit Court of the City of Salem, Virginia in Plat Book 16, Pages 82-83, Slide 246.

AFFADAVIT OF MAILING PURSUANT TO \$15.2-2204 **CODE OF VIRGINIA**

PLANNING COMMISSION **MARCH 13, 2024**

ITEM#

This is to certify that I mailed letters in reference to the rezoning request of E3MAG, LLC, property owner for rezoning the property located at 744 Electric Road (Tax Map # 155-2-2.2), from HBD Highway Business District to HM Heavy Manufacturing District, to the following property owners and adjacent property owners on February 20, 2024, in the 2:00 p.m. mail:

E3MAG LLC 1819 ELECTRIC RD STE E **ROANOKE VA 24018**

E2STJOHN LLC 1819 ELECTRIC RD STE E **ROANOKE VA 24018**

ST JOHN PLACE LLC 1819 ELECTRIC RD STE E **ROANOKE VA 24018**

DANNY R & SONJA S KANE C/O KELLY JONES P O BOX 914 **SALEM VA 24153**

THE ENTERPRISE CENTER PROPERTY OWNERS ASSOC INC 1819 ELECTRIC RD STE E **ROANOKE VA 24018**

DCKM PROPERTIES LLC 14018 SULLYFIELD CIR STE E **CHANTILLY VA 20151**

SOUTHERN OAK INVESTMENTS LLC 3051 GLENMONT DR **ROANOKE VA 24018**

BROWN-BOLLING PROPERTIES LLC 940 CAMNEY LN VINTON VA 24179

LWC LLC 110 ST JOHN RD LOT 15C **SALEM VA 24153**

PHOENIX SALEM INUSTIAL INVESTORS LLC 401 E KILBOURN AVE STE 201 MILWAUKEE WI 53202

HAROLD L HUGHES REBECCA D HUGHES 616 CATAWBA DR **SALEM VA 24153**

WILLIAM A MAIO TAMMY QUESENBERRY MAIO 596 CATAWBA DR **SALEM VA 24153**

ANN L ANDREWS 594 CATAWBA DR **SALEM VA 24153**

LORI M FADORICK 590 CATAWBA DR **SALEM VA 24153**

MOUNT SINAI PROPERTIES -**ELECTRIC ROAD LLC** P O BOX 3096 **SALEM VA 24153**

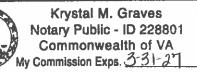
BRUSHY MOUNTAIN ENG PLLC 3553 CARVINS COVE RD **SALEM VA 24153**

STEPHANIE K GORDON 622 CATAWBA DR **SALEM VA 24153**

City of Salem
Commonwealth of Virginia
The foregoing instrument was acknowledged before me this 33rd day of Fel YUAII, 2021 by

Oretta tri aman

My commission expires:



City, State, Zip	ROANOKE VA 24018	ROANOKE VA 24018	ROANOKE VA 24018	ROANOKE VA 24018	SALEM VA 24153	ROANOKE VA 24018	ROANOKE VA 24018	CHANTILLY VA 20151	ROANOKE VA 24018	ROANOKE VA 24018	VINTON VA 24179	SALEM VA 24153	VINTON VA 24179	VINTON VA 24179	MILWAUKEE WI 53202	SALEM VA 24153	SALEM VA 24153	SALEM VA 24153	SALEM VA 24153	SALEM VA 24153	SALEM VA 24153
Address 2																					
Address 1	1819 ELECTRIC RD SUITE E	P O BOX 914	1819 ELECTRIC RD SUITE E	1819 ELECTRIC RD SUITE E	14018 SULLYFIELD CIR SUITE E	3051 GLENMONT DR	1819 ELECTRIC RD SUITE E	940 CAMNEY LN	110 ST JOHN RD LOT 15C	940 CAMNEY LN	940 CAMNEY LN	401 E KILBOURN AVE STE 201	622 CATAWBA DR	616 CATAWBA DR	596 CATAWBA DR	594 CATAWBA DR	590 CATAWBA DR	P O BOX 3096			
Co-Owner Name					C/O KELLY JONES		OWNERS ASSOCIATION INC								SULC		REBECCA D HUGHES	TAMMY QUESENBERRY MAIO			SOAD LLC
Owner Name	E3MAG LLC	E2ST JOHN LLC	ST JOHN PLACE LLC	E2STJOHN LLC	DANNY R & SONJA S KANE	ST JOHN PLACE LLC	THE ENTERPRISE CENTER PROPERTY OWNERS ASSOCIATION INC	DCKM PROPERTIES LLC	SOUTHERN OAK INVESTMENTS LLC	ST JOHN PLACE LLC	BROWN-BOLLING PROPERTIES LLC	LWC LLC	BROWN-BOLLING PROPERTIES LLC	BROWN-BOLLING PROPERTIES LLC	PHOENIX SALEM INDUSTRIAL INVESTORS LLC	STEPHANIE K GORDON	HAROLD L HUGHES	WILLIAM A MAIO	ANNLANDREWS	LOR! M FADORICK	MOUNT SINAI PROPERTIES - ELECTRIC ROAD LLC
Location	744 ELECTRIC RD	68 ST JOHN RD	72 ST JOHN RD	84 ST JOHN RD	151 ST JOHN RD	88 ST JOHN RD	126 ST JOHN RD	94 ST JOHN RD	98 ST JOHN RD	102 ST JOHN RD	108 ST JOHN RD	110 ST JOHN RD	114 ST JOHN RD	118 ST JOHN RD	1501 ROANOKE BLVD	622 CATAWBA DR	616 CATAWBA DR	598 CATAWBA DR	594 CATAWBA DR	590 CATAWBA DR	565 ELECTRIC RD
MBLU	155-2-2.2	155-2-2.1	155-2-1	155-2-2	155-2-3	189-3-4	189-3-3	189-3-7	189-3-3.6	189-3-3.5	189-3-3.4	189-3-3.5	189-3-3.2	189-3-3.1	189-2-1	189-1-3	189-1-2	189-1-1	155-1-4	155-1-3	155-1-2



IMPORTANT NOTICE OF PUBLIC HEARINGS PROPOSAL TO CHANGE ZONING

Notice is hereby given that a request has been filed with the City of Salem by the property owner/petitioner of the property described below. The Planning Commission of the City of Salem will consider this request at its meeting listed below and make a recommendation to the City Council. The City Council of the City of Salem will also consider this request, and the recommendation of the Planning Commission at its meeting listed below. City Council will make the final decision in this matter.

Property Owner/Petitioner:

E3MAG, LLC

Location of Property:

744 Electric Road (Tax Map # 155-2-2.2)

Purpose of Request:

To rezone the property located at 744 Electric Road (Tax Map # 155-2-2.2) from HBD Highway Business District to HM Heavy Manufacturing District.

The date, time, and place of the public hearing scheduled by the Planning Commission on this request are as follows:

WEDNESDAY, MARCH 13, 2024 – 7 P.M. COMMUNITY ROOM, SALEM CIVIC CENTER 1001 ROANOKE BOULEVARD, SALEM, VIRGINIA

The date, time, and place of the public hearing scheduled by City Council on this request are as follows:

MONDAY, MARCH 25, 2024 – 6:30PM COUNCIL CHAMBERS, FIRST FLOOR, SALEM CITY HALL 114 NORTH BROAD STREET, SALEM, VIRGINIA

Additional information on this request may be obtained in the Community Development Department, 21 South Bruffey Street, Salem, Virginia or at (540) 375-3032.

H. Robert Light
Deputy Executive Secretary
Planning Commission

PAYMENT DATE
01/17/2024
COLLECTION STATION
Engineering/Inspections
RECEIVED FROM
E3MAG LLC
DESCRIPTION

City of Salem P.O. Box 869 Salem, VA 24153 BATCH NO. 2024-00003815 RECEIPT NO. 2024-00075819 CASHIER Krystal Graves

PAYMENT CODE PLAN FILING FEE	RECEIPT DESCRIPTION Planning Rezoning/Site Plan Rev	TRANSACTION AMOUNT \$1,000,00
	Total Cash	
	Total Amount	t: \$1,000.00

AT A REGULAR MEETING OF THE PLANNING COMMISSION OF THE CITY OF SALEM, VIRGINIA held in the Council Chambers of City Hall, 114 North Broad Street Salem, VA 24153

AGENDA ITEM: Amendment to the Zoning Ordinance

Hold public hearing to consider the request of Pinkesh R. Patel and Sonal P. Patel, property owners, for rezoning the property located at 1200 Blk Thompson Memorial Drive (Tax Map # 20-2-4) from RSF Residential Single

Family to HBD Highway Business District.

SUBMITTED BY: Max Dillon, Planner

SUMMARY OF INFORMATION:

SITE CHARACTERISTICS:

Zoning: RSF Residential Single Family Land Use Plan Designation: Residential

Existing Use: Vacant

Proposed Use: Commercial - gas station, convenience store, drive thru restaurant

The subject property (1200 blk Thompson Memorial Drive) consists of a 2.674 acre tract of land which currently sits within the RSF Residential Single Family zoning designation. The applicant is requesting a rezoning of the property from RSF to HBD in order to facilitate the construction of a gas station, convenience store, and drive thru restaurant development. Situated adjacent to Interstate 81, this property is uniquely positioned to potentially serve the commercial needs of both travelers and local residents alike as there are no other commercial establishments currently located in this portion of Salem. Furthermore, the approved Edgebrook Development to the north of this site in Roanoke County may catalyze the evolution of its surrounding corridor. Still, the subject property is currently bounded (within Salem) by residentially zoned parcels, many of which serve single family homes.

A conceptual site plan has been included with the submittal that displays a proposed convenience store and restaurant positioned behind the gas pump structures (located closer to Thompson Memorial Drive). The exhibit indicates two separate access points – one which intersects Penguin Lane and the other with Thompson Memorial Drive. If this rezoning application is approved, this development project is subject to site plan review and corresponding compliance with Salem's ordinances.

The Future Land Use Map (FLUM) identifies this area as residential which is inconsistent with the proposed future utilization of the property.

REQUIREMENTS:

The proposal meets the requirements of Section 106-214.3. Site development regulations for HBD.

OPTIONS:

- 1. Recommend approval of the request.
- 2. Recommend denial of the request.



PLEASE REPLY TO: ANDREW R STOVER, ESQ P O BOX 279 SALEM, VIRGINIA 24153

PHONE: (540) 725-8183 E-MAIL: ASTOVER@OPNLAW.COM 3140 CHAPARRAL DRIVE, SUITE 200-C ROANOKE, VIRGINIA 24018 55405 159 0200 - TAX 55405 PMS 0208 WWW.OFM AVECOM

110 EAST FIRST STREET SALEM, VIRGINIA 24153 (S40) 369 2345 4FAX (340) 337 9560

February 1, 2024

City of Salem Planning Commission Attn: James E. Taliaferro, II, Executive Secretary City of Salem Planning Commission 114 North Broad Street Salem, Virginia 24153

Re: Request to Amend the Zoning Ordinance of the City of Salem 1200 BLK Thompson Memorial Drive (Tax Map. No. 20-2-4)

Dear Mr. Taliaferro:

I hope this letter finds you well. My name is Andrew Stover, and my law firm represents Mr. and Mrs. Pinkesh and Sonal Patel, the owners of that certain real property located in the City of Salem on the 1200 Block of Thompson Memorial Drive and more particularly identified as Tax Map No. 20-2-4 (the "Property"). On behalf of Mr. and Mrs. Patel, I write to officially request that the Property be rezoned from the Residential Single-Family District ("RSF") to the Highway Business District ("HBD").

As mentioned, the Property is currently zoned RSF. Mr. and Mrs. Patel would like to construct a convenience store, gasoline station, and restaurant with a drive-through on the Property, which are uses not permitted in the RSF District. As such, Mr. and Mrs. Patel seek to rezone the Property to HBD, a district that permits such uses by right.

The Property is located immediately adjacent to and southeast of the junction of Interstate 81 and Thompson Memorial Drive. Given its proximity to the interstate, as well as the fact that no gasoline stations, convenience stores, or restaurants exist along the Thompson Memorial Drive corridor, the Property is particularly amendable to the

{00443294-1}

construction of such a convenience store, gasoline station, and restaurant with a drivethrough. I have included herewith a concept plan and elevations depicting the proposed project.

Thank you in advance for your assistance with this matter. Please reach out to me at the email address or telephone number provided above should you have any further questions or need any additional materials.

Very Truly Yours,

1.32

Andrew R. Stover, Esq

[00443294-1]



City of Salem Rezoning Application

Pre-application Meeting (optional)

Meetings with the Community Development Staff are recommended prior to submittal of a rezoning application. Please bring a plat to the meeting with a sketch of your proposal.

Application Submittal

- The application deadline is the first of the month for inclusion on the following month's agenda. If the first falls on a weekend or holiday, the application deadline will be the following business day.
- When submitting an application be sure to include the following: a complete application, plat of the subject property, legal description that includes metes and bounds, and supplementary information to support the request (such as conceptual plans and building elevations). Please note: incomplete applications will not be accepted and will be returned to the applicant.
- The application fee is due at time of submittal. (See Page 4)
- PLEASE NOTE: As per 106-520(C) of the City of Salem Zoning Ordinance no application shall be
 accepted for a lot or parcel that does not comply with the minimum lot area, width, or frontage
 requirements of the requested zoning district. A variance from the Board of Zoning Appeals must
 be obtained prior to the submission of a rezoning application.

Application Distribution for City Review

Complete applications may be routed to City departments for review.

Staff/Applicant Meeting

 The staff may contact the applicant to schedule a meeting to discuss comments provided by reviewing agencies, to request additional information or plan revisions, and to negotiate proffers.

Planning Commission

- Revised conceptual plans and draft proffers must be submitted prior to the Planning Commission meeting. Proffers and conceptual plans may be revised in accordance with Staff's recommendations, and revisions incorporating the staff's recommendations must be submitted prior to the Planning Commission meeting.
- A staff report and recommendation is included in the Planning Commission packet. The packet is distributed approximately 1 week prior to the Planning Commission meeting.
- The Planning Commission meets on the 1st Wednesday after the 1st City Council meeting of the month.
- Following a public hearing on the rezoning case, the Planning Commission may recommend approval, approval with revisions to the proffers, denial, or deferral of the application.

City Council

- Signed and notarized final proffers must be submitted prior to the City Council meeting.
- A staff report containing the recommendation of the Planning Commission and Staff is sent to the City Council prior to the meeting.
- The City Council typically hears rezoning cases on the 4th Monday of every month. Cases are
 usually heard by Council at the meeting following the Planning Commission meeting.
- Following a public hearing on the case, the City Council may vote to approve, approve with proffered conditions, deny, defer the application to another meeting, or remand the application back to the Planning Commission for further consideration.

ATTACHMENTS - For ALL REQUESTS you must submit the following electronically:

- a. A fully completed signed application.
- b. Acknowledgement of Application Fee Payment Procedure (Page 4)
- c. Signed Proffer Statement if applicable (Pages 6 & 7)
- d. A plat of the subject property, which accurately reflects the current property boundaries, is drawn to scale, and shows existing structures. (Typically, available from the City Clerk's Office.)
- e. Responses to questions on Page 5
- f. Historic Impact Information (if any)
- g. For applications requiring plans, please submit electronically only. No hard copies will be accepted.
- h. Check here if the conceptual plan will serve as the preliminary plat.

NOTE: Elevations will be required with new development.

TO THE APPLICANT:

It is the policy of the City of Salem City Council, the City of Salem Planning Commission, and City of Salem Board of Zoning Appeals to require a property to be posted when a zoning action is being considered. Such a posting notifies the general public of an impending action and the location being considered.

It is incumbent on you, the applicant, to ensure the sign is in the proper location and remains there until an action has taken place. Consequently, the procedure for posting is as follows:

- 1. The Community Development Staff will post the sign on your property.
- You should check the location of the sign to make certain it is in the right place on your property. If it is not, notify the Community Development Office as soon as possible.
- 3. You should check periodically to ensure the safety of the sign. If it is stolen or otherwise harmed, notify the Community Development Office as soon as possible.

In submitting this rezoning application, you hereby grant permission to the agents and employees of the City of Salem to enter the referenced property for the purposes of processing and reviewing the above application.

Should you have any questions regarding this policy, please contact a member of Community Development.

City of Salem Community Development Application

Request for REZONING or CONDITIONAL REZONING Case #: APPLICANT INFORMATION Owner: Pinkesh R. Patel and Sonal P. Patel Telephone No. (540) 725-8183 Fax No. (540) 772-0216 Contact Name: Andrew R. Stover, Esq. Email Address Address: 110 E. First Street, Salem, Virginia 24153 astover@opniaw.com Applicant/Contract Purchaser Pinkesh R. Patel and Sonal P. Patel Telephone No. (540) 725-8183 Fax No. (540) 772-0216 Contact Name: Andrew R. Stover, Esq. Email Address Address: 110 E. First Street, Salem, Virginia 24153 astover@opnlaw.com **PARCEL INFORMATION** For multiple parcels, please attach a page Total Area (acres/square feet) 2.674 acres (Tax ID #'s) 20-2-4 Current Zoning RSF Deed Book 292 __Page 693 Requested Zoning HBD Requested Use Convenience Store; gasoline station; restaurant with drive-through Subdivision __ Current Use Vacant Location Description (Street Address, if applicable)_ 1200 BLK Thompson Memorial Drive □ Conditional Zoning Request: See Attached Proffer sheets SIGNATURE OF OWNER CONTRACT PURCHASER (attach contract) As owner or authorized agent of this property, I hereby certify that this application is complete and accurate to the best of my knowledge, and I hereby grant permission to the agents and employees of the City of Salem to enter the property for the purposes of processing and reviewing this request. Signature PIM-ESH PATEL Date 1/31/2024 Print Name Pinkesh R. Patel Date 1/31/2024 Signature 15 501 Print Name Sonal P. Patel QUESTIONS/ LETTERS/ SHOULD BE FORWARDED TO THE FOLLOWING**: Name Andrew R. Stover, Esq. Telephone No. (540) 725-8183 Address: 110 E. First Street, Salem, Virginia 24153 No. 1540) 772-02 Fax Email Address_ astover@opnlaw.com **It is the responsibility of the contact person to provide copies of all correspondence to other interested parties to the application.

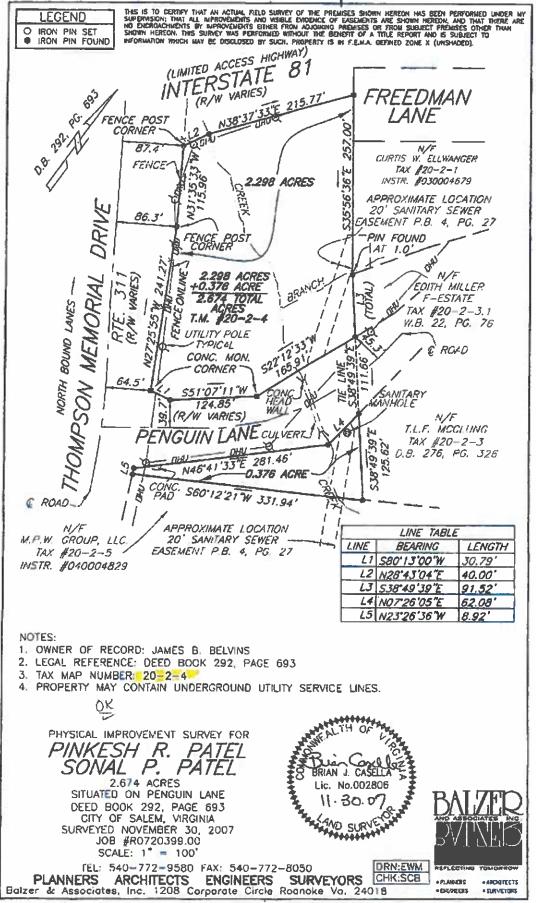
ACKNOWLEDGEMENT OF APPLICA	ATION FEE PAYMENT	F PROCEDURE	
Application fees must be submitted at the complete until the payment for all applicab Department. I acknowledge that I am res I further acknowledge that any application being considered filed for the next mor	le fees has been receive ponsible for ensuring the ion fee submitted aften th's meetings.	d by the City of Salem Comm nat such fees are received by the deadline shall result	tunity Development by the City of Salem. In the application
Signature of applicant/authorized agent	PINESH PATEL	Date: 1/31/	2024
Print Name: Pinkesh R. Pa			
Signature of applicant/authorized agent	Doubleme by	Date: 1/31/	2024
Print Name: Sonal P. Patel			
below:			
If you would like your correspondence emailed and/or faxed, please make selections, and provide the information below: astover@opnlaw.com			
• •	be paid at the payable to the		Please make
Rezoning ap	pplication fee	\$1,000	
FOR STAFF USE ONLY			
Staff Reviewer:		Application Complete?	⊔YES ⊔NO
Date:			

	What is the Future Land Use Designation for the subject property?				
2.	Describe in detail the proposed use of the property. The proposed use of the Property is as a convenience store, gasoline station, and restaurant with drive-through.				
3. List any sensitive environmental or unique features on the property. Are there any high volta public utility lines, or others? There is a very small creek/stream running from the northwestern-most corner through the southeastern-most corner of the Property. Utilities exist as depicted on that certain plat dated 11/30/					
ŀ.	Is the subject property located within the Floodplain District? YES NO If yes, describe the proposed measures for meeting the standards of the Floodplain Ordinance.				
i.	Is the subject property listed as a historic structure or located within a historic district? YES NO If yes, describe the proposed measures for meeting the standards of the Department of Historic Resources.				
·.	Have you provided a conceptual plan of the proposed development, including general lot configurations and road				
	locations? Are the proposed lot sizes compatible with existing parcel sizes in the area? Yes, a conceptual plan including lot configurations and road locations has been provided, and yes, the lot size				
	plan including lot configurations and road locations has been provided, and yes, the lot size is compatible with existing parcel sizes in the area.				
۷ 2	plan including lot configurations and road locations has been provided, and yes, the lot size is compatible with existing parcel sizes in the area. ERESPOND FOR COMMERCIAL REZONING APPLICATIONS What provisions will be made to ensure safe and adequate access to the subject property? Safe and adequate access to the Property will be ensured through the locations for ingress and egress to the Property as shown on the Concept Plan.				
۷ 2	plan including lot configurations and road locations has been provided, and yes, the lot size is compatible with existing parcel sizes in the area. ERESPOND FOR COMMERCIAL REZONING APPLICATIONS What provisions will be made to ensure safe and adequate access to the subject property? Safe and adequate access to the Property will be ensured through the locations for ingress and egress to the				
V a F	plan including lot configurations and road locations has been provided, and yes, the lot size is compatible with existing parcel sizes in the area. ERESPOND FOR COMMERCIAL REZONING APPLICATIONS What provisions will be made to ensure safe and adequate access to the subject property? Safe and adequate access to the Property will be ensured through the locations for ingress and egress to the Property as shown on the Concept Plan. How will the traffic impact of this development be addressed? Any potential traffic impact of this development will be addressed via the locations for ingress and egress to the Property as shown on the Concept Plan. Describe why the proposed use is desirable and appropriate for the area. What measure will be taken to assure the proposed use will not have a negative impact on the surrounding vicinity? The proposed use is desirable and appropriate for the area. What measure will be taken to assure the proposed use will not have a negative impact on the surrounding vicinity? The proposed use is desirable and appropriate for the area. Some proposed use is desirable and appropriate for the area because the Property abuts Interstate 81 and there are no gasoline stations, convenience stores, or restaurants on the				
V a F	plan including lot configurations and road locations has been provided, and yes, the lot size is compatible with existing parcel sizes in the area. ERESPOND FOR COMMERCIAL REZONING APPLICATIONS What provisions will be made to ensure safe and adequate access to the subject property? Safe and adequate access to the Property will be ensured through the locations for ingress and egress to the Property as shown on the Concept Plan. How will the traffic impact of this development be addressed? Any potential traffic impact of this development will be addressed via the locations for ingress and egress to the Property as shown on the Concept Plan. Describe why the proposed use is desirable and appropriate for the area. What measure will be taken to assure the proposed use will not have a negative impact on the surrounding vicinity? The proposed use is desirable and appropriate.				

Legal Description

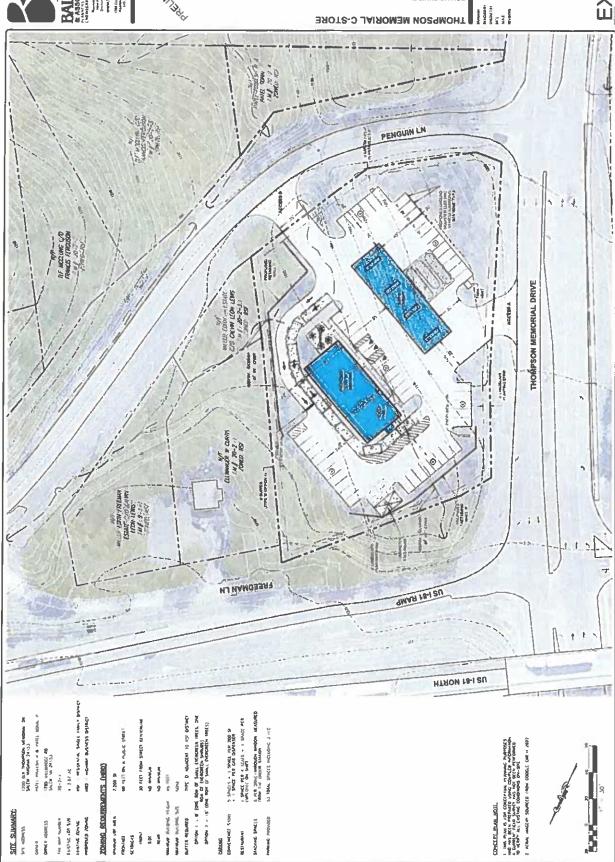
All that certain lot or parcel of land, with all improvements thereon and appurtenances thereunto belonging, lying and being in the **CITY OF SALEM**, State of Virginia, and being more particularly described as being **2.674 ACRES** as shown on plat of survey for Pinkesh R. Patel and Sonal P. Patel prepared by Balzer and Associates, Inc., dated 11/30/2007, Job No. R0720399.00; and,

BEING the same property conveyed to the grantor herein from Elmer M. Thompson by deed dated August 31, 1998 and recorded in the Clerk's Office of the Circuit Court for the City of Salem, Virginia in Deed Book 292, page 693, and from L. Richard Padgett, Jr., Special Commissioner, by deed dated October 7, 2003, recorded in the aforesaid Clerk's Office in Instrument No. 030005491.



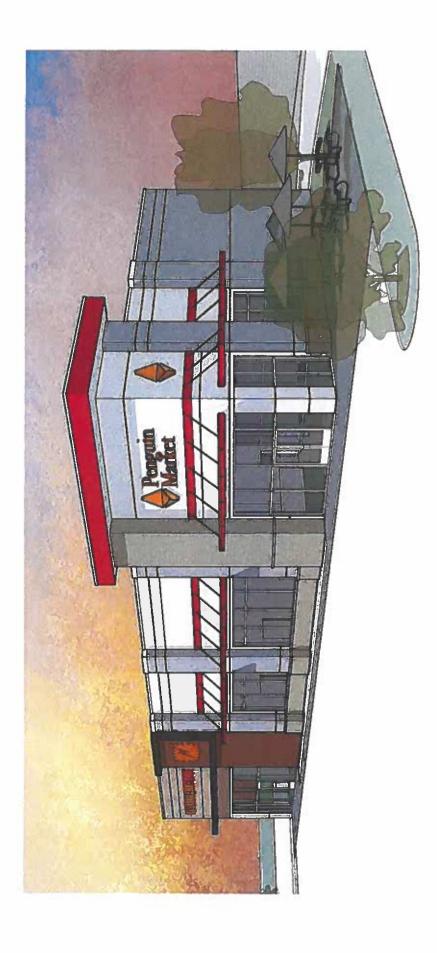






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PENGUIN MARKET

SCHEMATIC RENDERING

THOMPSON MEMORIAL DRIVE SALEM, VIRGINIA CONTROL OF THE SALEM, VIRGINIA CONTROL OF THE SALEM SALE

NOT TO SCALE NOT FOR CONSTRUCTION 2024-01-29 Roanoke Office © 2024 Belzer & Associates Inc.



AFFADAVIT OF MAILING PURSUANT TO S15.2-2204 CODE OF VIRGINIA

PLANNING COMMISSION **MARCH 13, 2024**

ITEM#

This is to certify that I mailed letters in reference to the rezoning request of Pinkish R. Patel and Sonal P. Patel, property owners for rezoning the property located at 1200 Blk Thompson Memorial Drive (Tax Map # 20-2-4), from RSF Residential Single Family District to HBD Highway Business District, to the following property owners and adjacent property owners on February 20, 2024, in the 2:00 p.m. mail:

PINKESH R PATEL SONAL P PATEL 1785 MILLBRIDGE RD **SALEM VA 24153**

MPW GROUP LLC **POBOX18 SALEM VA 24153**

TLF MCCLUNG C/O FRANCES FERGUSON 1917 MAYLIN DR SALEM VA 2415

EDITH F MILLER ESTATE C/O CALVIN LEON LEWIS 1231 THOMPSON MEMORIAL DR **SALEM VA 24153**

W CURTIS ELLWANGER 150 FREEDMAN LN **SALEM VA 24153**

EDITH FREEMAN MILLER ESTATE C/O CALVIN LEON LEWIS 1231 THOMPSON MEMORIAL DR **SALEM VA 24153**

BARBARA JEAN FULLER BOYDEN LIFE EST C/O CALVIN LEON LEWIS 1231 THOMPSON MEMORIAL DR **SALEM VA 24153**

COVENANT COMMUNITY CHURCH INC PO BOX 1214 **SALEM VA 24153**

COUNTY OF ROANOKE ZONING DIVISION 5204 BERNARD DR 2ND FLOOR **ROANOKE VA 24018**

City of Salem

Commonwealth of Virginia

The foregoing instrument was acknowledged before me this 33rd ovet

Notary Public My commission expires: \

 $m_0 n$

Krystal M. Graves Notary Public - ID 228801 Commonwealth of VA My Commission Exps. 3-31-2

	Location		Co-Owner Name	Address 1	Address 2 City, State, Zip
20-2-4	1200 BLK THOMPSON MEMORIAL DR PINKESH R PATEL	PINKESH R PATEL	SONAL P PATEL	1785 MILL BRIDGE RD	SALEM VA 24153
20-2-5	1220 THOMPSON MEMORIAL DR	MPW GROUP LLC		P O BOX 18	SALEM VA 24153
20-2-3	120 PENGUIN LN	TLF MCCLUNG	C/O FRANCES FERGUSON	1917 MAYLIN DR	SALEM VA 24153
20-2-3.1	121 PENGUIN LN	EDITH F MILLER ESTATE	C/O CALVIN LEON LEWIS	1231 THOMPSON MEMORIAL DR	SALEM VA 24153
20-2-1	150 FREEDMAN LN	W CURTIS ELLWANGER		150 FREEDMAN LN	SALEM VA 24153
9-1-1	100 BLK PENGUIN LN	EDITH FREEMAN MILLER ESTATE	C/O CALVIN LEON LEWIS	1231 THOMPSON MEMORIAL DR	SALEM VA 24153
21-1-4	1247 THOMPSON MEMORIAL DR	EDITH F MILLER ESTATE	C/O CALVIN LEON LEWIS	1231 THOMPSON MEMORIAL DR	SALEM VA 24153
20-1-1	1231-1239 THOMPSON MEMORIAL DR	231-1239 THOMPSON MEMORIAL DR. BARBARA JEAN FULLER BOYDEN LIFE C/O CALVIN LEON LEWIS	E C/O CALVIN LEON LEWIS	1231 THOMPSON MEMORIAL DR	SALEM VA 24153
26-1-1	955 BIRD LN	COVENANT COMMUNITY CHURCH INC		P O BOX 1214	SALEM VA 24153
		COUNTY OF ROANOKE	ZONING DIVISION	5204 BERNARD DR 2ND FLOOR	ROANOKE VA 24018



February 23, 2024

Pinkesh R. Patel Sonal P. Patel 1785 Millbridge Road Salem, VA 24153

RE: Petition For Zoning Amendment (Rezoning)

1200 Blk Thompson Memorial Drive

Tax Map # 20-2-4

To Whom It May Concern:

You and/or your agent shall appear before the Planning Commission on:

Wednesday, March 13, 2024 at 7:00 p.m. in the

Community Room, Salem Civic Center 1001 Roanoke Boulevard

AND

Salem City Council on:

Monday, March 25, 2024 at 6:30 p.m. in the

Council Chambers, First Floor, Salem City Hall 114 North Broad Street, Salem, Virginia

for consideration of your request for rezoning the above referenced property.

If you have any questions regarding this matter, please contact our office at (540) 375-3032.

Mary Ellen H. Wines, CZA CFM Planning and Zoning Administrator



IMPORTANT NOTICE OF PUBLIC HEARINGS PROPOSAL TO CHANGE ZONING

Notice is hereby given that a request has been filed with the City of Salem by the property owner/petitioner of the property described below. The Planning Commission of the City of Salem will consider this request at its meeting listed below and make a recommendation to the City Council. The City Council of the City of Salem will also consider this request, and the recommendation of the Planning Commission at its meeting listed below. City Council will make the final decision in this matter.

Property Owner/Petitioner:

Pinkesh R. Patel and Sonal P. Patel

Location of Property:

1200 Blk Thompson Memorial Drive (Tax Map # 20-2-4)

Purpose of Request:

To rezone the property located at 1200 Blk Thompson Memorial Drive (Tax Map # 20-2-4) from RSF Residential Single Family to HBD Highway Business District.

The date, time, and place of the public hearing scheduled by the Planning Commission on this request are as follows:

WEDNESDAY, MARCH 13, 2024 – 7 P.M. COMMUNITY ROOM, SALEM CIVIC CENTER 1001 ROANOKE BOULEVARD, SALEM, VIRGINIA

The date, time, and place of the public hearing scheduled by City Council on this request are as follows:

MONDAY, MARCH 25, 2024 – 6:30PM COUNCIL CHAMBERS, FIRST FLOOR, SALEM CITY HALL 114 NORTH BROAD STREET, SALEM, VIRGINIA

Additional information on this request may be obtained in the Community Development Department, 21 South Bruffey Street, Salem, Virginia or at (540) 375-3032.

H. Robert Light
Deputy Executive Secretary
Planning Commission

PAYMENT DATE 01/04/2024 COLLECTION STATION

Engineering/Inspections

RECEIVED FROMPinkesh Patel

DESCRIPTION

rezone 1200 Thompson Memorial Drive 20-2-4

City of Salem P.O. Box 869 Salem, VA 24153 BATCH NO. 2024-00003588 RECEIPT NO. 2024-00070721 CASHIER Krystal Graves

PAYMENT CODE	RECEIPT DESCRI	PTION	TRANSACTION AMOUNT
PLAN FILING FEE	Planning Rezoning/Site Plan Rev		\$1,000.0
	Total Cash	\$0.00	
	Total Check	\$1,000.00	
	Total Charg	e \$0.00	
	Total Wire	\$0.00	
	Total Other		
	Total Remit		
	Change Total Recei	\$0.00 ved \$1,000.00	
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